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As filed with the Securities and Exchange Commission on June 10, 2014.

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1

REGISTRATION STATEMENT

Under
The Securities Act of 1933

CAPNIA, INC.

(Exact name of Registrant as specified in its charter)

Delaware	3845	77-0523891
(State or other jurisdiction of incorporation or organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

3 Twin Dolphin Drive, Suite 160
Redwood City, CA 94065
(650) 213-8444

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Anish Bhatnagar
Chief Executive Officer
Capnia, Inc.
3 Twin Dolphin Drive, Suite 160
Redwood City, CA 94065
(650) 213-8444

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Michael J. Danaher, Esq. Elton Satusky, Esq. Wilson Sonsini Goodrich & Rosati Professional Corporation 650 Page Mill Road Palo Alto, California 94304 (650) 493-9300	Mitchell S. Nussbaum, Esq. Angela M. Dowd, Esq. Loeb & Loeb LLP 345 Park Avenue New York, NY 10154 (212) 407-4000

Approximate date of commencement of proposed sale to the public: As soon as practicable after this registration statement becomes effective.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended, check the following box. ☒

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☒ (do not check if a smaller reporting company)	Smaller reporting company ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)	Amount of Registration Fee
Units, each consisting of one share of common stock, $0.001 par value per share, and a warrant to purchase one share of common stock(2)(3)	$	$
Common stock included in the units(3)(4)(5)		
Warrants included in the units(3)(4)		
Shares of common stock underlying the warrants included in the units(3)(5)(6)		
Underwriters' unit purchase warrant(7)		
Units underlying Underwriters' unit purchase warrant ("Underwriters' Units")(2)(4)		
Common stock included in the Underwriters' Units(4)(5)		
Warrants included in the Underwriters' Units(4)		
Shares of common stock underlying the warrants included in the Underwriters' Units(5) (6)		
Total	$ 23,000,000	$ 2,962.40

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act of 1933, as amended.
(2) The units will consist of one share of common stock and one warrant to purchase one share of common stock.
(3) Includes shares and warrants that the underwriter has the option to purchase to cover over-allotments, if any.
(4) No fee required pursuant to Rule 457(g) under the Securities Act of 1933, as amended.
(5) Pursuant to Rule 416 under the Securities Act of 1933, as amended, the securities being registered hereunder include such indeterminate number of additional shares of common stock as may be issued after the date hereof as a result of stock splits, stock dividends or similar transactions.
(6) We have calculated the proposed maximum aggregate offering price of the common stock underlying the warrants and the underwriter's warrants by assuming that such

warrants are exercisable to purchase common stock at a price per share equal to 110% of the price per share of the common stock underlying each unit sold in this offering.

(7) Represents 5% of the units to be sold in this offering, including those that may be sold pursuant to the exercise of the over-allotment option.

The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

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The information in this preliminary prospectus is not complete and may be changed. These securities may not be sold until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell nor does it seek an offer to buy these securities in any jurisdiction where the offer or sale is not permitted.

Subject to completion, dated , 2014

CAPNIA

Units, Each Consisting Of One Share of Common Stock and a Warrant to Purchase One Share of Common Stock

This is the initial public offering of securities of Capnia, Inc. We are offering units, each unit consisting of one share of our common stock and a warrant to purchase one share of common stock. Prior to this offering, there has been no public market for our securities. Each warrant entitles the holder to purchase one share of our common stock at a price equal to 110% of the offering price of the common stock underlying the units, subject to adjustment as described herein. Each warrant will become exercisable immediately following issuance and will expire on , 2019. We expect the initial public offering price to be between $ and $ per unit. We have applied for listing of our units, common stock and warrants on the NASDAQ Capital Market under the trading symbols "CAPNU," "CAPN" and "CAPNW," respectively. No assurance can be given that our application will be approved. If the application is not approved, we will not complete this offering.

The units will begin trading on or promptly after the date of this prospectus. The units will automatically separate and each of the common stock and warrants will trade separately on the first trading day following the expiration of the underwriters' 45-day over-allotment option, unless Maxim Group LLC, the representative of the underwriters, determines that an earlier date is acceptable based on its assessment of the relative strengths of the securities markets and small capitalization companies in general, and the trading pattern of, and demand for, our securities in particular.

We are an emerging growth company under the Jumpstart our Business Startups Act of 2012, or JOBS Act, and, as such, may elect to comply with certain reduced public company reporting requirements for future filings.

Investing in our securities involves a high degree of risk. See "Risk Factors" beginning on page 12.

	Per Unit	Total
Initial public offering price	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds, before expenses	$	$

(1) See the heading entitled "Underwriting" on page 143 of this prospectus for additional disclosure regarding compensation to the underwriter payable by us.

Certain of our existing stockholders, or their affiliates, including entities associated with Vivo Ventures, have indicated to us their interest in purchasing up to $5,000,000 of units in this offering at the offering price.

We have granted the underwriters an option, exercisable one or more times in whole or in part, to purchase up to additional units from us at the public offering price, less the underwriting discount, within 45 days from the date of this prospectus to cover over-allotments, if any. If the underwriter exercises the option in full, the total underwriting discounts and commissions payable will be $, and the total proceeds to us, before expenses, will be $. Prior to separation of the units, any exercise of the over-allotment will be settled in units, and subsequent to the separation of the units will be settled in shares of common stock and warrants, as applicable.

The underwriters expect to deliver the units against payment in New York, New York on , 2014.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

Sole Book-Running Manager

Maxim Group LLC

Co-Manager

Cantor Fitzgerald & Co.

The date of this prospectus is , 2014.

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CoSense™

End Tidal Carbon Monoxide Monitor

Commercial Launch Planned In Second Half of 2014

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Neither we nor the underwriters have authorized anyone to provide any information or to make any representations other than those contained in this prospectus or in any free writing prospectuses prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. This prospectus is an offer to sell only the units offered hereby, but only under circumstances and in jurisdictions where it is lawful to do so. The information contained in this prospectus is accurate only as of its date regardless of the time of delivery of this prospectus or of any sale of securities.

Neither we nor the underwriters have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the U.S. Persons who come into possession of this prospectus and any free writing prospectus related to this offering in jurisdictions outside the U.S. are required to inform themselves about and to observe any restrictions as to this offering and the distribution of this prospectus and any such free writing prospectus applicable to that jurisdiction.

Until , 2014 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriter and with respect to their unsold allotments or subscriptions.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before deciding to invest in our securities, you should read this entire prospectus carefully, including the sections of this prospectus entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes contained elsewhere in this prospectus. Unless the context otherwise requires, references in this prospectus to the "company," "Capnia," "we," "us" and "our" refer to Capnia, Inc.

Overview

We develop medical diagnostics and therapeutics based on our proprietary technology for precision metering of gas flow. Our first product, CoSense™, aids in the diagnosis of hemolysis in neonates, a dangerous condition in which red blood cells degrade rapidly, which can lead to long-term developmental disability. CoSense received initial 510(k) clearance for sale in the U.S. in the fourth quarter of 2012, with a more specific Indication for Use related to hemolysis issued in the first quarter of 2014, and received CE Mark approval for sale in the European Union, or E.U., in the third quarter of 2013. CoSense is not yet commercially available and has thus not generated commercial sales to date; however, we are currently focused on launching CoSense commercially with the proceeds of this offering. We intend to begin selling CoSense in the second half of 2014. CoSense combines a portable detection device with a single-use disposable nasal cannula to measure carbon monoxide, or CO, in the portion of the exhaled breath that originates from the deepest portion of the lung, which is referred to as the "end-tidal" component of the breath.

With respect to therapeutics, we have previously obtained CE Mark approval in the E.U. for Serenz™, an as-needed treatment of symptoms related to allergic rhinitis, or AR. Serenz has shown statistically significant improvements in AR symptoms in randomized, controlled Phase 2 clinical trials. In the U.S., where Serenz has not yet been approved, the FDA may require Phase 3 trials to be conducted prior to approval. Serenz is still in development and has not generated sales to date.

CoSense

Approximately 143 million babies are born annually worldwide, with approximately 9.2 million of these born in the U.S. and E.U. Over 60% of neonates present with jaundice at some point in the first five days of life. We believe CoSense has the potential to become a part of routine pre-discharge screening for all newborns, by aiding in the differential diagnosis of hemolysis in infants that present with, or are at risk of developing, jaundice. Red blood cell breakdown is a normal phenomenon, but in certain situations the breakdown is accelerated or is excessive and is referred to as hemolysis. The most common cause of hospital readmission during the neonatal phase is jaundice, and we expect that CoSense will help reduce such readmissions. Many causes of jaundice do not represent a significant health threat. However, when severe jaundice occurs in the presence of hemolysis, rapid diagnosis and treatment may be necessary for infants to avoid life-long neurological impairment or other disability. Also, unnecessary treatment increases hospital expenses, is stressful for both infant and parents and may increase morbidity. There is an unmet need, therefore, for more accurate diagnostics for hemolysis, particularly if they are non-invasive, rapid, and easy to use.

CoSense detects hemolysis by measuring CO in the "end-tidal" component of the breath, and the measurement we perform with CoSense is referred to as end-tidal carbon monoxide, or ETCO. The American Academy of Pediatrics, or AAP, guidelines, published in the journal Pediatrics in 2004, recommend ETCO measurement be performed on certain neonates to assess the presence of hemolysis. These guidelines also note that ETCO is the only test that provides a *direct* measurement of bilirubin production because CO is a direct chemical byproduct of hemolysis. Therefore, ETCO provides a direct indication of the rate of bilirubin production from

hemolysis. Measurement of serum bilirubin, whether performed via a transcutaneous bilirubinometer or via a conventional needle-stick assay, is only indicative of the bilirubin level at a point in time. It does not capture the rate of bilirubin production or the presence/absence of hemolysis, leaving the physician uncertain as to the patient's level of risk.

Today, no device is currently commercially available for accurately measuring the ETCO levels associated with the rate of hemolysis in clinical practice in neonates. As a result, we believe that CoSense will be the only device on the market that enables physicians to practice in accordance with the AAP guidelines when evaluating jaundiced neonates for potential treatment.

Sales and marketing activities associated with the launch of CoSense comprise a significant portion of our use of proceeds from this offering. We plan to hire our own sales force to market CoSense to hospitals and other medical institutions in the U.S. CoSense has the following advantages that we believe will drive its adoption by hospitals, other medical institutions and physicians:

- rapid administration at the point-of-care, yielding results in approximately five minutes;
- non-invasive and minimally disruptive to the neonate;
- no requirement for specific breath maneuver;
- simple user interface that allows the healthcare professional to use it correctly with minimal training;
- no on-site calibration necessary; and
- accuracy over a range of CO concentrations clinically relevant to detection of hemolysis.

In addition, we believe the CoSense device will be priced at a level that falls below the typical capital equipment purchasing threshold for a hospital or other medical institution in the U.S.

Our Sensalyze™ Technology Platform

CoSense is the first 510(k) cleared or CE mark approved device based on our Sensalyze Technology Platform. We also intend to use our research and development expertise to develop additional diagnostic devices that are based on this platform, with a particular emphasis on products that could be sold effectively by the same sales force that we intend to deploy to commercialize CoSense. Our Sensalyze Technology Platform combines hardware, sensors, and software to provide the following novel capabilities:

- identification of full breaths that follow a normal pattern, also known as "physiologic" breaths, even if the patient is breathing very rapidly—a capability that is particularly relevant in infants;
- capture of individual exhaled breaths, and segmentation of the breath into different components such as "end-tidal," "upper airway" and "lower airway," which may allow the localization of the source of a given analyte to a specific anatomic area; and
- ability to move a specific micro-liter component of breath to a sensor module.

When combined, these capabilities provide a novel platform for non-invasive detection of various analytes. Our current development pipeline includes proposed diagnostic devices for asthma in children, assessment of blood carbon dioxide, or CO_2, concentration in neonates, and malabsorption in infants with colic.

We may also license elements of our Sensalyze Technology Platform to other companies that have complementary development or commercial capabilities.

Serenz

Serenz, our therapeutic product candidate, is a treatment for symptoms related to AR, which, when triggered by seasonal allergens, is commonly known as hay fever or seasonal allergies. Several Phase 2 clinical trials have been conducted in which Serenz showed statistically significant improvements in total nasal symptom scores, or TNSS, in symptomatic patients when compared to controls. Serenz has not shown statistically significant improvements in trials in which it was used in a scheduled dosing paradigm (see "Business — Serenz — Clinical Trials of Serenz Using Other Dosing Methods" on pages 95-96 of this prospectus), and as a result we have pursued development of Serenz using an as-needed dosing regimen. AR is typically an episodic disorder with intermittent symptoms. However, there is no treatment currently available that provides truly rapid relief of symptoms, other than topical decongestants, which can have significant side effects. The more optimal therapeutic for an episodic disorder is one that will treat symptoms when they occur, and can therefore be taken only as needed. We believe that Serenz has an ideal profile for an as-needed therapeutic for AR and may provide advantages over regularly dosed, slow to act currently marketed products.

Our Serenz technology is based upon the observation that nasal, non-inhaled CO_2 delivered at a low flow rate into the nasal cavity can alleviate the symptoms of AR, via a mechanism of action that is not yet known. Serenz is a convenient, hand-held device that delivers a low-flow of CO_2 to the nasal mucosa.

In clinical trials to date, Serenz has shown a large effect size, a rapid onset of effect — within 30 minutes after administration — and a mild side effect profile. We believe that such a therapeutic index positions Serenz well to be a potential first-line treatment for any AR sufferer. Serenz can be taken as a stand-alone treatment or as an adjunct to other medications, and can be used on an as-needed basis.

We currently plan to commercialize Serenz in the E.U. via distributorship arrangements. In the U.S., we believe that Serenz may be classified as either a medical device or a drug-device combination. The level of investment required to obtain marketing approval will depend, in large part, on this classification. We therefore intend to determine the appropriate regulatory approval pathway for Serenz in dialogue with the U.S. Food and Drug Administration, or FDA, and subsequently to seek a partner or distributorship arrangements for commercialization. In 2013, we out-licensed Serenz to Block Drug Company, a wholly-owned subsidiary of GlaxoSmithKline, or GSK, realizing revenue in the form of a non-refundable up-front payment of $3.0 million. In June 2014, the agreement with GSK terminated and GSK returned the licensed rights to Serenz back to us. We believe GSK's decision to terminate the agreement was for strategic reasons not related to the product or new data. We do not expect that the net proceeds from this offering, and our existing cash and cash equivalents, will be sufficient to enable us to fund both the commercialization of our CoSense product and Phase 3 clinical trials for Serenz, if such trials are necessary for approval in the U.S.

Risks Associated With Our Business

Our business is subject to numerous risks and uncertainties related to: the development and commercialization of CoSense, our reliance on third parties for manufacturing, our financial condition and need for additional capital, the operation of our business, our intellectual property, government regulation and this offering and ownership of our securities. These risks include those highlighted in the section entitled "Risk Factors" immediately following this prospectus summary, including the following:

- We have a limited operating history and have incurred significant losses since our inception, and we anticipate that we will continue to incur substantial losses for the foreseeable future. As of March 31, 2014, on an unaudited basis, we had an accumulated deficit of $57.9 million. We have only one

product approved for sale, and have generated no commercial sales to date, which, together with our limited operating history, makes it difficult to evaluate our business and assess our future viability.

- CoSense, or any of our planned products, may fail to achieve the degree of market acceptance by physicians, patients, caregivers, healthcare payors, and others in the medical community, necessary for commercial success.
- We have not commercialized any product in the past, and the challenges involved in establishing a new sales operation may expose us to a higher than usual level of risk with respect to commercializing CoSense.
- While we have obtained approval to market CoSense in the U.S. and the E.U., our other products, including our AR treatment product, Serenz, have not yet received approval for sale in the U.S. We may be required to conduct additional clinical trials prior to obtaining approval for Serenz or for other future products. We may not obtain such approvals for sale on a predictable timeframe, or at all.
- Neither CoSense, nor its associated consumables, have ever been manufactured on a commercial scale, and there are risks associated with scaling up manufacturing to commercial scale. The commercial manufacturers may not be successful in achieving the levels of production volume, quality, or manufacturing costs necessary to support commercial success of CoSense.
- We previously out-licensed Serenz to a partner, who terminated the agreement and returned the rights to Serenz back to us in June 2014.
- As of December 31, 2013, our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.
- We may need additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all, which would force us to delay, reduce or suspend our research and development programs and other operations or commercialization efforts. Raising additional capital may subject us to unfavorable terms, cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to our planned products and technologies.
- Our business depends on our continuing to satisfy the FDA and any other applicable U.S. and international regulatory requirements with respect to medical diagnostics or therapeutics, including requirements which may change or be created in the future.
- We have obtained certain key intellectual property relating to CoSense from BioMedical Drug Development, Inc., or BDDI, and any breach of our asset purchase agreement with BDDI would prevent or otherwise materially adversely affect our ability to proceed with any development or potential commercialization of CoSense.
- We need to obtain or maintain patents or other appropriate protection for the intellectual property utilized in our current and planned product offerings, and we must avoid infringement of third-party intellectual property.

Corporate information

We were incorporated in Delaware in August of 1999. Our principal executive offices are located at 3 Twin Dolphin Drive, Suite 160, Redwood City, CA 94065, and our telephone number is (650) 213-8444. Our

website address is *www.capnia.com*. The information contained on our website is not incorporated by reference into this prospectus, and you should not consider any information contained on, or that can be accessed through, our website as part of this prospectus, or in deciding whether to purchase our securities.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act of 2012. As such, we are eligible for exemptions from various reporting requirements applicable to other public companies that are not emerging growth companies, including, but not limited to, not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002 and reduced disclosure obligations regarding executive compensation. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least $1.0 billion, (3) the date on which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, and (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period.

"Capnia," "CoSense," "Serenz," "Sensalyze," our logo and our other trade names, trademarks and service marks appearing in this prospectus are our property. Other trade names, trademarks and service marks appearing in this prospectus are the property of their respective holders.

THE OFFERING	
Securities offered by Capnia	units, each unit consisting of one share of common stock and a warrant to purchase one share of common stock.
Common stock outstanding prior to this offering	shares
Common stock to be outstanding after this offering	shares
Terms of warrants issued as a part of the units	Exercise price — $, which is equal to 110% of the offering price of the common stock underlying the units. Exercisability — each warrant is exercisable for one share of common stock, subject to adjustment as described herein. Exercise period — each warrant will become exercisable immediately following issuance and will expire on , 2019.
Underwriters' over-allotment option	We have granted the underwriters the right to purchase up to additional units from us at the public offering price less the underwriting discount within 45 days from the date of this prospectus to cover over-allotments. Prior to separation of the units, any exercise of the over-allotment will be settled in units, and subsequent to the separation of the units will be settled in shares of common stock and warrants, as applicable.
Separation of common stock and warrants issued as part of the units	The units will begin trading on or promptly after the date of this prospectus. The units will automatically separate and each of the common stock and warrants will trade separately on the first trading day following the expiration of the underwriters' 45-day over-allotment option, unless Maxim Group LLC, the representative of the underwriters, determines that an earlier date is acceptable based on its assessment of the relative strengths of the securities markets and small capitalization companies in general, and the trading pattern of, and demand for, our securities in particular.
Use of proceeds	We estimate that our net proceeds from this offering will be approximately $17.1 million, or approximately $20.7 million if the underwriters exercise their over-allotment option in full. We intend to use approximately $10.2 million of the net proceeds from this offering to fund our planned commercial launch of CoSense, and related costs, and

	the balance to fund working capital, capital expenditures, research and development of additional products, and other general corporate purposes. This may include the acquisition or licensing of other products, businesses or technologies, although we have no plans regarding any specific acquisition candidates at this time. See "Use of Proceeds" for additional information.
Lock-up	Prior to the completion of this offering, we and each of our officers, directors, and 1.0% or greater stockholders will agree, subject to certain exceptions, not to sell, offer, agree to sell, contract to sell, hypothecate, pledge, grant any option to purchase, make any short sale of, or otherwise dispose of or hedge, directly or indirectly, any units, shares of common stock or warrants, or any securities convertible into or exercisable or exchangeable for units, shares of common stock or warrants, whether any such transaction described above is to be settled by delivery of units, shares of common stock or warrants, in cash or otherwise, for a period of 180 days after the date of the final prospectus relating to this offering. See "Underwriting" for additional information.
Underwriter compensation warrants	We will issue to Maxim Group LLC, the representative of the underwriters, upon closing of this offering, compensation warrants entitling the representative to purchase 5.0% of the aggregate number of units issued in this offering, including units issued pursuant to the exercise of the over-allotment option. The units will be settled in shares of common stock and warrants. The underwriter warrants will have a term of five years and may be exercised commencing 180 days after the date of effectiveness of the Registration Statement on Form S-1 of which this prospectus forms a part. The underwriter warrants may be exercised on a cashless basis.
Risk factors	See "Risk Factors" beginning on page 12 and the other information included in this prospectus for a discussion of factors you should carefully consider before deciding to invest in our securities.
Proposed NASDAQ Capital Market symbol	We have applied for the listing of our units, common stock and warrants on The NASDAQ Capital Market under the trading symbols "CAPNU," "CAPN" and "CAPNW," respectively.

The number of shares of our common stock to be outstanding after this offering is based on shares of our common stock outstanding as of , 2014, and excludes the following:

- shares of our common stock issuable upon the exercise of stock options outstanding as of , 2014 at a weighted-average exercise price of $ per share;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Equity Incentive Plan, which will become effective in connection with the completion of this offering;
- shares of our common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Employee Stock Purchase Plan;
- shares of our common stock issuable upon the exercise of warrants to purchase convertible preferred stock outstanding as of , 2014 at a weighted-average exercise price of per share; and
- shares of our common stock issuable upon the exercise of warrants issued in connection with our 2010/2012 convertible promissory notes outstanding as of , 2014 at a weighted-average exercise price of per share; and
- shares of our common stock issuable upon the exercise of warrants that are part of the units sold in this offering.

Unless otherwise indicated, all information in this prospectus reflects and assumes the following:

- a one-for- reverse split of our common stock effected on , 2014;
- the automatic conversion of all outstanding shares of our convertible preferred stock in connection with this offering into an aggregate of shares of our common stock immediately prior to the closing of this offering;
- the automatic conversion of the outstanding 2010/2012 convertible promissory notes in connection with this offering into an aggregate of shares of our common stock immediately prior to the closing of this offering;
- the automatic conversion of the outstanding 2014 convertible promissory notes in connection with this offering into an aggregate of units immediately prior to the closing of this offering;
- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws immediately prior to the closing of this offering; and
- no exercise of the underwriters' over-allotment option.

SUMMARY FINANCIAL AND OTHER DATA

The following tables summarize our financial data and should be read together with the sections in this prospectus entitled "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

We have derived the statement of operations data for the years ended December 31, 2012 and 2013 and for the period from inception to December 31, 2013 and the balance sheet data as of December 31, 2012 and 2013 from our audited financial statements included elsewhere in this prospectus. The summary consolidated financial data for the three months ended March 31, 2013 and 2014, and for the period from August 25, 1999 (date of inception) to March 31, 2014 and as of March 31, 2014 are derived from our unaudited consolidated financial statements appearing elsewhere in this prospectus. The unaudited consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements and, in the opinion of management, reflect all adjustments, which include only normal recurring adjustments, necessary to present fairly our financial position as of March 31, 2014 and the results of operations for the three months ended March 31, 2013 and 2014, and for the period from August 25, 1999 (date of inception) to March 31, 2014. Our historical results are not necessarily indicative of the results that should be expected in the future.

	Year Ended December 31,		Three Months Ended March 31,		Period from August 25, 1999 (Inception) to December 31,	Period from August 25, 1999 (Inception) to March 31,
	2012	2013	2013	2014	2013	2014
			(in thousands, except share and per share data) (unaudited)			(unaudited)
Statement of Operations Data:						
Revenue	$ —	$ 3,000	$ 3,000	$ —	$ 3,000	$ 3,000
Operating expenses:						
Research and development	2,470	2,380	703	372	36,652	37,024
General and administrative	1,127	1,467	416	312	15,960	16,272
Total operating expenses	3,597	3,847	1,119	684	52,612	53,296
Operating income (loss)	(3,597)	(847)	1,881	(684)	(49,612)	(50,296)
Therapeutic discovery grant proceeds	—	—	—	—	733	733
Interest income	3	2	—	—	814	815
Interest expense	(2,866)	(2,860)	(944)	(388)	(9,721)	(10,108)
Other income (expense), net	(22)	(2)	77	238	685	923
Net income (loss) and comprehensive income (loss)	$(6,482)	$(3,707)	1,014	(834)	$ (57,101)	$ (57,935)
Net income (loss) per common share, basic[1]	$ (1.04)	$ (0.58)	$ 0.16	$ (0.13)		
Net income (loss) per common share, diluted[1]	$ (1.04)	$ (0.58)	$ 0.05	$ (0.13)		

	Year Ended December 31,		Three Months Ended March 31,		Period from August 25, 1999 (Inception) to December 31,	Period from August 25, 1999 (Inception) to March 31,
	2012	2013	2013	2014	2013	2014
	(in thousands, except share and per share data)					
					(unaudited)	
Shares used to compute net income (loss) per common share, basic	6,244,230	6,428,278	6,426,939	6,428,716		
Shares used to compute net income (loss) per common share, diluted[1]	6,244,230	6,428,278	27,067,245	6,428,716		
Pro forma net income (loss) per common share, basic and diluted[1] (unaudited)						
Shares used to compute pro forma net income (loss) per common share, basic and diluted[1] (unaudited)						

(1) See Note 13 to our financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma net income (loss) per share, basic and diluted, and the number of shares used in the computation of the per share amounts.

	As of March 31, 2014	As of March 31, 2014	
		Pro Forma[1]	Pro Forma As Adjusted[2][3]
		(in thousands) (unaudited)	
Balance Sheet Data:			
Cash and cash equivalents	$ 764		
Working capital (deficit)	(13,704)		
Total assets	1,031		
Convertible promissory notes	14,379		
Convertible preferred stock	23,808		
Deficit accumulated during the development stage	(57,935)		
Total stockholders' equity (deficit)	(38,687)		

(1) The pro forma column reflects (i) the filing of our amended and restated certificate of incorporation and the automatic conversion of outstanding shares of our convertible preferred stock as of March 31, 2014 into an aggregate of shares of common stock immediately prior to the closing of this offering; (ii) the issuance of 2010/2012 convertible promissory notes and automatic conversion of these notes into shares of common stock as if they had occurred as of March 31, 2014 and the receipt of approximately $ million of gross proceeds from such sale; (iii) the issuance of convertible promissory notes in 2014 and automatic conversion of those notes into units as if they had occurred as of March 31, 2014 and the receipt of approximately $1.8 million of gross proceeds from such sale; and (iv) shares of our common stock issuable upon the exercise of warrants issued in connection with our 2010/2012 convertible promissory notes outstanding as of March 31, 2014.

(2) The pro forma as adjusted column reflects the pro forma adjustments described in footnote (1) above and the sale by us of units in this offering at an assumed initial public offering price of $ per unit, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) A $1.00 increase (decrease) in the assumed initial public offering price of $ per unit would increase (decrease) each of cash and cash equivalents, working capital and total assets by $ million and decrease (increase) total stockholders' equity (deficit) by $ million, assuming the number of units we are offering, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of units we are offering. An increase (decrease) of 1,000,000 units in the number of units we are offering would increase (decrease) each of cash and cash equivalents, working capital and total assets by approximately $ million and decrease (increase) total stockholders' equity (deficit) by approximately $ million, assuming the assumed initial public offering price per unit, as set forth on the cover page of this prospectus, remains the same. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price, number of units offered and other terms of this offering determined at pricing.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should consider carefully the following risks, together with all the other information in this prospectus, including our financial statements and notes thereto, before you invest in our securities. If any of the following risks actually materializes, our operating results, financial condition and liquidity could be materially adversely affected. As a result, the trading price of our securities could decline and you could lose part or all of your investment.

Risks related to our financial condition and capital requirements

We have a limited operating history and have incurred significant losses since our inception, and we anticipate that we will continue to incur substantial losses for the foreseeable future. We have only one product approved for sale, and have generated no commercial sales to date, which, together with our limited operating history, makes it difficult to evaluate our business and assess our future viability.

We are a developer of therapeutics and diagnostics with a limited operating history. Other than CoSense, which has received 510(k) clearance from the FDA and CE Mark clearance in the E.U., we have no other products currently approved. Evaluating our performance, viability or future success will be more difficult than if we had a longer operating history or approved products for sale on the market. We continue to incur significant research and development and general and administrative expenses related to our operations. Investment in medical device product development is highly speculative, because it entails substantial upfront capital expenditures and significant risk that any potential planned product will fail to demonstrate adequate accuracy or clinical utility. We have incurred significant operating losses in each year since our inception, and expect that we will not be profitable for some time after the completion of this offering. As of March 31, 2014 (unaudited), we had an accumulated deficit of $57.9 million.

We expect that our future financial results will depend primarily on our success in launching, selling and supporting CoSense and other products using our Sensalyze Technology Platform. This will require us to be successful in a range of activities, including manufacturing, marketing and selling CoSense. We are only in the preliminary stages of some of these activities. We may not succeed in these activities and may never generate revenue that is sufficient to be profitable in the future. Even if we are profitable, we may not be able to sustain or increase profitability on a quarterly or annual basis. Our failure to achieve sustained profitability would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our planned products, market our current and planned products, or continue our operations.

We currently have no source of product revenue and may never become profitable.

To date, we have not generated any revenues from commercial product sales, and have not generated sufficient revenues from licensing activities to achieve profitability. Our ability to generate revenue from product sales and achieve profitability will depend upon our ability, alone or with any future collaborators, to successfully commercialize products, including CoSense, Serenz, or any planned products that we may develop, in-license or acquire in the future. Our ability to generate revenue from product sales from planned products also depends on a number of additional factors, including our ability to:

- develop a commercial organization capable of sales, marketing and distribution of any products for which we obtain marketing approval in markets where we intend to commercialize independently;
- achieve market acceptance of our products, if any;
- set a commercially viable price for our products;
- establish and maintain supply and manufacturing relationships with reliable third parties, and ensure adequate and legally compliant manufacturing to maintain that supply;

- obtain coverage and adequate reimbursement from third-party payors, including government and private payors;
- find suitable distribution partners for CoSense or Serenz to help us market, sell and distribute our approved products in other markets;
- demonstrate the safety and efficacy of Serenz to the satisfaction of FDA and obtain regulatory approval for Serenz and planned products, if any, for which there is a commercial market;
- complete and submit applications to, and obtain regulatory approval from, foreign regulatory authorities;
- complete development activities, including any potential Phase 3 clinical trials of Serenz, successfully and on a timely basis;
- establish, maintain and protect our intellectual property rights and avoid third-party patent interference or patent infringement claims; and
- attract, hire and retain qualified personnel.

In addition, because of the numerous risks and uncertainties associated with product development, including that CoSense, Serenz or any planned products may not advance through development or achieve the endpoints of applicable clinical trials, we are unable to predict the timing or amount of increased expenses, or when or if we will be able to achieve or maintain profitability. In addition, our expenses could increase beyond expectations if we decide, or are required by the FDA or foreign regulatory authorities, to perform studies or clinical trials in addition to those that we currently anticipate. Even if we are able to complete the development and regulatory process for Serenz or any planned products, we anticipate incurring significant costs associated with commercializing these products.

Even if we are able to generate revenues from the sale of CoSense, Serenz or any planned products that may be approved, we may not become profitable and may need to obtain additional funding to continue operations. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or shut down our operations.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or below our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. From time to time, we may enter into collaboration agreements with other companies that include development funding and significant upfront and milestone payments or royalties, which may become an important source of our revenue. Accordingly, our revenue may depend on development funding and the achievement of development and clinical milestones under any potential future collaboration and license agreements and sales of our products, if approved. These upfront and milestone payments may vary significantly from period to period and any such variance could cause a significant fluctuation in our operating results from one period to the next. In addition, we measure compensation cost for stock-based awards made to employees at the grant date of the award, based on the fair value of the award as determined by our board of directors, and recognize the cost as an expense over the employee's requisite service period. As the variables that we use as a basis for valuing these awards change over time, including, after the closing of this offering, our underlying stock price and stock price volatility, the magnitude of the expense that we must recognize may vary significantly. Furthermore, our operating results may fluctuate due to a variety of other factors, many of which are outside of our control and may be difficult to predict, including the following:

- the cost and risk of initiating sales and marketing activities, including substantial hiring of sales and marketing personnel;

- the timing and cost of, and level of investment in, research and development activities relating to our planned products, which will change from time to time;
- our ability to enroll patients in clinical trials and the timing of enrollment;
- the cost of manufacturing CoSense and any planned products, which may vary depending on FDA guidelines and requirements, the quantity of production and the terms of our agreements with manufacturers;
- expenditures that we will or may incur to acquire or develop additional planned products and technologies;
- the design, timing and outcomes of clinical studies for Serenz and any planned products or competing planned products;
- changes in the competitive landscape of our industry, including consolidation among our competitors or potential partners;
- any delays in regulatory review or approval of Serenz or any of our planned products;
- the level of demand for CoSense, and for Serenz and any planned products, should they receive approval, which may fluctuate significantly and be difficult to predict;
- the risk/benefit profile, cost and reimbursement policies with respect to our future products, if approved, and existing and potential future drugs that compete with our planned products;
- competition from existing and potential future offerings that compete with CoSense, Serenz or any of our planned products;
- our ability to commercialize CoSense or any planned product inside and outside of the U.S., either independently or working with third parties;
- our ability to establish and maintain collaborations, licensing or other arrangements;
- our ability to adequately support future growth;
- potential unforeseen business disruptions that increase our costs or expenses;
- future accounting pronouncements or changes in our accounting policies; and
- the changing and volatile global economic environment.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. Investors should not rely on our past results as an indication of our future performance. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our revenue or operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially. Such a stock price decline could occur even when we have met any previously publicly stated revenue or earnings guidance we may provide.

We may need additional funds to support our operations, and such funding may not be available to us on acceptable terms, or at all, which would force us to delay, reduce or suspend our research and development programs and other operations or commercialization efforts. Raising additional capital may subject us to unfavorable terms, cause dilution to our existing stockholders, restrict our operations, or require us to relinquish rights to our planned products and technologies.

The commercialization of CoSense, as well as the completion of the development and the potential commercialization of planned products, will require substantial funds. As of March 31, 2014, on an unaudited basis, we had approximately $0.8 million in cash and cash equivalents. We believe that our existing cash and cash equivalents, including the net proceeds we received from our April 2014 convertible note financing, will be sufficient to sustain operations for at least the next 12 months based on our existing business plan, without the inclusion of net proceeds from this offering. Our future financing requirements will depend on many factors, some of which are beyond our control, including the following:

- the cost of activities and added personnel associated with the commercialization of CoSense, including marketing, manufacturing, and distribution;
- the cost of preparing to manufacture CoSense instruments and consumables on a larger scale;
- the degree and rate of market acceptance of CoSense, and the revenue that we are able to collect from sales of CoSense as a result;
- our ability to set a commercially attractive price for CoSense devices and consumables, and our customers' perception of the value relative to the prices we set;
- our ability to clarify the regulatory path in the U.S. for Serenz, and the potential requirement for additional pivotal clinical studies;
- the timing of, and costs involved in, seeking and obtaining approvals from the FDA and other regulatory authorities for Serenz and other planned products;
- our ability to obtain a partner for Serenz on attractive economic terms, or engage in commercial sales of Serenz on our own or through distributors;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights and/or the loss of those rights;
- our ability to enter into distribution, collaboration, licensing, commercialization or other arrangements and the terms and timing of such arrangements;
- the emergence of competing technologies or other adverse market developments;
- the costs of attracting, hiring and retaining qualified personnel;
- unforeseen developments during our clinical trials;
- unforeseen changes in healthcare reimbursement for any of our approved products;
- our ability to maintain commercial scale manufacturing capacity and capability with a commercially acceptable cost structure;
- unanticipated financial resources needed to respond to technological changes and increased competition;

- enactment of new legislation or administrative regulations;
- the application to our business of new regulatory interpretations;
- claims that might be brought in excess of our insurance coverage;
- the failure to comply with regulatory guidelines; and
- the uncertainty in industry demand.

We do not have any material committed external source of funds or other support for our commercialization and development efforts. Until we can generate a sufficient amount of product revenue to finance our cash requirements, which we may never do, we expect to finance future cash needs through a combination of public or private equity offerings, debt financings, collaborations, strategic alliances, licensing arrangements and other marketing and distribution arrangements. Additional financing may not be available to us when we need it or it may not be available on favorable terms. If we raise additional capital through marketing and distribution arrangements or other collaborations, strategic alliances or licensing arrangements with third parties, we may have to relinquish certain valuable rights to Serenz, CoSense, or potential planned products, technologies, future revenue streams or research programs, or grant licenses on terms that may not be favorable to us. If we raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. If we are unable to obtain adequate financing when needed, we may have to delay, reduce the scope of, or suspend one or more of our clinical studies or research and development programs or our commercialization efforts.

Our independent registered public accounting firm has expressed substantial doubt about our ability to continue as a going concern.

As described in Note 1 of our accompanying audited financial statements, our auditors have included a "going concern" provision in their opinion on our financial statements, expressing substantial doubt that we can continue as an ongoing business for the next twelve months. Our financial statements do not include any adjustments that may result from the outcome of this uncertainty. If we cannot secure the financing needed to continue as a viable business, our stockholders may lose some or all of their investment in us.

Risks related to the development and commercialization of our products

Our success depends heavily on the successful commercialization of our CoSense device to aid in diagnosis of neonatal hemolysis. If we are unable to sell sufficient numbers of our CoSense instruments and disposables, our revenues may be insufficient to achieve profitability.

CoSense is our sole product approved for sale. As a result, we will derive substantially all of our revenues from sales of CoSense devices and consumables for the foreseeable future. If we cannot generate sufficient revenues from sales, we may be unable to finance our continuing operations.

We have not commercialized any product in the past, and may not be successful in commercializing CoSense.

We have no history of successful product launches. Our efforts to launch CoSense into the neonatology marketplace are subject to a variety of risks, any of which may prevent or limit sales of the CoSense instruments and consumables. Furthermore, commercialization of products into the medical marketplace is subject to a variety of regulations regarding the manner in which potential customers may be engaged, the manner in which

products may be lawfully advertised, and the claims that can be made for the benefits of the product, among other things. Our lack of experience with product launches may expose us to a higher than usual level of risk of non-compliance with these regulations, with consequences that may include fines or the removal of CoSense from the marketplace by regulatory authorities.

If we are unable to execute our sales and marketing strategy for CoSense, and are unable to gain acceptance in the market, we may be unable to generate sufficient revenue to sustain our business.

Although we believe that CoSense, and our planned products, represent promising commercial opportunities, our products may never gain significant acceptance in the marketplace and therefore may never generate substantial revenue or profits for us. We will need to establish a market for CoSense and build that market through physician education, awareness programs, and other marketing efforts. Gaining acceptance in medical communities depends on a variety of factors, including clinical data published or reported in reputable contexts, and word-of-mouth between physicians. The process of publication in leading medical journals is subject to a peer review process and peer reviewers may not consider the results of our studies sufficiently novel or worthy of publication. Failure to have our studies published in peer-reviewed journals may limit the adoption of our current test and our planned tests.

Our ability to successfully market CoSense and our future diagnostic products will depend on numerous factors, including:

- the outcomes of clinical utility studies of such diagnostics in collaboration with key thought leaders to demonstrate our products' value in informing important medical decisions such as treatment selection;
- the success of the sales force which we intend to hire with some of the proceeds of this offering;
- whether healthcare providers believe such tests provide clinical utility;
- whether the medical community accepts that such tests are sufficiently sensitive and specific to be meaningful in patient care and treatment decisions; and
- whether hospital administrators, health insurers, government health programs and other payors will cover and pay for such tests and, if so, whether they will adequately reimburse us.

Failure to achieve widespread market acceptance of CoSense and our other planned products would materially harm our business, financial condition and results of operations.

If physicians decide not to order CoSense in significant numbers, we may be unable to generate sufficient revenue to sustain our business.

To generate demand for CoSense and our other planned products, we will need to educate neonatologists, pediatricians, and other health care professionals on the clinical utility, benefits and value of the tests we provide through published papers, presentations at scientific conferences, educational programs and one-on-one education sessions by members of our sales force. In addition, we will need support of hospital administrators that the clinical and economic utility of CoSense justifies payment for the device and consumables at adequate pricing levels. We need to hire additional commercial, scientific, technical and other personnel to support this process.

In addition, the AAP guidelines for the management of hemolysis in neonates are subject to physician interpretation. We interpret the AAP guidelines to recommend the use of ETCO for the detection of hemolysis in neonates; however, the guidelines do not contain a concrete workflow for the diagnosis or treatment of hemolysis, so physicians may interpret the guidelines in a different way. Furthermore, AAP guidelines are

updated approximately every ten years, and the current guidelines were published in 2004, so the guidelines may change in the near term.

If we cannot convince medical practitioners to order and pay for our current test and our planned tests, and if we cannot convince institutions to pay for our current test and our planned tests, we will likely be unable to create demand in sufficient volume for us to achieve sustained profitability.

If CoSense, or our other planned products, do not continue to perform as expected, our operating results, reputation and business will suffer.

Our success depends on the market's confidence that CoSense and our other planned products can provide reliable, high-quality diagnostic results. We believe that our customers are likely to be particularly sensitive to test defects and errors, and prior products made by other companies for the same diagnostic purpose have failed in the marketplace, in part as a result of poor diagnostic accuracy. As a result, the failure of CoSense or our planned products to perform as expected would significantly impair our reputation and the clinical usefulness of such tests. Reduced sales might result, and we may also be subject to legal claims arising from any defects or errors.

If our sole final-assembly manufacturing facility becomes damaged or inoperable, or we are required to vacate the facility, our ability to sell CoSense and to and pursue our research and development efforts may be jeopardized.

We currently manufacture CoSense instruments and consumables. These are comprised of components sourced from a variety of contract manufacturers, with final assembly and calibration completed at our facility in Redwood City, California. We have recently moved these facilities from our prior location, a move which may be disruptive and risks interruption of manufacturing activities. We do not have any backup final-assembly facilities. We depend on contract manufacturers for our CoSense components, and for some of these we rely on a sole supplier. The San Francisco Bay area has experienced serious fires and power outages in the past, and is considered to lie in an area with significantly above-average earthquake risk. Our facilities and equipment, or those of our sole-source suppliers, could be harmed or rendered inoperable by natural or man-made disasters, including fire, earthquake, flooding and power outages. Any of these may render it difficult or impossible for us to manufacture products for some period of time. If our facility is inoperable for even a short period of time, the inability to manufacture our current products, and the interruption in research and development of our planned products, may result in the loss of customers or harm to our reputation or relationships with scientific or clinical collaborators; we may be unable to regain those customers or repair our reputation in the future. Furthermore, our facilities and the equipment we use to perform our research and development work could be costly and time-consuming to repair or replace.

If we cannot compete successfully with other diagnostic modalities, we may be unable to increase or sustain our revenues or achieve and sustain profitability.

Our principal competition comes from mainstream diagnostic methods, used by physicians for many years, which focus on invasive blood tests such as the Coombs test, blood counts and serum bilirubin. In addition, transcutaneous monitors of bilirubin also create a competitive threat. It may be difficult to change the methods or behavior of neonatologists and pediatricians to incorporate CoSense in their practices in conjunction with or instead of blood tests.

In addition, several larger companies have extensive sales presence in the neonatology area and could potentially develop non-invasive diagnostic tests that compete with CoSense or our planned products. These include General Electric Healthcare, Philips, Draeger, Covidien, Masimo, Natus Medical, and CAS Medical. Some of our present and potential competitors have widespread brand recognition and substantially greater financial and technical resources and development, production and marketing capabilities than we do. Others may develop lower-priced tests that payors and physicians could view as functionally equivalent to our current or

planned tests, which could force us to lower the list price of our tests. This would impact our operating margins and our ability to achieve and maintain profitability. If we cannot compete successfully against current or future competitors, we may be unable to increase or create market acceptance and sales of our current or planned tests, which could prevent us from increasing or sustaining our revenues or achieving or sustaining profitability.

We expect to continue to incur significant expenses to develop and market additional diagnostic tests, which could make it difficult for us to achieve and sustain profitability.

In recent years, we have incurred significant costs in connection with the development of CoSense. For the year ended December 31, 2012, our research and development expenses were $2.5 million, and for the year ended December 31, 2013, our research and development expenses were $2.4 million. We expect our expenses to increase for the foreseeable future, as we conduct studies of CoSense and continue to develop our planned products, including tests for nitric oxide and other analytes. We will also incur significant expenses to establish a sales and marketing organization, and to drive adoption of and reimbursement for our products. As a result, we need to generate significant revenues in order to achieve sustained profitability.

Serenz may not be approved for sale in the U.S., or in any territory outside of the E.U.

Neither we nor any future collaboration partner can commercialize Serenz in the U.S. without first obtaining regulatory approval for the product from the FDA. In the E.U., we previously obtained a CE Mark, clearing the device for commercial sale. However, upon our license of the product to Block Drug Company, a wholly-owned subsidiary of GlaxoSmithKline, or GSK, we discontinued the contract manufacturing relationships that formed a key element of the CE Mark documentation. An application for revival of the CE Mark will need to be submitted to the Notified Body for approval prior to commercialization of Serenz in the E.U. Furthermore, neither we, nor any future collaboration partner, can commercialize Serenz in any country outside of the E.U. without obtaining regulatory approval from comparable foreign regulatory authorities. The approval route for Serenz in the U.S. may be through a device approval or a drug-device combination approval. If it is a device approval pathway, it may be either via the premarket approval, or PMA, process, a *de novo* 510(k) pathway, or traditional 510(k). Additional randomized, controlled clinical trials may be necessary to obtain approval. The approval process may take several years to complete, and approval may never be obtained. Before obtaining regulatory approvals for the commercial sale of Serenz for treatment of AR, we must demonstrate with substantial evidence, gathered in preclinical and well-controlled clinical studies, that the planned product is safe and effective for use for that target indication. We may not conduct such a trial or may not successfully enroll or complete any such trial. Serenz may not achieve the required primary endpoint in the clinical trial, and Serenz may not receive regulatory approval. We must also demonstrate that the manufacturing facilities, processes and controls are adequate. Additionally, the FDA may determine that Serenz should be regulated as a combination product or as a drug, and in that case, the approval process would be further lengthened.

Moreover, obtaining regulatory approval for marketing of Serenz in one country does not ensure we will be able to obtain regulatory approval in other countries, while a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in other countries.

Even if we or any future collaboration partner were to successfully obtain a regulatory approval for Serenz, any approval might contain significant limitations related to use restrictions for specified age groups, warnings, precautions or contraindications, or may be subject to burdensome post-approval study or risk management requirements. If we are unable to obtain regulatory approval for Serenz in one or more jurisdictions, or any approval contains significant limitations, we may not be able to obtain sufficient revenue to justify commercial launch. Also, any regulatory approval of Serenz, once obtained, may be withdrawn. Even if we obtain regulatory approval for Serenz in additional countries, the commercial success of the product will depend on a number of factors, including the following:

- establishment of commercially viable pricing, and obtaining approval for adequate reimbursement from third-party and government payors;

- our ability, or that of third-party manufacturers that we may retain, to manufacture quantities of Serenz using commercially viable processes at a scale sufficient to meet anticipated demand and reduce our cost of manufacturing, and that are compliant with current Good Manufacturing Practices, or cGMP, regulations;

- our success in educating physicians and patients about the benefits, administration and use of Serenz;

- the availability, perceived advantages, relative cost, relative safety and relative efficacy of alternative and competing treatments;

- acceptance of Serenz as safe and effective by patients, caregivers and the medical community; and

- a continued acceptable safety profile of Serenz following approval.

Many of these factors are beyond our control. If we are unable to successfully commercialize Serenz, or unable to obtain a partner to commercialize it, we may not be able to earn any revenues related to Serenz. This would result in an adverse effect on our business, financial condition, results of operations and growth prospects.

The regulatory approval process is expensive, time consuming and uncertain, and may prevent us or our partners from obtaining approval for the commercialization of Serenz or our other development candidates. Approval of Serenz in the U.S. or other territories may require that we, or a partner, conduct additional randomized, controlled clinical trials.

The regulatory pathway for approval of Serenz in the U.S. has not been determined. However, there is a significant risk that the FDA will require us to file for approval via the PMA pathway for devices, or may classify Serenz as a drug-device combination that must be approved via the new drug application, or NDA, pathway typically used for drug products. In either of these cases, the FDA may require that additional randomized, controlled clinical trials be conducted before an application for approval can be filed. These are typically expensive and time consuming, and require substantial commitment of financial and personnel resources from the sponsoring company. These trials also entail significant risk, and the data that results may not be sufficient to support approval by the FDA or other regulatory bodies.

Furthermore, regulatory approval of either a PMA or an NDA is not guaranteed, and the filing and approval process itself is expensive and may take several years. The FDA also has substantial discretion in the approval process. Despite the time and expense exerted, failure may occur at any stage, and we could encounter problems that cause us to abandon or repeat clinical studies. The FDA can delay, limit, or deny approval of a future product for many reasons, including but not limited to:

- a future product may not be deemed to be safe and effective;

- FDA officials may not find the data from clinical and preclinical studies sufficient;

- the FDA may not approve our or our third-party manufacturer's processes or facilities; or

- the FDA may change its approval policies or adopt new regulations.

If Serenz, or our future products, fail to demonstrate safety and efficacy in further clinical studies that may be required, or do not gain regulatory approval, our business and results of operations will be materially and adversely harmed.

The mechanism of action of Serenz has not been fully determined or validated.

The exact mechanism of action(s) of Serenz is unknown. Therapeutics are increasingly focused on target-driven development, and an understanding of a future product's mechanism of action is typically understood to make development less risky. The FDA may view this as increasing the potential risks, and

diminishing the potential benefits, of Serenz. In addition, potential partners may view this as a limitation of the program, and it may be more challenging for us to obtain a partnership on favorable terms as a result.

Because the results of preclinical testing and earlier clinical trials, and the results to date in various clinical trials, are not necessarily predictive of future results, Serenz may not have favorable results in later clinical trials or receive regulatory approval.

Success in preclinical testing and early clinical trials does not ensure that later clinical trials will generate adequate data to demonstrate the efficacy and safety of an investigational product. A number of companies in the pharmaceutical and biotechnology industries, including those with greater resources and experience, have suffered significant setbacks in clinical trials, even after seeing promising results in earlier clinical trials. Despite the results to date in the various clinical studies performed with Serenz, we do not know whether pivotal clinical trials, if the FDA requires they be conducted, will demonstrate adequate efficacy and safety to result in regulatory approval to market Serenz. Even if we, or a future partner, believe that the data is adequate to support an application for regulatory approval to market our planned products, the FDA or other applicable foreign regulatory authorities may not agree and may require additional clinical trials. If these subsequent clinical trials do not produce favorable results, regulatory approval for Serenz may not be achieved.

There can be no assurance that Serenz will not exhibit new or increased safety risks in subsequent clinical trials. In addition, preclinical and clinical data are often susceptible to varying interpretations and analyses, and many other companies that have believed their planned products performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain regulatory approval for the marketing of their products.

Delays in the enrollment of patients in any of our clinical studies could increase development costs and delay completion of the study.

We or any future collaboration partner may not be able to initiate or continue clinical studies for Serenz if we are unable to locate and enroll a sufficient number of eligible patients to participate in these studies as required by the FDA or other regulatory authorities. Even if a sufficient number of patients can be enrolled in clinical trials, if the pace of enrollment is slower than we expect, the development costs for our planned products may increase and the completion of our studies may be delayed, or the studies could become too expensive to complete.

If clinical studies of Serenz or any of our planned products fail to demonstrate safety and efficacy to the satisfaction of the FDA or similar regulatory authorities outside the U.S. or do not otherwise produce positive results, we may incur additional costs, experience delays in completing or ultimately fail in completing the development and commercialization of Serenz or our planned products.

Before obtaining regulatory approval for the sale of any planned product we must conduct extensive clinical studies to demonstrate the safety and efficacy of our planned products in humans. Clinical studies are expensive, difficult to design and implement, can take many years to complete and are uncertain as to outcome. A failure of one or more of our clinical studies could occur at any stage of testing.

Numerous unforeseen events during, or as a result of, clinical studies could occur, which would delay or prevent our ability to receive regulatory approval or commercialize Serenz or any of our planned products, including the following:

- clinical studies may produce negative or inconclusive results, and we may decide, or regulators may require us, to conduct additional clinical studies or abandon product development programs;

- the number of patients required for clinical studies may be larger than we anticipate, enrollment in these clinical studies may be insufficient or slower than we anticipate or patients may drop out of these clinical studies at a higher rate than we anticipate;

- the cost of clinical studies or the manufacturing of our planned products may be greater than we anticipate;
- third-party contractors may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we might have to suspend or terminate clinical studies of our planned products for various reasons, including a finding that our planned products have unanticipated serious side effects or other unexpected characteristics or that the patients are being exposed to unacceptable health risks;
- regulators may not approve our proposed clinical development plans;
- regulators or independent institutional review boards, or IRBs, may not authorize us or our investigators to commence a clinical study or conduct a clinical study at a prospective study site;
- regulators or IRBs may require that we or our investigators suspend or terminate clinical research for various reasons, including noncompliance with regulatory requirements; and
- the supply or quality of our planned products or other materials necessary to conduct clinical studies of our planned products may be insufficient or inadequate.

If we or any future collaboration partner are required to conduct additional clinical trials or other testing of Serenz or any planned products beyond those that we contemplate, those clinical studies or other testing cannot be successfully completed, if the results of these studies or tests are not positive or are only modestly positive or if there are safety concerns, we may:

- be delayed in obtaining marketing approval for our planned products;
- not obtain marketing approval at all;
- obtain approval for indications that are not as broad as intended;
- have the product removed from the market after obtaining marketing approval;
- be subject to additional post-marketing testing requirements; or
- be subject to restrictions on how the product is distributed or used.

Our product development costs will also increase if we experience delays in testing or approvals. We do not know whether any clinical studies will begin as planned, will need to be restructured or will be completed on schedule, or at all.

Significant clinical study delays also could shorten any periods during which we may have the exclusive right to commercialize our planned products or allow our competitors to bring products to market before we do, which would impair our ability to commercialize our planned products and harm our business and results of operations.

Even if subsequent clinical trials demonstrate acceptable safety and efficacy of Serenz for treatment of AR, the FDA or similar regulatory authorities outside the U.S. may not approve Serenz for marketing or may approve it with restrictions on the label, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

It is possible that the FDA or similar regulatory authorities may not consider the results of the clinical trials to be sufficient for approval of Serenz for this indication. In general, the FDA suggests that sponsors complete two

adequate and well-controlled clinical studies to demonstrate effectiveness because a conclusion based on two persuasive studies will be more compelling than a conclusion based on a single study. The FDA may nonetheless require that we may conduct additional clinical studies, possibly using a different clinical study design.

Moreover, even if the FDA or other regulatory authorities approve Serenz, the approval may include additional restrictions on the label that could make Serenz less attractive to physicians and patients compared to other products that may be approved for broader indications, which could limit potential sales of Serenz.

If we fail to obtain FDA or other regulatory approval of Serenz, or if the approval is narrower than what we seek, it could impair our ability to realize value from Serenz, and therefore may have a material adverse effect on our business, financial condition, results of operations and growth prospects.

Even if Serenz or any planned products receive regulatory approval, these products may fail to achieve the degree of market acceptance by physicians, patients, caregivers, healthcare payors and others in the medical community necessary for commercial success.

If Serenz or any planned products receive regulatory approval, they may nonetheless fail to gain sufficient market acceptance by physicians, hospital administrators, patients, healthcare payors and others in the medical community. The degree of market acceptance of our planned products, if approved for commercial sale, will depend on a number of factors, including the following:

- the prevalence and severity of any side effects;
- their efficacy and potential advantages compared to alternative treatments;
- the price we charge for our planned products;
- the willingness of physicians to change their current treatment practices;
- convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try new therapies and of physicians to prescribe these therapies;
- the strength of marketing and distribution support; and
- the availability of third-party coverage or reimbursement.

For example, a number of companies offer therapies for treatment of AR patients based on a daily regimen, and physicians, patients or their families may not be willing to change their current treatment practices in favor of Serenz even if it is able to offer additional efficacy or more attractive product attributes. If Serenz or any planned products, if approved, do not achieve an adequate level of acceptance, we may not generate significant product revenue and we may not become profitable on a sustained basis or at all.

We currently have no sales or distribution personnel and only limited marketing capabilities. If we are unable to develop a sales and marketing and distribution capability on our own or through collaborations or other marketing partners, we will not be successful in commercializing CoSense, Serenz, or other planned products.

We do not have a sales or marketing infrastructure and have no experience in the sale, marketing or distribution of diagnostic or therapeutic products. To achieve commercial success for any approved product, we must either develop a sales and marketing organization or outsource these functions to third parties. We intend to commercialize CoSense with our own specialty sales force in the U.S., Canada and potentially other geographies. If we obtain regulatory approval, we intend to commercialize Serenz through third-party partners or distributors.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force is expensive and time-consuming, and could delay any product launch. If the commercial launch of a planned product for which we recruit a sales force and establish marketing capabilities is delayed, or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition our sales and marketing personnel.

We also may not be successful entering into arrangements with third parties to sell and market our planned products or may be unable to do so on terms that are favorable to us. We likely will have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively and could damage our reputation. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our planned products.

We may attempt to form partnerships in the future with respect to Serenz or other future products, but we may not be able to do so, which may cause us to alter our development and commercialization plans, and may cause us to terminate the Serenz program.

We may form strategic alliances, create joint ventures or collaborations, or enter into licensing agreements with third parties that we believe will more effectively provide resources to develop and commercialize our programs. For example, we currently intend to identify one or more new partners or distributors for the commercialization of Serenz. We may also attempt to find one or more strategic partners for the development or commercialization of one or more of our other future products.

We face significant competition in seeking appropriate strategic partners, and the negotiation process to secure favorable terms is time-consuming and complex. In addition, the termination of our license agreement for Serenz with our former partner, may negatively impact the perception of Serenz held by other potential partners for the program. We may not be successful in our efforts to establish such a strategic partnership for any future products and programs on terms that are acceptable to us, or at all.

Any delays in identifying suitable collaborators and entering into agreements to develop or commercialize our future products could negatively impact the development or commercialization of our future products, particularly in geographic regions like the E.U., where we do not currently have development and commercialization infrastructure. Absent a partner or collaborator, we would need to undertake development or commercialization activities at our own expense. If we elect to fund and undertake development and commercialization activities on our own, we may need to obtain additional expertise and additional capital, which may not be available to us on acceptable terms or at all. If we are unable to do so, we may not be able to develop our future products or bring them to market, and our business may be materially and adversely affected.

Serenz or our planned products may cause serious adverse side effects or have other properties that could delay or prevent their regulatory approval, limit the commercial desirability of an approved label or result in significant negative consequences following any marketing approval.

The risk of failure of clinical development is high. It is impossible to predict when or if this or any planned products will prove safe enough to receive regulatory approval. Undesirable side effects caused by Serenz or any of our planned products could cause us or regulatory authorities to interrupt, delay or halt clinical trials They could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or other comparable foreign regulatory authority.

Additionally, if Serenz or any of our planned products receives marketing approval, and we or others later identify undesirable side effects caused by such product, a number of potentially significant negative consequences could result, including:

- we may be forced to recall such product and suspend the marketing of such product;

- regulatory authorities may withdraw their approvals of such product;
- regulatory authorities may require additional warnings on the label that could diminish the usage or otherwise limit the commercial success of such products;
- the FDA or other regulatory bodies may issue safety alerts, Dear Healthcare Provider letters, press releases or other communications containing warnings about such product;
- the FDA may require the establishment or modification of Risk Evaluation Mitigation Strategies or a comparable foreign regulatory authority may require the establishment or modification of a similar strategy that may, for instance, restrict distribution of our products and impose burdensome implementation requirements on us;
- we may be required to change the way the product is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to subjects or patients;
- we may be subject to litigation or product liability claims; and
- our reputation may suffer.

Any of these events could prevent us from achieving or maintaining market acceptance of the particular planned product, if approved.

We face competition, which may result in others discovering, developing or commercializing products before we do, or more successfully than we do.

Alternatives exist for CoSense and for Serenz, and we will likely face competition with respect to any planned products that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies, medical device companies, and biotechnology companies worldwide. There are several large pharmaceutical and biotechnology companies that currently market and sell AR therapies to our target patient group. These companies may reduce prices for their competing drugs in an effort to gain or retain market share, and undermine the value proposition that Serenz or CoSense might otherwise be able to offer to payors. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization. Many of these competitors are attempting to develop therapeutics for our target indications.

Smaller or early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified technical and management personnel, establishing clinical study sites and patient registration for clinical studies, as well as in acquiring technologies complementary to, or necessary for, our programs.

Even if we are able to commercialize CoSense, Serenz, or any planned products, or to obtain a partner to commercialize Serenz, the products may become subject to unfavorable pricing regulations, third-party reimbursement practices or healthcare reform initiatives, thereby harming our business.

The regulations that govern marketing approvals, pricing and reimbursement for new products vary widely from country to country. Some countries require approval of the sale price of a product before it can be marketed. In many countries, the pricing review period begins after marketing approval is granted. In some foreign markets, pricing remains subject to continuing governmental control even after initial approval is granted.

As a result, we might obtain regulatory approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product and negatively impact the revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more planned products, even if our planned products obtain regulatory approval.

Our ability to commercialize CoSense or any planned products successfully also will depend in part on the extent to which reimbursement for these products and related treatments becomes available from government health administration authorities, private health insurers and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and these third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. We cannot be sure that reimbursement will be available for any product that we commercialize and, if reimbursement is available, what the level of reimbursement will be. Reimbursement may impact the demand for, or the price of, any product for which we obtain marketing approval. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with products administered under the supervision of a physician. If reimbursement is not available or is available only to limited levels, we may not be able to successfully commercialize any planned product that we successfully develop.

While we expect payments for CoSense to be part of a Diagnosis-Related Group, or DRG, (also known as a bundled payment) we may have to obtain reimbursement for it from payors directly. There may be significant delays in obtaining reimbursement for CoSense, and coverage may be more limited than the purposes for which the product is approved by the FDA or regulatory authorities in other countries. Moreover, eligibility for reimbursement does not imply that any product will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale and distribution. Interim payments for new products, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Payment rates may vary according to the use of the product and the clinical setting in which it is used, may be based on payments allowed for lower cost products that are already reimbursed and may be incorporated into existing payments for other services. Net prices for products may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of products from countries where they may be sold at lower prices than in the U.S. Third-party payors often rely upon Medicare coverage policy and payment limitations in setting their own reimbursement policies. Our inability to promptly obtain coverage and profitable payment rates from both government funded and private payors for new products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition. In some foreign countries, including major markets in the E.U. and Japan, the pricing of prescription pharmaceuticals is subject to governmental control. In these countries, pricing negotiations with governmental authorities can take nine to twelve months or longer after the receipt of regulatory marketing approval for a product. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product to other available therapies. Our business could be materially harmed if reimbursement of CoSense, if any, is unavailable or limited in scope or amount or if pricing is set at unsatisfactory levels.

Similar risks apply to the reimbursement of Serenz.

Product liability lawsuits against us could cause us to incur substantial liabilities and to limit commercialization of any products that we may develop.

We face an inherent risk of product liability exposure related to the sale of CoSense and any planned products in human clinical studies. The marketing, sale and use of CoSense and our planned products could lead to the filing of product liability claims against us if someone alleges that our tests failed to perform as designed. We may also be subject to liability for a misunderstanding of, or inappropriate reliance upon, the information we

provide. If we cannot successfully defend ourselves against claims that CoSense or our planned products caused injuries, we may incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any planned products that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of patients from clinical studies or cancellation of studies;
- significant costs to defend the related litigation and distraction to our management team;
- substantial monetary awards to patients;
- loss of revenue; and
- the inability to commercialize any products that we may develop.

We currently hold $5.0 million in product liability insurance coverage, which may not be adequate to cover all liabilities that we may incur. Insurance coverage is increasingly expensive. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

The loss of key members of our executive management team could adversely affect our business.

Our success in implementing our business strategy depends largely on the skills, experience and performance of key members of our executive management team and others in key management positions, including Dr. Anish Bhatnagar, our Chief Executive Officer, Anthony Wondka, our Vice President of Research and Development and Antoun Nabhan, our Vice President of Corporate Development. The collective efforts of each of these persons, and others working with them as a team, are critical to us as we continue to develop our technologies, tests and research and development and sales programs. As a result of the difficulty in locating qualified new management, the loss or incapacity of existing members of our executive management team could adversely affect our operations. If we were to lose one or more of these key employees, we could experience difficulties in finding qualified successors, competing effectively, developing our technologies and implementing our business strategy. Our Chief Executive Officer, Vice President of Corporate Development and Vice President of Research and Development have employment agreements, however, the existence of an employment agreement does not guarantee retention of members of our executive management team and we may not be able to retain those individuals for the duration of or beyond the end of their respective terms. We do not maintain “key person” life insurance on any of our employees.

In addition, we rely on collaborators, consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our collaborators, consultants and advisors are generally employed by employers other than us and may have commitments under agreements with other entities that may limit their availability to us.

The loss of a key employee, the failure of a key employee to perform in his or her current position or our inability to attract and retain skilled employees could result in our inability to continue to grow our business or to implement our business strategy.

There is a scarcity of experienced professionals in our industry. If we are not able to retain and recruit personnel with the requisite technical skills, we may be unable to successfully execute our business strategy.

The specialized nature of our industry results in an inherent scarcity of experienced personnel in the field. Our future success depends upon our ability to attract and retain highly skilled personnel, including scientific, technical, commercial, business, regulatory and administrative personnel, necessary to support our anticipated growth, develop our business and perform certain contractual obligations. Given the scarcity of professionals with the scientific knowledge that we require and the competition for qualified personnel among life science businesses, we may not succeed in attracting or retaining the personnel we require to continue and grow our operations.

Our inability to attract, hire and retain a sufficient number of qualified sales professionals would hamper our ability to increase demand for CoSense, to expand geographically and to successfully commercialize any other products we may develop.

To succeed in selling CoSense and any other products that we are able to develop, we must develop a sales force in the U.S. and internationally by recruiting sales representatives with extensive experience in neonatology and close relationships with neonatologists, pediatricians, nurses, and other hospital personnel. To achieve our marketing and sales goals, we will need to build our sales and commercial infrastructure, with which to date we have had little experience. Sales professionals with the necessary technical and business qualifications are in high demand, and there is a risk that we may be unable to attract, hire and retain the number of sales professionals with the right qualifications, scientific backgrounds and relationships with decision-makers at potential customers needed to achieve our sales goals. We expect to face competition from other companies in our industry, some of whom are much larger than us and who can pay greater compensation and benefits than we can, in seeking to attract and retain qualified sales and marketing employees. If we are unable to hire and retain qualified sales and marketing personnel, our business will suffer.

We may encounter manufacturing problems or delays that could result in lost revenue. Additionally, we currently rely on third-party suppliers for critical materials needed to manufacture CoSense instruments and consumables, as well as our planned products. Any problems experienced by these suppliers could result in a delay or interruption of their supply to us, and as a result, we may face delays in the commercialization of CoSense or the development and commercialization of planned products.

We perform final assembly of CoSense instruments and consumables at our facility in Redwood City, CA. We believe that we currently have adequate manufacturing capacity. If demand for our current products and our planned products increases significantly, we will need to either expand our manufacturing capabilities or outsource to other manufacturers. We currently have limited experience in commercial-scale manufacturing of our planned products, and we currently rely upon third-party contract manufacturing organizations to manufacture and supply components for our CoSense instrument and consumables. The manufacture of these products in compliance with the FDA's regulations requires significant expertise and capital investment, including the development of advanced manufacturing techniques and process controls. Manufacturers of medical device products often encounter difficulties in production, including difficulties with production costs and yields, quality control, quality assurance testing, shortages of qualified personnel, as well as compliance with strictly enforced FDA requirements, other federal and state regulatory requirements, and foreign regulations.

We currently purchase components for the CoSense instruments and consumables under purchase orders and do not have long-term contracts with most of the suppliers of these materials. If suppliers were to delay or stop producing our components, or if the prices they charge us were to increase significantly, or if they elected not to sell to us, we would need to identify other suppliers. We could experience delays in manufacturing the instruments or consumables while finding another acceptable supplier, which could impact our results of operations. The changes could also result in increased costs associated with qualifying the new materials or reagents and in increased operating costs. Further, any prolonged disruption in a supplier's operations could have

a significant negative impact on our ability to manufacture and deliver products in a timely manner. Some of the components used in our CoSense are currently sole-source, and substitutes for these components might not be able to be obtained easily or may require substantial design or manufacturing modifications. Any significant problem experienced by one of our sole source suppliers may result in a delay or interruption in the supply of components to us because the number of third-party manufacturers with the necessary manufacturing and regulatory expertise and facilities is limited. Any delay or interruption would likely lead to a delay or interruption in our manufacturing operations. The inclusion of substitute components must meet our product specifications and could require us to qualify the new supplier with the appropriate government regulatory authorities. It could be expensive and take a significant amount of time to arrange for alternative suppliers, which could have a material adverse effect on our business. New manufacturers of any planned product would be required to qualify under applicable regulatory requirements and would need to have sufficient rights under applicable intellectual property laws to the method of manufacturing the planned product. Obtaining the necessary FDA approvals or other qualifications under applicable regulatory requirements and ensuring non-infringement of third-party intellectual property rights could result in a significant interruption of supply and could require the new manufacturer to bear significant additional costs that may be passed on to us.

We may acquire other businesses or form joint ventures or make investments in other companies or technologies that could harm our operating results, dilute our stockholders' ownership, increase our debt or cause us to incur significant expense.

As part of our business strategy, we may pursue acquisitions or licenses of assets or acquisitions of businesses. We also may pursue strategic alliances and joint ventures that leverage our core technology and industry experience to expand our product offerings or sales and distribution resources. Our company has limited experience with acquiring other companies, acquiring or licensing assets or forming strategic alliances and joint ventures. We may not be able to find suitable partners or acquisition candidates, and we may not be able to complete such transactions on favorable terms, if at all. If we make any acquisitions, we may not be able to integrate these acquisitions successfully into our existing business, and we could assume unknown or contingent liabilities. Any future acquisitions also could result in significant write-offs or the incurrence of debt and contingent liabilities, any of which could have a material adverse effect on our financial condition, results of operations and cash flows. Integration of an acquired company also may disrupt ongoing operations and require management resources that would otherwise focus on developing our existing business. We may experience losses related to investments in other companies, which could have a material negative effect on our results of operations. We may not identify or complete these transactions in a timely manner, on a cost-effective basis, or at all, and we may not realize the anticipated benefits of any acquisition, license, strategic alliance or joint venture. To finance such a transaction we may choose to issue shares of our common stock as consideration, which would dilute the ownership of our stockholders. If the price of our common stock is low or volatile, we may not be able to acquire other companies or fund a joint venture project using our stock as consideration. Alternatively, it may be necessary for us to raise additional funds for acquisitions through public or private financings. Additional funds may not be available on terms that are favorable to us, or at all.

International expansion of our business will expose us to business, regulatory, political, operational, financial and economic risks associated with doing business outside of the U.S.

Our business strategy contemplates international expansion, including partnering with medical device distributors, and introducing CoSense and other planned products outside the U.S. Doing business internationally involves a number of risks, including:

- multiple, conflicting and changing laws and regulations such as tax laws, export and import restrictions, employment laws, regulatory requirements and other governmental approvals, permits and licenses;

- potential failure by us or our distributors to obtain regulatory approvals for the sale or use of our current test and our planned future tests in various countries;

- difficulties in managing foreign operations;
- complexities associated with managing government payor systems, multiple payor-reimbursement regimes or self-pay systems;
- logistics and regulations associated with shipping products, including infrastructure conditions and transportation delays;
- limits on our ability to penetrate international markets if our distributors do not execute successfully;
- financial risks, such as longer payment cycles, difficulty enforcing contracts and collecting accounts receivable, and exposure to foreign currency exchange rate fluctuations;
- reduced protection for intellectual property rights, or lack of them in certain jurisdictions, forcing more reliance on our trade secrets, if available;
- natural disasters, political and economic instability, including wars, terrorism and political unrest, outbreak of disease, boycotts, curtailment of trade and other business restrictions; and
- failure to comply with the Foreign Corrupt Practices Act, including its books and records provisions and its anti-bribery provisions, by maintaining accurate information and control over sales activities and distributors' activities.

Any of these risks, if encountered, could significantly harm our future international expansion and operations and, consequently, have a material adverse effect on our financial condition, results of operations and cash flows.

Intrusions into our computer systems could result in compromise of confidential information.

The diagnostic accuracy of CoSense depends, in part, on the function of software run by the microprocessors embedded in the device. This software is proprietary to us. While we have made efforts to test the software extensively, it is potentially subject to malfunction. It may be vulnerable to physical break-ins, hackers, improper employee or contractor access, computer viruses, programming errors, or similar problems. Any of these might result in confidential medical, business or other information of other persons or of ourselves being revealed to unauthorized persons.

The CoSense device also stores test results, a feature which assists medical professionals in interfacing the device with electronic medical records systems. There are a number of state, federal and international laws protecting the privacy and security of health information and personal data. As part of the American Recovery and Reinvestment Act 2009, or ARRA, Congress amended the privacy and security provisions of the Health Insurance Portability and Accountability Act, or HIPAA. HIPAA imposes limitations on the use and disclosure of an individual's healthcare information by healthcare providers, healthcare clearinghouses, and health insurance plans, collectively referred to as covered entities. The HIPAA amendments also impose compliance obligations and corresponding penalties for non-compliance on individuals and entities that provide services to healthcare providers and other covered entities, collectively referred to as business associates. ARRA also made significant increases in the penalties for improper use or disclosure of an individual's health information under HIPAA and extended enforcement authority to state attorneys general. The amendments also create notification requirements for individuals whose health information has been inappropriately accessed or disclosed: notification requirements to federal regulators and in some cases, notification to local and national media. Notification is not required under HIPAA if the health information that is improperly used or disclosed is deemed secured in accordance with encryption or other standards developed by the U.S. Department of Health and Human Services, or HHS. Most states have laws requiring notification of affected individuals and state regulators in the event of a breach of personal information, which is a broader class of information than the health

information protected by HIPAA. Many state laws impose significant data security requirements, such as encryption or mandatory contractual terms to ensure ongoing protection of personal information. Activities outside of the U.S. implicate local and national data protection standards, impose additional compliance requirements and generate additional risks of enforcement for non-compliance. We may be required to expend significant capital and other resources to ensure ongoing compliance with applicable privacy and data security laws, to protect against security breaches and hackers or to alleviate problems caused by such breaches.

Risks related to the operation of our business

Any future distribution or commercialization agreements we may enter into for CoSense, Serenz, or any other planned product, may place the development of these products outside our control, may require us to relinquish important rights, or may otherwise be on terms unfavorable to us.

We may enter into additional distribution or commercialization agreements with third parties with respect to CoSense, to Serenz, or with respect to planned products, for commercialization in or outside the U.S. Our likely collaborators for any distribution, marketing, licensing or other collaboration arrangements include large and mid-size medical device and diagnostic companies, regional and national medical device and diagnostic companies, and distribution or group purchasing organizations. We will have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of our planned products. Our ability to generate revenue from these arrangements will depend in part on our collaborators' abilities to successfully perform the functions assigned to them in these arrangements.

Collaborations involving our planned products are subject to numerous risks, which may include the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to any such collaborations;
- collaborators may not pursue development and commercialization of CoSense or our other planned products, or may elect not to continue or renew efforts based on clinical study results, changes in their strategic focus for a variety of reasons, potentially including the acquisition of competitive products, availability of funding, and mergers or acquisitions that divert resources or create competing priorities;
- collaborators may delay clinical studies, provide insufficient funding for a clinical study program, stop a clinical study, abandon a planned product, repeat or conduct new clinical studies or require a new engineering iterations of a planned product for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or planned products;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to their marketing and distribution;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that causes the delay or termination of the research, development or commercialization of our planned products or that results in costly litigation or arbitration that diverts management attention and resources;

- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable planned products; and

- collaborators may own or co-own intellectual property covering our products that results from our collaborating with them, and in such cases, we would not have the exclusive right to commercialize such intellectual property.

Any termination or disruption of collaborations could result in delays in the development of planned products, increases in our costs to develop the planned products or the termination of development of a planned product.

Our future success depends on our ability to retain our chief executive officer and other key executives and to attract, retain and motivate qualified personnel.

We are highly dependent on our chief executive officer and the other principal members of our executive team. Under the terms of their employment, our executives may terminate their employment with us at any time. The loss of the services of any of these people could impede the achievement of our research, development and commercialization objectives.

Recruiting and retaining qualified scientific, clinical, manufacturing and sales and marketing personnel will also be critical to our success. We may not be able to attract and retain these personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions. In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us.

We expect to expand our development, regulatory and sales and marketing capabilities, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

As of May 31, 2014, we had six employees and seven full-time or part-time consultants. Over the next several years, we expect to experience significant growth in the number of our employees and the scope of our operations, particularly in the areas of engineering, product development, regulatory affairs and sales and marketing. To manage our anticipated future growth, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion of our operations or recruit and train additional qualified personnel. The physical expansion of our operations may lead to significant costs and may divert our management and business development resources. Future growth would impose significant added responsibilities on members of management, including:

- managing our clinical trials effectively, which we anticipate being conducted at numerous clinical sites;

- identifying, recruiting, maintaining, motivating and integrating additional employees with the expertise and experience we will require;

- managing our internal development efforts effectively while complying with our contractual obligations to licensors, licensees, contractors and other third parties;

- managing additional relationships with various strategic partners, suppliers and other third parties;

- improving our managerial, development, operational and finance reporting systems and procedures; and
- expanding our facilities.

Our failure to accomplish any of these tasks could prevent us from successfully growing. Any inability to manage growth could delay the execution of our business plans or disrupt our operations.

Because we intend to commercialize CoSense outside the U.S., we will be subject to additional risks.

A variety of risks associated with international operations could materially adversely affect our business, including:

- different regulatory requirements for device approvals in foreign countries;
- reduced protection for intellectual property rights;
- unexpected changes in tariffs, trade barriers and regulatory requirements;
- economic weakness, including inflation or political instability in particular foreign economies and markets;
- compliance with tax, employment, immigration and labor laws for employees living or traveling abroad;
- foreign taxes, including withholding of payroll taxes;
- foreign currency fluctuations, which could result in increased operating expenses and reduced revenue, and other obligations incident to doing business in another country;
- workforce uncertainty in countries where labor unrest is more common than in the U.S.;
- production shortages resulting from any events affecting raw material supply or manufacturing capabilities abroad; and
- business interruptions resulting from geopolitical actions, including war and terrorism, or natural disasters including earthquakes, typhoons, floods and fires.

We rely on third parties to conduct certain components of our clinical studies, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such studies.

We rely on third parties, such as contract research organizations, or CROs, clinical data management organizations, medical institutions and clinical investigators, to perform various functions for our clinical trials. Our reliance on these third parties for clinical development activities reduces our control over these activities but does not relieve us of our responsibilities. We remain responsible for ensuring that each of our clinical studies is conducted in accordance with the general investigational plan and protocols for the study. Moreover, the FDA requires us to comply with standards, commonly referred to as good clinical practices, for conducting, recording and reporting the results of clinical studies to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of patients in clinical studies are protected. Furthermore, these third parties may also have relationships with other entities, some of which may be our competitors. If these third parties do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical studies in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, regulatory approvals for our planned products and will not be able to, or may be delayed in our efforts to, successfully commercialize our planned products.

If we use biological and hazardous materials in a manner that causes injury, we could be liable for damages.

Our manufacturing processes currently require the controlled use of potentially harmful chemicals. We cannot eliminate the risk of accidental contamination or injury to employees or third parties from the use, storage, handling or disposal of these materials. In the event of contamination or injury, we could be held liable for any resulting damages, and any liability could exceed our resources or any applicable insurance coverage we may have. Additionally, we are subject to, on an ongoing basis, federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products. These are particularly stringent in California, where our manufacturing facility and several suppliers are located. The cost of compliance with these laws and regulations may become significant and could have a material adverse effect on our financial condition, results of operations and cash flows. In the event of an accident or if we otherwise fail to comply with applicable regulations, we could lose our permits or approvals or be held liable for damages or penalized with fines.

Risks related to intellectual property

Third parties may initiate legal proceedings alleging that we are infringing their intellectual property rights, the outcome of which would be uncertain and could have a material adverse effect on the success of our business.

Patent litigation is prevalent in the medical device and diagnostic sectors. Our commercial success depends upon our ability and the ability of our distributors, contract manufacturers, and suppliers to manufacture, market, and sell our planned products, and to use our proprietary technologies without infringing, misappropriating or otherwise violating the proprietary rights or intellectual property of third parties. We may become party to, or be threatened with, future adversarial proceedings or litigation regarding intellectual property rights with respect to our products and technology. Third parties may assert infringement claims against us based on existing or future intellectual property rights. If we are found to infringe a third-party's intellectual property rights, we could be required to obtain a license from such third-party to continue developing and marketing our products and technology. We may also elect to enter into such a license in order to settle pending or threatened litigation. However, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us, and could require us to pay significant royalties and other fees. We could be forced, including by court order, to cease commercializing the infringing technology or product. In addition, we could be found liable for monetary damages. A finding of infringement could prevent us from commercializing our planned products or force us to cease some of our business operations, which could materially harm our business. Many of our employees were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such employee's former employer. These and other claims that we have misappropriated the confidential information or trade secrets of third parties can have a similar negative impact on our business to the infringement claims discussed above.

Even if we are successful in defending against intellectual property claims, litigation or other legal proceedings relating to such claims may cause us to incur significant expenses, and could distract our technical and management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce our resources available for development activities. We may not have sufficient financial or other resources to adequately conduct such litigation or proceedings. Some of our competitors may be able to sustain the costs of

such litigation or proceedings more effectively than we can because of their substantially greater financial resources. Uncertainties resulting from the initiation and continuation of litigation or other intellectual property related proceedings could have a material adverse effect on our ability to compete in the marketplace.

If we fail to comply with our obligations in our intellectual property agreements, we could lose intellectual property rights that are important to our business.

We are a party to intellectual property arrangements and expect that our future license agreements will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, any licensor may have the right to terminate such agreements, in which event we may not be able to develop and market any product that is covered by such agreements. For example, we entered into an asset purchase agreement with BDDI on May 11, 2010, pursuant to which we have ongoing payment obligations relating to CoSense. A breach of this agreement would therefore materially adversely affect our ability to commercialize CoSense as currently planned. BDDI has the right to terminate the agreement upon 60 days' written notice in the event that we fail to make any royalty payment when due and do not remedy such failure after notice. Termination of this agreement, or reduction or elimination of our rights under it or any other agreement, may result in our having to negotiate new or reinstated arrangements on less favorable terms, or our not having sufficient intellectual property rights to operate our business. The occurrence of such events could materially harm our business and financial condition.

The risks described elsewhere pertaining to our intellectual property rights also apply to any intellectual property rights that we may license, and any failure by us or any future licensor to obtain, maintain, defend and enforce these rights could have a material adverse effect on our business.

Our ability to successfully commercialize our technology and products may be materially adversely affected if we are unable to obtain and maintain effective intellectual property rights for our technologies and planned products, or if the scope of the intellectual property protection is not sufficiently broad.

Our success depends in large part on our ability to obtain and maintain patent and other intellectual property protection in the U.S. and in other countries with respect to our proprietary technology and products.

The patent position of medical device and diagnostic companies generally is highly uncertain and involves complex legal and factual questions for which legal principles remain unresolved. In recent years patent rights have been the subject of significant litigation. As a result, the issuance, scope, validity, enforceability and commercial value of the patent rights we rely on are highly uncertain. Pending and future patent applications may not result in patents being issued which protect our technology or products or which effectively prevent others from commercializing competitive technologies and products. Changes in either the patent laws or interpretation of the patent laws in the U.S. and other countries may diminish the value of the patents we rely on or narrow the scope of our patent protection. The laws of foreign countries may not protect our rights to the same extent as the laws of the U.S. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the U.S. and other jurisdictions are typically not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patents or pending patent applications, or that we or were the first to file for patent protection of such inventions.

Even if the patent applications we rely on issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. The issuance of a patent is not conclusive as to its scope, validity or enforceability, and the patents we rely on may be challenged in the courts or patent offices in the U.S. and abroad. Such challenges may result in patent claims being narrowed, invalidated or held unenforceable, which could limit our ability to stop or prevent us from stopping others from using or

commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products. Given the amount of time required for the development, testing and regulatory review of new planned products, patents protecting such products might expire before or shortly after such products are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours or otherwise provide us with a competitive advantage.

We may become involved in legal proceedings to protect or enforce our intellectual property rights, which could be expensive, time-consuming, or unsuccessful.

Competitors may infringe or otherwise violate the patents we rely on, or our other intellectual property rights. To counter infringement or unauthorized use, we may be required to file infringement claims, which can be expensive and time-consuming. Any claims that we assert against perceived infringers could also provoke these parties to assert counterclaims against us alleging that we infringe their intellectual property rights. In addition, in an infringement proceeding, a court may decide that a patent we are asserting is invalid or unenforceable, or may refuse to stop the other party from using the technology at issue on the grounds that the patents we are asserting do not cover the technology in question. An adverse result in any litigation proceeding could put one or more patents at risk of being invalidated or interpreted narrowly. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation.

Interference or derivation proceedings provoked by third parties or brought by the U.S. Patent and Trademark Office, or USPTO, or any foreign patent authority may be necessary to determine the priority of inventions or other matters of inventorship with respect to patents and patent applications. We may become involved in proceedings, including oppositions, interferences, derivation proceedings inter partes reviews, patent nullification proceedings, or re-examinations, challenging our patent rights or the patent rights of others, and the outcome of any such proceedings are highly uncertain. An adverse determination in any such proceeding could reduce the scope of, or invalidate, important patent rights, allow third parties to commercialize our technology or products and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize products without infringing third-party patent rights. Our business also could be harmed if a prevailing party does not offer us a license on commercially reasonable terms, if any license is offered at all. Litigation or other proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. We may also become involved in disputes with others regarding the ownership of intellectual property rights. If we are unable to resolve these disputes, we could lose valuable intellectual property rights.

Even if resolved in our favor, litigation or other legal proceedings relating to intellectual property claims may cause us to incur significant expenses, and could distract our technical or management personnel from their normal responsibilities. In addition, there could be public announcements of the results of hearings, motions or other interim proceedings or developments and if securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the market price of our common stock. Such litigation or proceedings could substantially increase our operating losses and reduce the resources available for development activities or any future sales, marketing or distribution activities. Uncertainties resulting from the initiation and continuation of intellectual property litigation or other proceedings could have a material adverse effect on our ability to compete in the marketplace.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected, harming our business and competitive position.

In addition to our patented technology and products, we rely upon confidential proprietary information, including trade secrets, unpatented know-how, technology and other proprietary information, to develop and maintain our competitive position. Any disclosure to or misappropriation by third parties of our confidential proprietary information could enable competitors to quickly duplicate or surpass our technological achievements,

thus eroding our competitive position in the market. We seek to protect our confidential proprietary information, in part, by confidentiality agreements with our employees and our collaborators and consultants. We also have agreements with our employees and selected consultants that obligate them to assign their inventions to us. These agreements are designed to protect our proprietary information, however, we cannot be certain that our trade secrets and other confidential information will not be disclosed or that competitors will not otherwise gain access to our trade secrets, or that technology relevant to our business will not be independently developed by a person that is not a party to such an agreement. Furthermore, if the employees, consultants or collaborators that are parties to these agreements breach or violate the terms of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets through such breaches or violations. Further, our trade secrets could be disclosed, misappropriated or otherwise become known or be independently discovered by our competitors. In addition, intellectual property laws in foreign countries may not protect trade secrets and confidential information to the same extent as the laws of the U.S. If we are unable to prevent disclosure of the intellectual property related to our technologies to third parties, we may not be able to establish or maintain a competitive advantage in our market, which would harm our ability to protect our rights and have a material adverse effect on our business.

We may not be able to protect or enforce our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on all of our planned products throughout the world would be prohibitively expensive to us. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and, further, may export otherwise infringing products to territories where we have patent protection but where enforcement is not as strong as in the U.S. These products may compete with our products in jurisdictions where we do not have any issued patents and our patent claims or other intellectual property rights may not be effective or sufficient to prevent them from so competing. Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents and other intellectual property protection, particularly those relating to biopharmaceuticals, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Intellectual property rights do not necessarily address all potential threats to our competitive advantage.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business or permit us to maintain our competitive advantage. The following examples are illustrative:

- Others may be able to make products that are similar to CoSense or other planned products, but that are not covered by claims in our patents;
- The original filers of the patents we purchased from BDDI might not have been the first to make the inventions covered by the claims contained in such patents;
- We might not have been the first to file patent applications covering an invention;
- Others may independently develop similar or alternative technologies or duplicate any of our technologies without infringing our intellectual property rights;
- Pending patent applications may not lead to issued patents;
- Issued patents may not provide us with any competitive advantages, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;

- Our competitors might conduct research and development activities in countries where we do not have patent rights and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;

- We may not develop or in-license additional proprietary technologies that are patentable; and

- The patents of others may have an adverse effect on our business.

Should any of these events occur, they could significantly harm our business, results of operations and prospects.

Obtaining and maintaining patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents or applications will be due to be paid by us to the USPTO and various governmental patent agencies outside of the U.S. in several stages over the lifetime of the patents or applications. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. In many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which noncompliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to use our technologies and this circumstance would have a material adverse effect on our business.

Recent patent reform legislation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of our issued patents.

In March 2013, under the recently enacted America Invents Act, or AIA, the U.S. moved to a first-to-file system and made certain other changes to its patent laws. The effects of these changes are currently unclear as the USPTO must still implement various regulations, the courts have yet to address these provisions and the applicability of the act and new regulations on specific patents discussed herein have not been determined and would need to be reviewed. Accordingly, it is not yet clear what, if any, impact the AIA will have on the operation of our business. However, the AIA and its implementation could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents, all of which could have a material adverse effect on our business and financial condition.

If we do not obtain a patent term extension in the U.S. under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the term of our marketing exclusivity for our planned products, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our products, if any, one or more of the U.S. patents covering any such approved product(s) or the use thereof may be eligible for up to five years of patent term restoration under the Hatch-Waxman Act. The Hatch-Waxman Act allows a maximum of one patent to be extended per FDA approved product. Patent term extension also may be available in certain foreign countries upon regulatory approval of our planned products. Nevertheless, we may not be granted patent term extension either in the U.S. or in any foreign country because of, for example, our failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents, or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than we request.

If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than requested, the period during which we will have the right to exclusively market our product will be

shortened and our competitors may obtain approval of competing products following our patent expiration, and our revenue could be reduced, possibly materially.

Risks related to government regulation

The regulatory approval process is expensive, time consuming and uncertain, and may prevent us from obtaining approvals for the commercialization of Serenz or our planned products.

The research, testing, manufacturing, labeling, approval, selling, import, export, marketing and distribution of medical devices are subject to extensive regulation by the FDA and other regulatory authorities in the U.S. and other countries, which regulations differ from country to country. We are not permitted to market our planned products in the U.S. until we received the requisite approval or clearance from the FDA. We have not submitted an application or received marketing approval for Serenz or any planned products. Obtaining PMA or 510(k) clearance for a medical device from the FDA can be a lengthy, expensive and uncertain process. In addition, failure to comply with FDA and other applicable U.S. and foreign regulatory requirements may subject us to administrative or judicially imposed sanctions, including the following:

- warning letters;
- civil or criminal penalties and fines;
- injunctions;
- suspension or withdrawal of regulatory approval;
- suspension of any ongoing clinical studies;
- voluntary or mandatory product recalls and publicity requirements;
- refusal to accept or approve applications for marketing approval of new drugs or biologics or supplements to approved applications filed by us;
- restrictions on operations, including costly new manufacturing requirements; or
- seizure or detention of our products or import bans.

Prior to receiving approval to commercialize any of our planned products in the U.S. or abroad, we may be required to demonstrate with substantial evidence from well-controlled clinical studies, and to the satisfaction of the FDA and other regulatory authorities abroad, that such planned products are safe and effective for their intended uses. Results from preclinical studies and clinical studies can be interpreted in different ways. Even if we believe the preclinical or clinical data for our planned products are promising, such data may not be sufficient to support approval by the FDA and other regulatory authorities. Administering any of our planned products to humans may produce undesirable side effects, which could interrupt, delay or cause suspension of clinical studies of our planned products and result in the FDA or other regulatory authorities denying approval of our planned products for any or all targeted indications.

Regulatory approval from the FDA is not guaranteed, and the approval process is expensive and may take several years. The FDA also has substantial discretion in the approval process. Despite the time and expense exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon or repeat clinical studies, or perform additional preclinical studies and clinical studies. The number of preclinical studies and clinical studies that will be required for FDA approval varies depending on the planned product, the disease

or condition that the planned product is designed to address and the regulations applicable to any particular planned product. The FDA can delay, limit or deny approval of a planned product for many reasons, including, but not limited to, the following:

- a planned product may not be deemed safe or effective;
- FDA officials may not find the data from preclinical studies and clinical studies sufficient;
- the FDA might not approve our or our third-party manufacturer's processes or facilities; or
- the FDA may change its approval policies or adopt new regulations.

If Serenz or any planned products fail to demonstrate safety and efficacy in clinical studies or do not gain regulatory approval, our business and results of operations will be materially and adversely harmed.

Even if we receive regulatory approval for a planned product, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and subject us to penalties if we fail to comply with applicable regulatory requirements.

Once regulatory approval has been obtained, the approved product and its manufacturer are subject to continual review by the FDA or non-U.S. regulatory authorities. Our regulatory approval for CoSense, as well as any regulatory approval that we receive for Serenz or for any planned products may be subject to limitations on the indicated uses for which the product may be marketed. Future approvals may contain requirements for potentially costly post-marketing follow-up studies to monitor the safety and efficacy of the approved product. In addition, we are subject to extensive and ongoing regulatory requirements by the FDA and other regulatory authorities with regard to the labeling, packaging, adverse event reporting, storage, advertising, promotion and recordkeeping for our products. In addition, we are required to comply with cGMP regulations regarding the manufacture of Serenz, which include requirements related to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Further, regulatory authorities must approve these manufacturing facilities before they can be used to manufacture drug products, and these facilities are subject to continual review and periodic inspections by the FDA and other regulatory authorities for compliance with cGMP regulations. If we or a third party discover previously unknown problems with a product, such as adverse events of unanticipated severity or frequency, or problems with the facility where the product is manufactured, a regulatory authority may impose restrictions on that product, the manufacturer or us, including requiring withdrawal of the product from the market or suspension of manufacturing.

Failure to obtain regulatory approvals in foreign jurisdictions will prevent us from marketing our products internationally.

We intend to seek a distribution and marketing partner for CoSense outside the U.S. and may market planned products in international markets. We have obtained a CE Mark for CoSense and is therefore authorized for sale in the E.U.; however, in order to market our planned products in regions such as the Asia Pacific and many other foreign jurisdictions, we must obtain separate regulatory approvals.

We have had limited interactions with foreign regulatory authorities. The approval procedures vary among countries and can involve additional clinical testing, and the time required to obtain approval may differ from that required to obtain FDA approval. Moreover, clinical studies or manufacturing processes conducted in one country may not be accepted by regulatory authorities in other countries. Approval by the FDA does not ensure approval by regulatory authorities in other countries, and approval by one or more foreign regulatory authorities does not ensure approval by regulatory authorities in other foreign countries or by the FDA. However, a failure or delay in obtaining regulatory approval in one country may have a negative effect on the regulatory process in others. The foreign regulatory approval process may include all of the risks associated with obtaining

FDA approval. We may not obtain foreign regulatory approvals on a timely basis, if at all. We may not be able to file for regulatory approvals and even if we file we may not receive necessary approvals to commercialize our products in any market.

Healthcare reform measures could hinder or prevent our planned products' commercial success.

In the U.S., there have been, and we expect there will continue to be, a number of legislative and regulatory changes to the healthcare system in ways that could affect our future revenue and profitability and the future revenue and profitability of our potential customers. Federal and state lawmakers regularly propose and, at times, enact legislation that would result in significant changes to the healthcare system, some of which are intended to contain or reduce the costs of medical products and services. For example, one of the most significant healthcare reform measures in decades, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or PPACA, was enacted in 2010. The PPACA contains a number of provisions, including those governing enrollment in federal healthcare programs, reimbursement changes and fraud and abuse measures, all of which will impact existing government healthcare programs and will result in the development of new programs. The PPACA, among other things:

- imposes a tax of 2.3% on the retail sales price of medical devices sold after December 31, 2012.
- could result in the imposition of injunctions;
- requires collection of rebates for drugs paid by Medicaid managed care organizations; and
- requires manufacturers to participate in a coverage gap discount program, under which they must agree to offer 50% point-of-sale discounts off negotiated prices of applicable branded drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

While the U.S. Supreme Court upheld the constitutionality of most elements of the PPACA in June 2012, other legal challenges are still pending final adjudication in several jurisdictions. In addition, Congress has also proposed a number of legislative initiatives, including possible repeal of the PPACA. At this time, it remains unclear whether there will be any changes made to the PPACA, whether to certain provisions or its entirety. At this time, we believe the 2.3% tax on sales of medical devices will be applicable to sales of CoSense devices, and may be applicable to CoSense consumables and Serenz devices. We cannot assure you that the PPACA, as currently enacted or as amended in the future, will not adversely affect our business and financial results and we cannot predict how future federal or state legislative or administrative changes relating to healthcare reform will affect our business.

In addition, other legislative changes have been proposed and adopted since the PPACA was enacted. For example, the Budget Control Act of 2011, among other things, created the Joint Select Committee on Deficit Reduction to recommend proposals for spending reductions to Congress. The Joint Select Committee did not achieve a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, which triggered the legislation's automatic reduction to several government programs, including aggregate reductions to Medicare payments to providers of up to 2% per fiscal year, starting in 2013. In January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, or the ATRA, which delayed for another two months the budget cuts mandated by the sequestration provisions of the Budget Control Act of 2011. The ATRA, among other things, also reduced Medicare payments to several providers, including hospitals, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. In March 2013, the President signed an executive order implementing sequestration, and in April 2013, the 2% Medicare reductions went into effect. We cannot predict whether any additional legislative changes will affect our business.

There likely will continue to be legislative and regulatory proposals at the federal and state levels directed at containing or lowering the cost of health care. We cannot predict the initiatives that may be adopted in

the future or their full impact. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of health care may adversely affect:

- our ability to set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability; and
- the availability of capital.

Further, changes in regulatory requirements and guidance may occur and we may need to amend clinical study protocols to reflect these changes. Amendments may require us to resubmit our clinical study protocols IRBs for reexamination, which may impact the costs, timing or successful completion of a clinical study. In light of widely publicized events concerning the safety risk of certain drug products, regulatory authorities, members of Congress, the Governmental Accounting Office, medical professionals and the general public have raised concerns about potential drug safety issues. These events have resulted in the recall and withdrawal of drug products, revisions to drug labeling that further limit use of the drug products and establishment of risk management programs that may, for instance, restrict distribution of drug products or require safety surveillance or patient education. The increased attention to drug safety issues may result in a more cautious approach by the FDA to clinical studies and the drug approval process. Data from clinical studies may receive greater scrutiny with respect to safety, which may make the FDA or other regulatory authorities more likely to terminate or suspend clinical studies before completion, or require longer or additional clinical studies that may result in substantial additional expense and a delay or failure in obtaining approval or approval for a more limited indication than originally sought.

Given the serious public health risks of high profile adverse safety events with certain drug products, the FDA may require, as a condition of approval, costly risk evaluation and mitigation strategies, which may include safety surveillance, restricted distribution and use, patient education, enhanced labeling, special packaging or labeling, expedited reporting of certain adverse events, preapproval of promotional materials and restrictions on direct-to-consumer advertising.

If we fail to comply with healthcare regulations, we could face substantial penalties and our business, operations and financial condition could be adversely affected.

Even though we do not and will not control referrals of healthcare services or bill directly to Medicare, Medicaid or other third-party payors, certain federal and state healthcare laws and regulations pertaining to fraud and abuse and patients' rights are and will be applicable to our business. We could be subject to healthcare fraud and abuse and patient privacy regulation by both the federal government and the states in which we conduct our business. The regulations that may affect our ability to operate include, without limitation:

- the federal healthcare program Anti-Kickback Statute, which prohibits, among other things, any person from knowingly and willfully offering, soliciting, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual for, or the purchase, order or recommendation of, any good or service for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs;
- indirectly, to induce either the referral of an individual, for an item or service or the purchasing or ordering of a good or service, for which payment may be made under federal healthcare programs, such as the Medicare and Medicaid programs;
- the federal False Claims Act, which prohibits, among other things, individuals or entities from knowingly presenting, or causing to be presented, false claims, or knowingly using false statements, to obtain payment from the federal government, and which may apply to entities like us which provide coding and billing advice to customers;

- federal criminal laws that prohibit executing a scheme to defraud any healthcare benefit program or making false statements relating to healthcare matters;

- the federal transparency requirements under the Health Care Reform Law requires manufacturers of drugs, devices, biologics and medical supplies to report to the Department of Health and Human Services information related to physician payments and other transfers of value and physician ownership and investment interests;

- the federal Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, which governs the conduct of certain electronic healthcare transactions and protects the security and privacy of protected health information; and

- state law equivalents of each of the above federal laws, such as anti-kickback and false claims laws which may apply to items or services reimbursed by any third-party payor, including commercial insurers.

The PPACA, among other things, amends the intent requirement of the Federal Anti-Kickback Statute and criminal healthcare fraud statutes. A person or entity no longer needs to have actual knowledge of this statute or specific intent to violate it. In addition, the PPACA provides that the government may assert that a claim including items or services resulting from a violation of the Federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act.

If our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines and the curtailment or restructuring of our operations. Any penalties, damages, fines, curtailment or restructuring of our operations could adversely affect our ability to operate our business and our financial results. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

Risks related to this offering and ownership of our securities

Our stock price may be volatile, and purchasers of our securities could incur substantial losses.

Our stock price is likely to be volatile. The stock market in general, and the market for biotechnology and medical device companies in particular, have experienced extreme volatility that has often been unrelated to the operating performance of particular companies. As a result of this volatility, investors may not be able to sell their common stock at or above the initial public offering price. The market price for our common stock may be influenced by many factors, including the following:

- our ability to successfully commercialize, and realize revenues from sales of, CoSense;

- the success of competitive products or technologies;

- results of clinical studies of Serenz or planned products or those of our competitors;

- regulatory or legal developments in the U.S. and other countries, especially changes in laws or regulations applicable to our products;

- introductions and announcements of new products by us, our commercialization partners, or our competitors, and the timing of these introductions or announcements;

- actions taken by regulatory agencies with respect to our products, clinical studies, manufacturing process or sales and marketing terms;
- variations in our financial results or those of companies that are perceived to be similar to us;
- the success of our efforts to acquire or in-license additional products or planned products;
- developments concerning our collaborations, including but not limited to those with our sources of manufacturing supply and our commercialization partners;
- developments concerning our ability to bring our manufacturing processes to scale in a cost-effective manner;
- announcements by us or our competitors of significant acquisitions, strategic partnerships, joint ventures or capital commitments;
- developments or disputes concerning patents or other proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our products;
- our ability or inability to raise additional capital and the terms on which we raise it;
- the recruitment or departure of key personnel;
- changes in the structure of healthcare payment systems;
- market conditions in the pharmaceutical and biotechnology sectors;
- actual or anticipated changes in earnings estimates or changes in stock market analyst recommendations regarding our common stock, other comparable companies or our industry generally;
- trading volume of our common stock;
- sales of our common stock by us or our stockholders;
- general economic, industry and market conditions; and
- the other risks described in this “Risk factors” section.

These broad market and industry factors may seriously harm the market price of our common stock, regardless of our operating performance. In the past, following periods of volatility in the market, securities class-action litigation has often been instituted against companies. Such litigation, if instituted against us, could result in substantial costs and diversion of management’s attention and resources, which could materially and adversely affect our business, financial condition, results of operations and growth prospects.

Future sales of our common stock, or the perception that future sales may occur, may cause the market price of our common stock to decline, even if our business is doing well.

Sales of substantial amounts of our common stock in the public market after this offering, or the perception that these sales may occur, could materially and adversely affect the price of our common stock and could impair our ability to raise capital through the sale of additional equity securities. The shares of common stock sold in this offering will be freely tradable, without restriction, in the public market, except for any shares sold to our affiliates.

In connection with this offering, we, our officers and directors and holders of 1% or more of our currently outstanding shares of common stock have agreed prior to the commencement of this offering, subject to limited exceptions, not to sell or transfer any shares of common stock for 180 days after the date of this prospectus without the consent of Maxim Group LLC, or Maxim. However, Maxim may release these shares from any restrictions at any time. We cannot predict what effect, if any, market sales of shares held by any stockholder or the availability of shares for future sale will have on the market price of our common stock.

Approximately shares of common stock may be sold in the public market by existing stockholders after the date of this prospectus and an additional shares of common stock may be sold in the public market by existing stockholders on or about 181 days after the date of this prospectus, subject to volume and other limitations imposed under the federal securities laws. Sales of substantial amounts of our common stock in the public market after the completion of this offering, or the perception that such sales could occur, could adversely affect the market price of our common stock and could materially impair our ability to raise capital through offerings of our common stock. See the section entitled "Shares Eligible for Future Sale" for a more detailed description of the restrictions on selling shares of our common stock after this offering.

We are issuing warrants to purchase shares of common stock in this offering. We will also issue a warrant to the underwriter in this offering to purchase an additional units, including units pursuant to the exercise of the overallotment option. In addition, as of May 31, 2014, we had outstanding options to purchase 2,891,125 shares of our common stock and outstanding warrants to purchase an aggregate of 111,111 shares of our common stock. We plan to register for offer and sale the shares of common stock that are reserved for issuance pursuant to outstanding options. Shares covered by such registration statements upon the exercise of stock options generally will be eligible for sale in the public market, except that affiliates will continue to be subject to volume limitations and other requirements of Rule 144 under the Securities Act of 1933, as amended. The issuance or sale of such shares could depress the market price of our common stock.

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company," as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, which was enacted in April 2012. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company for up to five years, although circumstances could cause us to lose that status earlier. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year following the fifth anniversary of the completion of this offering, (2) the last day of the fiscal year in which we have total annual gross revenue of at least $1.0 billion, (3) the date on which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700.0 million as of the prior June 30th, and (4) the date on which we have issued more than $1.0 billion in non-convertible debt securities during the prior three-year period. We cannot predict if investors will find our common stock less attractive because we may rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may suffer or be more volatile.

Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. We have elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period under the JOBS Act.

After this offering, our executive officers, directors and principal stockholders will continue to maintain the ability to control or significantly influence all matters submitted to stockholders for approval.

Upon the closing of this offering, our executive officers, directors and stockholders who owned more than 5% of our outstanding common stock before this offering will, in the aggregate, beneficially own shares representing approximately % of our common stock, based on shares of common stock outstanding as of the date of this offering, including the shares of common stock issuable upon conversion of our convertible promissory notes upon the closing of this offering and after giving effect to and the sale of units in this offering. As a result, if these stockholders were to choose to act together, they would be able to control or significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these stockholders, if they choose to act together, will control or significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This concentration of voting power could delay or prevent an acquisition of our company on terms that other stockholders may desire.

We will incur significant increased costs as a result of operating as a public company, and our management will be required to devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, the other rules and regulations of the Securities and Exchange Commission, or SEC, and the rules and regulations of The NASDAQ Capital Market, or NASDAQ. The expenses that will be required in order to adequately prepare for being a public company will be material, and compliance with the various reporting and other requirements applicable to public companies will require considerable time and attention of management. For example, the Sarbanes-Oxley Act and the rules of the SEC and national securities exchanges have imposed various requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls. Our management and other personnel will need to devote a substantial amount of time to these compliance initiatives. These rules and regulations will continue to increase our legal and financial compliance costs and will make some activities more time-consuming and costly. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance, and we may be required to accept reduced policy limits on coverage or incur substantial costs to maintain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified personnel to serve on our board of directors, our board committees, or as executive officers.

The Sarbanes-Oxley Act requires, among other things, that we maintain effective internal control over financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal control over financial reporting to allow management to report on the effectiveness of our internal control over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act, beginning as early as our annual report on Form 10-K for the fiscal year ended December 31, 2014. In addition, we will be required to have our independent registered public accounting firm attest to the effectiveness of our internal control over financial reporting beginning with our annual report on Form 10-K following the date on which we are no longer an emerging growth company. Our compliance with Section 404 of the Sarbanes-Oxley Act will require that we incur substantial accounting expense and expend significant management efforts. We currently do not have an internal audit group, and we will need to hire additional accounting and financial staff with appropriate public company experience and technical accounting knowledge. If we are not able to comply with the requirements of Section 404 in a timely manner, or if we or our independent registered public accounting firm identify deficiencies in our internal control over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by NASDAQ, the SEC or other regulatory authorities, which would require additional financial and management resources.

Our ability to successfully implement our business plan and comply with Section 404 requires us to be able to prepare timely and accurate financial statements. We expect that we will need to continue to improve existing, and implement new operational and financial systems, procedures and controls to manage our business effectively. Any delay in the implementation of, or disruption in the transition to, new or enhanced systems, procedures or controls, may cause our operations to suffer and we may be unable to conclude that our internal control over financial reporting is effective and to obtain an unqualified report on internal controls from our auditors as required under Section 404 of the Sarbanes-Oxley Act. This, in turn, could have an adverse impact on trading prices for our common stock, and could adversely affect our ability to access the capital markets.

We have identified a material weakness in our internal control over financial reporting as of December 31, 2013, and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If we fail to remedy our material weaknesses, or if we fail to establish and maintain effective control over financial reporting, our ability to accurately and timely report our financial results could be adversely affected.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with U.S. generally accepted accounting principles. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of annual or interim financial statements will not be prevented or detected on a timely basis. Prior to the completion of this offering, we have been a private company with limited accounting personnel and other resources to address our internal control over financial reporting. During the course of preparing for this offering, we determined that material adjustments to various accounts were necessary, which required us to restate the financial statements for the year ended December 31, 2012, which had been previously audited by another independent audit firm. These adjustments leading to a restatement of those financial statements led us to conclude that we had a material weakness in internal control over financial reporting as of December 31, 2012. The material weakness that we identified was that we did not maintain a sufficient complement of resources with an appropriate level of accounting knowledge, experience and training commensurate with our structure and financial reporting requirements. We also found that the weakness persisted through the year ending December 31, 2013. As of that time, our financial operations staff consisted of one part-time consultant.

This material weakness contributed to adjustments to previously issued financial statements principally, but not limited to, the following areas: equity accounting in connection with our issuance of Series A, B, and C convertible preferred stock and related warrants, and period-end cutoff for development-related expenses.

For a discussion of our remediation plan and the actions that we have executed during 2014, see “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Controls and procedures.” The actions we have taken are subject to continued review, supported by confirmation and testing by management as well as audit committee oversight. While we have implemented a plan to remediate this weakness we cannot assure you that we will be able to remediate this weakness, which could impair our ability to accurately and timely report our financial position, results of operations or cash flows. If we are unable to successfully remediate this material weakness, and if we are unable to produce accurate and timely financial statements, our stock price may be adversely affected and we may be unable to maintain compliance with applicable NASDAQ listing requirements.

Our failure to remediate the material weakness identified above or the identification of additional material weaknesses in the future, could adversely affect our ability to report financial information, including our filing of quarterly or annual reports with the SEC on a timely and accurate basis. Moreover, our failure to remediate the material weakness identified above or the identification of additional material weaknesses, could prohibit us from producing timely and accurate consolidated financial statements, which may adversely affect our stock price and we may be unable to maintain compliance with NASDAQ listing requirements.

Our ability to use our net operating loss carry forwards and certain other tax attributes may be limited.

Our ability to utilize our federal net operating loss, carryforwards and federal tax credit may be limited under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code. The limitations apply if an "ownership change," as defined by Section 382, occurs. Generally, an ownership change occurs if the percentage of the value of the stock that is owned by one or more direct or indirect "five percent shareholders" increases by more than 50% over their lowest ownership percentage at any time during the applicable testing period (typically three years). If we have experienced an "ownership change" at any time since our formation, we may already be subject to limitations on our ability to utilize our existing net operating losses and other tax attributes to offset taxable income. In addition, future changes in our stock ownership, which may be outside of our control, may trigger an "ownership change" and, consequently, Section 382 and 383 limitations. As a result, if we earn net taxable income, our ability to use our pre-change net operating loss carryforwards and other tax attributes to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us.

If you purchase our securities in this offering, you will incur immediate and substantial dilution in the book value of your investment.

The initial public offering price is substantially higher than the net tangible book value per share of our securities. Investors purchasing units in this offering will pay a price per unit that substantially exceeds the book value of our tangible assets after subtracting our liabilities. As a result, investors purchasing units in this offering will incur immediate dilution of $ per unit, based on an assumed initial public offering price of $ per unit, which is the midpoint of the price range set forth on the cover of this prospectus. Further, investors purchasing units in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own, as a result of such investment, only approximately % of the shares of common stock outstanding immediately following this offering.

The exercise of any of our outstanding options would result in additional dilution. As a result of the dilution to investors purchasing units in this offering, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation. Further, because we may need to raise additional capital to fund our clinical development programs, we may in the future sell substantial amounts of common stock or securities convertible into or exchangeable for common stock. These future issuances of equity or equity-linked securities, together with the exercise of outstanding options and any additional shares issued in connection with acquisitions, if any, may result in further dilution to investors.

A significant number of our shares of our common stock will become eligible for sale upon the completion of this offering, and a significant number of additional shares of our common stock may become eligible for sale at a later date, and their sale could depress the market price of our common stock.

Each unit issued in this offering will consist of one share of common stock and a warrant to purchase one share of common stock. We will also issue a warrant to purchase units to the underwriters that, if executed, would result in the issuance of an additional shares of common stock and warrants to purchase an additional shares of common stock. We will also have outstanding other warrants that, if executed, would result in the issuance of an additional shares of common stock at a weighted average exercise price of $ per share.

As of March 31, 2014, we had outstanding $ aggregate principal amount and accrued interest outstanding under the 2010/2012 convertible promissory notes and $ aggregate principal amount and accrued interest outstanding under the 2014 convertible promissory notes, each of which will automatically convert into units upon the completion of this offering. Assuming an offering price of $ per unit, the 2010/2012 convertible promissory notes and the 2014 convertible promissory notes will automatically convert into shares of common stock.

As of May 31, 2014, options to purchase shares of our common stock, which were issued to our officers, directors and employees, were outstanding with a weighted average exercise price of $ per share. Options to purchase of such shares are currently exercisable or will be exercisable within 60 days of the date of this prospectus.

The sale or even the possibility of sale of the shares of common stock described above could substantially reduce the market price for our common stock or our ability to obtain future financing.

An active trading market may not develop for our securities, and you may not be able to sell your units, common stock or warrants at or above the initial public offering price or warrant exercise price per share.

There is no established trading market for our securities, and the market for our securities may be highly volatile or may decline regardless of our operating performance. Prior to this offering, you could not buy or sell our securities publicly. An active public market for our securities may not develop or be sustained after this offering. We cannot predict the extent to which investor interest in our company will lead to the development of an active trading market in our units, common stock or warrants or how liquid that market might become. If a market does not develop or is not sustained, it may be difficult for you to sell your securities at the time you wish to sell them, at a price that is attractive to you, or at all.

The initial public offering price per unit has been determined through negotiation between us and representatives of the underwriter, and may not be indicative of the market prices that prevail after this offering. You may not be able to sell your common stock or warrants at or above the initial public offering price or warrant exercise price per share.

Due to the speculative nature of warrants, there is no guarantee that it will ever be profitable for holders of the warrants to exercise the warrants.

The warrants being offered as part of the units do not confer any rights of common stock ownership on their holders, such as voting rights or the right to receive dividends, but rather merely represent the right to acquire shares of common stock at a fixed price for a limited period of time. Specifically, following issuance of the warrants, warrant-holders may exercise their right to acquire the common stock and pay an exercise price of $ per share (which is equal to 110% of the public offering price of the common stock underlying the units), prior to the expiration of the five-year term on , 2019, after which date any unexercised warrants will expire and have no further value. Moreover, following this offering, the market value of the warrants is uncertain and there can be no assurance that the market value of the warrants will equal or exceed their public offering price. There can be no assurance that the market price of the common stock will ever equal or exceed the exercise price of the warrants, and, consequently, whether it will ever be profitable for holders of the warrants to exercise the warrants.

Holders may be unable to exercise the warrants if we do not maintain a current prospectus and comply with applicable securities laws.

No warrants will be exercisable unless at the time of exercise a prospectus relating to the common stock issuable upon exercise of the warrants is current and the common stock has been registered or qualified or is deemed to be exempt under the securities laws of the state of residence of the holder of the warrants. Under the terms of the warrant agreement, we have agreed to meet these conditions and use our best efforts to maintain a current prospectus relating to the common stock issuable upon exercise of the warrants until the expiration of the warrants. However, we cannot assure you that we will be able to do so, and if we do not maintain a current prospectus related to the common stock issuable upon exercise of the warrants, holders will be unable to exercise their warrants and we will not be required to settle any such warrant exercise. If the prospectus relating to the common stock issuable upon the exercise of the warrants is not current or if the common stock is not qualified or exempt from qualification in the jurisdictions in which the holders of the warrants reside, we will not be required

to net cash settle or cash settle the warrant exercise, the warrants may have no value, the market for the warrants may be limited and the warrants may expire worthless.

If securities or industry analysts do not publish research, or publish inaccurate or unfavorable research, about our business, our stock price and trading volume could decline.

The trading market for our common stock will depend, in part, on the research and reports that securities or industry analysts publish about us or our business. Securities and industry analysts do not currently, and may never, publish research on our company. If no securities or industry analysts commence coverage of our company, the trading price for our common stock would likely be negatively impacted. In the event securities or industry analysts initiate coverage, if one or more of the analysts who cover us downgrade our stock or publish inaccurate or unfavorable research about our business, our stock price would likely decline. In addition, if our operating results fail to meet the forecast of analysts, our stock price would likely decline. If one or more of these analysts cease coverage of our company or fail to publish reports on us regularly, demand for our common stock could decrease, which might cause our stock price and trading volume to decline.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Although we currently intend to use the net proceeds from this offering in the manner described in the section entitled "Use of Proceeds," our management will have broad discretion in the application of the balance of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. The failure by our management to apply these funds effectively could result in financial losses that could have a material adverse effect on our business, cause the price of our common stock to decline and delay the commercialization of CoSense or other planned products. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

Provisions in our corporate charter documents and under Delaware law could make an acquisition of us more difficult and may prevent attempts by our stockholders to replace or remove our current management.

Provisions in our corporate charter and our bylaws that will become effective upon the closing of this offering may discourage, delay or prevent a merger, acquisition or other change in control of us that stockholders may consider favorable, including transactions in which stockholders might otherwise receive a premium for their shares. These provisions could also limit the price that investors might be willing to pay in the future for shares of our common stock, thereby depressing the market price of our common stock. In addition, these provisions may frustrate or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors. Because our board of directors is responsible for appointing the members of our management team, these provisions could in turn affect any attempt by our stockholders to replace current members of our management team. Among others, these provisions include the following:

- our board of directors will be divided into three classes with staggered three-year terms which may delay or prevent a change of our management or a change in control;
- our board of directors will have the right to elect directors to fill a vacancy created by the expansion of our board of directors or the resignation, death or removal of a director, which will prevent stockholders from being able to fill vacancies on our board of directors;
- our stockholders will not be able to act by written consent or call special stockholders' meetings; as a result, a holder, or holders, controlling a majority of our capital stock would not be able to take certain actions other than at annual stockholders' meetings or special stockholders' meetings called by our board of directors, the chairman of our board, the chief executive officer or the president;

- our certificate of incorporation will prohibit cumulative voting in the election of directors, which limits the ability of minority stockholders to elect director candidates;

- future amendments of our certificate of incorporation and bylaws will require the approval of 66 2/3% of our outstanding voting securities;

- our stockholders will be required to provide advance notice and additional disclosures in order to nominate individuals for election to our board of directors or to propose matters that can be acted upon at a stockholders' meeting, which may discourage or deter a potential acquiror from conducting a solicitation of proxies to elect the acquiror's own slate of directors or otherwise attempting to obtain control of our company; and

- our board of directors will be able to issue, without stockholder approval, shares of undesignated preferred stock, which makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to acquire us.

Moreover, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits a person who owns in excess of 15% of our outstanding voting stock from merging or combining with us for a period of three years after the date of the transaction in which the person acquired in excess of 15% of our outstanding voting stock, unless the merger or combination is approved in a prescribed manner.

Our employment agreements with our executive officers may require us to pay severance benefits to any of those persons who are terminated in connection with a change in control of us, which could harm our financial condition or results.

Certain of our executive officers are parties to employment agreements that contain change in control and severance provisions providing for aggregate cash payments of up to approximately $ million for severance and other benefits and acceleration of vesting of stock options with a value of approximately $ million (as of March 31, 2014, based on an assumed initial public offering price of $ per unit, which is the midpoint of the price range set forth on the cover page of this prospectus) in the event of a termination of employment in connection with a change in control of us. The accelerated vesting of options could result in dilution to our existing stockholders and harm the market price of our common stock. The payment of these severance benefits could harm our financial condition and results. In addition, these potential severance payments may discourage or prevent third parties from seeking a business combination with us.

Because we do not anticipate paying any cash dividends on our common stock in the foreseeable future, capital appreciation, if any, will be our stockholders' sole source of gain.

We have never declared or paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. In addition, the terms of existing or any future debt agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be our stockholders' sole source of gain for the foreseeable future.

CAUTIONARY STATEMENT CONCERNING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections titled "Prospectus Summary," "Risk Factors," "Use of Proceeds," "Management's Discussion and Analysis of Financial Condition and Results of Operations," "Market, Industry and other Data," "Business" and "Shares Eligible for Future Sale," contains forward-looking statements. In some cases you can identify these statements by forward-looking words, such as "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "could," "would," "project," "plan," "potential," "seek," "expect," "goal," or the negative or plural of these words or similar expressions. These forward-looking statements include, but are not limited to, statements concerning the following:

- our expected uses of the net proceeds to us from this offering;
- our ability to commercialize CoSense on the timetable that we project;
- the timing and the success of U.S. approval of Serenz pursuant to our clinical and regulatory efforts;
- whether the results of the trials will be sufficient to support domestic or global regulatory approvals for Serenz;
- our ability to maintain regulatory approval of CoSense or to obtain and maintain regulatory approval of our planned products;
- our expectation that our existing capital resources and the net proceeds from this offering will be sufficient to enable us to successfully commercialize CoSense;
- the benefits of the use of CoSense or Serenz;
- the projected dollar amounts of future sales of established and novel diagnostics for neonatal hemolysis;
- our ability to successfully commercialize CoSense or any planned products;
- the rate and degree of market acceptance of CoSense, Serenz, or any planned products;
- our expectations regarding government and third-party payor coverage and reimbursement;
- our ability to manufacture CoSense instruments and consumables in conformity with the FDA's requirements and to scale up manufacturing of CoSense instruments and consumables to commercial scale;
- our ability to successfully build a sales force and commercial infrastructure;
- our ability to compete with companies that may enter the market with products that compete with CoSense;
- our reliance on third parties to conduct clinical studies;
- our reliance on third-party contract manufacturers to manufacture and supply our planned products for us;
- our reliance on our collaboration partners' performance over which we do not have control;
- our ability to retain and recruit key personnel, including development of a sales and marketing function;

- our ability to obtain and maintain intellectual property protection for CoSense, Serenz or any planned products;
- our estimates of our expenses, ongoing losses, future revenue, capital requirements and our needs for or ability to obtain additional financing;
- our expectations regarding the time during which we will be an emerging growth company under the Jumpstart Our Business Startups Act;
- our ability to identify, develop, acquire and in-license new products and planned products;
- our ability to successfully establish and successfully maintain appropriate collaborations and derive significant revenue from those collaborations;
- our financial performance; and
- developments and projections relating to our competitors or our industry.

These forward-looking statements are subject to a number of risks, uncertainties and assumptions, including those described in "Risk factors." Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the impact of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties and assumptions, the forward-looking events and circumstances discussed in this prospectus may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements.

You should not rely upon forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, levels of activity, performance or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update publicly any forward-looking statements for any reason after the date of this prospectus to conform these statements to actual results or to changes in our expectations.

You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement of which this prospectus is a part with the understanding that our actual future results, levels of activity, performance and events and circumstances may be materially different from what we expect.

MARKET, INDUSTRY AND OTHER DATA

We obtained the industry, market and similar data set forth in this prospectus from our own internal estimates and research, and from industry publications and research, surveys and studies conducted by third parties, including primary market research performed by Charles River Associates, or CRA, which was commissioned by us. These data involve a number of assumptions and limitations, and you are cautioned not to give undue weight to such information and estimates.

Information that is based on estimates, forecasts, projections, market research or similar methodologies is inherently subject to uncertainties and actual events or circumstances may differ materially from events and circumstances that are assumed in this information. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires.

CRA's study was prepared for us on terms specifically limiting the liability of CRA. CRA's conclusions are the result of the exercise of CRA's reasonable professional judgment, based in part upon materials and information and information provided to CRA by us and others. Use of this information by you or any third party for whatever purpose should not, and does not, absolve you or such third party from using due diligence in verifying the information. CRA has not been requested to opine as to, and does not guarantee, warrant or opine upon: (i) the underlying business decision to participate (or not to participate) in any transaction or investment relating to Serenz; or (ii) our failure to perform in any particular manner. Any opinion expressed by CRA shall not amount to any form of guarantee that CRA has determined or predicted future events or circumstances, and no such reliance may be inferred or implied. The information is effective as of the date the study was created. CRA has no obligation to update the information set forth in the study and expressly disclaims any such responsibility. Any use which you or a third party makes of this information, or any reliance on it, or decisions to be made based on it, are the responsibility of you or such third party. CRA accepts no duty of care or liability of any kind whatsoever to you or any such third party, and by your receipt and review of this information, you release and hold CRA (including all of its affiliates, officers, employees and directors) harmless for all claims, liabilities and damages, if any, suffered as a result of decisions made, or not made, or actions taken, or not taken, based on or related to this information.

USE OF PROCEEDS

We estimate that the net proceeds from our issuance and sale of our units in this offering will be approximately $17.1 million, or approximately $20.7 million if the underwriters exercise their over-allotment option to purchase additional units in full, assuming an initial public offering price of $, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per unit would increase (decrease) the net proceeds from this offering by approximately $ million, assuming that the number of units we are offering, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of units we are offering. Each increase (decrease) of 1,000,000 units in the number of units we are offering would increase (decrease) the net proceeds to us from this offering by approximately $ million, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

As of March 31, 2014, we had cash and cash equivalents of approximately $0.8 million and we received approximately an additional $1.8 million in gross proceeds from our convertible promissory note financing in April 2014. We estimate that our net proceeds from this offering will be approximately $17.1 million, or approximately $20.7 million if the underwriters exercise their over-allotment option in full. We intend to use the net proceeds from this offering as follows:

- Approximately $10.2 million of the net proceeds from this offering will fund our planned commercial launch of CoSense; and
- Approximately $6.9 million to fund working capital, capital expenditures, research and development of additional future products, and other general corporate purposes, which may include the acquisition or licensing of other products, businesses or technologies, although we have no plans regarding any specific acquisition candidates at this time.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development and commercialization efforts and the status of and results from clinical studies, as well as any collaborations that we may enter into with third parties and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our planned use of the net proceeds from this offering described above, and our planned use of our existing cash and cash equivalents, we expect that such funds will be sufficient to enable us to complete our planned development of one or more additional diagnostic products based on our Sensalyze Technology Platform. However, it is possible that we will not achieve the progress that we expect because the actual costs and timing of medical diagnostic development, particularly clinical studies, are difficult to predict, subject to substantial risks and delays and often vary depending on the particular indication and development strategy. We do not expect that the net proceeds from this offering and our existing cash and cash equivalents will be sufficient to enable us to fund Phase 3 clinical trials for Serenz, if necessary for regulatory approval in the U.S.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment grade, interest bearing instruments such as money market funds, certificates of deposit, commercial paper and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid, and do not anticipate declaring or paying, any cash dividends on any of our capital stock. We currently intend to retain all available funds and any future earnings for use in the operation of our business and do not anticipate paying any dividends in the foreseeable future. Future determination as to the declaration and payment of dividends, if any, will be at the discretion of our board of directors and will depend on then existing conditions, including our operating results, financial conditions, contractual restrictions, capital requirements, business prospects and other factors our board of directors may deem relevant.

CAPITALIZATION

The following table sets forth our capitalization as of March 31, 2014:

- on an actual basis;
- on a pro forma basis to reflect: (1) the filing of our amended and restated certificate of incorporation and the automatic conversion of outstanding shares of our convertible preferred stock in connection with this offering as of March 31, 2014 into an aggregate of shares of common stock immediately prior to the closing of this offering; (2) the issuance of 2010/2012 convertible promissory notes and automatic conversion of these notes in connection with this offering into shares of common stock as if they had occurred as of March 31, 2014 and the receipt of approximately $ million of gross proceeds from such sale; (3) the issuance of convertible promissory notes in 2014 and automatic conversion of those notes in connection with this offering into units as if they had occurred as of March 31, 2014 and the receipt of approximately $1.8 million of gross proceeds from such sale; and (4) shares of our common stock issuable upon the exercise of warrants issued in connection with our 2010/2012 convertible promissory notes outstanding as of March 31, 2014; and
- on a pro forma as adjusted basis to further reflect the sale by us of units in this offering at an assumed initial public offering price of $ per unit, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

You should read this table together with the sections in this prospectus entitled "Selected Financial Data," and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our financial statements and related notes included elsewhere in this prospectus.

	As of March 31, 2014		
	Actual	Pro Forma	Pro Forma As Adjusted(1)
	(in thousands, except share data) (unaudited)		
Convertible promissory notes issued in 2010 and 2012, and accrued interest	$ 14,379		
Convertible promissory notes issued in 2014, and accrued interest			
Convertible preferred stock, par value $0.001 per share:			
21,702,428 shares authorized, 10,385,395 shares issued and outstanding, actual; no shares authorized, issued and outstanding pro forma and pro forma as adjusted	23,808		
Stockholders' equity (deficit):			
Common stock, par value $0.001 per share: 29,500,000 shares authorized, 6,428,716 shares issued and outstanding, actual; shares authorized, shares issued and outstanding pro forma; shares authorized, shares issued and outstanding, pro forma as adjusted	6		
Additional paid-in capital	19,241		
Accumulated deficit	(57,934)		
Total stockholders' deficit	(38,687)		
Total liabilities and stockholders' equity (deficit)	$ 500	$	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) each of cash and cash equivalents, working capital and total assets by $ and decrease (increase) total stockholders' deficit by $, assuming the number of shares we are offering, as set forth on the cover page of this prospectus, remains the same, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of shares we are offering. An increase (decrease) of 1,000,000 shares in the number of shares we are offering would increase (decrease) each of pro forma as adjusted cash

and cash equivalents, working capital and total assets by approximately $ and decrease (increase) total stockholders' deficit by approximately $, assuming the assumed initial public offering price per share, as set forth on the cover page of this prospectus, remains the same. The pro forma as adjusted information is illustrative only, and we will adjust this information based on the actual initial public offering price, number of shares offered and other terms of this offering determined at pricing.

The number of shares of our common stock issued and outstanding on an actual, pro forma and pro forma as adjusted basis in the table above excludes the following:

- shares of our common stock issuable upon the exercise of stock options outstanding as of , 2014 at a weighted-average exercise price of $ per share;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Equity Incentive Plan, which will become effective in connection with the completion of this offering;
- shares of our common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Employee Stock Purchase Plan;
- shares of our common stock issuable upon the exercise of warrants to purchase convertible preferred stock outstanding as of , 2014 at a weighted-average exercise price of per share; and
- shares of our common stock issuable upon the exercise of warrants issued in connection with our 2010/2012 convertible promissory notes outstanding as of , 2014 at a weighted-average exercise price of per share; and
- shares of our common stock issuable upon the exercise of warrants that are part of the units sold in this offering;

DILUTION

Dilution is the amount by which the offering price paid by the purchasers of the units sold in the offering exceeds the pro forma as adjusted net tangible book value per share of our common stock after this offering. Such calculation does not reflect any dilution associated with the sale and exercise of the warrants issued as part of the units. The historical net tangible book value of our common stock as of March 31, 2014 was $ million, or $ per share. The pro forma net tangible book value of our common stock as of March 31, 2014 was $ million, or $ per share. Pro forma net tangible book value per share represents our total tangible assets less our total liabilities, divided by the number of outstanding shares of our common stock, after giving effect to the pro forma adjustments referenced under "Capitalization."

After giving effect to (i) the pro forma adjustments referenced under "Capitalization", (ii) an increase in total assets to reflect our receipt of the net proceeds from this offering (assuming the public offering price will be $ per unit, the midpoint of the range set forth on the cover page of the prospectus after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us) and (iii) the addition of the number of shares offered by this prospectus to the number of shares outstanding, our pro forma as adjusted net tangible book value as of March 31, 2014 would have been approximately $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value of $ per share to our existing stockholders and an immediate dilution of $ per share to investors purchasing units in this offering.

The following table illustrates this dilution on a per share basis to new investors, assuming $ of value is attributed to the warrants issued as a part of the units:

Assumed initial public offering price per share		$
Historical net tangible book value per share as of March 31, 2014	$	
Pro forma net tangible book value per share as of March 31, 2014	$	
Increase in pro forma net tangible book value per share attributable to new investors		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to investors participating in this offering		$

Each $1.00 increase (decrease) in the assumed initial public offering price of $ per unit would increase (decrease) the pro forma net tangible book value, as adjusted to give effect to this offering, by $ per share and the dilution to new investors by $ per share, assuming the number of units offered by us, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise their option to purchase additional units in this offering in full, which includes shares of common stock issued as part of the units, the pro forma net tangible book value, as adjusted to give effect to this offering, would be $ per unit and the dilution to new investors would be $ per unit.

We may also increase or decrease the number of units we are offering. An increase (decrease) of 1,000,000 units in the number of units we are offering would increase (decrease) our pro forma as adjusted net tangible book value by approximately $ million, or $ per unit, and decrease (increase) the pro forma dilution per unit to investors in this offering by $ per unit, assuming that the assumed initial public offering price remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. The pro forma information discussed above is illustrative only and will change based on the actual initial public offering price, number of units and other terms of this offering determined at pricing.

The table below summarizes as of March 31, 2014, on a pro forma as adjusted basis described above, the number of shares of our common stock, the total consideration, and the average price per share (i) paid to us by our existing stockholders and (ii) to be paid by new investors purchasing our common stock in this offering at an assumed initial public offering price of $ per units, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Number	Percent	
Existing stockholders before this offering		%	$	%	$
New investors					
Total		100.0%	$	100.0%	$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share would increase (decrease) total consideration paid by new investors by $ million and increase (decrease) the percent of total consideration paid by new investors by %, assuming the number of units we are offering, as set forth on the cover page of this prospectus, remains the same, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We may also increase or decrease the number of units we are offering.

If the underwriters exercise their option to purchase additional units in this offering in full, the percentage of shares of our common stock held by existing stockholders will be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares held by new investors will increase to shares, or % of the total number of shares of our common stock outstanding after this offering.

The number of shares of our common stock to be outstanding after this offering is based on shares of our common stock outstanding as of , 2014, and excludes the following:

- shares of our common stock issuable upon the exercise of stock options outstanding as of , 2014 at a weighted-average exercise price of $ per share;
- shares of common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Equity Incentive Plan, which will become effective in connection with the completion of this offering;
- shares of our common stock, subject to increase on an annual basis, reserved for future issuance under our 2014 Employee Stock Purchase Plan;
- shares of our common stock issuable upon the exercise of warrants to purchase convertible preferred stock outstanding as of , 2014 at a weighted-average exercise price of per share;
- shares of our common stock issuable upon the exercise of warrants issued in connection with our 2010/2012 convertible promissory notes outstanding as of , 2014 at a weighted-average exercise price of per share; and
- shares of our common stock issuable upon the exercise of warrants that are part of the units sold in this offering.

To the extent that any outstanding options or warrants, including the warrants issued as part of the units sold in this offering, are exercised, new options are issued under our stock-based compensation plans or we issue additional shares of common stock in the future, there will be further dilution to investors participating in this offering. If all of these options and warrants were exercised, then our existing stockholders, including the holders of these options and warrants, would own % and our new investors would own % of the total number of shares of our common stock outstanding upon the closing of this offering. In such event, the total consideration paid by our existing stockholders, including the holders of these options and warrants, would be approximately $ million, or %, the total consideration paid by our new investors would be $ million, or %, the average price per share paid by our existing stockholders would be $, and the average price per share paid by our new investors would be $.

SELECTED FINANCIAL DATA

You should read the following selected financial data together with the section of this prospectus entitled "Management's Discussion and Analysis of Financial condition and Results of Operations" and our financial statements and the related notes included in this prospectus. The statement of operations data for the years ended December 31, 2012 and 2013 and the period from inception to December 31, 2013 and the balance sheet data as of December 31, 2012 and 2013, respectively, are derived from our audited financial statements included elsewhere in this prospectus. The statements of operations data for the three months ended March 31, 2013 and 2014 and for the periods from August 25, 1999 (inception) to March 31, 2014, and the balance sheet data as of March 31, 2014, are derived from our unaudited financial statement included elsewhere in this prospectus. Our historical results are not necessarily indicative of the results to be expected in the future.

Statement of Operations Data:	Year Ended December 31,		Three Months Ended March 31,		Period from August 25, 1999 (Inception) through December 31, 2013	Period from August 25, 1999 (Inception) through March 31, 2014
	2012	2013	2013	2014		
	(in thousands, except share and per share data)		(unaudited)			(unaudited)
Revenue	$ —	$ 3,000	$ 3,000	$ —	$ 3,000	$ 3,000
Expenses						
Research and development	2,470	2,380	703	372	36,652	37,024
General and administrative	1,127	1,467	416	312	15,960	16,272
Total expenses	3,597	3,847	1,119	684	52,612	53,296
Operating income (loss)	(3,597)	(847)	1,881	(684)	(49,612)	(50,296)
Therapeutic discovery grant proceeds	—	—	—	—	733	733
Interest and other income (expense)						
Interest income	3	2	—	—	814	815
Interest expense	(2,866)	(2,860)	(944)	(388)	(9,721)	(10,108)
Other income (expense), net	(22)	(2)	77	238	685	923
Net income (loss) and comprehensive income (loss)	$ (6,482)	$ (3,707)	$ 1,014	$ (834)	$ (57,101)	$ (57,935)
Weighted average common shares outstanding(1)						
Basic	6,244,230	6,428,278	6,426,939	6,428,716		
Diluted	6,244,230	6,428,278	27,067,245	6,428,716		
Net income (loss) per share(1)						
Basic	$ (1.04)	$ (0.58)	$ 0.16	$ (0.13)		
Diluted	$ (1.04)	$ (0.58)	$ 0.05	$ (0.13)		

(1) See Note 13 to our financial statements included elsewhere in this prospectus for an explanation of the method used to calculate the historical and pro forma net income (loss) per share, basic and diluted, and the number of shares used in the computation of the per share amounts.

Balance Sheet Data	December 31		March 31
	2012	2013	2014
			(unaudited)
Cash and cash equivalents	$ 2,155	$ 1,269	$ 764
Working capital (deficit)	(9,155)	(12,655)	(13,704)
Total assets	2,514	1,587	1,031
Convertible promissory notes	11,132	13,992	14,379
Total stockholders' deficit	(34,196)	(37,864)	(38,687)

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the portion of this prospectus entitled "Selected Financial Data" and our financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risk and uncertainties, such as statements of our plans, objectives, expectations, intentions, and beliefs. Our actual results may differ materially from those discussed in these forward-looking statements as a result of various factors, including those set forth under "Risk Factors" and in other parts of this prospectus. The share numbers in the following discussion reflect a reverse stock split that we effected immediately before the date of this offering.

Overview

We were incorporated in the State of Delaware on August 25, 1999. Our principal executive offices are located at 3 Twin Dolphin Drive, Suite 160, Redwood City, California, 94065. We develop diagnostics and therapeutics based on our proprietary technology for precision metering of gas flow. Our first product, CoSense, aids in the diagnosis of hemolysis in neonates, a dangerous condition in which red blood cells degrade rapidly, which can lead to long-term developmental disability. CoSense received initial 510(k) clearance for sale in the U.S. in the fourth quarter of 2012, with a more specific Indication for Use related to hemolysis in the first quarter of 2014 and received CE Mark approval for sale in the E.U. in the third quarter of 2013. We are preparing to commercialize CoSense using our own sales efforts, and intend to direct a significant portion of the use of proceeds of this offering to sales and marketing of CoSense, which is scheduled to begin in the second half of 2014. In addition, we are applying our research and development efforts to additional diagnostic products based on our Sensalyze Technology Platform, a portfolio of proprietary methods and devices which enables CoSense and can be applied to detect a variety of analytes in exhaled breath.

Prior to 2010, our efforts were primarily focused on development of therapeutics rather than diagnostics. We have previously obtained CE Mark approval in the E.U. for Serenz, an as-needed treatment for AR that has shown statistically significant improvements in AR symptoms in randomized, controlled Phase 2 clinical trials completed by us. We outlicensed Serenz to GSK in 2013, realizing revenue in the form of a non-refundable up-front payment of $3 million. In June 2014, the agreement terminated and GSK returned the licensed rights to Serenz back to us. We have no further monetary obligations to GSK related to the terminated agreement. We intend to engage in further research and development of Serenz prior to obtaining a partner for the final development and commercialization of the product.

Financial overview

Summary

We have not generated net income from operations, and, at December 31, 2013 and as of March 31, 2014, we had an accumulated deficit of $57.1 million and $57.9 million, respectively, primarily as a result of research and development and general and administrative expenses. While we may in the future generate revenue from a variety of sources, potentially including sales of CoSense and other diagnostic products, license fees, milestone payments, and research and development payments in connection with potential future strategic partnerships, we have, to date, generated revenue only from the 2013 license agreement pertaining to Serenz. The GSK agreement terminated in June 2014, and we may not generate future licensing revenue. We may never be successful in commercializing our CoSense product or in developing additional products. Accordingly, we expect to incur significant losses from operations for the foreseeable future, and there can be no assurance that we will ever generate significant revenue or profits.

Revenue recognition

We have thus far earned revenue primarily from a licensing agreement in connection with intellectual property created by us. We apply the provisions of Financial Accounting Standards Board, or FASB, Accounting Standards Codification, or ASC, Topic 605, Revenue Recognition, to recognize revenue. We begin recognizing revenue when persuasive evidence of an arrangement exists, such as a contract or purchase order, delivery has occurred, no significant obligations with regard to implementation or integration exist, the fee is fixed or determinable, and collectability is reasonably assured.

Research and development expenses

Research and development costs are expensed as incurred. Research and development costs consist primarily of salaries and benefits, consultant fees, prototype expenses, certain facility costs and other costs associated with clinical trials, net of reimbursed amounts. Costs to acquire technologies to be used in research and development that have not reached technological feasibility, and have no alternative future use, are expensed to research and development costs when incurred.

General and administrative expenses

General and administrative expenses consist principally of personnel-related costs, professional fees for legal, consulting, audit and tax services, insurance, rent, and other general operating expenses not otherwise included in research and development. We anticipate general and administrative expenses will increase in future periods, reflecting an expanding infrastructure, other administrative expenses and increased professional fees associated with being a public reporting company.

Other income (expense), net

Other income (expense), net is comprised of changes in the fair value of the convertible preferred stock warrant liabilities.

Critical accounting policies, significant judgments and use of estimates

This discussion and analysis of our financial condition and results of operations is based on our financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or U.S. GAAP. The preparation of these financial statements requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and liabilities as of the date of the financial statements, as well as the reported expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions. We believe that the accounting policies discussed below are critical to understanding our historical and future performance, as these policies relate to the more significant areas involving management's judgments and estimates.

Research and development expense

Research and development costs are expensed as incurred. Research and development expense includes payroll and personnel expenses; consulting costs; external contract research and development expenses; and allocated overhead, including rent, equipment depreciation and utilities, and relate to both company-sponsored programs as well as costs incurred pursuant to reimbursement arrangements. Nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed.

As part of the process of preparing our financial statements, we are required to estimate our accrued research and development expenses. This process involves reviewing contracts and purchase orders, reviewing the terms of our intellectual property agreements, communicating with our applicable personnel to identify services that have been performed on our behalf, and estimating the level of service performed and the associated cost incurred for the service when we have not yet been invoiced or otherwise notified of actual cost. The majority of our service providers invoice us monthly in arrears for services performed. We make estimates of our accrued expenses as of each balance sheet date in our financial statements based on facts and circumstances known to us at that time. We periodically confirm the accuracy of our estimates with the service providers and make adjustments if necessary. Examples of estimated accrued research and development expenses include fees to:

- contract manufacturers in connection with the production of clinical trial materials;
- contract research organizations and other service providers in connection with clinical studies;
- investigative sites in connection with clinical studies;
- vendors in connection with preclinical development activities; and
- professional service fees for consulting and related services.

We base our expenses related to clinical studies on our estimates of the services received and efforts expended pursuant to contracts with multiple research institutions and contract research organizations that conduct and manage clinical studies on our behalf. The financial terms of these agreements are subject to negotiation, vary from contract to contract, and may result in uneven payment flows and expense recognition. Payments under some of these contracts depend on factors such as the successful enrollment of patients and the completion of clinical trial milestones. In accruing service fees, we estimate the time period over which services will be performed and the level of effort to be expended in each period. If the actual timing of the performance of services or the level of effort varies from our estimate, we adjust the accrual accordingly. Our understanding of the status and timing of services performed relative to the actual status and timing of services performed may vary and may result in our reporting changes in estimates in any particular period. To date, there have been no material differences from our estimates to the amounts actually incurred. However, due to the nature of these estimates, we cannot assure you that we will not make changes to our estimates in the future as we become aware of additional information about the status or conduct of our clinical studies or other research activity.

Stock-based compensation expense

For the years ended December 31, 2012 and 2013 and for the three months ended March 31, 2014, stock-based compensation expense was approximately $24,000, $38,000 and $11,000, respectively. As of December 31, 2013 and as of March 31, 2014, we had approximately $8,000 and $44,000, respectively, of total unrecognized compensation expense, which we expect to recognize over a period of approximately 0.4 years and 0.5 years, respectively. The intrinsic value of all outstanding stock options as of March 31, 2014 was approximately $ million based on a hypothetical common stock fair value of $ per share, the midpoint of the estimated price range. We expect to continue to grant equity incentive awards in the future as we continue to expand our number of employees and seek to retain our existing employees, and to the extent that we do, our actual stock-based compensation expense recognized in future periods will likely increase.

Stock-based compensation costs related to stock options granted to employees are measured at the date of grant based on the estimated fair value of the award, net of estimated forfeitures. We estimate the grant date fair value, and the resulting stock-based compensation expense, using the Black-Scholes option-pricing model. The grant date fair value of stock-based awards is recognized on a straight-line basis over the requisite service period, which is generally the vesting period of the award. Stock options we grant to employees generally vest over four years.

The Black-Scholes option-pricing model requires the use of highly subjective assumptions to estimate the fair value of stock-based awards. If we had made different assumptions, our stock-based compensation

expense, net loss and net loss per share of common stock could have been significantly different. These assumptions include:

- *Fair value of our common stock:* Because our stock is not publicly traded, we must estimate its fair value, as discussed in "Common stock valuations" below.

- *Expected volatility:* As we do not have a trading history for our common stock, the expected stock price volatility for our common stock was estimated by taking the average historical price volatility for industry peers based on daily price observations over a period equivalent to the expected term of the stock option grants. Industry peers consist of several public companies in the medical device and diagnostics industries that are similar in size, stage of life cycle and financial leverage. We did not rely on implied volatilities of traded options in our industry peers' common stock because the volume of activity was relatively low. We intend to continue to consistently apply this process using the same or similar public companies until a sufficient amount of historical information regarding the volatility of our own common stock price becomes available, or unless circumstances change such that the identified companies are no longer similar to us, in which case, more suitable companies whose share prices are publicly available would be utilized in the calculation

- *Expected term:* We do not believe we are able to rely on our historical exercise and post-vesting termination activity to provide accurate data for estimating the expected term for use in estimating the fair value-based measurement of our options. Therefore, we have opted to use the "simplified method" for estimating the expected term of options.

- *Risk-free rate:* The risk-free interest rate is based on the yields of U.S. Treasury securities with maturities similar to the expected time to liquidity.

- *Expected dividend yield:* We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, we used an expected dividend yield of zero.

No employee options were granted in 2012 or 2013. There were 152,200 options granted in February 2014. In addition to the assumptions used in the Black-Scholes option-pricing model, we must also estimate a forfeiture rate to calculate the stock-based compensation expense for our awards. We will continue to use judgment in evaluating the expected volatility, expected terms, and forfeiture rates utilized for our stock-based compensation expense calculations on a prospective basis.

Common stock valuations

The estimated fair value of the common stock underlying our stock options was determined at each grant date by our board of directors and was supported by periodic independent third-party valuations. Our board of directors intended all options granted to be exercisable at a price per share not less than the per-share fair value of our common stock underlying those options on the date of grant. The valuations of our common stock were determined in accordance with the guidelines outlined in the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or the Practice Aid. The methodology used by the third-party valuation specialists to determine the fair value of our common stock included estimating the fair value of the enterprise, subtracting the fair value of debt from this enterprise value, and then allocating this value to all of the equity interests using the option pricing method. The assumptions used in the valuation model to determine the estimated fair value of our common stock as of the grant date of each option are based on numerous objective and subjective factors, combined with management judgment, including the following:

- independent third-party valuations as of December 31, 2013 and March 31, 2014;

- progress of research and development activities;
- our operating and financial performance, including our levels of available capital resources;
- the valuation of publicly-traded companies in the diagnostics and biotechnology sectors;
- rights and preferences of our common stock compared to the rights and preferences of our other outstanding equity securities;
- equity market conditions affecting comparable public companies, as reflected in comparable companies' market multiples, initial public offering valuations and other metrics;
- the achievement of enterprise milestones, including our progress toward product approvals;
- the likelihood of achieving a liquidity event for the shares of common stock, such as an initial public offering or an acquisition of our company given prevailing market and biotechnology sector conditions;
- sales of our convertible preferred stock and convertible promissory notes in arms-length transactions;
- the illiquidity of our securities by virtue of being a private company;
- business risks; and
- management and board experience.

Common stock valuation methodologies

The valuations were performed in accordance with applicable elements of the American Institute of Certified Public Accountants Practice Aid, *Valuation of Privately-Held-Company Equity Securities Issued as Compensation*, or the Practice Aid. The Practice Aid prescribes several valuation approaches for estimating the value of an enterprise, such as the cost, market and income approaches, and various methodologies for allocating the value of an enterprise to its common stock.

The Practice Guide identifies various available methods for allocating enterprise value across classes and series of capital stock to determine the estimated fair value of common stock at each valuation date. In accordance with the Practice Aid, we considered the following methods:

- *Option Pricing Method.* Under the option pricing method, or OPM, shares are valued by creating a series of call options with exercise prices based on the liquidation preferences and conversion terms of each equity class. The estimated fair values of the preferred and common stock are inferred by analyzing these options.
- *Hybrid Method.* The Hybrid Method blends the concepts of the Probability-Weighted Expected Return Method, or PWERM, with the concepts of the Option Pricing Method, or OPM. We considered the valuation of the common stock under the following scenarios: (a) the currently planned initial public offering; (b) a merger or sale of the business; or (c) remaining private. The first two scenarios were implemented by: (i) estimating the future equity value under each case; (ii) allocating the future value in each scenario according to the subject company's capital structure; (iii) weighting each scenario; (iv) discounting the value to a present value equivalent using a risk-adjusted discount rate; and (v) considering discounts for lack of control or marketability, as appropriate. In accordance with the Practice Aid, the third scenario, remaining private, is modeled using the OPM over a variety of timeframes until the senior securities such as our preferred stock are redeemed or repurchased.

Based on our early stage of development and other relevant factors, we determined that this combination was the most appropriate method for allocating our enterprise value to determine the estimated fair value of our common stock for valuations performed as of December 31, 2013, and March 31, 2014. On December 31, 2013 and March 31, 2014, we estimated the fair value of our common stock to be $0.63 and $0.76, respectively. Following the closing of this offering, the fair value of our common stock will be determined based on its closing price on NASDAQ.

Estimated fair value of convertible preferred stock warrant liabilities

We have issued warrants to purchase shares of our convertible preferred stock. We have classified the fair value of these warrants as liabilities on the balance sheet as they correspond to the treatment of the preferred stock as temporary equity. We account for the warrants as a derivative instrument. Changes in the fair value of the warrants are presented separately as changes in warrant liability in our statements of operations for each reporting period. We use the Monte Carlo simulation model to determine the fair value of the warrants. As a result, the valuation of this derivative instrument is subjective because the option-valuation model requires the input of highly subjective assumptions, including the expected stock price volatility and the probability of a future occurrence of an fundamental transaction. Changes in these assumptions can materially affect the fair value estimate and, such impacts can, in turn, result in material non-cash charges or credits, and related impacts on earnings or loss per share, in the statements of operations. We will continue to adjust the liability for changes in fair value until the earlier of the expiration of the warrants or their exercise, at which time the liability will be reclassified into stockholders' deficit. We records any change in fair value as a component of other income or expense.

Income taxes

We account for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are recorded based on the estimated future tax effects of differences between the amounts at which assets and liabilities are recorded for financial reporting purposes and the amounts recorded for income tax purposes. Deferred income taxes are classified as current or non-current, based on the classifications of the related assets and liabilities giving rise to the temporary differences. A valuation allowance is provided against our deferred income tax assets when their realization is not reasonably assured.

We assess all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely to be realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and we will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

Results of operations

Comparison of the three months ended March 31, 2013 and 2014 (Unaudited)

The following table summarizes our net income (loss) during the periods indicated (in thousands, except percentages):

	Three Months Ended March 31,		Increase/(Decrease)	
	2013	2014		
Revenue	$ 3,000	$ —	$ (3,000)	(100%)
Operating expenses:				
Research and development	703	372	(331)	(47%)
General and administrative	416	312	(104)	(25%)
Income (loss) from operations	1,881	(684)	(2,565)	(136%)
Interest income (expense), net	(944)	(388)	(556)	(59%)
Other income (expense), net	77	238	161	211%
Net income (loss)	$ 1,014	$ (834)	$ (1,848)	(182%)

Revenue

No revenue was recognized in the three months ended March 31, 2014. The $3.0 million revenue recognized in the three months ended March 31, 2013 represented the revenue recognized in the form of a non-refundable up-front payment pursuant to our license agreement with GSK.

Research and development expense

Research and development expense decreased $0.3 million, or 47%, from $0.7 million in the three months ended March 31, 2013 to $0.4 million in the three months ended March 31, 2014. The expenses are associated with clinical trials conducted with CoSense in 2013 and the decline in expenses was due to the ramp-down of regulatory costs associated with the approval of CoSense.

General and administrative expense

General and administrative expense decreased $0.1 million, or 25%, from $0.4 million in the three months ended March 31, 2013 to $0.3 million in the three months ended March 31, 2014. The decrease in general and administrative expense was primarily due to lower consulting fees, professional services and facilities-related expenses incurred during the 2014 period as compared to 2013.

Interest income

Interest income was not material and remained relatively consistent between the two quarters.

Interest expense

Interest expense decreased $0.6 million, or 59% from $0.9 million in the three months ended March 31, 2013 to $0.4 million in the three months ended March 31, 2014. Interest expense includes the amortization of the debt discounts associated with the convertible notes, and because the discounts to the notes were fully amortized as of December 31, 2013, the three months ended 2014 was less than the comparable period in 2013. We recorded accrued interest expense on the convertible promissory notes outstanding during the three months ended March 31, 2013 and 2014. The total principal plus accrued interest on the convertible promissory notes as of March 31, 2013 and 2014 was $12.0 million and $14.4 million, respectively.

Other income (expense), net

The other income in the three months ended March 31, 2013 increased by $0.2 million or 211% from $77,000 in the three months ended March 31, 2013 to $238,000 in the three months ended March 31, 2014. This increase was primarily due to a change in the fair value of the preferred stock warrants of $0.2 million.

Results of operations

Comparison of the years ended December 31, 2012 and 2013

The following table summarizes our net loss during the periods indicated (in thousands, except percentages):

	Year Ended December 31,		Increase/(Decrease)	
	2012	2013		
Revenue	$ —	$ 3,000	$ 3,000	NM(1)
Operating expenses:				
Research and development	2,470	2,380	(90)	(4)%
General and administrative	1,127	1,467	340	30%
Loss from operations	(3,597)	(847)	(2,750)	(76)%
Interest income (expense), net	(2,863)	(2,858)	(5)	NM(1)
Other income (expense), net	(22)	(2)	(20)	NM(1)
Net loss	$ (6,482)	$ (3,707)	$ (2,775)	(43)%

(1) Not meaningful.

Revenue

No revenue was recognized in the year ended December 31, 2012. The $3.0 million revenue recognized in the year ended December 31, 2013 represented the revenue recognized pursuant to our license agreement with GSK.

Research and development expense

Research and development expense decreased $0.1 million, or 4%, from $2.5 million for 2012 to $2.4 million for 2013. This was due to expenses associated with clinical trials conducted with CoSense in 2013 and the ramp-down of regulatory costs associated with approval of CoSense. For the years ended December 31, 2012 and 2013, substantially all of our research and development expense related to our development activity for Serenz and CoSense.

General and administrative expense

General and administrative expense increased $0.3 million, or 30%, from $1.1 million for 2012 to $1.5 million for 2013. The increase in general and administrative expense was primarily due to additional consulting, professional services and facilities expenses incurred during the 2013 period as compared to 2012, as we prepared for commercialization of the CoSense product and pursued license opportunities for our Serenz product.

Interest income

Interest income was not material and remained relatively consistent between the two years.

Interest expense

Interest expense remained relatively the same in each period, including $2.9 million for both periods. We record interest expense on the convertible promissory notes outstanding during the year, and as of December 31, 2012 and 2013, the total principal and accrued but unpaid interest balance on the notes was $11.1 and $14.0 million, respectively. Interest expense included non-cash expense related to the amortization of the debt discount in both years.

Other income (expense), net

Other income (expense), net decreased $20,000, from $22,000 in expense for 2012 to $2,000 in expense for 2013. This decrease was primarily due to a change in the fair value of the preferred stock warrant liability and the receipt in 2013 of $0.1 million due to a payment from an insurance company that converted from a mutual company to a privately held company.

Liquidity, capital resources and plan of operations

Since our inception and through March 31, 2014, we have financed our operations primarily through private placements of our equity securities and debt financing. At March 31, 2014, we had cash and cash equivalents of $0.8 million, a majority of which is invested in a money market fund at an AAA-rated financial institution. We expect to incur substantial expenditures in the foreseeable future for the development and potential commercialization of Serenz and CoSense products.

We may continue to require additional financing to develop our future products and fund operations for the foreseeable future. In April 2014, we received gross proceeds of approximately $1.8 million from the sale of convertible promissory notes, and we will continue to seek funds through equity or debt financings (including this offering), collaborative or other arrangements with corporate sources, or through other sources of financing. Assuming we are successful in concluding this offering, we expect that we will have sufficient working capital to execute on our business plan through at least June 2015. If we are not successful in concluding this offering, nor able to raise any additional funds via alternative sources of financing, we expect that we will have to restructure our business significantly to focus resources on the commercial launch of CoSense, and without significant near-term revenue from CoSense sales, we may not continue as a going concern. Adequate additional funding may not be available to us on acceptable terms, or at all. Our failure to raise capital as and when needed could have a negative impact on our financial condition and our ability to pursue our business strategies. These uncertainties raise substantial doubt as to our ability to continue as a going concern. Our financial statements included in this prospectus do not include any adjustments that might be necessary if we are unable to continue as a going concern. We anticipate that we may need to raise substantial additional capital, the requirements of which will depend on many factors, including:

- the rate of progress in the commercialization of our products and the generation of revenue from product sales;
- the degree and rate of market acceptance of any products launched by us or future partners;
- the cost of commercializing our products, including the costs of sales, marketing, and distribution;
- the costs of developing our anticipated internal sales and marketing capabilities;
- the cost of preparing to manufacture our products on a larger scale;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;

- our ability to enter into additional collaboration, licensing, commercialization or other arrangements and the terms and timing of such arrangements; and

- the emergence of competing technologies or other adverse market developments.

If we are unable to raise additional funds when needed, our ability to attain commercial success with CoSense, or our other potential products, may be impaired. We may also be required to delay, reduce, or terminate some or all of our development programs and clinical trials. We may also be required to sell or license to others technologies or future products or programs that we would prefer to develop and commercialize ourselves.

Cash flows

The following table sets forth the primary sources and uses of cash and cash equivalents for each of the periods presented below:

	Year Ended December 31,		Three Months Ended March 31,	
	2012	2013	2013	2014
			(unaudited)	
Net cash used in operating activities	$ (3,496,432)	$ (885,218)	$ 2,084,895	$ (509,359)
Net cash used in investing activities	(2,490)	(1,274)	(1,274)	-
Net cash provided by financing activities	5,026,898	-	-	4,500
Net increase (decrease) in cash and cash equivalents	$ 1,527,976	$ (886,492)	$ 2,083,621	$ (504,859)

Cash provided by (used in) operating activities

During the three months ended March 31, 2014, net cash used in operating activities was $0.5 million, which was primarily due to the use of funds in our operations related to the development of our products. Net cash provided by operating activities in the three months ended March 31, 2013 was due primarily to the receipt of $3.0 million from GSK, less operating expenses incurred during the period.

Net cash used in operating activities was $3.5 million and $0.9 million in 2012 and 2013, respectively, which was primarily due to the use of funds in our operations related to the development of our products. Cash used in operating activities in 2013 decreased compared to 2012 primarily due to licensing revenues received in 2013, resulting in lower net loss from operations.

Cash used in investing activities

Cash used in investing activities consisted primarily of investment in equipment, and an increase in restricted cash due to requirements under lease obligations.

Cash provided by financing activities

During the three months ended March 31, 2014, cash provided by financing activities was $4,500, consisting primarily of net proceeds from the sale of property, plant and equipment.

Cash provided by financing activities was $0 in 2013, compared to $5.0 million in 2012. Cash provided by financing activities in 2012 consisted primarily of net proceeds from the issuance of convertible promissory notes.

As of May 31, 2014, we had cash and cash equivalents of approximately $1.6 million, including the net proceeds we received from our convertible note financing in April 2014. As described in Note 1 of our accompanying audited financial statements, our auditors have included a “going concern” provision in their

opinion on our financial statements, expressing substantial doubt that we can continue as an ongoing business for the next twelve months. The offering contemplated in this prospectus would give us cash resources for at least the next twelve months according to our current business plan. In the event that this offering does not raise a sufficient amount, we may be required to alter our business plan, which may impair the value of our business.

Contractual obligations and commitments

As of December 31, 2013, we had lease obligations totaling $111,000 consisting of an operating lease for our operating facility that expired in May 2014. We signed a sublease in May 2014, which expires in May 2015, for a new office space in Redwood City, California that expires in May 2015. The sublease is for one year commencing June 1, 2014, with an option to renew to June 2018. We prepaid rent for the last four months of the initial lease term. Minimum payments under the agreement are $199,000 in calendar 2014 and $18,000 in calendar 2015.

We are obligated to make future payments to third parties under in-license agreements, including sublicense fees, royalties, and payments that become due and payable on the achievement of certain development and commercialization milestones. As the amount and timing of sublicense fees and the achievement and timing of these milestones are not probable and estimable, such commitments have not been included on our balance sheet or in the contractual obligations tables above. We are also obligated to make certain payments of deferred compensation to management upon completion of certain types of transactions. As the amount and timing of such payments are not probable and estimable, such commitments have not been included on our balance sheet or in the contractual obligations tables above.

Convertible Promissory Notes

In 2010, we entered into a convertible promissory note and warrant purchase agreement with various investors, pursuant to which we sold convertible promissory notes to the investors totaling approximately $5.2 million. The notes are collateralized by substantially all of our assets and bear interest at a fixed rate of 12% per annum, which is accrued but not paid. These notes are convertible into equity securities at a 25% discount to the price per share of the next round of equity securities to be issued. In connection with the sale of additional convertible promissory notes issued by us in April 2014, as described below, we extended the maturity date of the outstanding 2010 convertible promissory notes to September 30, 2015, or upon an occurrence of demand, made after such date, by the holders of two-thirds of the total principal amount of the 2010 convertible promissory notes then outstanding.

In 2012, we entered into a convertible promissory note and warrant purchase agreement, as amended, with various investors, pursuant to which we sold convertible promissory notes totaling: (i) in January 2012, $1.9 million; and (ii) in July 2012, $3.1 million, respectively. The notes are collateralized by substantially all of our assets and bear interest at a fixed rate of 12% per annum, which is accrued but not paid. They are convertible into equity securities at a 25% discount to the price per share of the next round of equity securities to be issued. In connection with the sale of additional convertible promissory notes issued by us in April 2014, as described below, we extended the maturity date of the outstanding 2012 convertible promissory notes to September 30, 2015, or upon an occurrence of demand, made after such date, by the holders of two-thirds of the total principal amounts of 2012 convertible notes payable then outstanding.

We refer to the 2010 convertible promissory notes and 2012 convertible promissory notes, collectively in this prospectus as the 2010/2012 convertible promissory notes. The outstanding 2010/2012 convertible promissory notes, and warrants associated therewith, were subsequently amended in May 2014 to provide for the conversion of these notes into shares of our common stock, in connection with this offering, at a discount of 25% of the public offering price of the common stock, and exercise of the warrants for shares of our common stock with an exercise price of 75% of the public offering price of the common stock. Additionally, upon conversion of the outstanding 2010/2012 convertible promissory notes into shares of our common stock in this offering, the security interest associated with these instruments will be extinguished.

In April 2014, we entered into a convertible promissory note and warrant purchase agreement with various investors, pursuant to which we sold convertible promissory notes to the investors totaling approximately $1.8 million. The maturity date of these notes is September 30, 2015, following which, upon an occurrence of demand, made after such date, by the holders of two-thirds of the total principal amount of 2014 convertible promissory notes then outstanding. The 2014 convertible promissory notes are unsecured and bear interest as follows: (i) if this offering is completed, at a fixed rate of 2% per annum; or (ii) if a convertible preferred stock financing occurs before the completion of this offering, or if neither this offering nor a convertible preferred stock financing is completed before the maturity date of these notes, at a fixed rate of 12% per annum. The 2014 convertible promissory notes are convertible as follows: (i) if this offering is completed, these notes will automatically convert into units at a discount of 30% to the public offering price of the units; or (ii) (A) if a convertible preferred stock financing which results in gross proceeds to us of at least $1.5 million (excluding the conversion of all of our outstanding convertible promissory notes) occurs prior to this offering being completed, the 2014 convertible promissory notes will automatically convert into the series of convertible preferred stock sold in that financing at a price per share equal to 75% of the price per share paid by other investors in that financing, or (B) if no such preferred stock financing which results in gross proceeds to us of at least $1.5 million (excluding conversion of these notes) occurs prior the maturity date of these notes, these notes may be converted, at the election of each note holder, into either (1) shares of the series of convertible preferred stock sold in our next preferred stock financing at a price per share equal to 75% of the price per share paid by other investors in such financing, or (2) shares of our Series C convertible preferred stock, at a price per share of $1.35 per share, in each case following the maturity date of these notes.

We apply the accounting standards for derivatives and hedging and for distinguishing liabilities from equity when accounting for hybrid contracts that feature conversion options. Our accounts for convertible debt instruments when we have determined that the embedded conversion options should not be bifurcated from their host instruments in accordance with ASC 470-20 *"Debt with Conversion and Other Options"*. Our records, when necessary, discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized over the term of the related debt.

Off-balance sheet arrangements

Since our inception, we have not engaged in any off-balance sheet arrangements, as these are defined in the rules and regulations of the SEC.

JOBS Act accounting election

The JOBS Act permits an "emerging growth company" such as us to take advantage of an extended transition period to comply with new or revised accounting standards applicable to public companies. We are choosing to take advantage of this provision and, as a result, we will adopt the extended transition period available under the JOBS Act until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided under the JOBS Act.

Quantitative and qualitative disclosures about market risk

The primary objective of our investment activities is to preserve our capital to fund our operations. We also seek to maximize income from our cash and cash equivalents without assuming significant risk. To achieve our objectives, we invest our cash and cash equivalents in money market funds. As of March 31, 2014, we had cash and cash equivalents of $0.8 million consisting of cash and investments in a highly liquid U.S. money market fund. A portion of our investments may be subject to interest rate risk and could fall in value if market interest rates increase. However, because our investments are primarily short-term in duration, we believe that our exposure to interest rate risk is not significant and a 1% movement in market interest rates would not have a significant impact on the total value of our portfolio. We actively monitor changes in interest rates and invest in accordance with an investment policy ratified by the Audit Committee of our board of directors.

Controls and procedures

A company's internal control over financial reporting is a process designed by, or under the supervision of, that company's principal executive and principal financial officers, or persons performing similar functions, and effected by that company's board of directors, management and other personnel to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate.

In connection with our preparation for this offering, we concluded that there was a material weakness in our internal control over financial reporting that caused the restatement of our previously issued financial statements as of and for the year ended December 31, 2012, and the deficiencies extended through the year ended December 31, 2013. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis.

The following material weakness was identified: We did not maintain a sufficient complement of resources with an appropriate level of accounting knowledge, experience and training commensurate with our structure and financial reporting requirements. As of December 31, 2013, our financial operations staff consisted of one part-time consultant.

During the first quarter of 2014 and in preparation for this offering, we initiated various remediation efforts, including initiation of hiring processes for additional personnel with the appropriate public company and technical accounting expertise, and other actions that are more fully described below. As such remediation efforts are still ongoing, we have concluded that the material weakness has not been remediated. Our remediation efforts to date have included the following:

Addition of Employee Resources—We are in the process of adding appropriate full-time resources to our finance team and are have hired additional external consultants with public company and technical accounting experience to facilitate accurate and timely accounting closes, and to accurately prepare and review financial statements and related footnote disclosures. Our finance team is being expanded to include external consultants with significant financial and accounting technical experience.

Other Actions to Strengthen the Internal Control Environment—As a result of the additional resources added to the finance function, we are allowing for separate preparation and review of the reconciliations and other account analyses. In addition, these additional finance resources are allowing us to develop a more structured close process, including enhancing our existing policies and procedures, to improve the completeness, timeliness and accuracy of our financial reporting and disclosures including, but not limited to, those regarding proper financial statement classification, recognition of accruals to ensure proper period-end cutoff of expenses and assessing more judgmental areas of accounting.

The actions that have been taken are subject to continued review, supported by confirmation and testing by management as well as audit committee oversight. While we have implemented a plan to remediate this weakness, we cannot assure you that we will be able to remediate this weakness, which could impair our ability to accurately and timely report our financial position, results of operations or cash flows.

See "Risk factors—Risks relating to our business— "We have identified a material weakness in our internal control over financial reporting as of December 31, 2013, and may identify additional material weaknesses in the future that may cause us to fail to meet our reporting obligations or result in material misstatements of our financial statements. If we fail to remedy our material weaknesses, or if we fail to establish and maintain effective control over financial reporting, our ability to accurately and timely report our financial results could be adversely affected."

BUSINESS

Overview

We develop medical diagnostics and therapeutics based on our proprietary technology for precision metering of gas flow. Our first product, CoSense, aids in the diagnosis of hemolysis in neonates, a dangerous condition in which red blood cells degrade rapidly, which can lead to long-term developmental disability. CoSense received initial 510(k) clearance for sale in the U.S. in the fourth quarter of 2012, with a more specific Indication for Use related to hemolysis in the first quarter of 2014, and received CE Mark approval for sale in the European Union, or E.U., in the third quarter of 2013.

With respect to therapeutics, we have previously obtained CE Mark approval in the E.U. for Serenz, an as-needed treatment for allergic rhinitis, or AR, that has shown statistically significant improvements in AR symptoms in randomized, controlled Phase 2 clinical trials. Our research and development efforts are focused on additional diagnostic products based on our Sensalyze Technology Platform, a portfolio of proprietary methods and devices which enables CoSense, and can be applied to detect a variety of analytes in exhaled breath.

Approximately 143 million babies are born annually worldwide, with approximately 9.2 million of these born in the U.S. and E.U. Over 60% of neonates present with jaundice at some point in the first five days of life. We believe CoSense has the potential to become a part of routine pre-discharge screening for all newborns, by aiding in the differential diagnosis of hemolysis in infants that present with, or are at risk of developing, jaundice. Red blood cell breakdown is a normal phenomenon but in certain situations the breakdown is accelerated or is excessive, and is referred to as hemolysis. The most common cause of hospital readmission during the neonatal phase is jaundice, and we expect that CoSense will help reduce such readmissions. Many causes of jaundice do not represent a significant health threat. However, when severe jaundice occurs in the presence of hemolysis, rapid diagnosis and treatment may be necessary for infants to avoid life-long neurological impairment or other disability. Also, unnecessary treatment increases hospital expenses, is stressful for both infant and parents and may increase morbidity. There is an unmet need, therefore, for more accurate diagnostics for hemolysis, particularly if they are non-invasive, rapid, and easy to use. Currently, hemolysis is detected via a variety of blood tests, which are limited in their diagnostic accuracy and suffer from other drawbacks, including the need for painful blood draws and a waiting period for results. CoSense detects hemolysis by measuring carbon monoxide, or CO, in the portion of the exhaled breath that originates from the deepest portion of the lung. This is referred to as the “end-tidal” component of the breath, and the measurement we perform with CoSense is referred to as end-tidal carbon monoxide, or ETCO. This measurement is typically reported after being corrected for ambient CO levels, and is referred to as ETCOc. Throughout this document, ETCO refers to ETCOc levels. The American Academy of Pediatrics, or AAP, guidelines published in the journal Pediatrics in 2004 recommend ETCO measurement be performed on certain neonates to assess the presence of hemolysis. Because CO is a direct byproduct of hemolysis, ETCO can measure the rate of bilirubin production from hemolysis. However, no device is currently commercially available for accurately measuring the ETCO levels associated with the rate of hemolysis in clinical practice in neonates. As a result, we believe that CoSense will be the only device on the market that enables physicians to practice in accordance with the AAP guidelines when evaluating jaundiced neonates for potential treatment.

We are currently focused on launching CoSense commercially, which we intend to commence in the second half of 2014 with the proceeds of this offering. CoSense combines a portable detection device with a single-use disposable nasal cannula to measure ETCO. While our launch efforts will initially focus on establishing an installed base of devices and building physician support for the device, we expect sales of the disposable cannula to be the largest component of our revenue over time. An electronic interface between the device and the consumable cannula requires one-time use of our cannula, which also promotes good hygiene and is necessary to preserve the accuracy of the device.

Sales and marketing activities associated with the launch of CoSense comprise a significant portion of our planned use of proceeds from this offering. We plan to hire our own sales force to market CoSense to hospitals and other medical institutions in the U.S. We also intend to use our research and development expertise to develop additional diagnostic devices based on our Sensalyze Technology Platform that can also be sold by our sales force. Our current development pipeline includes proposed diagnostic devices for asthma in children, assessment of blood carbon dioxide, or CO_2, concentration in neonates and malabsorption in infants with colic. We may also license elements of our Sensalyze Technology Platform to other companies that have complementary development or commercial capabilities.

Serenz, our therapeutic product candidate, is a treatment for symptoms related to AR, which, when triggered by seasonal allergens, is commonly known as hay fever or seasonal allergies. Several Phase 2 clinical trials have been completed in which Serenz showed statistically significant improvements in total nasal symptom scores, in symptomatic patients when compared to controls. AR is typically an episodic disorder with intermittent symptoms. However, there is no treatment currently available that provides truly rapid relief of symptoms, other than topical decongestants, which can have significant side effects. The more optimal therapeutic for an episodic disorder is one that will treat symptoms when they occur, and can therefore be taken only as needed. We believe that Serenz has an ideal profile for an as-needed therapeutic for AR and may provide advantages over regularly dosed, slow to act currently marketed products.

We currently plan to commercialize Serenz in the E.U. via distributorship arrangements. In the U.S., we intend to determine the regulatory approval pathway with the U.S. Food and Drug Administration, or FDA, for Serenz and subsequently to seek a partner or distributorship arrangements for commercialization.

CoSense

CoSense is the first device using our Sensalyze Technology Platform to achieve regulatory approval. CoSense detects ETCO, which can be elevated due to endogenous causes such as excessive breakdown of red blood cells, or hemolysis, or exogenous causes such as CO poisoning and smoke inhalation. Our first target market is for the detection of hemolysis in neonates, a disorder in which CO and bilirubin are produced in excess as byproducts of the breakdown of red blood cells. Hemolysis can place neonates at high risk for hyperbilirubinemia and resulting neurodevelopmental disability. The AAP recommends the use of ETCO monitoring to evaluate neonates for hemolysis, but there is no device currently on the market for physicians to effectively monitor ETCO in clinical practice.

Hemolysis and Bilirubin

We estimate that 34% of the 9.2 million newborns in the U.S. and E.U. each year should be tested for hemolysis under current treatment practice, representing approximately 3.1 million newborns. We believe that many of these infants are tested, but using relatively inaccurate and invasive diagnostic methods. Retrospective analysis of data, including data from over 54,000 infants compiled by the Collaborative Perinatal Project sponsored by the National Institutes of Health, or NIH, suggests that the only factor that predisposes infants with jaundice to adverse neurodevelopmental outcomes is the concurrent presence of hemolysis. Hemolysis can be caused by a number of factors, including physical trauma and bruising, blood group incompatibility, autoimmune disorders, and genetic causes such as sickle cell disease and G6PD enzyme deficiency. Because bilirubin is the chemical byproduct of the destruction of hemoglobin within red blood cells, hemolysis causes bilirubin production to spike. Bilirubin is yellow in color, and if present in excessive amounts in the body, known as hyperbilirubinemia, it can be deposited in tissues such as the skin and conjunctiva. The condition manifests as a yellowing of skin and conjunctiva and is called jaundice. Elevated levels of bilirubin are particularly dangerous to neonates, who have immature livers and therefore lack the adult ability to excrete bilirubin. Neonates also lack a well-formed blood-brain barrier to prevent bilirubin from entering the central nervous system, or CNS, where bilirubin is known to be toxic to neuronal tissue.

Adverse Effects of Jaundice and Hyperbilirubinemia

Every year approximately 143 million babies are born world-wide, of which 4.0 million are in the U.S. and 5.2 million in the E.U. It is estimated that up to 60% of term neonates and 80% of preterm neonates may have jaundice. Most neonates have non-pathologic jaundice, which is related to a decreased capacity of the neonate to excrete bilirubin into the intestinal tract for elimination from the body. These neonates will often normalize their bilirubin levels without a need for treatment. When treatment is required, it is typically via phototherapy, which typically involves isolating the baby in a chamber that directs blue-wavelength light to the baby's skin. The light penetrates the skin and breaks down bilirubin via a photochemical reaction over a period of several hours. When treatment is performed in a timely fashion, adverse outcomes can be avoided. Some neonates with jaundice, however, will develop adverse neurodevelopmental outcomes related to hyperbilirubinemia.

According to the Agency for Healthcare Research and Quality, part of the U.S. Department of Health and Human Services, neonatal jaundice is the single largest cause for hospital readmission of neonates in the U.S. This results in inefficient care and can also be highly stressful and disruptive for the parents and neonate.

Exposure to excess bilirubin in the CNS as a result of hyperbilirubinemia is toxic and may cause long-term developmental disabilities. These abnormalities may be subtle, and include hearing problems and low IQ. Subtle forms of disability are known as Bilirubin-Induced Neurological Dysfunction, or BIND. More severe bilirubin-induced disabilities, including respiratory failure and resulting death, can be referred to as Acute Bilirubin Encephalopathy, or ABE. Bilirubin toxicity can ultimately result in a chronic, severe, and disabling condition called kernicterus. Kernicterus is a cerebral palsy-like condition in which the patient lacks muscle tone and motor control, cannot operate self-sufficiently, and can require long-term care. The National Quality Forum has in the past described kernicterus as a "never event," one which physicians should ensure never occurs in their practice.

Limitations of Current Diagnostic Methods

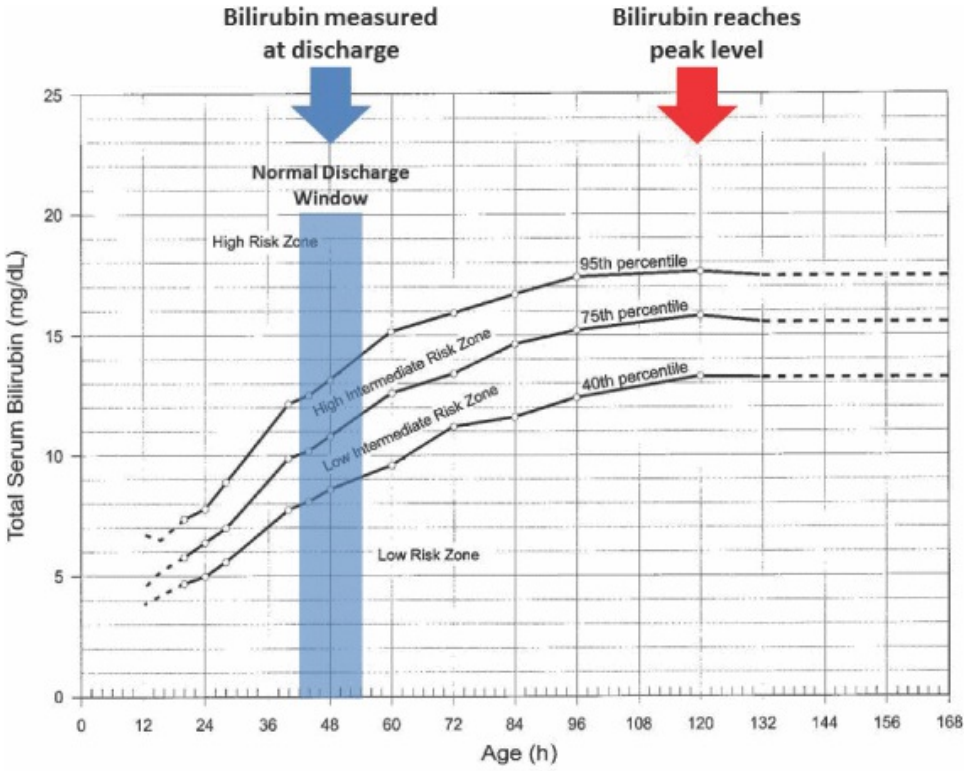
It has been reported in peer-reviewed publications that the presence of hemolysis in a neonate with jaundice is a predictor of adverse neurodevelopmental outcomes. If neonates with high rates of hemolysis could be identified before they are discharged from the hospital, treatment could begin earlier, exposure to excessive bilirubin would be minimized and readmissions for jaundice would be reduced. Currently, accurate tools for diagnosing hemolysis in neonates are not available in the market. Tests that are commonly done to assess hemolysis such as serial hematocrit levels, reticulocyte counts and peripheral smear, are all invasive blood tests and are less useful in neonates due to physiologic changes resulting from childbirth. Hematocrit levels and reticulocyte counts may be elevated in neonates unrelated to pathological conditions, and confound the diagnosis of hemolysis, which typically involves low hematocrit and high reticulocyte counts. The Coombs test, a blood test that detects antibodies that can cause hemolysis, is used extensively as a measure of hemolysis; however, it is inaccurate and often requires a painful heel stick to draw a blood sample. Other conditions besides hemolysis may trigger a false positive or false negative Coombs test. In spite of these limitations, we believe that the Coombs test remains the most frequently used diagnostic for hemolysis by physicians.

Today, the AAP recommends that all neonates be routinely tested for bilirubin levels at some point prior to being discharged from the hospital, although other organizations such as the United States Preventive Services Task Force or USPSTF, have not made similar recommendations. In many hospitals this is done via a blood test, although transcutaneous bilirubin meters are now available to test bilirubin levels non-invasively through the skin. Inaccurate results with use of these devices have been reported based on serum bilirubin level, measurement site, race, and ethnicity. In addition, bilirubin levels reflect only a point in time rather than the rate of increase, and therefore, may not address the risk of subsequent adverse outcomes. These tests do not capture the rate of bilirubin production or the presence/absence of hemolysis, leaving the physician uncertain as to the patient's level of risk. Since many babies have bilirubin levels in a zone described as "intermediate risk" by current treatment guidelines, it is difficult for physicians to decide whether to treat aggressively or more conservatively.

Phototherapy is widely used to treat jaundice, and applied to approximately 8% of all births in the U.S. However, phototherapy treatment disrupts the opportunity for parent-newborn bonding, and is often highly stressful for infants and new parents. In some cases, particularly among low-risk newborns who are jaundiced, but not hemolyzing, phototherapy may not be necessary. In other cases, observation of jaundice and early testing for hemolysis may accelerate diagnosis and treatment with phototherapy. In all cases, understanding the rate of hemolysis is a critical part of providing timely and effective care. There is a significant need for a test to aid in the diagnosis of hemolysis that is rapid, accurate, and easy to use across all acuity levels within neonatal care.

Also, neonates are typically discharged from the hospital within 48 hours of normal birth in the U.S. Hospitals are under pressure to discharge even earlier, in order to reduce costs and manage inpatient capacity. Bilirubin levels, however, typically peak more than 72 hours post birth, as shown in Figure 1 below. We believe that neonates with hemolysis can experience bilirubin levels in the intermediate risk range at time of discharge, but can spike rapidly to neurotoxic levels in the post-discharge period, out of the range expected based on the "Bhutani nomogram."

Figure 1: Survey-based "Bhutani nomogram" of bilirubin levels over time, based on data from 2,840 neonates



Curved lines represent 40th, 75th and 95th percentile levels of bilirubin at specific age in hours

Physicians need to identify the cause of the jaundice and, based upon these findings, determine whether the infant is at serious risk for BIND, ABE, or kernicterus. However, physicians often have a diagnostic dilemma as to what is causing the jaundice. It is often not possible, with current diagnostic techniques and clinical workflow, to test whether it is merely a physiologic jaundice that poses little risk, or some other process that presents a serious risk to the neonate. Risk arises primarily from the presence of hemolysis, which leads to

hyperbilirubinemia that persists rather than resolving spontaneously. As a result of the serious consequences of hyperbilirubinemia, the AAP recommends that all neonates be closely monitored for jaundice, and has called for physicians to determine the presence or absence of hemolysis in order to make appropriate treatment decisions. As a result, there are both clinical need and physician interest in the development of accurate and non-invasive methods for detecting hemolysis. CoSense addresses this need to measure a baby's exhaled CO to assess the rate of hemolysis accurately, and does so via a non-invasive measurement at the point-of-care. It delivers results within minutes, enabling more timely treatment than the current standard of care.

CoSense: FDA 510(k) Clearance and CE Mark Approval

CoSense, our first Sensalyze Technology Platform product to receive 510(k) clearance from the FDA and CE mark approved, is a monitor of end-tidal CO, or ETCO. CO is a direct byproduct of hemolysis, and based on extensive published data such as that from Stanford University, the rate of bilirubin production can be measured by analyzing the concentration of CO in a neonate's exhaled breath.

CoSense is a point-of-care device that consists of a light-weight, compact monitoring device and a single-use nasal cannula, both shown in Figure 2 below. The cannula is placed just inside the nostril of the neonate and is connected to the monitor. The CoSense device is turned on and acquires the breath signal while the neonate breathes. Appropriate sample acquisition takes an average of 30 seconds. The cannula can then be removed from the baby and the device takes another four minutes to report the test result.

Figure 2: CoSense

CoSense
Dimensions: 9.7 x 7.8 x 2.7 inches

The AAP recommends the use of ETCO monitoring for the detection of hemolysis. We believe ETCO monitoring will enable more rapid and appropriate treatment decisions and reduce overall costs of patient care. However, there is currently no device on the market that effectively measures ETCO in neonates.

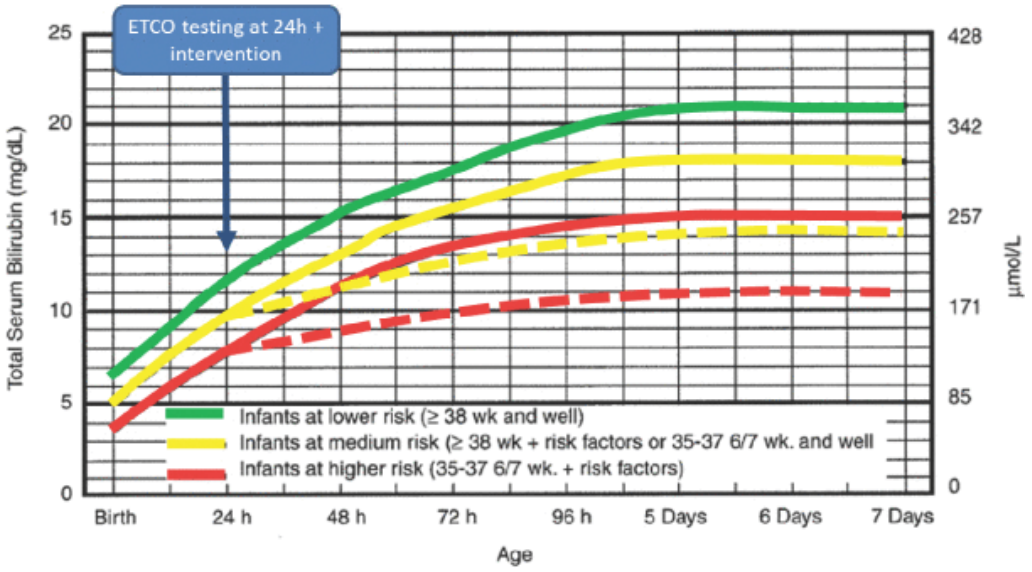
With CoSense data, physicians may be able to quickly identify neonates with jaundice who are at risk of adverse neurological outcomes or other disability because of hemolysis. The physician can then initiate earlier treatments for jaundice, such as phototherapy, when necessary. As shown in Figure 3 below, we believe the potential impact of CoSense should result in reduced development of hyperbilirubinemia in neonates. In addition, CoSense may also help identify neonates who do not have excessive hemolysis, and therefore may not require phototherapy or serial bilirubin measurements. As a result, these infants may be discharged from the hospital earlier, or with less intensive clinical follow-up. We believe this will reduce the total number of blood draws that are necessary. We also believe this will reduce the rate of readmissions, resulting in significant cost savings for the hospital.

CoSense has the following advantages that we believe will drive its adoption by hospitals, other medical institutions and physicians:

- rapid administration at the point-of-care, yielding results in approximately five minutes;
- non-invasive and minimally disruptive to the neonate;
- no requirement for specific breath maneuver;
- simple user interface that allows the healthcare professional to use it correctly with minimal training;
- no on-site calibration necessary; and
- accuracy over a range of CO concentrations clinically relevant to detection of hemolysis.

In addition, we believe the CoSense device will be priced at a level that falls below the typical capital equipment purchasing threshold for a hospital or other medical institution in the U.S.

Figure 3: Guidelines for phototherapy from the AAP based on bilirubin levels (solid lines) at a specified age for infants at low, medium or high risk. The potential trajectory of bilirubin with early intervention based on CoSense testing, as estimated by us, is represented by dashed lines. This suggests that exposure to bilirubin in medium and high risk patients could be substantially reduced by testing with CoSense.



Clinical Trials

Three investigator-sponsored clinical trials have been performed to validate the ability of CoSense to detect the presence of hemolysis. Two of these were performed in neonates. A third trial was performed in children with sickle cell anemia, or SCA, a disease which results in chronic hemolysis.

In a pilot clinical trial at Stanford University, a bench to bedside evaluation of CoSense was undertaken to identify hemolysis in neonates, and to correlate ETCO levels with bilirubin production as defined by levels of carboxyhemoglobin, or COHb, in the blood. Since CO combines with hemoglobin in the blood with high affinity to form carboxyhemoglobin, or COHb, the level of COHb is expected to closely relate to ETCO.

In bench studies, inter-device accuracy and intra-device imprecision were evaluated in three different CoSense devices. In the clinical setting, 73 neonates who all had a gestational age, or GA, more than 30 weeks were tested. ETCO measurements, in triplicate, were compared to COHb levels measured by gas chromatography in the subset of 20 of the 73 neonates who consented to testing for COHb and were suspected of having hemolysis. Gas chromatography is a technique better suited to the laboratory than to high-volume clinical use, particularly in the point-of-care neonatal diagnostic setting. It requires a large, complicated chromatography instrument and highly trained staff.

In the bench studies, overall mean inter-device accuracy was high (98.3±3% (range 93.2–99.4%) and 98.7±2.1% (range 93.3–101.2%) at 2.4 and 5.1 ppm, respectively. Mean intra-device imprecision was low (3.3% (range 2.8–3.7%) and 2.5% (range 1.9–2.6%) at 2.4 and 5.1 ppm, respectively), indicating that CoSense provides consistent results across multiple devices as well as repeatedly within a device. Figure 4 represents the distribution of 102 ETCO measurements from 73 neonates. We believe that values over the 50th percentile (or 1.5 ppm) represent a risk for hemolysis, and the risk increases with values at the higher percentile levels. Figure 5

shows the relationship between ETCO measurements from CoSense and COHb levels measured via gas chromatography (23 samples from 20 patients). A close correlation between the two is seen ($r^2 = 0.96$), confirming that ETCO values with CoSense accurately measure bilirubin production and therefore hemolysis.

Figure 4: ***Distribution of ETCO Values.*** **A total of 102 ETCOc measurements were collected from 73 newborns. We believe that infants with ETCO values above the 50th percentile are at risk for hemolysis, with the risk increasing at higher percentiles.**

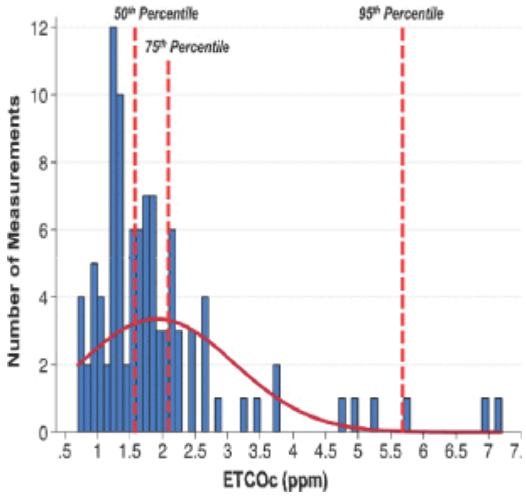
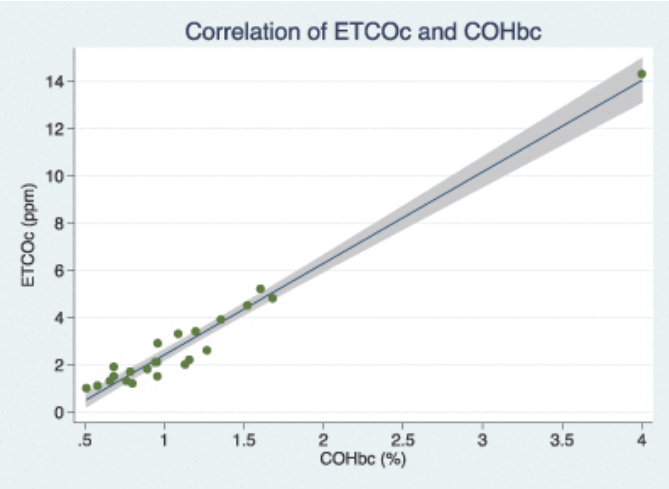


Figure 5: ***Correlation of ETCO as measured via CoSense with COHb measured via gas chromatography.*** **The correlation coefficient is 0.97.**



The ability of CoSense to identify hemolysis in neonates with significant hyperbilirubinemia was evaluated at The Children's Hospital of Zhejiang University School of Medicine in Hangzhou, China. Significant hyperbilirubinemia was defined as total serum bilirubin, TSB, levels that require phototherapy according to AAP guidelines. Investigators compared ETCO, as measured with CoSense, with current blood tests for hemolysis, such as hematocrit, or Hct, which measures the number of red blood cells, reticulocyte count, or Retic, which measures new red cell production levels, serum bilirubin test, and the Coombs Test. While these tests are often performed to detect hemolysis in neonates, they are not considered to be reliable in the neonatal setting. The information that is gained from a combination of all these tests is therefore used to inform a determination of the presence or absence of hemolysis. Certain tests may be better than others for a given type of hemolysis, whereas ETCO levels are elevated due to hemolysis regardless of the cause.

Fifty-six neonates with significant hyperbilirubinemia participated in this non-randomized open-label trial.

The groups with positive and negative Coombs test were well-matched for GA and birth weight. Mean results are shown in Figure 6 below. The group with positive Coombs had lower hematocrit and higher reticulocyte counts, supporting the presence of hemolysis. Total serum bilirubin was similar across the two groups, suggesting that bilirubin by itself is not a specific marker for hemolysis. ETCO levels were statistically significantly higher in the positive Coombs group. These data show that ETCO measurement with CoSense can provide the physician with similar information to that currently provided by invasive blood tests regarding the patient's hemolytic status, but with a simple, non-invasive breath test.

Figure 6: The Children's Hospital of Zhejiang University School of Medicine Clinical Trial Results

Patients (N = 56)	Positive Coombs	Negative Coombs	P value
Hematocrit (%)	47.1 ± 8.4	57.3± 9.8	0.348
Reticulocyte Count (%)	5.6 ± 3.9	2.8 ± 1.3	< 0.01
Total Serum Bilirubin (umol/L)	320 ± 88.8	329.4 ± 83.3	0.969
ETCOc (ppm) via CoSense	2.8 ± 2.1	1.7 ± 1.0	< 0.028

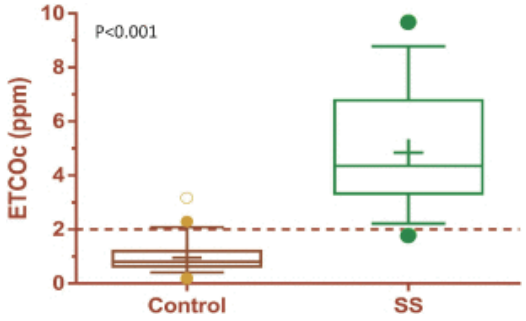
In a third clinical trial, ETCO concentration was measured in children with SCA, who are known to have chronic hemolysis, using CoSense at Children's Hospital & Research Center in Oakland, California. Children between five and fourteen years old with SCA, who were not on regular transfusions, were eligible to participate in the trial. Children with exposure to second-hand smoke, acute respiratory infection or symptomatic asthma were excluded. Healthy children between five and fourteen years old served as matched controls. Up to three measurements were taken for each subject using CoSense, and the highest ETCO value was used. One control subject had a high ETCO value and was excluded from the analysis since he was found to have asthma and was on anti-epileptic medication.

The mean ages of 16 children with SCA and 17 healthy children controls were 9.7 years and 9.9 years, respectively. The mean ± standard deviation ETCO for SCA was 4.85 ± 2.24 ppm versus 0.96 ± 0.54 ppm for controls ($p<0.001$).

The mean ETCO in the children with SCA was five-fold higher than the control group, with little overlap seen between the groups. ETCO levels were measured during tidal breathing in the tested children using CoSense. The data shows that CoSense may be useful to monitor the rate of hemolysis in children with SCA.

Figure 7: Significantly higher ETCO in sickle cell patients compared with normals

Highest ETCOc Value for Each Subject		
Patients (N=33)	**Sickle Cell (N=16)**	**Control (N=17)**
Mean	**4.85**	**0.96**
Standard Deviation	**2.24**	**0.54**
p < 0.001		



Market Opportunity

Independent market research that we conducted has identified a large market opportunity for the CoSense device in the well-baby nursery and labor and delivery units in term neonates (less than 37 weeks), as well as in the neonatal intensive care unit, or NICU, in preterm births (less than 34 weeks) and late preterm births (between 34 and 37 weeks).

In the U.S. and E.U., there are approximately 8.1 million term births and 1.1 million preterm and late preterm births each year. Approximately 60% of term births, or approximately 4.9 million births, and 80% of preterm and late preterm births, or approximately 900,000 births, are jaundiced and are at greatest risk for adverse outcomes. We believe that these neonates are at risk for hemolysis and are candidates to receive one or more CoSense tests during their hospital stay if our product was available for commercial sale.

Today, the presence of jaundice triggers either a transcutaneous or serum bilirubin test. With the availability of CoSense, physicians may complement bilirubin testing with hemolysis testing in order to perform a more complete clinical assessment. Neonates who are jaundiced but not hemolyzing may receive conservative management or phototherapy. Neonates with jaundice found to be hemolyzing will likely receive early phototherapy and also additional testing such as the Coombs test, Hct or Retic to diagnose the underlying cause of hemolysis. We believe that CoSense will allow physicians to reduce the number of neonates that receive these more invasive and more costly tests for hemolysis.

Sales and Marketing

We intend to market CoSense as the standard of care for evaluating neonates for the presence, or the rate, of hemolysis. Our launch strategy includes the following components:

- Sell CoSense directly to high-volume birthing hospitals in the U.S. via a direct sales force. Initially, we intend to deploy 12 field sales personnel with experience selling into the hospital arena, with additional personnel for medical/clinical support, technical support, training, marketing, and other support functions.

- Focus initial sales efforts on establishing and growing an installed base of CoSense devices in the highest-volume centers, which we define as centers with greater than 2,500 births annually. There are approximately 400 such hospitals in the U.S., and according to public information from Bilian's HealthDATA, these account for approximately 1.7 million births annually — 41% of the U.S. total.

By focusing each field salesperson on 30-35 sites, with particular emphasis on large multi-hospital regional networks and regional thought leader sites, we believe we can build relationships with each of these and convert from sales calls to instrument placements at a low single-digit percentage rate. Because we expect that consumable sales will drive the majority of revenues, and these will be ordered repeatedly as a result of factors other than direct promotion to existing CoSense user sites, our sales force could drive greater revenue per salesperson than might otherwise be the case.

- Subsequent efforts will focus on growing the volume of tests performed and associated consumables used. We plan to focus specifically on sales to the NICU, well-baby nursery, and labor/delivery units within each hospital. Because CoSense is a point-of-care device, each of these units of the hospital is a separate opportunity for CoSense placement.

- Establish and engage a network of distributors in the E.U. We may establish continuing operations at a location in the E.U. to ensure close coordination and effective execution of the CoSense sales and marketing plan in the E.U.

- Price the CoSense device at a level that allows hospitals to purchase it without protracted review via a "capital purchase committee" or analogous body. We believe that the cost of goods of CoSense devices allows us flexibility in setting this price, and we also believe we can offer customer hospitals attractive financing options to smooth out costs associated with the device purchase.

- Price the CoSense consumable cannula at a price that is competitive with the current costs of performing the Coombs Test and other associated invasive assays. We believe that this cost offset, complemented by potential improvements in readmission rates and clinical outcomes, will provide hospital decision-makers with a compelling economic case for adoption of CoSense.

- Build awareness of the AAP treatment guidelines, and of the benefits of CoSense, via medical education efforts to key clinical audiences, including neonatologists, pediatricians, obstetricians, and pediatric nurses.

- Collaborate with key specialty societies, including the Pediatric Academic Societies, American Academy of Family Physicians, or AAFP, and patient advocacy groups such as Parents of Infants and Children with Kernicterus, to ensure ongoing support for ETCO testing in clinical guidelines and to identify opportunities for expanding awareness of ETCO among their respective constituencies.

- Support clinical trials and publications that expand the base of evidence supporting broad adoption and use of CoSense. We expect these efforts will build support for the clinical benefits to patients as well as economic benefits to various stakeholders in the healthcare system.

We expect that we will expand our direct sales efforts to encompass lower-volume birthing centers in the U.S., once a sufficient proportion of the larger hospitals have begun to use CoSense. We may also selectively initiate direct sales to certain countries in the E.U. Furthermore, we see potential to use CoSense to make more rapid assessments of jaundiced babies in the outpatient pediatric setting, where new parents are frequently directed for followup care after hospital discharge. We will continue to evaluate expansion opportunities and pursue those where the potential to accelerate our business is deemed sufficient for the investment we put at risk.

Pricing and Reimbursement

We expect to sell the CoSense device at a price below the typical capital expenditure approval threshold levels of most hospitals and other medical institutions in the U.S. The decision to buy, therefore, would likely be driven at the departmental rather than at the institutional level. The primary decision makers are expected be the neonatologists and nurse managers in the pediatrics and neonatology departments. Our initial efforts will be to expand the install base of devices, and will be followed by efforts to increase use of the disposable cannula. The

business model anticipates a significant proportion of the revenues coming from the disposable sales, even more so in later years as the number of total CoSense devices in use in the field increases.

Since the use of CoSense is almost entirely in the inpatient setting around the time of birth, reimbursement would be in the form of a Diagnosis-Related Group, or DRG. Also known as a bundled payment, the DRG is a specific flat-fee payment amount for all services performed by a medical institution pursuant to a single diagnosis. We can, therefore, be reimbursed for the cost of a test directly from an institution without the need to approach payors such as insurance companies, or to obtain a separate reimbursement cost code. Hospital decisions to adopt new technologies for inpatient care are usually driven by improved outcomes and reduced costs of patient care. We expect that the use of CoSense will both improve outcomes related to hyperbilirubinemia and reduce the need for certain diagnostic tests in a subset of neonates with jaundice, which, as a result, will reduce overall testing costs. We also believe that positive identification of infants with hemolysis will lead to a reduced rate of readmissions for jaundice, and this array of benefits may support adoption of CoSense by clinicians and their institutions. We also plan to undertake a comprehensive effort to partner with key physician specialty societies, physician opinion leaders and patient advocacy groups to educate and inform payer stakeholders. The AAP guidelines recommend ETCO detection to confirm the presence or absence of hemolysis. In general, payer policies related to the care of neonates with jaundice reflect third-party treatment guidelines, and in this case the AAP guidelines favor use of ETCO testing, which CoSense is able to perform.

Clinical Advisors

We have a number of clinical advisors to our company, made up of key opinion leaders in the field of neonatology. The principal clinical advisors that we use are the following individuals:

Vinod (Vinny) K. Bhutani, M.D. Dr. Bhutani, a pro bono advisor, is a Professor of Pediatrics at the Stanford University School of Medicine's Division of Neonatal and Developmental Medicine and is also a Faculty member in the Stanford-India Biodesign Program. He serves as an elected member of the American Academy of Pediatrics Executive Committee, Section on Perinatal Pediatrics, and is an appointed member to the AAP Committee of Fetus and Newborn and the Subcommittee on Hyperbilirubinemia. An elected member of the American Pediatrics Society, Dr. Bhutani Co-Chairs the Audrey K. Brown Kernicterus Symposium and coordinates the Bilirubin Club at the Pediatric Academic Society annual meetings. He serves on the Board of California Association of Neonatologists and chairs the California Committee of Fetus and Newborn. Through the Program for Global Paediatric Research, Dr. Bhutani launched the Global Prevention of Kernicterus Network, serving as its Medical Director. His global heath-societal research and community service interests include prevention of jaundice-related newborn brain damage and ventilation-induced respiratory injury through systems-approach, biotechnologies, biodesign of affordable medical devices, and chemoprevention, as well as development, of affordable, sustainable, high quality strategies and policies to reduce infant mortality and morbidities.

David K. Stevenson, M.D. Dr. Stevenson, a pro bono advisor, is the Harold K. Faber Professor of Pediatrics, Director of the Charles B. and Ann L. Johnson Center for Pregnancy and Newborn Services, and the Former Vice Dean and Senior Associate Dean for Academic Affairs at Stanford University School of Medicine. He serves as Director of an NIH-Funded Training Program in Developmental and Neonatal Biology, Co-Director of Stanford's CTSA (Spectrum) and Leader of Child Health (Spectrum Child Health), and Principal Investigator of the March of Dimes Center for Prematurity Research, a transdisciplinary research effort with the objective of reducing the preterm birth rate. Dr. Stevenson was the recipient of the Virginia Apgar Award, the highest award in Perinatal Pediatrics in 2006. He served as President of the American Pediatric Society for 2005-06. More recently, he received the Maureen Andrew Mentor Award from the Society of Pediatric Research, and the Jonas Salk Award for Leadership in Prematurity Prevention from the March of Dimes Foundation. Dr Stevenson was elected to the Institute of Medicine of the National Academy of Sciences.

Robert D. Christensen, M.D. Dr. Christensen, a pro bono advisor, is the Director of Neonatal Research at Intermountain Healthcare and Director of the Intermountain Healthcare Clinical Neonatology Program for the

northern region where the majority of his research work is focused on observational and interventional clinical studies of neonatal clinical hematology and transfusion medicine. He has authored over 300 publications. Dr. Christensen held positions including Professor of Pediatrics at the University of Utah School of Medicine, the University of Florida College of Medicine, and the University of South Florida College of Medicine, and was Physician-in-Chief at All Children's Hospital in St. Petersburg, Florida. He has been a member of the NIH National Heart, Lung and Blood Institute, NIH National Institute of Child Health and Human Development, and National Foundation March of Dimes, was on the executive committee of Thrasher Research Fund, and was sub-committee chair of the American Academy of Pediatrics.

These clinical advisors are not subject to contractual relationships with us, but generally make themselves available to us for various clinical, scientific and other needs on an ad-hoc basis.

Competition for CoSense

Currently no device is commercially available with the sensitivity and accuracy necessary to detect ETCO levels that are meaningful for monitoring the rate of hemolysis in neonates, and we do not know of any such device that is under development by any party. From 2001 to 2004, Natus Medical marketed the Co-Stat device for detection of ETCO in neonates. The Natus product was withdrawn from the market due to poor sales. We believe Natus' Co-Stat did not achieve commercial success due to several disadvantages that we have overcome with our product, including a lack of consistent accuracy, limited ability to compensate for environmental factors such as humidity and heat, high price, and poor ease of use, including a requirement for frequent calibration.

In addition, devices are commercially available to measure CO poisoning from external sources, but these are less-sensitive devices that are not appropriate for detecting ETCO in the low concentrations, small volumes and high breath rates that are clinically relevant in neonates. CoSense has the ability to overcome these problems using our Sensalyze technology. Several companies and academic groups have capabilities sufficient to develop such devices, and these parties may have significant resources to devote to research, development, and commercialization of devices that may compete with CoSense as well as technologies that compete with our Sensalyze Technology Platform generally. Competition within our target market will depend on several factors, including:

- quality and strength of clinical and analytical validation data;
- confidence of health care providers in diagnostic results;
- reimbursement and payment factors;
- inclusion in practice guidelines;
- cost-effectiveness;
- ease of use; and
- the strength of our intellectual property

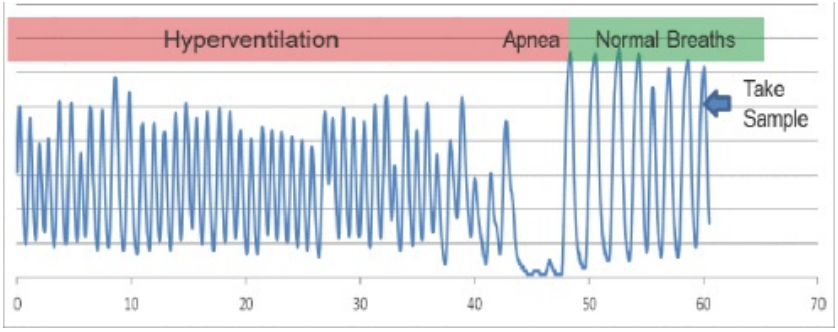
Today, physicians primarily diagnose hemolysis via Coombs and other blood tests, and these will represent the primary competition to CoSense initially. These tests do not capture the rate of bilirubin production or the presence/absence of hemolysis, leaving the physician uncertain as to the patient's level of risk. We believe that we can demonstrate compelling advantages over such tests, including faster results, the ability to avoid painful blood draws and greater diagnostic clarity and accuracy. We also believe we will be able to demonstrate economic and workflow advantages over the existing diagnostic practice.

Our Sensalyze Technology Platform

A variety of medical diagnostic testing is performed via measurement of gas concentrations, either from blood samples or from exhaled breath. Examples include capnometry and pulse oximetry, both routinely used in patient monitoring. Devices used for detecting the presence of various analytes in exhaled breath typically rely on the patient performing a specified breath maneuver. Examples of such maneuvers include breath holding, forced expiration, or breathing at a specified rate. The use of these devices is limited to those who can perform such maneuvers, such as adults and older children.

The limitations of existing breath-based technologies are particularly problematic in neonates. Neonates typically have very rapid and irregular breathing patterns as shown in Figure 8 below. They also inhale and exhale relatively small volumes, which limits the accuracy of devices that require the larger-volume sample sizes exhaled by older patients. In addition, they are not able to perform specified breath maneuvers. Our Sensalyze Technology Platform allows the measurement of analytes in all patients, from neonates to adults, regardless of their ability to actively perform a breath maneuver.

Figure 8: Breath Patterns in Newborns



Our Sensalyze Technology Platform combines hardware, sensors, and software to provide the following novel capabilities:

- Identification of full breaths that follow a normal pattern, also known as “physiologic” breaths. Our platform can identify physiologic breaths even if the patient is breathing very rapidly, a capability that is particularly relevant in infants.
- Capture of individual exhaled breaths, and segmentation of the breath into different components such as “end-tidal”, “upper airway”, and “lower airway”. This may allow the localization of the source of a given analyte to a specific anatomic area.
- Ability to move a specific micro-liter component of breath to a sensor module.

When combined, these capabilities provide a novel platform for non-invasive detection of various analytes.

Sensalyze Technology Platform - Research and Development of Additional Diagnostic Products

While the commercialization of CoSense will be our primary focus, we also intend to utilize our research and development expertise to develop other diagnostic devices that leverage the capabilities of our Sensalyze Technology Platform. We expect to introduce additional products of our own and are continuing to

develop additional diagnostic tests for analytes that might be found in the exhaled breath. These include the following diagnostic opportunities:

- nitric oxide (NO) for assessment and management of asthma in children younger than seven years of age;
- end-tidal CO_2 for neonates; and
- hydrogen breath testing for infants with colic.

We may also license elements of our Sensalyze Technology Platform to other companies that have complementary development or commercial capabilities.

Nitric Oxide for Assessment and Management of Asthma in Children Younger than Seven Years of Age

Asthma is a highly prevalent pediatric disease, occurring in 9% of children in the U.S. There are an estimated five million children under the age of seven with asthma in the U.S. and the E.U. Diagnosis and management of asthma in children under seven years of age is clinically challenging. The use of NO to assess and manage asthma in older children and adults at the point-of-care has been well established in the clinical literature and in clinical practice, and is recommended by the American Thoracic Society. However, the use of current diagnostic technologies, such as the NIOX MINO marketed by Aerocrine AB, requires the patient to follow specific instructions, including controlled exhalation in a specific matter, in order to collect a valid breath sample. These instructions are typically too complex for children under the age of seven. As a result, there are no reliable point-of-care tests for the assessment and management of asthma in infants and children under the age of seven. The lack of a diagnostic and management tool may contribute to delayed diagnosis or inappropriate treatment of these younger patients.

We believe we can develop an additional diagnostic using our Sensalyze Technology Platform for assessing and managing children with asthma under the age of seven with NO. Our Sensalyze Technology Platform is uniquely suited to address the need of pediatricians and pediatric pulmonologists. Our proprietary sampling technology can capture a breath sample during a child's natural breathing cycle and as a result, no controlled exhalation is required, which enables use in younger children.

End-Tidal Carbon Dioxide for Neonates

End-tidal CO_2, or $ETCO_2$,monitoring is often necessary for neonates in the NICU, in order to ensure adequate ventilation. The measurement of arterial CO_2 tension, $PaCO_2$, is the current standard of care for evaluating the adequacy of oxygenation. However, due to the risks of arterial blood sampling, including the requirement for central or peripheral arterial catheters, increased risk of infection, and blood loss requiring transfusion, there is an unmet need for alternative methods of monitoring CO_2 in the blood. Monitoring neonates using $ETCO_2$ may be beneficial because it is non-invasive, portable, and provides a rapid assessment of the trend in CO_2. $ETCO_2$ is used in estimating $PaCO_2$ in adult and pediatric intensive care settings; however, the devices available for neonatal use lack accuracy.

We believe our Sensalyze Technology Platform can be used to facilitate more precise $ETCO_2$ monitoring in neonates. Of the nine million babies born in the U.S. and the E.U. each year, 12% may be admitted to the NICU. We expect that neonatologists and NICU nurses would perform $ETCO_2$ testing on neonates in the NICU frequently in order to track CO_2 levels.

Hydrogen Breath Testing for Infants with Colic

Each year, up to 2.5 million infants in the U.S. and the E.U. are diagnosed with colic, a non-specific condition that is often blamed on gastrointestinal intestinal, or GI, distress. Parents of infants with colic must

often support extensive dietary modifications, including trials of different types of baby formula, in order to reduce the colic. Despite these efforts, the source of the colic often remains unknown and may not even be GI related. Identifying malabsorption as a cause of the colic, or ruling out malabsorption, may help clinicians better diagnose and treat these patients. Although hydrogen breath testing is frequently used to identify patients with dietary intolerances or bacterial overgrowth in the GI tract, it is not routinely used to identify malabsorption in infants with colic. Similar to NO breath testing, most devices currently available for hydrogen breath testing require a forced exhalation and are not appropriate for an infant patient population.

We believe our Sensalyze Technology Platform can be leveraged for hydrogen breath testing in infants. This would most likely be performed in the outpatient clinic setting, where pediatricians and pediatric gastroenterologists are the key institutional decision makers. Our proprietary sampling technology can capture a breath sample during an infant's natural breathing cycle, again with no forced exhalation required, a significant innovation which enables its use in with infants.

Serenz

Allergic Rhinitis

Allergic rhinitis, which is commonly and colloquially referred to as "allergies," is characterized by symptoms are often episodic and include nasal congestion, itching, sneezing and runny nose. It is one of the most common ailments in the western world and is growing rapidly, making AR one of the largest potential pharmaceutical markets. There are approximately 39 million sufferers in the U.S. and 48 million in France, Germany, Italy, Spain and the United Kingdom, and an additional 36 million in Japan, according to research firm GlobalData. Prevalence of AR is growing rapidly in the developed world. The most common AR drug therapies include antihistamines, and intranasal steroids. Leukotriene inhibitors and other drugs are also currently prescribed to AR patients. Several of these drugs have generated sales in excess of $1 billion per year as branded products. However, these products have significant limitations and AR sufferers remain dissatisfied with the available treatments. Thus, there is a need for a more effective treatment with a faster onset of action and improved safety profile.

AR is a cause of significant morbidity in spite of available treatments. According to the Allergies In America Survey conducted in 2006, most AR sufferers reported themselves to be less than "very satisfied" with the products they were taking for allergy relief. Fifty-two percent reported they had suffered from impaired work performance or missed work due to their AR symptoms even though 69% had used medication at some point in the prior four weeks. Current treatments provide incomplete relief from symptoms, and have significant side effects such as drowsiness.

A 2012 survey of 140 AR sufferers in the U.S. and the E.U., conducted on our behalf by Charles River Associates, indicated that approximately 27% would be "highly likely" to try Serenz as a treatment for their AR at our intended price point. Those who categorized themselves as "highly likely" to try Serenz at our proposed price points indicated that, on average, they expected to use it between four and seven months out of the year, and to use one to two doses per day during these months. The U.S. patients surveyed reported that they currently spend an average of $64 to $112 each month, out of pocket (excluding insurance or government payor support), for AR medication.

Serenz Technology

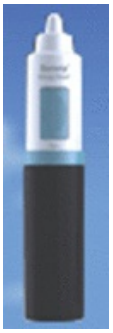
Our Serenz technology is based upon the observation that non-inhaled CO_2 delivered at a low-flow rate into the nasal cavity, alleviates the symptoms of AR. Serenz is a convenient, hand-held device that delivers low-flow CO_2 to the nasal mucosa. It contains a pressurized canister of gas, with approximately enough gas to dose as-needed for one to two weeks. The device is disposable and engineered for ease of use. Our proprietary technology ensures very precise control of aspects such as flow rate and volume, which we believe are both critical to achieve the desired clinical performance.

In our clinical trials to date, Serenz has shown a large effect size, an onset of effect within 30 minutes and a mild side effect profile. We believe that such a therapeutic index positions Serenz well to be a potential first-line treatment for any AR sufferer. Serenz can be taken as a stand-alone treatment or as an adjunct to other medications, and can be used on an as-needed basis.

One Serenz device, as shown in Figure 9, contains enough gas for approximately 22 doses, which we believe will treat AR for an average of one to two weeks, depending on frequency of use. We have not determined pricing for Serenz, but expect to price it at a premium to existing over-the-counter therapies for AR due to the benefits we believe the product provides to patients over such therapies.

Based on clinical trials to date, we believe Serenz exhibits the ideal characteristics of an AR therapeutic, including:

Figure 9: Serenz Device



Serenz
Dimensions: 4-7/8 x 1-3/8 inches

- Rapid relief
- Relief from all nasal symptoms
- Mild side effect profile
- No long-lasting side effects
- Locally acting
- Non-sedating
- Non-steroidal
- Usable on an as-needed basis

The "As-Needed Only" Treatment Paradigm

The traditional therapeutics used for the symptomatic treatment of AR have left a significant unmet need in this population. These therapeutics, mostly antihistamines and nasal steroids, are typically used on a scheduled basis, for example daily or twice a day. This is counter-intuitive given that the symptoms of AR are typically episodic, such as when a subject is exposed to a pollen when they step outdoors in allergy season. The reason for chronic treatment of this episodic disorder is that the available treatments for AR take too long to act. Even when used "as-needed", these products are unlikely to have a meaningful effect on efficacy in a very short time frame.

Antihistamines typically take one or more hours to have an effect. Their efficacy may decrease further over time for patients and as exposure to allergens continues, whether seasonal or perennial. In addition, antihistamines in general do not have any effect on congestion.

Nasal steroids can take days before peak effect. While they are more efficacious than antihistamines, they must be taken regularly during the allergy season or indefinitely for perennial allergies. In addition, they have bothersome side effects and are associated with the perception issues that relate to steroid use in general.

We believe that a treatment that can act rapidly such that it can be taken only when needed is ideal for the AR patient population. In addition, it should not have any lasting or significant side effects. Serenz has the characteristics of such a treatment.

Clinical Trials of Serenz in Allergic Rhinitis

We have conducted six randomized, controlled clinical trials involving 975 patients, testing the safety and efficacy of nasal CO_2 in treating the symptoms of AR. Four of these clinical trials were in patients with seasonal AR, or SAR, and two of these clinical trials was in patients with perennial AR, or PAR. In addition, GSK conducted a trial in 147 patients to assess the consumer appeal of Serenz for patients with nasal congestion. The trials using the as-needed approach showed statistically significant and clinically meaningful effects in both SAR and PAR. The effect is seen on each of the individual nasal and non-nasal symptoms, with as little as a 10 second per nostril

application of Serenz. Given the rapid onset and generally mild side effect profile, we believe Serenz is ideally suited for marketing to patients for use on an as-needed basis. Effectiveness of treatments for AR is typically assessed in trials by measuring change in TNSS, or Total Nasal Symptom Scores, from before to after treatment. Each nasal symptom (congestion, runny nose, itchy nose and sneezing) is assigned a value of 0 to 5 (such as in SAR-2005) or 0 to 3 (such as in C216). Lower values denote less severe symptoms. The TNSS is then calculated by adding values for each of the four symptoms. Therefore, the worst TNSS corresponding to the worst symptoms could be 12 or 20.

Figure 10: Serenz Allergic Rhinitis Clinical Trial Summary

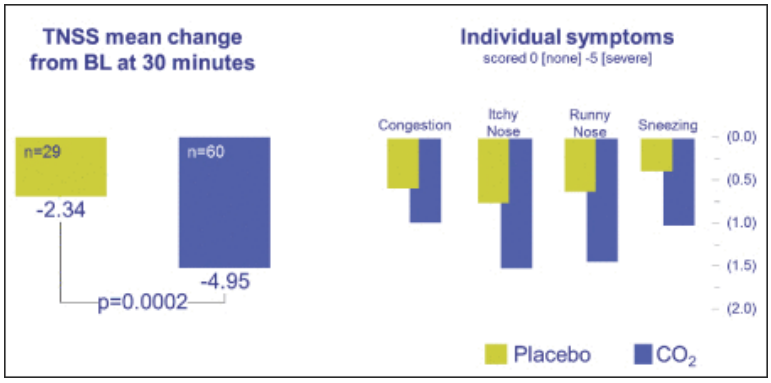
Trial	N=	Dosing
SAR-2005	89	As Needed Single dose: 60s @ 10 ml/s
C211 (PAR-2006)	348	As Needed Single dose: 10s or 30s @ 5 or 10 ml/s
C213	20	Dose A: 5s / nostril @ 0.5 SLPM Dose B: 10s / nostril @ 0.5 SLPM Dose C: 30s / nostril @ 0.5 SLPM Dose D: 30s / nostril @ 0 SLPM, no gas
C215	453	14 day Tx BID 10s @ 0.5 SLPM
C216	32	As-Needed 14 day Tx PRN 10s @ 0.5 SLPM
C218	33	14 day Tx QID 10s @ 0.5 SLPM
RH01910	147	7 day Tx: d1 single-dose + d2-7 as-needed up to QID

Clinical Trials of Serenz Using As-Needed Dosing

The as-needed use of Serenz is supported by single as well as multiple dose studies.

The first single dose study was conducted by us in 2005 (SAR-2005). It was a randomized, placebo-controlled clinical trial in patients with SAR. Symptomatic patients were treated with a single one-time application of active nasal CO_2 or placebo dose for 60 seconds per nostril. Symptoms were measured just before and at several time points after the treatment. Statistically significant improvements in symptoms were noted as early as 10 minutes and lasting for as long as 24 hours following treatment. Figure 11 shows the mean change from baseline in TNSS as well as individual nasal symptoms at 30 minutes, which was the pre-specified primary endpoint (p=0.0002).

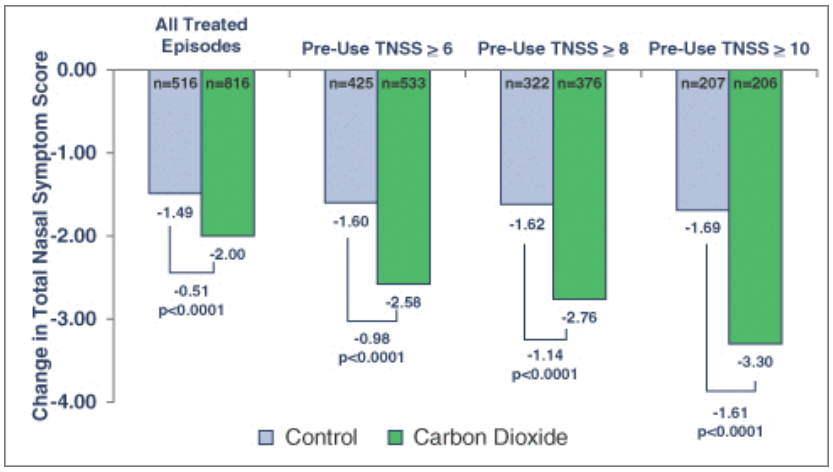
Figure 11: SAR 2005 Change in TNSS and Individual Symptoms from Baseline at 30 minutes



Our second study in AR was a randomized, placebo-controlled clinical trial in patients with PAR called C211 (PAR-2006), conducted in 2006. Symptomatic patients were treated with a single application of active nasal CO_2 or placebo dose. Patients were assigned to one of six treatment groups in order to determine the optimal dose for future studies based on duration and flow rate. Symptoms were measured just before and at several time points after the treatment. Statistically significant improvements in symptoms ($p<0.05$) were noted at 30 minutes in the CO_2 at 10 mL per second for 10 seconds per nostril cohort. This improvement was sustained for between four to six hours of relief of AR symptoms in this cohort, supporting the efficacy of nasal CO_2 in symptomatic patients with PAR and confirming the dose of 10 seconds per nostril as appropriate for future clinical trials.

In 2009, we completed C216, our first multi-application, randomized, placebo-controlled trial in which the nasal CO_2 device was used as needed in patients with SAR. Patients applied active or placebo 10 seconds per nostril, only as needed, up to a maximum of six times per day for 14 days. Symptoms were measured just before, and again at 30 minutes after, each treatment during the 14-day treatment period. Statistically significant improvements ($p<0.0001$) in symptoms were noted at 30 minutes after treatment during the 14-day treatment period (Figure 12). The magnitude of the treatment effect became larger (from -0.51 to -1.61) as the severity of baseline symptoms increased, which was denoted by higher pre-use TNSS (greater than or equal to 10). These results show that the nasal CO_2 device is effective for the as-needed treatment of SAR symptoms. The treatment effectiveness was rapid (within 30 minutes), the effect on symptoms was clinically meaningful, and highly statistically significant ($p<0.0001$).

Figure 12: C216 Change from Pre-Use TNSS at 30 Minutes
(individual symptoms scored 0 (none) to 3 (severe), maximum worst TNSS 12)



Study RH01910 was a multi-center, open-label, two-part study conducted by GSK, and completed in 2014, with the primary objective of estimating the consumer appeal of Serenz in subjects with nasal congestion. 147 subjects were enrolled into Part 1 of the study and administered a single dose of nasal CO_2 in the clinic. At the end of Part 1, subjects were given the option to continue in the study in which they could take a Serenz device home for an additional six days of use. 143 subjects (100% of subjects who completed Part 1) chose to continue into Part 2 of the study, took a Serenz device home to treat their nasal congestion as needed but no more than four times per day.

The primary analysis in this study was performed on the Per Protocol (PP) Population (N=133). The subjects, n=10, not included in the PP population were due to incomplete diaries, use for more days than specified and faulty devices. After initial product use in clinic, 90% of subjects thought that Serenz was as good or better than they expected and 59% would probably or definitely buy the product. After in-home use for six additional days, the proportion that would probably or definitely buy it remained unchanged. 46% would buy Serenz every two weeks or more frequently and 32% would like to buy the product more than once a week. Twelve percent (12%) or less disagreed with the statement that the product helped relieve congestion through all seven days of treatment. 75% of subjects stated that the Serenz worked as well or better than their usual product for treating congestion, with over 30% stating that it was much better than their usual product. Serenz was well-tolerated with adverse events consistent with previous studies and no serious adverse events.

These data show that Serenz has an attractive profile for the treatment of congestion sufferers.

Clinical Trials of Serenz Using Other Dosing Methods

One trial in PAR patients was designed to quantify an effect on nasal congestion with an acoustic rhinometer but the data was not evaluable due to malfunctioning of the rhinometer. Other clinical trials that have been conducted with nasal CO_2 for AR have evaluated the more traditional paradigm of scheduled dosing. Efficacy measurements in these clinical trials, based on a guidance document published by the FDA, are recorded in the morning and evening, regardless of the time of the treatment or pre-treatment symptoms. These measurements reflect the overall symptomatic relief during the day and do not measure the specific effect of a treatment on an episode of symptoms. Two of these clinical trials evaluated scheduled dosing — one was twice a day and the other four times a day in patients with SAR.

In 2008, we completed our first multi-application, randomized, placebo-controlled clinical trial in patients with SAR, called C215. Approximately 450 patients were randomized in the trial and treated with active or placebo 10 seconds per nostril two times a day for 14 days. There were no statistically significant improvements in TNSS, during the 14-day treatment period with scheduled dosing ($p>0.05$).

In 2009, we completed a multi-application, randomized, placebo-controlled clinical trial called C218 in which the nasal CO_2 device was used four times a day in patients with SAR for 14 days, regardless of symptoms at the time of administration. There were no statistically significant improvements in TNSS during the 14-day treatment period ($p>0.05$).

Measurement of TNSS in this scheduled dosing paradigm, or reflective and instantaneous TNSS, show the efficacy to be predictably lacking since these measurements reflect the overall symptomatic relief during the day, and do not measure the specific effect of a treatment on an episode of symptoms.

Safety of Serenz

There were no application-related or device-related serious adverse events in any of the clinical trials conducted. Adverse events were generally mild and application-related, and resolved immediately upon cessation of application. The most common adverse events were transient nasal sensation and tearing of the eyes, or lacrimation, that lasted for the duration of the application only.

The nasal sensation commonly encountered during these clinical trials was described by patients differently, and ranges from tingling to burning to pain. We also observed that these sensations were generally not severe enough for patients to discontinue use of nasal CO_2, and for more than 1,000 patients treated in all of the AR clinical trials, only six patients discontinued use of nasal CO_2 due to an adverse event. We believe that these clinical trials provide evidence that gentle cleansing of the nasal mucosa with Serenz is safe, acts locally and provides rapid relief of allergy symptoms.

Serenz Regulatory Status

A CE Mark was granted to us for marketing of Serenz in the E.U. in December 2011. Following out-licensing of Serenz to GSK in 2013, we withdrew our CE mark, since CE marks are site-specific and not transferable. In June 2014, the agreement terminated and the licensed rights to Serenz was returned to us. As a result, we intend to re-file the documentation to reinstate our CE Mark.

The approval route for Serenz in the U.S. may be through a device approval or a drug-device combination approval. In the case of a drug-device combination, a new drug application, or NDA, filing with the FDA will be required. If it is a device approval pathway, it may be either via the PMA process, a *de novo* 510(k) pathway, or traditional 510(k). Additional randomized, controlled clinical trials may be necessary to obtain approval.

We expect to clarify the pathway for approval in dialogue with the FDA by the first quarter of 2015. If pivotal clinical trials are required by the FDA particularly in the case of an NDA or a PMA filing, we currently believe that each of these trials will be 400 to 600 patients in size, and take approximately a year to complete once started. We may partner the program in advance of such clinical trials, if we can do so on terms that maximize the value of the program, and as a result, we may not conduct these clinical trials but instead rely on collaboration partners.

Our Partnership for Serenz

In 2013 we entered into a partnership with GSK, in which GSK was solely responsible for the development and commercialization of Serenz world-wide. In April 2014, GSK notified us that they were

terminating our license agreement with them, following which, pursuant to a 30-business-day prior notice provision contained in the license agreement allowing GSK to terminate upon such notice before commercialization, the license agreement formally terminated and the licensed rights to Serenz were returned to us in June 2014. GSK informed us that this decision to terminate the relationship was made due to GSK's belief that the product would be classified as a drug-device combination by the FDA, which would increase development costs and timelines to the point that their strategic objectives would no longer be met. We believe that their decision to terminate the relationship was unrelated to any clinical data from, or technical aspects of, the program.

We intend to pursue certain capital-efficient strategies to advance the program until such point as we can again identify a partner with appropriate clinical and commercial capabilities.

Other Serenz Clinical Trials

Prior to the nasal CO_2 Phase 2 clinical trials in AR, we had conducted a safety and feasibility study involving 54 patients in migraine patients. We have also explored the use of nasal CO_2 for treatment of migraine headaches and temporomandibular disorders. A total of 928 patients were enrolled across six separate safety and efficacy trials in these non-AR indications. The product showed signs of efficacy, statistically significant in some, but not all, trials, and rapid onset of effect. For strategic reasons we have focused further development on AR. Importantly, in the non-AR trials, the product showed a mild and well-tolerated safety profile that is similar to that seen in trials of Serenz for AR.

Manufacturing

We currently manufacture CoSense instruments at our facility in Redwood City, California. We assemble components from a variety of original equipment manufacturer, or OEM, sources. Our manufacturing facility is registered with the FDA and certified to the ISO 13485 standard, the internationally harmonized regulatory requirement for quality management systems of medical device companies. We may, depending on sales volume and ongoing requirements in specific sales geographies, outsource manufacturing of components, or finished goods, to various OEMs in the future.

We have manufactured the Serenz device in partnership with an OEM supplier based in Shenzhen, China and intend to manufacture future supply with this same OEM supplier.

Intellectual Property

Our Sensalyze Technology Platform Patent Portfolio

Our patent portfolio surrounding our Sensalyze Technology Platform, including CoSense, consists of one issued U.S. patent, four pending U.S. non-provisional patent applications, and four pending U.S. provisional patent applications. Three of the non-provisional filings have corresponding Patent Cooperation Treaty, or PCT, filings and are still eligible for expansion into other geographies. It is our intent to file these, and future cases, in other major commercial geographies over time. Our issued U.S. patent (no. 8,021,308) expires in August 2027. The pending patent applications, if issued, would likely expire on dates ranging from 2023 through 2034.

The issued patent and patent pending applications include:

- detection and storage of discrete portions of a breath;
- methods of diversion and isolation of gases to enable measurement within a breath pattern;
- specific compositions of valving and pumps to route airflow in a tightly controlled manner;

- collection methods for increasing the precision of measurement of small volumes of gas;
- identifying a "physiologically representative" breath, including both algorithm and physical capture; and
- various methods for arrangement and specification of components to enhance precision and compensate for factors that cause inaccurate measurements.

Our issued U.S. patent was acquired from BDDI and is subject to an asset purchase agreement with BDDI that contains ongoing contingent payment obligations, including the following royalty range on aggregate net sales of CoSense in the U.S.:

- Net sales at or below $10 million 2%
- Net sales at between $10 million and $25 million 3%
- Net sales at between $25 million and $50 million 4%
- Net sales above $50 million 5%

Serenz Patent Portfolio

Successful application of therapeutic gases to the nasal mucosa is generally dependent on specific dosing, concentration, and rate of gas outflow. The CO_2 gas used in the Serenz product is packaged in small sealed cylinders with relatively high internal pressure; regulating the flow of gas from this high pressure cylinder to the relatively low flow rates required for Serenz presents significant technical challenges. Our Serenz patent portfolio addresses these challenges.

Our Serenz patent portfolio consists of over 30 issued patents and over 40 pending patent applications. In the U.S., twelve issued patents, one allowed non-provisional patent application, and 7 pending non-provisional patent applications cover the Serenz technology. The U.S. patents and patent applications have corresponding issued patents and pending patent applications in developed nations. The expiration dates for the issued patents vary, with the latest being in 2022. Patent term extension due to regulatory review may be requested in the U.S. based upon one or more of the issued U.S. patents under the Drug Price Competition and Patent Term Restoration Act of 1984, also known as the Hatch-Waxman Act.

Our pending applications, when issued, would likely expire between 2020 and 2033.

Our issued patents and pending patent applications include claims directed to:

- gas dispensing devices, including various nosepiece configurations, pressure regulators, and cylinder configurations;
- methods for delivering therapeutic gases to patients;
- the treatment of various medical conditions via delivery of therapeutic gases to the nasal cavity; and
- combined delivery of gases with other therapeutic agents.

Government Regulation

Federal Food, Drug, and Cosmetic Act

In the U.S., diagnostic assays are regulated by the FDA as medical devices under the Federal Food, Drug, and Cosmetic Act, or FFDCA. We received initial FDA 510(k) clearance for CoSense in the fourth quarter of 2012, with a more specific Indication for Use related to hemolysis in the first quarter of 2014. Serenz has not yet commenced any process for regulatory approval in the U.S. We also plan to seek FDA clearance or approval for other diagnostic products currently under development. There are two regulatory pathways to receive authorization to market diagnostics: a 510(k) premarket notification and a premarket approval application, or PMA. The FDA makes a risk-based determination as to the pathway for which a particular diagnostic is eligible. CoSense was cleared via the 501(k) premarket notification pathway as a Class II medical device.

The information that must be submitted to the FDA in order to obtain clearance or approval to market a new medical device varies depending on how the medical device is classified by the FDA. Medical devices are classified into one of three classes on the basis of the controls deemed by the FDA to be necessary to reasonably ensure their safety and effectiveness. Class I devices are subject to general controls, including labeling, registration and listing and adherence to FDA's quality system regulation, which are device-specific good manufacturing practices. Class II devices are subject to general controls and special controls, including performance standards and postmarket surveillance. Class III devices are subject to most of these requirements, as well as to premarket approval. Most Class I devices are exempt from premarket submissions to the FDA; most Class II devices require the submission of a 510(k) premarket notification to the FDA; and Class III devices require submission of a PMA. Most diagnostic kits are regulated as Class I or II devices and are either exempt from premarket notification or require a 510(k) submission.

510(k) premarket notification. A 510(k) notification requires the sponsor to demonstrate that a medical device is substantially equivalent to another marketed device, termed a "predicate device," that is legally marketed in the U.S. and for which a PMA was not required. A device is substantially equivalent to a predicate device if it has the same intended use and technological characteristics as the predicate; or has the same intended use but different technological characteristics, where the information submitted to the FDA does not raise new questions of safety and effectiveness and demonstrates that the device is at least as safe and effective as the legally marketed device. Under current FDA policy, if a predicate device does not exist, the FDA may make a risk-based determination based on the complexity and clinical utility of the device that the device is eligible for *de novo* 510(k) review instead of a requiring a PMA. The *de novo* 510(k) review process is similar to clearance of the 510(k) premarket notification, despite the lack of a suitable predicate device.

The FDA's performance goal review time for a 510(k) notification is 90 days from the date of receipt, however, in practice, the review often takes longer. In addition, the FDA may require information regarding clinical data in order to make a decision regarding the claims of substantial equivalence. Clinical studies of diagnostic products are typically designed with the primary objective of obtaining analytical or clinical performance data. If the FDA believes that the device is not substantially equivalent to a predicate device, it will issue a "Not Substantially Equivalent" letter and designate the device as a Class III device, which will require the submission and approval of a PMA before the new device may be marketed. Under certain circumstances, the sponsor may petition the FDA to make a risk-based determination of the new device and reclassify the new device as a Class I or Class II device. Any modifications made to a device, its labeling or its intended use after clearance may require a new 510(k) notification to be submitted and cleared by FDA. Some modifications may only require documentation to be kept by the manufacturer, but the manufacturer's determination of the absence of need for a new 510(k) notification remains subject to subsequent FDA disagreement and enforcement to cease marketing of the modified device.

The FDA has undertaken a systematic review of the 510(k) clearance process that includes both internal and independent recommendations for reform of the 510(k) system. The internal review, issued in August 2010,

included a recommendation for development of a guidance document defining a subset of moderate risk (Class II) devices to include implantable, life-supporting or life-sustaining devices, called Class IIb, for which additional clinical or manufacturing data typically would be necessary to support a substantial equivalence determination. In the event that such new Class IIb sub-classification is adopted, we believe that most of the tests that we may pursue would be classified as Class IIa devices having the same requirements of the current Class II designation. In July 2011, the Institute of Medicine, or IOM, issued its independent recommendations for 510(k) reform. As the FDA receives public comment on the IOM recommendations and reconciles its plan of action to respond to both the internal and IOM recommendations, the availability of the 510(k) pathway for our diagnostic tests, and the timing and data burden required to obtain 510(k) clearance, could be adversely impacted. We cannot predict the impact of the 510(k) reform efforts on the development and clearance of our future diagnostic tests.

De Novo 510(k). If a previously unclassified new medical device does not qualify for the 510(k) pre-market notification process because there is no predicate device to which it is substantially equivalent, and if the device may be adequately regulated through general controls or special controls, the device may be eligible for *de novo* classification through what is called the *de novo* review process. In order to use the *de novo* review process, a company must receive a letter from the FDA stating that, because the device has been found not substantially equivalent to a legally marketed Class I or II medical device or to a Class III device marketed prior to May 28, 1976 for which the FDA has not required the submission of a PMA application, it has been placed into Class III. After receiving this letter, we, within 30 days, must submit to the FDA a request for a risk based down classification of the device from Class III to Class I or II based on the device's moderate or low risk profile which meets the definition of a Class I or Class II medical device. The FDA then has 60 days in which to decide whether to down classify the device. If the FDA agrees that a lower classification is warranted, it will issue a new regulation describing the device type and, for a Class II device, publish a Special Controls guidance document. The Special Controls guidance document specifies the scope of the device type and the recommendations for submission of subsequent devices for the same intended use. If a product is classified as Class II through the *de novo* review process, then that device may serve as a predicate device for subsequent 510(k) pre-market notifications.

Premarket approval. The PMA process is more complex, costly and time consuming than the 510(k) process. A PMA must be supported by more detailed and comprehensive scientific evidence, including clinical data, to demonstrate the safety and efficacy of the medical device for its intended purpose. If the device is determined to present a "significant risk," the sponsor may not begin a clinical trial until it submits an investigational device exemption, or IDE, to the FDA and obtains approval from the FDA to begin the trial.

After the PMA is submitted, the FDA has 45 days to make a threshold determination that the PMA is sufficiently complete to permit a substantive review. If the PMA is complete, the FDA will file the PMA. The FDA is subject to a performance goal review time for a PMA of 180 days from the date of filing, although in practice this review time is longer. Questions from the FDA, requests for additional data and referrals to advisory committees may delay the process considerably. Indeed, the total process may take several years and there is no guarantee that the PMA will ever be approved. Even if approved, the FDA may limit the indications for which the device may be marketed. The FDA may also request additional clinical data as a condition of approval or after the PMA is approved. Any changes to the medical device may require a supplemental PMA to be submitted and approved.

Regulation of Pharmaceuticals or Combination Products. In the U.S., the FDA may determine that Serenz should be regulated as a combination product or as a drug. The sales and marketing of pharmaceutical products in the U.S. are subject to extensive regulation by the FDA. The FFDCA and other federal and state statutes and regulations govern, among other things, the research, development, testing, manufacture, storage, recordkeeping, approval, labeling, promotion and marketing, distribution, post-approval monitoring and reporting, sampling, and import and export of pharmaceutical products. Failure to comply with applicable FDA or other requirements may subject a company to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending applications, a clinical hold, warning letters, recall or seizure of products,

partial or total suspension of production, withdrawal of the product from the market, injunctions, fines, civil penalties or criminal prosecution.

FDA approval is required before any new unapproved drug or dosage form, including a new use of a previously approved drug, can be marketed in the U.S. The process required by the FDA before a drug may be marketed in the U.S. generally involves:

- completion of pre-clinical laboratory and animal testing and formulation studies in compliance with the FDA's current good laboratory practice regulation;
- submission to the FDA of an investigational new drug, or IND, application for human clinical testing which must become effective before human clinical trials may begin in the U.S.;
- approval by an IRB at each clinical trial site before a trial may be initiated at the site;
- performance of adequate and well-controlled human clinical trials in accordance with current good clinical practices, or GCP regulations, to establish the safety and efficacy of the proposed drug product for each intended use;
- satisfactory completion of an FDA pre-approval inspection of the facility or facilities at which the product is manufactured to assess compliance with the FDA's cGMP regulations, and for devices and device components, the FDA's Quality Systems Regulation, or QSR, and to assure that the facilities, methods and controls are adequate to preserve the drug's identity, strength, quality and purity;
- submission to the FDA of an NDA;
- satisfactory review by an FDA advisory committee, if applicable; and
- FDA review and approval of the NDA.

The pre-clinical and clinical testing and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our future products will be granted on a timely basis, if at all. Pre-clinical tests include laboratory evaluation of product chemistry, formulation, stability and toxicity, as well as animal studies to assess the characteristics and potential safety and efficacy of the product. The results of pre-clinical tests, together with manufacturing information, analytical data and a proposed clinical trial protocol and other information, are submitted as part of an IND to the FDA. Some pre-clinical testing may continue even after the IND is submitted. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30-day time period, raises concerns or questions relating to one or more proposed clinical trials and places a trial on clinical hold, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, our submission of an IND may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development.

Further, an independent IRB, covering each site proposing to conduct the clinical trial must review and approve the plan for any clinical trial and informed consent information for subjects before the trial commences at that site and it must monitor the study until completed. The FDA, the IRB, or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk or for failure to comply with the IRB's requirements, or may impose other conditions.

Clinical trials involve the administration of an investigational drug to human subjects under the supervision of qualified investigators in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Sponsors of clinical trials generally must register and report, at the NIH-maintained website ClinicalTrials.gov, key parameters of certain clinical trials. For purposes of an NDA submission and approval, human clinical trials are typically conducted in the following sequential phases, which may overlap or be combined:

Phase 1: The drug is initially introduced into healthy human subjects or patients and tested for safety, dose tolerance, absorption, metabolism, distribution and excretion and, if possible, to gain an early indication of its effectiveness.

Phase 2: The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more extensive Phase 3 clinical trials.

Phase 3: These are commonly referred to as pivotal studies. When Phase 2 evaluations demonstrate that a dose range of the product appears to be effective and has an acceptable safety profile, Phase 3 trials are undertaken in large patient populations to further evaluate dosage, to obtain additional evidence of clinical efficacy and safety in an expanded patient population at multiple, geographically-dispersed clinical trial sites, to establish the overall risk-benefit relationship of the drug and to provide adequate information for the labeling of the drug.

Phase 4: In some cases, the FDA may condition approval of an NDA for a future product on the sponsor's agreement to conduct additional clinical trials to further assess the drug's safety and effectiveness after NDA approval. Such post-approval trials are typically referred to as Phase 4 studies.

The results of product development, pre-clinical studies and clinical trials are submitted to the FDA as part of an NDA. NDAs must also contain extensive information relating to the product's pharmacology, CMC and proposed labeling, among other things.

For combination products, the FDA's review may include the participation of both the FDA's Center for Drug Evaluation and Research and the FDA's Center for Devices and Radiological Health, which may complicate or prolong the review.

Before approving an NDA, the FDA may inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP, and if applicable, QSR, requirements and are adequate to assure consistent production of the product within required specifications. Additionally, the FDA will typically inspect one or more clinical sites to assure compliance with GCP before approving an NDA.

After the FDA evaluates the NDA and, in some cases, the related manufacturing facilities, it may issue an approval letter, or it may issue a Complete Response Letter, or CRL, to indicate that the review cycle for an application is complete and that the application is not ready for approval. CRLs generally outline the deficiencies in the submission and may require substantial additional testing or information in order for the FDA to reconsider the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when the deficiencies have been addressed to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Once issued, the FDA may withdraw product approval if ongoing regulatory requirements are not met or if safety problems are identified after the product reaches the market. In addition, the FDA may require post-approval testing, including Phase 4 studies, and surveillance programs to monitor the effect of approved products which have been commercialized, and the FDA has the authority to prevent or limit further marketing of a product based on the results of these post-marketing programs. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label, and, even if the FDA approves a product, it may limit the approved indications for use for the product or impose other conditions, including labeling or distribution restrictions or other risk-management mechanisms. Further, if there are any modifications to the drug, including changes in indications, labeling, or manufacturing processes or facilities, the sponsor may be required to submit and obtain FDA approval of a new or supplemental NDA, which may require the development of additional data or conduct of additional pre-clinical studies and clinical trials.

Continuing FDA Regulation

Devices. Under the medical device regulations, the FDA regulates quality control and manufacturing procedures by requiring us to demonstrate and maintain compliance with the quality system regulation, which sets forth the FDA's current good manufacturing practices requirements for medical devices. The FDA monitors compliance with the quality system regulation and current good manufacturing practices requirements by conducting periodic inspections of manufacturing facilities. We could be subject to unannounced inspections by the FDA. Violations of applicable regulations noted by the FDA during inspections of our manufacturing facilities, or the manufacturing facilities of these third parties, could adversely affect the continued marketing of our tests.

The FDA also enforces post-marketing controls that include the requirement to submit medical device reports to the agency when a manufacturer becomes aware of information suggesting that any of its marketed products may have caused or contributed to a death, serious injury or serious illness or any of its products has malfunctioned and that a recurrence of a malfunction would likely cause or contribute to a death or serious injury or illness. The FDA relies on medical device reports to identify product problems and utilizes these reports to determine, among other things, whether it should exercise its enforcement powers. The FDA may also require postmarket surveillance studies for specified devices.

FDA regulations also govern, among other things, the preclinical and clinical testing, manufacture, distribution, labeling and promotion of medical devices. In addition to compliance with good manufacturing practices and medical device reporting requirements, we will be required to comply with the FDCA's general controls, including establishment registration, device listing and labeling requirements. If we fail to comply with any requirements under the FDCA, we could be subject to, among other things, fines, injunctions, civil penalties, recalls or product corrections, total or partial suspension of production, denial of premarket notification clearance or approval of products, rescission or withdrawal of clearances and approvals, and criminal prosecution. We cannot assure you that any final FDA policy, once issued, or future laws and regulations concerning the manufacture or marketing of medical devices will not increase the cost and time to market of new or existing tests. Furthermore, any current or future federal and state regulations also will apply to future tests developed by us.

If our promotional activities fail to comply with these FDA regulations or guidelines, we may be subject to warnings from, or enforcement action by, these authorities. In addition, our failure to follow FDA rules and guidelines relating to promotion and advertising may cause the FDA to issue warning letters or untitled letters, suspend or withdraw a product from the market, require a recall or institute fines or civil fines, or could result in disgorgement of money, operating restrictions, injunctions or criminal prosecution.

Pharmaceuticals. Once an NDA is approved, a product will be subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to drug-device listing, recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product.

In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP or QSR requirements. Changes to the manufacturing process are strictly regulated and generally require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP or QSR and impose reporting and documentation requirements upon us and any third-party manufacturers that we may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP or QSR compliance.

Once an approval is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market, though the FDA must provide an application holder with notice and an opportunity for a hearing in order to withdraw its

approval of an application. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in, among other things:

- restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve pending applications or supplements to approved applications, or suspension or revocation of product approvals;
- product seizure or detention, or refusal to permit the import or export of products; and
- injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates the marketing, labeling, advertising and promotion of drug and device products that are placed on the market. While physicians may prescribe drugs and devices for off label uses, manufacturers may only promote for the approved indications and in accordance with the provisions of the approved label. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off label uses, and a company that is found to have improperly promoted off label uses may be subject to significant liability.

Advertising

Advertising of our tests is subject to regulation by the Federal Trade Commission, or FTC, under the FTC Act. The FTC Act prohibits unfair or deceptive acts or practices in or affecting commerce. Violations of the FTC Act, such as failure to have substantiation for product claims, would subject us to a variety of enforcement actions, including compulsory process, cease and desist orders and injunctions, which can require, among other things, limits on advertising, corrective advertising, consumer redress and restitution, as well as substantial fines or other penalties. Any enforcement actions by the FTC could have a material adverse effect our business.

HIPAA and Other Privacy Laws

The Health Insurance Portability and Accountability Act of 1996, or HIPAA, established for the first time comprehensive protection for the privacy and security of health information. The HIPAA standards apply to three types of organizations, or "Covered Entities": health plans, healthcare clearing houses, and healthcare providers which conduct certain healthcare transactions electronically. Covered Entities and their Business Associates must have in place administrative, physical, and technical standards to guard against the misuse of individually identifiable health information. Because we are a healthcare provider and we conduct certain healthcare transactions electronically, we are presently a Covered Entity, and we must have in place the administrative, physical, and technical safeguards required by HIPAA, HITECH and their implementing regulations. Additionally, some state laws impose privacy protections more stringent than HIPAA. Most of the institutions and physicians from which we obtain biological specimens that we use in our research and validation work are Covered Entities and must obtain proper authorization from their patients for the subsequent use of those samples and associated clinical information. We may perform future activities that may implicate HIPAA, such as providing clinical laboratory testing services or entering into specific kinds of relationships with a Covered Entity or a Business Associate of a Covered Entity.

If we or our operations are found to be in violation of HIPAA, HITECH or their implementing regulations, we may be subject to penalties, including civil and criminal penalties, fines, and exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. HITECH increased the civil and criminal penalties that may be imposed against Covered Entities, their Business Associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.

Our activities must also comply with other applicable privacy laws. For example, there are also international privacy laws that impose restrictions on the access, use, and disclosure of health information. All of these laws may impact our business. Our failure to comply with these privacy laws or significant changes in the laws restricting our ability to obtain tissue samples and associated patient information could significantly impact our business and our future business plans.

Federal and State Billing and Fraud and Abuse Laws

Antifraud Laws/Overpayments. As participants in federal and state healthcare programs, we are subject to numerous federal and state antifraud and abuse laws. Many of these antifraud laws are broad in scope, and neither the courts nor government agencies have extensively interpreted these laws. Prohibitions under some of these laws include:

- the submission of false claims or false information to government programs;
- deceptive or fraudulent conduct;
- excessive or unnecessary services or services at excessive prices; and
- prohibitions in defrauding private sector health insurers.

We could be subject to substantial penalties for violations of these laws, including denial of payment and refunds, suspension of payments from Medicare, Medicaid or other federal healthcare programs and exclusion from participation in the federal healthcare programs, as well as civil monetary and criminal penalties and imprisonment. One of these statutes, the False Claims Act, is a key enforcement tool used by the government to combat healthcare fraud. The False Claims Act imposes liability on any person who, among other things, knowingly presents, or causes to be presented, a false or fraudulent claim for payment by a federal healthcare program. In addition, violations of the federal physician self-referral laws, such as the Stark laws discussed below, may also violate false claims laws. Liability under the False Claims Act can result in treble damages and imposition of penalties. For example, we could be subject to penalties of $5,500 to $11,000 per false claim, and each use of our product could potentially be part of a different claim submitted to the government. Separately, the HHS office of the Office of Inspector General, or OIG, can exclude providers found liable under the False Claims Act from participating in federally funded healthcare programs, including Medicare. The steep penalties that may be imposed on laboratories and other providers under this statute may be disproportionate to the relatively small dollar amounts of the claims made by these providers for reimbursement. In addition, even the threat of being excluded from participation in federal healthcare programs can have significant financial consequences on a provider.

Numerous federal and state agencies enforce the antifraud and abuse laws. In addition, private insurers may also bring private actions. In some circumstances, private whistleblowers are authorized to bring fraud suits on behalf of the government against providers and are entitled to receive a portion of any final recovery.

Federal and State "Self-Referral" and "Anti-Kickback" Restrictions

Self-Referral law. We are subject to a federal "self-referral" law, commonly referred to as the "Stark" law, which provides that physicians who, personally or through a family member, have ownership interests in or compensation arrangements with a laboratory are prohibited from making a referral to that laboratory for laboratory tests reimbursable by Medicare, and also prohibits laboratories from submitting a claim for Medicare payments for laboratory tests referred by physicians who, personally or through a family member, have ownership interests in or compensation arrangements with the testing laboratory. The Stark law contains a number of specific exceptions which, if met, permit physicians who have ownership or compensation arrangements with a testing laboratory to make referrals to that laboratory and permit the laboratory to submit claims for Medicare payments for laboratory tests performed pursuant to such referrals.

We are subject to comparable state laws, some of which apply to all payors regardless of source of payment, and do not contain identical exceptions to the Stark law. For example, we are subject to a North Carolina self-referral law that prohibits a physician investor from referring to us any patients covered by private, employer-funded or state and federal employee health plans. The North Carolina self-referral law contains few exceptions for physician investors in securities that have not been acquired through public trading, but will generally permit us to accept referrals from physician investors who buy their shares in the public market.

We have several stockholders who are physicians in a position to make referrals to us. We have included within our compliance plan procedures to identify requests for testing services from physician investors and we do not bill Medicare, or any other federal program, or seek reimbursement from other third-party payors, for these tests. The self-referral laws may cause some physicians who would otherwise use our laboratory to use other laboratories for their testing.

Providers are subject to sanctions for claims submitted for each service that is furnished based on a referral prohibited under the federal self-referral laws. These sanctions include denial of payment and refunds, civil monetary payments and exclusion from participation in federal healthcare programs and civil monetary penalties, and they may also include penalties for applicable violations of the False Claims Act, which may require payment of up to three times the actual damages sustained by the government, plus civil penalties of $5,500 to $11,000 for each separate false claim. Similarly, sanctions for violations under the North Carolina self-referral laws include refunds and monetary penalties.

Anti-Kickback Statute. The federal Anti-Kickback Statute prohibits persons from knowingly and willfully soliciting, receiving, offering or paying remuneration, directly or indirectly, to induce either the referral of an individual, or the furnishing, recommending, or arranging for a good or service, for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The term "remuneration" is not defined in the federal Anti-Kickback Statute and has been broadly interpreted to include anything of value, including for example, gifts, discounts, the furnishing of supplies or equipment, credit arrangements, payments of cash, waivers of payment, ownership interests and providing anything at less than its fair market value. The reach of the Anti-Kickback Statute was also broadened by the Patient Protection and Affordable Care Act of 2010, or PPACA, which, among other things, amends the intent requirement of the federal Anti-Kickback Statute and certain criminal healthcare fraud statutes, effective March 23, 2010. Pursuant to the statutory amendment, a person or entity does not need to have actual knowledge of this statute or specific intent to violate it in order to have committed a violation. In addition, PPACA provides that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act or the civil monetary penalties statute, which imposes penalties against any person who is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent. Sanctions for violations of the federal Anti-Kickback Statute may include imprisonment and other criminal penalties, civil monetary penalties and exclusion from participation in federal healthcare programs.

The OIG has criticized a number of the business practices in the clinical laboratory industry as potentially implicating the Anti-Kickback Statute, including compensation arrangements intended to induce referrals between laboratories and entities from which they receive, or to which they make, referrals. In addition, the OIG has indicated that "dual charge" billing practices that are intended to induce the referral of patients reimbursed by federal healthcare programs may violate the Anti-Kickback Statute.

Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs, and do not contain identical safe harbors. For example, North Carolina has an anti-kickback statute that prohibits healthcare providers from paying any financial compensation for recommending or securing patient referrals. Penalties for violations of this statute include license suspension or revocation or other disciplinary action. Other states have similar anti-kickback prohibitions.

Both the federal Anti-Kickback Statute and the North Carolina anti-kickback law are broad in scope. The anti-kickback laws clearly prohibit payments for patient referrals. Under a broad interpretation, these laws could also prohibit a broad array of practices involving remuneration where one party is a potential source of referrals for the other.

If we or our operations are found to be in violation of any of the laws described above or any other governmental regulations that apply to us, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from participation in U.S. federal or state health care programs, and the curtailment or restructuring of our operations. To the extent that any product we make is sold in a foreign country in the future, we may be subject to similar foreign laws and regulations, which may include, for instance, applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals. To reduce the risks associated with these various laws and governmental regulations, we have implemented a compliance plan. Although compliance programs can mitigate the risk of investigation and prosecution for violations of these laws, the risks cannot be entirely eliminated. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Moreover, achieving and sustaining compliance with applicable federal and state privacy, security and fraud laws may prove costly.

International Medical Device Regulations

International marketing of medical devices is subject to foreign government regulations, which vary substantially from country to country. The European Commission is the legislative body responsible for directives with which manufacturers selling medical products in the E.U. and the European Economic Area, or EEA, must comply. The E.U. includes most of the major countries in Europe, while other countries, such as Switzerland, are part of the EEA and have voluntarily adopted laws and regulations that mirror those of the E.U. with respect to medical devices. The E.U. has adopted directives that address regulation of the design, manufacture, labeling, clinical studies and post-market vigilance for medical devices. Devices that comply with the requirements of a relevant directive will be entitled to bear the CE conformity marking, indicating that the device conforms to the essential requirements of the applicable directives and, accordingly, can be marketed throughout the E.U. and EEA.

Outside of the E.U., regulatory pathways for the marketing of medical devices vary greatly from country to country. In many countries, local regulatory agencies conduct an independent review of medical devices prior to granting marketing approval. For example, in China, approval by the SFDA, must be obtained prior to marketing an medical device. In Japan, approval by the MHLW following review by the Pharmaceuticals and Medical Devices Agency, or the PMDA is required prior to marketing an medical device. The process in such countries may be lengthy and require the expenditure of significant resources, including the conduct of clinical trials. In other countries, the regulatory pathway may be shorter or less costly. The timeline for the introduction of new medical devices is heavily impacted by these various regulations on a country-by-country basis, which may become more lengthy and costly over time.

U.S. Healthcare Reform

In March 2010, the PPACA was enacted, which includes measures that have or will significantly change the way healthcare is financed by both governmental and private insurers. Beginning in August 2013, the Physician Payment Sunshine Act, enacted as part of PPACA, and its implementing regulations requires medical device manufacturers to track certain financial arrangements with physicians and teaching hospitals, including any "transfer of value" made or distributed to such entities, as well as any investment interests held by physicians and their immediate family members. Manufacturers are required to report this information to Centers for Medicare & Medicaid Services, or CMS, beginning in 2014. Various states have also implemented regulations prohibiting certain financial interactions with healthcare professionals or mandating public disclosure of such financial interactions. We may incur significant costs to comply with such laws and regulations now or in the future.

The Foreign Corrupt Practices Act

The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering or authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the U.S. to comply with accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Employees

As of May 1, 2014, we had six full-time employees. We also have seven full-time or part-time consultants providing services to us. None of our employees is represented by a labor union or covered by collective bargaining agreements. We consider our relationship with our employees to be good.

Facilities

Our principal facilities consist of office space in Redwood City, California, which also contains our final assembly and calibration facility for CoSense. We currently occupy approximately 6,000 square feet of office space under a sublease that expires in May 2015.

Legal proceedings

We are not currently subject to any legal proceedings.

MANAGEMENT

Directors and Executive Officers

The following table sets forth information regarding our executive officers and directors as of May 31, 2014:

Name	Age	Position
Executive Officers:		
Anish Bhatnagar, M.D.	46	President, Chief Executive Officer and Director
Anthony Wondka	52	Vice President of Research and Development
Antoun Nabhan, J.D.	39	Vice President of Corporate Development
Non-Employee Directors:		
Ernest Mario, Ph.D.	75	Chairman
Edgar G. Engleman, M.D.	68	Director
Steinar J. Engelsen, M.D., M.Sc.(1)(2)(3)	63	Director
William G. Harris(1)(2)	56	Director
Stephen Kirnon, Ed.D.(2)(3)	51	Director
William James Alexander, M.D.(1)(3)	64	Director

(1) Member of the audit committee.
(2) Member of the compensation committee.
(3) Member of the nominating and corporate governance committee.

Executive Officers

Anish Bhatnagar, M.D. Dr. Bhatnagar was appointed as our Chief Executive Officer in February 2014. Prior to that, he served as our President and Chief Operating Officer. Dr. Bhatnagar joined us in 2006, and has held positions of increasing responsibility since then. Dr. Bhatnagar is a physician with over 15 years of experience in the medical device and biopharmaceutical industries. His experience spans development of biologics, drugs, drug-device combinations and diagnostic as well as therapeutic medical devices. His prior experience includes working at Coulter Pharmaceuticals, Inc. from 1998 to 2000 and Titan Pharmaceuticals, Inc. from 2000 to 2006. He is the author of several peer-reviewed publications, abstracts and book chapters. He obtained his medical degree at SMS Medical College in Jaipur, India and completed his Residency and Fellowship training in the U.S. at various institutions, including Georgetown University Hospital and the University of Pennsylvania.

We believe Dr. Bhatnagar is able to make valuable contributions to our board of directors due to his service as an executive officer of our company, including as Chief Executive Officer, extensive knowledge of medical device and pharmaceutical company operations, and extensive experience working with companies, regulators and other stakeholders in the medical device and pharmaceutical industries.

Anthony Wondka. Mr. Wondka was appointed as our Vice President of Research and Development in June 2013. Prior to that, he was a consultant for us since May 2011. He has held management and executive positions in the medical device industry for over 20 years, in large and small companies. From April 2006 to March 2011, Mr. Wondka served as VP of R&D and then VP of Technology and Clinical Affairs for Breathe Technologies, where he invented and co-invented ventilation products that address large unmet needs in chronic obstructive pulmonary disease, or COPD, and obstructive sleep apnea. From July 1997 to April 2006, Mr. Wondka was Director of R&D and VP of Manufacturing at Pulmonx, where he co-invented and led the early development of the Chartis™ diagnostic system and procedure that is used to guide endobronchial lung volume reduction for the treatment of COPD, and is currently being sold in the E.U. Prior to Pulmonx, Mr. Wondka worked at Pfizer subsidiary Shiley (acquired by Covidien) and Bear Medical (acquired by Carefusion), where he held lead roles in engineering and quality assurance, supporting commercialization activities for market leading ENT and respiratory products. He holds over 40 issued or pending patents and has a B.S. in Bioengineering from University of California San Diego.

Antoun Nabhan, J.D. Mr. Nabhan joined us in April 2014 and has served as a consultant to Capnia since October of 2013. He is a specialist in finance and corporate development for healthcare-related businesses. From 2012 to 2013, he was the Vice President of Corporate Development at Tobira Therapeutics, a drug development company. From 2008 to 2012, he was part of the corporate development and strategy team at Onyx Pharmaceuticals, Inc., an oncology drug company acquired by Amgen for $10.6 billion in 2013. He played a significant role in that company's acquisition of Proteolix, Inc. and subsequent out-license of Japanese-territory rights to its product, Kyprolis® (carfilzomib). Mr. Nabhan is a Principal of Sagamore Bioventures, a biotechnology-focused investment fund that he joined in 2002. From 2006 to 2008, he was a founder and Chief Financial Officer at Presidio Pharmaceuticals, Inc., a drug discovery company focused on hepatitis C, HIV, and other viral diseases. He co-founded Incellico Inc. (acquired by Sylventa Inc.) and served as its VP of Finance & Business Development. He started his career as an analyst for Deloitte & Touche Consulting Group. Mr. Nabhan received his J.D. from Harvard Law School, where he was an Affiliate of the Berkman Center for Law and Technology, and his A.B. from the University of Chicago.

Non-Employee Directors

Ernest Mario, Ph.D. Dr. Mario joined our board of directors in August 2007 and served as Chairman and Chief Executive Officer until February 2014 when he was named Chairman. From April 2003 to August 2007, Dr. Mario served as Chief Executive Officer and Chairman of Reliant Pharmaceuticals, Inc., a privately held pharmaceutical company that was acquired by GSK for approximately $1.6 billion in 2007. Dr. Mario served as Chief Executive Officer and Chairman of ALZA Corporation, a research-based pharmaceutical company, from November 1997 to December 2001, when ALZA was acquired by Johnson & Johnson for approximately $12 billion. Previously he served as Chief Executive Officer and Co-Chairman of ALZA from August 1993 to November 1997. From January 1992 until March 1993, Dr. Mario served as Deputy Chairman of Glaxo Holdings plc., a pharmaceutical company, and as Chief Executive from May 1989 to March 1993. Dr. Mario has current and past service on a number of corporate boards including Boston Scientific Corporation, Celgene Inc., Chimerix, Inc., Kindred Biosciences Inc., Tonix Pharmaceuticals Holding Corp. and XenoPort Inc. Dr. Mario is active in numerous educational and healthcare organizations. He is Chairman of the American Foundation for Pharmaceutical Education, a Director of the Gladstone Foundation, and past Chairman of the Duke University Health System. Dr. Mario earned his M.S. and Ph.D. in physical sciences at the University of Rhode Island and a B.S. in pharmacy at Rutgers. He holds honorary doctorates from the University of Rhode Island and Rutgers University. In 2007 he was awarded the Remington Medal by the American Pharmacists' Association, pharmacy's highest honor.

We believe Dr. Mario is able to make valuable contributions to our board of directors due to his extensive knowledge of our company, the industry, and our competitors, his extensive experience in risk oversight, quality and business strategy as a result of serving in leadership roles at multiple companies, his status as a significant stockholder and his prior service as our Chief Executive Officer.

Edgar G. Engleman, M.D. Dr. Engleman has been a member of our board of directors since June 2001. He is a founding member of Vivo Ventures, LLC (formerly BioAsia Investments) and since 1990 has served as Professor of Pathology and Medicine at Stanford University School of Medicine, where he oversees the Stanford Blood Center as well as his own immunology research group. An editor of numerous scientific journals and the inventor of multiple patented technologies, Dr. Engleman has authored more than 250 publications in medical and scientific journals and has trained more than 200 graduate students and postdoctoral fellows. Dr. Engleman has co-founded a number of biopharmaceutical companies including Cetus Immune Corporation (acquired by Chiron Corporation), Genelabs Technologies, Inc., (acquired by GlaxoSmithKline plc), National Medical Audit, and Dendreon Corporation. He is the lead inventor of the technology underlying Provenge, Dendreon's cancer vaccine, which was approved in 2010 to treat asymptomatic or minimally symptomatic metastatic hormone-refractory prostate cancer. Dr. Engleman currently serves on the boards of several private biotechnology companies, including Gryphon Therapeutics, Inc., Naryx Pharma, Inc., Eiger BioPharma, Inc., Nuveta, Inc. and Semnur Pharmaceuticals, Inc. He received his M.D. from Columbia University School of Medicine and his B.A. from Harvard University.

We believe Dr. Engleman is able to make valuable contributions to our board of directors due to his extensive knowledge of the healthcare industry, his medical expertise, his service on other company boards of directors, and his understanding of our company.

Steinar J. Engelsen, M.D., M.Sc., CEFA. Dr. Engelsen has been a member of our board of directors since April 2004. Since November 1996, Dr. Engelsen has been a partner of Teknoinvest AS, a venture capital firm based in Norway. From June 1989 until October 1996, Dr. Engelsen held various management positions within Hafslund Nycomed AS, a pharmaceutical company based in Europe, and affiliated companies. He was responsible for therapeutic research and development, most recently serving as Senior Vice President, Research and Development of Nycomed Pharma AS from January 1994 until October 1996. He currently serves on the board of directors of Insmed, Inc. In addition, from January to November 2000, Dr. Engelsen was acting Chief Executive Officer of Centaur Pharmaceuticals, Inc., a biopharmaceutical company. Dr. Engelsen also served as Chairman of the board of directors of Centaur. Dr. Engelsen received his M.Sc. in Nuclear Chemistry and his M.D. from the University of Oslo, and is a Certified European Financial Analyst from The Norwegian School of Economics.

We believe Dr. Engelsen is able to make valuable contributions to our board of directors due to his extensive healthcare management experience, his financial and business leadership and expertise resulting from serving as a director or executive officer of multiple companies, and his understanding of our company.

William G. Harris. Mr. Harris has been a member of our board of directors since June 2014. Since 2001, he has been the Senior Vice President of Finance and Chief Financial Officer of Xenoport, Inc. From 1996 to 2001, he held several positions with Coulter Pharmaceutical, Inc., a biotechnology company engaged in the development of novel therapies for the treatment of cancer and autoimmune diseases, the most recent of which was Senior Vice President and Chief Financial Officer. Corixa Corp., a developer of immunotherapeutic products, acquired Coulter Pharmaceutical in 2000. Prior to Coulter Pharmaceutical, from 1990 to 1996, Mr. Harris held several positions at Gilead Sciences, Inc., the most recent of which was director of finance. Mr. Harris received a B.A. from the University of California, San Diego and an M.B.A. from Santa Clara University, Leavey School of Business and Administration.

We believe Mr. Harris is able to make valuable contributions to our board of directors due to his vast experience as a finance professional in the biomedical and pharmaceutical industries.

Stephen Kirnon, Ed.D. Dr. Kirnon has been a member of our board of directors since July 2002. He has over 20 years of operational experience in biomedical organizations. Since January 2009, he has served as the Co-founder and CEO of PharmaPlan LLC. From January 2012 until July 2013 he served as Vice President, Co-Lead Life Science Practice at Witt/Kieffer, Ford, Hadelman, Lloyd Corp. Prior to that, Dr Kirnon was the President and Chief Executive Officer of Pepgen Corporation, a biopharmaceutical company based in Alameda, California, specializing in autoimmune diseases. He was formerly the President and CEO of Target Protein Technologies, Inc., a pharmaceutical company based in San Diego and specializing in the development of pharmaceutical compounds targeted to specific tissues and organs of the human body. Prior to TPT, he was the President and COO and a member of the Board of Yamanouchi Pharma Technologies, Inc., which is responsible for developing and commercializing Yamanouchi's proprietary drug delivery technologies as well as the U.S. development and manufacture of Yamanouchi's pharmaceuticals. Previously, Dr. Kirnon was the President of the Drug Delivery Division of Cygnus, Inc., successfully leading that Division into profitability and subsequently through sale of its business. Dr. Kirnon has also held various business development, sales, and marketing positions at Cygnus, Biogenex Laboratories, Inc., and GlaxoSmithKline plc. Dr. Kirnon received his doctorate in organization change and transformational leadership from as well as his M.B.A. from Pepperdine University, where he is an Adjunct Professor. He received a B.A. degree in Biochemistry from Harvard University. He is also a trustee of the New England College of Optometry.

We believe Dr. Kirnon is able to make valuable contributions to our board of directors due to his extensive operational experience in the biomedical and pharmaceutical industries, and his knowledge of our company.

William James Alexander, M.D., M.P.H., FACP. Dr. Alexander has been a member of our board of directors since June 2008. Since June 2008, he has worked as an independent consultant to the pharmaceutical industry. He also serves as Senior Director of Medical Affairs at Chiesi USA, Inc. He has held senior clinical development and regulatory positions at a number of companies, including Beecham, SmithKline The Beecham Group plc, GlaxoSmithKline plc, and Glaxo Wellcome plc. He has contributed to successful NDAs for products in multiple therapeutic areas, including antibacterials, antivirals (herpes, hepatitis, and HIV), asthma and COPD, as well as migraine. Dr. Alexander was a public health medical officer and clinical investigator in Birmingham, Alabama, and collaborated with the CDC in investigating the epidemiology of hepatitis C and HIV. He is certified by the American Board of Internal Medicine and has been a member of the Infectious Diseases Society of America since 2010. Dr. Alexander received his M.D. from the University of Missouri and his M.P.H. from the University of Alabama, Birmingham. He received his B.S. in science from Mississippi State University.

We believe Dr. Alexander is able to make valuable contributions to our board of directors due to his years of public health and pharmaceutical industry experience, his business and regulatory expertise resulting from his service in leadership positions at multiple companies, and his knowledge of our company.

Board Composition

Our business and affairs are managed under the direction of our board of directors, which currently consists of six members. The members of our board of directors were elected in compliance with the provisions of our amended and restated certificate of incorporation, as amended, and a voting agreement among certain of our stockholders, as amended. The voting agreement will terminate upon the closing of this offering and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors.

In accordance with our amended and restated certificate of incorporation to be filed in connection with this offering, our board of directors will be divided into three classes with staggered three-year terms. At each annual general meeting of stockholders, the successors to directors whose terms then expire will be elected to serve from the time of election and qualification until the third annual meeting following election. Our directors will be divided among the three classes as follows:

- The Class I directors will be Drs. Engleman and Alexander, and their terms will expire at our annual meeting of stockholders to be held in 2017;
- The Class II directors will be Drs. Kirnon and Engelsen, and their terms will expire at our annual meeting of stockholders to be held in 2018; and
- The Class III directors will be Drs. Bhatnagar and Mario and Mr. Harris, and their terms will expire at our annual meeting of stockholders to be held in 2019.

We expect that additional directorships resulting from an increase in the number of directors will be distributed among the three classes so that, as nearly as possible, each class will consist of one-third of the directors. The division of our board of directors into three classes with staggered three-year terms could potentially delay or prevent a change of our management or a change in control of our company.

Director Independence

Under the listing requirements and rules of The NASDAQ Capital Market, or NASDAQ, independent directors must comprise a majority of a listed company's board of directors within a specified period of time after this offering.

Our board of directors has undertaken a review of its composition, the composition of its committees, and the independence of each director. Based upon information requested from and provided by each director

concerning his or her background, employment and affiliations, including family relationships, our board of directors has determined that Drs. Engelsen, Kirnon and Alexander have no relationships that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director and that each of these directors is "independent," as that term is defined under the applicable rules and regulations of the Securities and Exchange Commission, or the SEC, and the listing requirements and rules of NASDAQ. In making this determination, our board of directors considered the current and prior relationships that each non-employee director has with our company, any other transactional relationships a non-employee director may have with our company, and all other facts and circumstances our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock held by each non-employee director and any of his and our respective affiliates.

Board Leadership Structure

Our board of directors has a Chairman, Dr. Mario, who has authority, among other things, to preside over board of directors meetings, and to call special meetings of the board. Accordingly, the Chairman has substantial ability to shape the work of our board of directors. We currently believe that separation of the roles of Chairman and Chief Executive Officer reinforces the leadership role of our board of directors in its oversight of the business and affairs of our Company. In addition, we currently believe that having a separate Chairman creates an environment that is more conducive to objective evaluation and oversight of management's performance, increasing management accountability and improving the ability of our board of directors to monitor whether management's actions are in the best interests of the company and its stockholders. However, no single leadership model is right for all companies and at all times. Our board of directors recognizes that depending on the circumstances, other leadership models, such as combining the role of Chairman with the role of Chief Executive Officer, might be appropriate. As a result, our board of directors may periodically review its leadership structure.

Board committees

Our board of directors has the authority to appoint committees to perform certain management and administration functions. Our board of directors has an audit committee, a compensation committee and a nominating and corporate governance committee. The composition and responsibilities of each committee are described below. Members will serve on these committees until their resignation or until otherwise determined by our board of directors. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus.

Audit committee

Our audit committee consists of Steinar J. Engelsen, William G. Harris and William James Alexander, each of whom satisfies the independence requirements under NASDAQ listing standards and Rule 10A-3(b)(1) of the Securities Exchange Act of 1934, as amended, or the Exchange Act. The chairperson of our audit committee is Mr. Harris. Each member of our audit committee can read and understand fundamental financial statements in accordance with audit committee requirements. In arriving at this determination, our board of directors has examined each audit committee member's scope of experience and the nature of their employment in the corporate finance sector.

Our audit committee oversees our corporate accounting and financial reporting process and assists our board of directors in oversight of the integrity of our financial statements, our compliance with legal and regulatory requirements, our independent auditor's qualifications, independence and performance and our internal accounting and financial controls. Our audit committee is responsible for the appointment, compensation, retention and oversight of our independent auditors. Our board of directors has determined that Dr. Engelsen and Mr. Harris are audit committee financial experts, as defined by the rules promulgated by the SEC.

Following the closing of this offering, the charter of the audit committee will be available on our website at *www.capnia.com*. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

Compensation committee

Our compensation committee consists of Steinar J. Engelsen, William G. Harris and Stephen Kirnon each of whom our board of directors has determined to be independent under NASDAQ listing standards, a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act, and an "outside director" as that term is defined in Section 162(m) of the Code. The chairperson of our compensation committee is Dr. Engelsen.

Our compensation committee oversees our compensation policies, plans and benefits programs and assists our board of directors in meeting its responsibilities with regard to oversight and determination of executive compensation. In addition, our compensation committee reviews and makes recommendations to our board of directors with respect to our major compensation plans, policies and programs and assesses whether our compensation structure establishes appropriate incentives for officers and employees.

Following the closing of this offering, the charter of the compensation committee will be available on our website at *www.capnia.com*. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

Nominating and corporate governance committee

Our nominating and corporate governance committee consists of Steinar J. Engelsen, Stephen Kirnon and William James Alexander, each of whom our board of directors has determined to be independent under NASDAQ listing standards. The chairperson of our nominating and corporate governance committee is Dr. Kirnon.

Our nominating and corporate governance committee is responsible for making recommendations to our board of directors regarding candidates for directorships and the size and composition of the board of directors and its committees. In addition, our nominating and corporate governance committee is responsible for reviewing and making recommendations to our board of directors on matters concerning corporate governance and conflicts of interest.

Following the closing of this offering, the charter of the nominating and corporate governance committee will be available on our website at *www.capnia.com*. The inclusion of our website address in this prospectus does not include or incorporate by reference into this prospectus the information on or accessible through our website.

Role in Risk Oversight

Our board of directors oversees an enterprise-wide approach to risk management, designed to support the achievement of business objectives, including organizational and strategic objectives, to improve long-term organizational performance and enhance stockholder value. The involvement of our board of directors in setting our business strategy is a key part of its assessment of management's plans for risk management and its determination of what constitutes an appropriate level of risk for our company. The participation of our board of directors in our risk oversight process includes receiving regular reports from members of senior management on areas of material risk to our company, including operational, financial, legal and regulatory, and strategic and reputational risks.

While our board of directors has the ultimate responsibility for the risk management process, senior management and various committees of our board of directors will also have responsibility for certain areas of risk management.

Our senior management team is responsible for day-to-day risk management and regularly reports on risks to our full board of directors or a relevant committee. Our finance and regulatory personnel serve as the primary monitoring and evaluation function for company-wide policies and procedures, and manage the day-to-day oversight of the risk management strategy for our ongoing business. This oversight includes identifying, evaluating, and addressing potential risks that may exist at the enterprise, strategic, financial, operational, compliance and reporting levels.

Our audit committee will focus on monitoring and discussing our major financial risk exposures and the steps management has taken to monitor and control such exposures, including our risk assessment and risk management policies. As appropriate, the audit committee will provide reports to and receive direction from the full board of directors regarding our risk management policies and guidelines, as well as the audit committee's risk oversight activities.

In addition, our compensation committee will assess our compensation policies to confirm that the compensation policies and practices do not encourage unnecessary risk taking. The compensation committee will review and discuss the relationship between risk management policies and practices, corporate strategy and senior executive compensation and, when appropriate, report on the findings from the discussions to our board of directors. Our compensation committee intends to set performance metrics that will create incentives for our senior executives that encourage an appropriate level of risk-taking that is commensurate with our short-term and long-term strategies.

Code of Business Conduct and Ethics

Upon the closing of this offering, we will adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting. Following the closing of this offering, the code of business conduct and ethics will be available on our website at *www.capnia.com*. We intend to disclose any amendments to the code, or any waivers of its requirements, on our website to the extent required by the applicable rules and exchange requirements. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has ever been an officer or employee of the company. None of our executive officers serve, or have served during the last fiscal year, as a member of a board of directors, compensation committee or other board committee performing equivalent functions of any entity that has one or more executive officers serving on our board directors or on our compensation committee.

Non-Employee Director Compensation

Directors who are employees do not receive any additional compensation for their service on our board of directors. We reimburse our non-employee directors for their reasonable out-of-pocket costs and travel expenses in connection with their attendance at board of directors and committee meetings. In 2013, certain of our non-employee directors received cash compensation as set forth below.

The following table sets forth information regarding compensation earned by our non-employee directors during the fiscal year ended December 31, 2013.

Name	Cash Compensation	Option Awards(1)	Other Compensation	Total
Edgar G. Engleman	—	—	—	—
Steinar J. Engelsen	—	—	—	—
Stephen Kirnon	—	—	—	—
William James Alexander	—	—	—	—

(1) The amounts in this column reflect the aggregate grant date fair value of each option award granted during the fiscal year, computed in accordance with FASB ASC Topic 718. The valuation assumptions used in determining such amounts are described in Note 6 and Note 9 to our financial statements included in this prospectus. The table below lists the aggregate number of shares and additional information with respect to the outstanding option awards held by each of our non-employee directors.

Name	Equity Award Grant Date	Number of Shares Subject to Outstanding Options as of December 31, 2013	Option Exercise Price(5)	Option Expiration Date
Edgar G. Engleman(1)	—	—	—	—
Steinar J. Engelsen(2)	—	—	—	—
Stephen Kirnon(3)	6/21/2005	21,875	$ 0.48	6/21/2015
Stephen Kirnon(3)	6/27/2008	20,000	$ 0.29	9/25/2018
Stephen Kirnon(3)	10/15/2008	10,000	$ 0.29	10/15/2018
William James Alexander(4)	9/25/2008	20,000	$ 0.29	9/25/2018
William James Alexander(4)	10/15/2008	10,000	$ 0.29	10/15/2018

(1) Dr. Engleman joined our board of directors in June 2001.
(2) Dr. Engelsen joined our board of directors in April 2004.
(3) Dr. Kirnon joined our board of directors in July 2002.
(4) Dr. Alexander joined our board of directors in June 2008.
(5) The grant date fair market value of the common stock underlying these option awards is equal to the option exercise price on the date of grant.

Our board of directors has adopted a non-employee director compensation policy, which will be effective for all of our non-employee directors upon the closing of this offering, pursuant to which we will compensate our non-employee directors with a combination of cash and equity. Each such director who is not affiliated with one of our principal stockholders will receive an annual base cash retainer of for such service, to be paid quarterly. The policy also provides that we compensate certain members of our board of directors for service on our committees as follows:

- The chair or executive chair of our board of directors will receive an annual cash retainer of for such service, paid quarterly;
- The chairperson of our audit committee will receive an annual cash retainer of for such service, paid quarterly;
- The chairperson of our compensation committee will receive an annual cash retainer of for such service, paid quarterly; and
- The chairperson of our nominating and corporate governance committee will receive an annual cash retainer of for such service, paid quarterly.

The policy further provides for the grant of equity awards as follows:

- For each new director that joins our board of directors after the closing of this offering, an initial stock option grant to purchase shares of our common stock, vesting annually over years; and
- Annually, for each director continuing to serve on our board of directors, a stock option grant to purchase shares of our common stock, vesting annually over years.

Each of these options will be granted with an exercise price equal to the fair market value of our common stock on the date of such grant.

EXECUTIVE COMPENSATION

As an emerging growth company, we have opted to comply with the executive compensation disclosure rules applicable to "smaller reporting companies," as such term is defined in the rules promulgated under the Securities Act of 1933, as amended, or the Securities Act, which require compensation disclosure for our principal executive officer and the two most highly compensated executive officers other than our principal executive officer. Our named executive officers for the year ended December 31, 2013 are:

- Ernest Mario, Ph.D., our Chairman and Former Chief Executive Officer;
- Anish Bhatnagar, M.D. our Chief Executive Officer, President and Chief Operating Officer;
- Anthony Wondka, our Vice President, Research & Development; and
- Antoun Nabhan, J.D., our Vice President of Corporate Development.

Throughout this section, we refer to these four officers as our named executive officers.

The Summary Compensation Table below sets forth information regarding the compensation awarded to or earned by our named executive officers during the year ended December 31, 2013.

2013 Summary compensation table

Name and principal position	Year	Salary	Option awards(1)	Non-equity incentive plan compensation	All Other Compensation	Total
Ernest Mario(2) Chairman (was Chief Executive Officer as of December 31, 2013)	2013	$ —	$ —	$ —	$ —	$ —
Anish Bhatnagar(3) Chief Executive Officer, President and Chief Operating Officer (was President and Chief Operating Officer as of December 31, 2013)	2013	$374,063	$ —	$ —	$ —	$374,063
Anthony Wondka Vice President, Research & Development	2013	$125,333	$ —	$ —	$ —	$125,333
Antoun Nabhan(4) Vice President of Corporate Development	2013	$ —	—	—	$ 4,000	$ 4,000

(1) The amounts in this column reflect the aggregate grant date fair value of each option award granted during the fiscal year ended December 31, 2013, computed in accordance with FASB ASC Topic 718. The valuation assumptions used in determining such amounts are described in Note 6 and Note 9 to our financial statements included in this prospectus.

(2) Dr. Mario was our Chief Executive Officer as of December 31, 2013. On February 6, 2014. Dr. Mario was appointed as our Executive Chairman, and subsequently our Chairman, and Dr. Bhatnagar succeeded him as our Chief Executive Officer.

(3) Dr. Bhatnagar was our President and Chief Operating Officer as of December 31, 2013. On February 6, 2014, Dr. Bhatnagar was appointed as our Chief Executive Officer following Dr. Mario's appointment as our Executive Chairman.

(4) Mr. Nabhan served as a consultant upon joining our company in 2013. Accordingly, Mr. Nabhan did not receive any base salary for 2013, but received payment of consulting fees for services rendered to our company during 2013.

Employment offer letters

We have entered into employment offer letters with each of our named executive officers. The offer letters provide for "at-will" employment and set forth the terms and conditions of employment, including annual base salary, target bonus opportunity, equity compensation, severance benefits and eligibility to participate in our employee benefit plans and programs. In connection with their employment, our named executive officers were each also required to execute our standard proprietary information and inventions agreement. The material terms of these offer letters are summarized below. These summaries are qualified in their entirety by reference to the actual text of the offer letters, which are filed as exhibits to the registration statement of which this prospectus is a part.

Agreement with Ernest Mario

We entered into an offer letter with Dr. Mario, dated June 22, 2007, pursuant to which Dr. Mario served as our Chief Executive Officer. The agreement provided for "at-will" employment and sets forth certain agreed upon terms and conditions of employment.

Agreement with Anish Bhatnagar

We entered into an employment agreement with Dr. Bhatnagar, dated April 26, 2010, pursuant to which Dr. Bhatnagar serves as our President and Chief Executive Officer. The agreement provides for "at-will" employment and sets forth certain agreed upon terms and conditions of employment. Dr. Bhatnagar's current annual base salary is $393,750.

Agreement with Anthony Wondka

We entered into an offer letter with Mr. Wondka, dated May 29, 2013, pursuant to which Mr. Wondka serves as our Vice President of Research and Development. The agreement provides for "at-will" employment and sets forth certain agreed upon terms and conditions of employment. Mr. Wondka's current annual base salary is $235,000.

Agreement with Antoun Nabhan

We entered into an offer letter with Mr. Nabhan, dated April 17, 2014, pursuant to which Mr. Nabhan serves as our Vice President of Corporate Development. The agreement provides for "at-will" employment and sets forth certain agreed upon terms and conditions of employment. Mr. Nabhan's current annual base salary is $225,000.

Potential payments and benefits upon termination or change of control

Dr. Bhatnagar. Pursuant to Dr. Bhatnagar's employment agreement, if Dr. Bhatnagar's employment is terminated without Cause by us (or our successor company) apart from a Change of Control (as defined in Dr. Bhatnagar's employment agreement) within two months prior to a Change of Control or within twelve months following a Change of Control, and if he executes and does not revoke a release of claims within 60 days following the date of his termination, Dr. Bhatnagar will be entitled to: (a) a lump sum severance payment equal to twelve months' of Dr. Bhatnagar's then current base salary; and (b) reimbursement for the cost of Dr. Bhatnagar's continued coverage under our employee benefit plans for a period ending on the earlier of twelve months following the date of the termination of his employment or the date on which he becomes eligible for coverage under similar employee benefit plans. In addition, pursuant to Dr. Bhatnagar's employment agreement, if, in the event of a Change of Control, Dr. Bhatnagar's employment is terminated without cause by us (or our successor company) or Dr. Bhatnagar resigns for Good Reason (as defined in Dr. Bhatnagar's employment agreement), and if he executes and does not revoke a release of claims within 60 days following the date of his

termination, Dr. Bhatnagar will be entitled to: (i) a lump sum severance payment equal to eighteen months' of Dr. Bhatnagar's then current base salary; (ii) a lump sum payment equal to the pro-rated portion of Dr. Bhatnagar's target bonus for the year of his termination; and (c) reimbursement for the cost of Dr. Bhatnagar's continued coverage under our employee benefit plans for a period ending on the earlier of eighteen months following the date of the termination of his employment or the date on which he becomes eligible for coverage under similar employee benefit plans.

Outstanding equity awards at December 31, 2013

The following table provides information regarding outstanding equity awards held by our named executive officers as of December 31, 2013.

Name	Grant date	Number of Securities Underlying Unexercised Options		Option Exercise Price	Option Expiration Date
		Exercisable	Unexercisable		
Anish Bhatnagar	6/8/2006	62,500(1)(3)	—	$ 0.29	6/8/2016
Anish Bhatnagar	3/14/2007	50,000(1)(2)	—	$ 0.88	3/14/2017
Anish Bhatnagar	9/25/2007	12,500(1)(3)	—	$ 0.88	9/25/2017
Anish Bhatnagar	6/27/2008	140,000(1)(3)	—	$ 0.88	9/25/2018
Anish Bhatnagar	10/15/2008	100,000(1)(3)	—	$ 0.29	10/15/2018
Anish Bhatnagar	6/3/2010	701,030(1)(3)	—	$ 0.10	6/3/2020
Anthony Wondka	—	—	—	$ —	—
Antoun Nabhan	—	—	—	$ —	—

(1) The options listed are fully vested or are subject to an early exercise right and may be exercised in full prior to vesting of the shares underlying such options. Vesting of all options is subject to continued service on each vesting date.

(2) The shares subject to the stock option vest over a four-year period as follows: 25% of the shares underlying the options vest on the one-year anniversary of the vesting commencement date and thereafter 1/48th of the shares vest each month, subject to the continued service with us through each vesting date.

(3) The shares subject to the stock option vest over a four-year period as follows: 1/48th of the shares vest each month, subject to the continued service with us through each vesting date.

Employee Benefits and Stock Plans

2014 Equity Incentive Plan

Our board of directors intends to adopt our 2014 Equity Incentive Plan, or the 2014 Plan before the completion of this offering, and we also expect our stockholders will approve it before the completion of this offering. Subject to stockholder approval, the 2014 Plan will be effective immediately before the completion of this offering and is not expected to be utilized until after the completion of this offering. Our 2014 Plan will provide for the grant of incentive stock options (within the meaning of Section 422 of the Code to our employees and any of our parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, or NSOs, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares to our employees, directors and consultants, and our parent and subsidiary corporations' employees and consultants.

Authorized Shares. A total of shares of our common stock will be reserved for issuance pursuant to the 2014 Plan, of which no awards are issued and outstanding. In addition, the shares reserved for issuance under our 2014 Plan will also include: (a) those shares reserved but unissued under our 2010 Plan (as defined below) as of the effective date described above; and (b) shares returned to our 2010 Plan as the result of expiration or termination of options (provided that the maximum number of shares that may be added to the 2014 Plan pursuant to (a) and (b) is shares). The number of shares available for issuance under the 2014 Plan will also include an annual increase on the first day of each year beginning in 2014, equal to the least of:

- shares;

- 4.0% of the outstanding shares of common stock as of the last day of our immediately preceding year; or
- such other amount as our board of directors may determine.

Our compensation committee will administer our 2014 Plan after the completion of this offering. In the case of options intended to qualify as "performance-based compensation" within the meaning of Section 162(m) of the Code, the committee will consist of two or more "outside directors" within the meaning of Section 162(m) of the Code.

Plan Administration. Subject to the provisions of our 2014 Plan, the administrator will have the power to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards, and the form of consideration, if any, payable upon exercise. The administrator also will have the authority to amend existing awards to reduce their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards with a higher or lower exercise price.

Stock Options. The exercise price of options granted under our 2014 Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of an incentive stock option may not exceed ten years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed five years and the exercise price must equal at least 110% of the fair market value on the grant date. Subject to the provisions of our 2014 Plan, the administrator will determines the term of all other options.

After the termination of service of an employee, director or consultant, he or she may exercise his or her option or stock appreciation right for the period of time stated in his or her award agreement. Generally, if termination is due to death or disability, the option or stock appreciation right will remain exercisable for twelve months. In all other cases, the option or stock appreciation right will generally remain exercisable for three months following the termination of service. However, in no event may an option be exercised later than the expiration of its term.

Stock Appreciation Rights. Stock appreciation rights may be granted under our 2014 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Subject to the provisions of our 2014 Plan, the administrator will determine the terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Restricted stock may be granted under our 2014 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator will determine the number of shares of restricted stock granted and may impose whatever conditions to vesting it determines to be appropriate (for example, the administrator may set restrictions based on the achievement of specific performance goals or continued service to us). The administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted Stock Units. Restricted stock units may be granted under our 2014 Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. The administrator will determine the terms and conditions of restricted stock units, including the number of units granted, the vesting criteria (which may include accomplishing specified performance criteria or continued service to us), and the form and timing of payment. The administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.

Performance Units and Performance Shares. Performance units and performance shares may be granted under our 2014 Plan Performance units and performance shares are awards that will result in a payment to a participant only if performance goals established by the administrator are achieved or the awards otherwise vest. The administrator will establish organizational or individual performance goals in its discretion, which, depending on the extent to which they are met, will determine the number or the value of performance units and performance shares to be paid out to participants. After the grant of a performance unit or performance share, the administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such performance units or performance shares. The administrator, in its sole discretion, may pay earned performance units or performance shares in the form of cash, in shares, or in some combination thereof.

Non-Employee Directors. Our 2014 Plan will provide that all non-employee directors will be eligible to receive all types of awards (except for ISOs) under the 2014 Plan. Please see the description of our non-employee director compensation above under "Management—Non-Employee Director Compensation."

Non-Transferability of Awards. Unless the administrator provides otherwise, our 2014 Plan generally will not allow for the transfer of awards, and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2014 Plan, the administrator will adjust the number and class of shares that may be delivered under the 2014 Plan or the number, class and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2014 Plan.

Merger or Change in Control. Our 2014 Plan will provide that in the event of a merger or change in control, as defined in the 2014 Plan, each outstanding award will be treated as the administrator determines, including that the successor corporation or its parent or subsidiary will assume or substitute an equivalent award for each outstanding award. The administrator will not be required to treat all awards similarly. If there is no assumption or substitution of outstanding awards, the awards will fully vest, all restrictions will lapse, all performance goals or other vesting criteria will be deemed achieved at 100% of target levels and the awards will become fully exercisable.

2014 Employee Stock Purchase Plan

Our board of directors intends to adopt the 2014 Employee Stock Purchase Plan, or the ESPP before the completion of this offering, and we also expect our stockholders will approve it before the completion of this offering. Subject to stockholder approval, the ESPP will be effective immediately prior to the completion of this and with our board of directors implementing offers thereunder its discretion after the completion of this offering.

Authorized Shares. A total of shares of our common stock will be made available for sale under the ESPP. In addition, our ESPP will provide for annual increases in the number of shares available for issuance under the plan on the first day of each year beginning in the year following the initial date that our board of directors authorizes commencement, equal to the least of:

- % of the outstanding shares of our common stock on the first day of such year;
- shares; or
- such amount as determined by our board of directors.

Plan Administration. Our compensation committee will administer the ESPP, and will have full and exclusive authority to interpret the terms of the plan and determine eligibility to participate, subject to the conditions of the plan as described below.

Eligibility. Generally, all of our employees will be eligible to participate if they are employed by us, or any participating subsidiary, for at least 20 hours per week and more than five months in any calendar year. However, an employee may not be granted rights to purchase stock under the ESPP if such employee:

- immediately after the grant would own stock possessing 5% or more of the total combined voting power or value of all classes of our capital stock; or
- hold rights to purchase stock under all of our employee stock purchase plans that accrue at a rate that exceeds $25,000 worth of stock for each calendar year.

Offering Periods. Our ESPP is intended to qualify under Section 423 of the Code. Each offering period includes purchase periods, which will be the approximately six months commencing with one exercise date and ending with the next exercise date. The offering periods are scheduled to start on the first trading day on or after and of each year, except for the first offering period, which will commence on the first trading day on or after completion of this offering and will end on the first trading day on or after , 2014.

Our ESPP will permit participants to purchase shares of common stock through payroll deductions of up to % of their eligible compensation. A participant may purchase a maximum of shares during a six-month period.

Exercise of Purchase Right. Amounts deducted and accumulated by the participant will be used to purchase shares of our common stock at the end of each six month purchase period. The purchase price of the shares will be % of the lower of the fair market value of our common stock on the first trading day of each offering period or on the exercise date. If the fair market value of our common stock on the exercise date is less than the fair market value on the first trading day of the offering period, participants will be withdrawn from the current offering period following their purchase of shares on the purchase date and will be automatically re-enrolled in a new offering period. Participants may end their participation at any time during an offering period and will be paid their accrued contributions that have not yet been used to purchase shares of common stock. Participation ends automatically upon termination of employment with us.

Non-Transferability. A participant may not transfer rights granted under the ESPP. If the compensation committee permits the transfer of rights, it may only be done by will, the laws of descent and distribution, or as otherwise provided under the ESPP.

Merger or Change in Control. In the event of our merger or change in control, as defined under the ESPP, a successor corporation may assume or substitute each outstanding purchase right. If the successor corporation refuses to assume or substitute for the outstanding purchase right, the offering period then in progress will be shortened, and a new exercise date will be set. The administrator will notify each participant that the exercise date has been changed and that the participant's option will be exercised automatically on the new exercise date unless prior to such date the participant has withdrawn from the offering period.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent dilution or enlargement of the benefits or potential benefits available under the ESPP, the administrator will adjust the number and class of shares that may be delivered under the ESPP, the purchase price per share and the number of shares covered by each option and the numerical share limits set forth in the ESPP.

Amendment; Termination. Our ESPP will automatically terminate in 2034, unless we terminate it sooner. Our board of directors has the authority to amend, suspend, or terminate our ESPP, except that, subject to certain exceptions described in the ESPP, no such action may adversely affect any outstanding rights to purchase stock under our ESPP.

Employee benefit plans

Our named executive officers are eligible to participate in our employee benefit plans, including our medical, dental, vision, group life, and accidental death and dismemberment insurance plans, in each case, on the same basis as all of our other employees. We maintain a 401(k) plan for the benefit of our eligible employees, including our named executive officers, as discussed in the section below entitled "Employee benefit plans—401(k) Plan."

1999 Stock Plan

Our board of directors and stockholders adopted our 1999 Incentive Stock Plan, or the 1999 Plan, in October 1999. Our 1999 Plan provided for the grant of nonstatutory stock options, or NSOs, and stock purchase rights to employees and consultants of ours or any parent or subsidiary of ours and to our directors. Our 1999 Plan also provided for the grant of incentive stock options, or ISOs (within the meaning of Section 422 of the Code), to employees of ours or any parent or subsidiary of ours. Our 1999 Stock Plan expired by its terms on October 5, 2009 and, accordingly, no further grants will be made under our 1999 Stock Plan. However, any outstanding awards granted under our 1999 Plan will remain outstanding, subject to the terms of our 1999 Plan and the applicable award agreements, until such awards are exercised or otherwise terminate or expire by their terms.

Authorized shares. Prior to the expiration of the 1999 Plan, the maximum number of shares of our common stock reserved for issuance under our 1999 Plan was 2,231,962 shares, measured on a pre-forward stock split basis. As of May 31, 2014, options to purchase 1,850,020 shares of our common stock remained outstanding under the 1999 Plan.

Shares issued under our 1999 Plan included any authorized but unissued or reacquired shares of our common stock.

Plan administration. Our board of directors, or a duly authorized committee of our board of directors, may administer our 1999 Plan. Subject to the terms of our 1999 Plan, the administrator has the authority to determine the terms of awards, including recipients, the exercise or purchase price of the awards (if any), the number of shares subject to awards, the vesting schedule applicable to the awards, and any transfer restrictions or rights of repurchase. Additionally, the administrator has the authority to determine the fair market value of our common stock, to determine whether and under what circumstances an option may be settled in cash instead of common stock, to reduce the exercise price of an option to the then-current fair market value of our common stock, to initiate an option exchange program whereby outstanding options are exchanged for options with a lower exercise price, and to allow optionees to satisfy withholding tax obligations by electing to have us withhold otherwise deliverable shares. The administrator also has the authority to prescribe, amend, and rescind rules and regulations relating to the 1999 Plan and to construe and interpret the terms of the 1999 Plan and awards granted pursuant to the 1999 Plan. All decisions, interpretations and other actions of our board of directors will be final and binding.

Stock Options. Stock options could be granted under the 1999 Plan. The exercise price of nonstatutory stock options granted under our 1999 Plan must at least be equal to 85% of the fair market value of our common stock on the date of grant, and the exercise price of incentive stock options granted under our 1999 Plan must at least be equal to the fair market value of our common stock on the date of grant, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the exercise price of any option must equal at least 110% of the fair market value on the grant date. The term of a stock option may not exceed 10 years, except that with respect to any participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term of an incentive stock option must not exceed 5 years. The administrator will determine the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for the period of time stated in his or her option agreement. Generally, if termination is due to death

or disability, the option will remain exercisable for 12 months. In all other cases, the option will generally remain exercisable for three months following the termination of service. However, in no event may an option be exercised later than the expiration of its term. Subject to the provisions of our 1999 Plan, the administrator determined the other terms of options.

Stock Purchase Rights. Restricted stock could be issued pursuant to the exercise or stock purchase rights granted under our 1999 Plan. Restricted stock consists of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator determined the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of our 1999 Plan, determined the terms and conditions of such awards. The administrator could impose whatever conditions to vesting it determined to be appropriate (for example, the administrator may have set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Holders of restricted stock generally have voting and dividend rights with respect to such shares upon issuance without regard to vesting, unless the administrator provided otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Non-Transferability of Awards. Our 1999 Plan does not allow for the transfer of awards, and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 1999 Plan, the administrator will adjust the number and class of shares that may be delivered under the 1999 Plan or the number, class and price of shares covered by each outstanding award.

Dissolution or Liquidation. In the event of our proposed dissolution or liquidation, the administrator will notify participants as soon as practicable. The administrator may allow for awards to be exercised until 15 days prior to such transaction as to all of the shares subject to such awards, including shares which would not otherwise be exercisable. In addition, the administrator may provide that any repurchase option of ours will lapse, so long as the proposed dissolution or liquidation takes place at the time and in the manner contemplated. All awards will terminate immediately prior to the consummation of such proposed transaction.

Merger or Asset Sale. Our 1999 Plan provides that in the event of a merger or sale of substantially all of the assets of our company, each outstanding award will be assumed or an equivalent award will be substituted by the successor corporation or its parent or subsidiary. If the successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, and the administrator will notify the holder of the award that such award will be fully exercisable for a period of 15 days from the date of such notice. The award will then terminate upon the expiration of the specified period of time.

Plan amendment or termination. Our board of directors has the authority to amend our 1999 Plan, provided that such action does not impair the existing rights of any participant without such participant's written consent.

2010 Stock Plan

Our board of directors and stockholders adopted our 2010 Plan in May 2010. Our 2010 Plan provides for the grant of NSOs, stock appreciation rights, restricted stock, and restricted stock units to employees and consultants of ours or any parent or subsidiary of ours and to our directors. Our 2010 Plan also provides for the grant of ISOs (within the meaning of Section 422 of the Code) to employees of ours or any parent or subsidiary of ours. Our 2010 Stock Plan will be terminated in connection with our initial public offering, and accordingly, no further grants will be made under our 2010 Plan. However, any outstanding awards granted under our 2010 Plan will remain outstanding, subject to the terms of our 2010 Plan and the applicable award agreements, until such awards are exercised or otherwise terminate or expire by their terms.

Authorized shares. Prior to the termination of the 2010 Plan, the maximum number of shares of our common stock reserved for issuance under our 2010 Plan is 2,523,362 shares. As of May 31, 2014, options to purchase 989,230 shares of our common stock remain outstanding.

Shares issued under our 2010 Plan include any authorized but unissued or reacquired shares of our common stock.

Plan administration. Our board of directors, or a duly authorized committee of our board of directors, may administer our 2010 Plan. Subject to the terms of our 2010 Plan, the administrator will have the power to administer the 2010 Plan, including but not limited to the power to interpret the terms of the 2010 Plan and awards granted under it; to create, amend, and revoke rules relating to the 2010 Plan, including creating sub-plans; and to determine the terms of the awards, including the exercise price, the number of shares subject to each such award, the exercisability of the awards, and the form of consideration, if any, payable upon exercise. The administrator will also have the authority to amend existing awards to reduce or increase their exercise price, to allow participants the opportunity to transfer outstanding awards to a financial institution or other person or entity selected by the administrator, and to institute an exchange program by which outstanding awards may be surrendered in exchange for awards of the same type which may have a higher or lower exercise price or different terms, awards of a different type, or cash.

Stock Options. Stock options could be granted under the 2010 Plan. The exercise price of options granted under our 2010 Plan must at least be equal to the fair market value of our common stock on the date of grant. The term of a stock option may not exceed 10 years, except that with respect to an ISO granted to a participant who owns more than 10% of the voting power of all classes of our outstanding stock, the term must not exceed 5 years and the exercise price must equal at least 110% of the fair market value on the grant date. The administrator determined the methods of payment of the exercise price of an option, which may include cash, shares or other property acceptable to the administrator, as well as other types of consideration permitted by applicable law. After the termination of service of an employee, director or consultant, he or she may exercise his or her option for 30 days (or 6 months in the case of a termination due to death or disability) or such longer period of time stated in his or her option agreement. However, in no event may an option be exercised later than the expiration of its term. Subject to the provisions of our 2010 Plan, the administrator determines the other terms of options.

Stock Appreciation Rights. Stock appreciation rights could be granted under our 2010 Plan. Stock appreciation rights allow the recipient to receive the appreciation in the fair market value of our common stock between the exercise date and the date of grant. Stock appreciation rights may not have a term exceeding 10 years. After the termination of service of an employee, director or consultant, he or she may exercise his or her stock appreciation right for the period of time stated in his or her option agreement. However, in no event may a stock appreciation right be exercised later than the expiration of its term. Subject to the provisions of our 2010 Plan, the administrator determined the other terms of stock appreciation rights, including when such rights become exercisable and whether to pay any increased appreciation in cash or with shares of our common stock, or a combination thereof, except that the per share exercise price for the shares to be issued pursuant to the exercise of a stock appreciation right will be no less than 100% of the fair market value per share on the date of grant.

Restricted Stock. Restricted stock could be granted under our 2010 Plan. Restricted stock awards are grants of shares of our common stock that vest in accordance with terms and conditions established by the administrator. The administrator determines the number of shares of restricted stock granted to any employee, director or consultant and, subject to the provisions of our 2010 Plan, determined the terms and conditions of such awards. The administrator could impose whatever conditions to vesting it determined to be appropriate (for example, the administrator may have set restrictions based on the achievement of specific performance goals or continued service to us); provided, however, that the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed. Recipients of restricted stock awards generally have voting

and dividend rights with respect to such shares upon grant without regard to vesting, unless the administrator provided otherwise. Shares of restricted stock that do not vest are subject to our right of repurchase or forfeiture.

Restricted Stock Units. Restricted stock units could be granted under our 2010 Plan. Restricted stock units are bookkeeping entries representing an amount equal to the fair market value of one share of our common stock. Subject to the provisions of our 2010 Plan, the administrator determined the terms and conditions of restricted stock units, including the vesting criteria (which may include accomplishing specified performance criteria or continued service to us) and the form and timing of payment. Notwithstanding the foregoing, the administrator, in its sole discretion, may accelerate the time at which any restrictions will lapse or be removed.

Non-Transferability of Awards. Unless the administrator provided otherwise, our 2010 Plan generally does not allow for the transfer of awards and only the recipient of an award may exercise an award during his or her lifetime.

Certain Adjustments. In the event of certain changes in our capitalization, to prevent diminution or enlargement of the benefits or potential benefits available under the 2010 Plan, the administrator will adjust the number and class of shares that may be delivered under the Plan or the number, class, and price of shares covered by each outstanding award, and the numerical share limits set forth in the 2010 Plan. In the event of our proposed liquidation or dissolution, the administrator will notify participants as soon as practicable and all awards will terminate immediately prior to the consummation of such proposed transaction.

Dissolution or Liquidation. In the event of our proposed dissolution or liquidation, the administrator will notify participants as soon as practicable, and all awards will terminate immediately prior to the consummation of such proposed transaction.

Change in control. Our 2010 Plan provides that in the event of a change in control, as defined under our 2010 Plan, each outstanding award will be treated as the administrator determines, except that if a successor corporation or its parent or subsidiary does not assume or substitute an equivalent award for any outstanding award, then such award will fully vest, all restrictions on such award will lapse, all performance goals or other vesting criteria applicable to such award will be deemed achieved at 100% of target levels and such award will become fully exercisable, if applicable, for a specified period prior to the transaction. The award will then terminate upon the expiration of the specified period of time.

Plan amendment or termination. Our board of directors has the authority to amend our 2010 Plan, provided that such action does not impair the existing rights of any participant without such participant's written consent.

401(k) plan

We maintain a retirement savings plan, or 401(k) plan, that provides eligible U.S. employees with an opportunity to save for retirement on a tax advantaged basis. Under our 401(k) plan, eligible employees may defer eligible compensation subject to applicable annual contribution limits imposed by the Code. Employees' pre-tax contributions are allocated to each participant's individual account. Participants are immediately and fully vested in their contributions. We do not currently provide an employer match on employee contributions. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan's related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the employees until distributed from the 401(k) plan.

In May 2014, our board of directors approved granting stock options to certain of our executive officers and directors, pursuant to our 2014 Plan, contingent and effective upon the closing of this offering. Each recipient will receive an option to purchase that number of shares of the our common stock sufficient to

constitute that percentage of the Company's total fully-diluted equity capitalization then outstanding, including previously granted equity, as shown alongside the name of each individual as follows:

Ernest Mario	1.0%
Anish Bhatnagar	4.0%
Anthony Wondka	0.6%
Antoun Nabhan	0.5%

The exercise price for these option grants shall be the offering price of our shares of common stock underlying the units sold in this offering.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation and amended and restated bylaws, each to be effective upon the completion of this offering, will provide that we will indemnify our directors and officers, and may indemnify our employees and other agents, to the fullest extent permitted by the Delaware General Corporation Law, which prohibits our amended and restated certificate of incorporation from limiting the liability of our directors for the following:

- any breach of the director's duty of loyalty to the corporation or its stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions; or
- any transaction from which the director derived an improper personal benefit.

If Delaware law is amended to authorize corporate action further eliminating or limiting the personal liability of a director, then the liability of our directors will be eliminated or limited to the fullest extent permitted by Delaware law, as so amended. Our amended and restated certificate of incorporation does not eliminate a director's duty of care and in appropriate circumstances, equitable remedies, such as injunctive or other forms of non-monetary relief, remain available under Delaware law. This provision also does not affect a director's responsibilities under any other laws, such as the federal securities laws or other state or federal laws. Under our amended and restated bylaws, we will also be empowered to purchase insurance on behalf of any person whom we are required or permitted to indemnify.

In addition to the indemnification required in our amended and restated certificate of incorporation and amended and restated bylaws, we plan to enter into indemnification agreements with each of our current directors and officers before the completion of this offering. These agreements will provide indemnification for certain expenses and liabilities incurred in connection with any action, suit, proceeding, or alternative dispute resolution mechanism, or hearing, inquiry, or investigation that may lead to the foregoing, to which they are a party, or are threatened to be made a party, by reason of the fact that they are or were a director, officer, employee, agent, or fiduciary of our company, or any of our subsidiaries, by reason of any action or inaction by them while serving as an officer, director, agent, or fiduciary, or by reason of the fact that they were serving at our request as a director, officer, employee, agent, or fiduciary of another entity. In the case of an action or proceeding by, or in the right of, our company or any of our subsidiaries, no indemnification will be provided for any claim where a court determines that the indemnified party is prohibited from receiving indemnification. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against directors for breach of their fiduciary duties. They may also reduce the likelihood of derivative litigation against directors and officers, even though an action, if successful, might benefit us and our stockholders. A stockholder's investment may be harmed to the extent we pay the costs of settlement and damage awards against directors and officers pursuant to these indemnification provisions. Insofar as we may provide indemnification for liabilities arising under the Securities Act to our directors, officers, and controlling persons pursuant to the foregoing provisions, or otherwise, we have been advised that, in the opinion of the SEC, such indemnification is against public policy as expressed in the Securities Act, and is, therefore, unenforceable. There is no pending litigation or proceeding naming any of our directors or officers as to which indemnification is being sought, nor are we aware of any pending or threatened litigation that may result in claims for indemnification by any director or officer.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Other than compensation arrangements, we describe below transactions and series of similar transactions, since January 1, 2011, to which we were a party or will be a party, in which:

- the amounts involved exceeded or will exceed $120,000; and
- any of our directors, executive officers, or holders of more than 5% of our capital stock, or any member of the immediate family of the foregoing persons, had or will have a direct or indirect material interest.

Compensation arrangements for our directors and named executive officers are described elsewhere in this prospectus.

Private Placement Financings

Over the past three years, following board and stockholder approval, we sold securities to certain private investors, including our directors and 5% stockholders and persons or entities associated with them.

In 2012, we sold convertible promissory notes in the initial and extension closings of a note and warrant financing with certain of our stockholders and their affiliates, in the aggregate original principal amount of approximately $5.0 million. Prior to our April 2014 convertible note and warrant financing, the notes we sold in 2012 have accrued simple interest at the rate 12% per annum, which amounts remain unpaid and, following the amendment of the notes in April 2014, unless earlier converted, two times the principal amount of the notes, together with accrued unpaid interest thereon, are due and payable on demand by the holders of two-thirds of the total principal amounts of the notes. In addition: (i) upon the occurrence of a convertible preferred stock financing which results in gross proceeds to us of at least $1.5 million (excluding the conversion of the notes), the notes are convertible into the series of convertible preferred stock sold in that financing at a price per share equal to 75% of the price per share paid by other investors in that financing; or (ii) if no such preferred stock financing which results in gross proceeds to us of at least $1.5 million (excluding conversion of the notes) occurs prior to the maturity date of the notes, the notes may be converted, at the election of each note holder, into either (1) shares of the series of securities sold in our next equity financing at a price per share equal to 75% of the price per share paid by other investors in that financing, or (2) shares of our Series C convertible preferred stock, at a price per share of $1.35 per share, in each case following the maturity date of the notes. Finally, pursuant to the terms of the 2012 note and warrant purchase agreement, as amended, that we entered into with the note holders, the note holders are also entitled to receive, upon conversion of the 2012 notes, warrants to purchase the number of shares equal to 25% of the aggregate principal value of such note, divided by the note conversion price per share. The warrants have a term of the earlier of (1) ten years, (2) a Change of Control (as defined in the notes), or (3) immediately prior to the closing of a Qualified IPO (as defined in our amended and restated certificate of incorporation). These 2012 convertible promissory notes and warrants associated therewith were subsequently amended in May 2014 to provide for the conversion of these notes into shares of our common stock in connection with this offering, at a discount of 25% of the public offering price of the common stock, and exercise of the associated warrants for shares of our common stock with an exercise price of 75% of the public offering price of the common stock.

In April 2014, we sold convertible promissory notes to certain of our existing stockholders and their affiliates, in the aggregate original principal amount of approximately $1.8 million. The maturity date of these notes is September 30, 2015 or upon an occurrence of demand, made after September 30, 2015, by the holders of two-thirds of the total principal amounts of the notes. The notes are unsecured and bear interest as follows: (i) if this offering is completed, simple interest at the rate of 2% per annum; or (ii) if a convertible preferred stock financing occurs before the completion of this offering, or if neither this offering nor a convertible preferred stock financing is completed before the maturity date of the notes, at the rate of 12% per annum. The notes are convertible as follows: (i) if this offering is completed, the notes will automatically convert into units at a

discount of 30% of the public offering price of the units; or (ii) (A) if a convertible preferred stock financing which results in gross proceeds to us of at least $1.5 million (excluding the conversion of the notes) occurs prior to this offering being completed, the notes will automatically convert into the series of stock sold in that financing at a price per share equal to 75% of the price per share paid by other investors in that financing, or (B) if no such equity financing results in gross proceeds to us of at least $1.5 million (excluding conversion of the notes) occurs prior the maturity date of the notes, the notes may be converted, at the election of each note holder, into either (1) shares of the series of convertible preferred stock sold in our next preferred stock financing at a price per share equal to 75% of the price per share paid by other investors in such financing, or (2) shares of our Series C convertible preferred stock, at a price per share of $1.35 per share, in each case following the maturity date of the notes. Finally, pursuant to the terms of the 2014 note and warrant purchase agreement that we entered into with the note holders, the note holders are also entitled to receive, upon any conversion of the 2014 convertible promissory notes other than in connection with this offering, warrants to purchase the number of shares equal to 25% of the aggregate principal value of such note, divided by the note conversion price per share. The warrants have a term of the earlier of (1) ten years, (2) a Change of Control (as defined in the notes), or (3) immediately prior to the closing of a Qualified IPO (as defined in our amended and restated certificate of incorporation, but excluding this offering).

The following table summarizes purchases since January 1, 2011 of our convertible promissory notes by our executive officers, directors and holders of more than 5% of our capital stock:

Stockholder	Aggregate principal amount of promissory notes purchased	Aggregate exercise price of warrants
Entities Associated with Vivo Ventures Fund V, L.P.(1)	$ 3,220,761.75	
Entities Associated with Teknoinvest VIII KS(2)	$ 4,270.97	
Ernest Mario, Ph.D.(3)	$ 426,957.58	

(1) The purchasers were (a) BDF IV Annex Fund, L.P., which purchased notes with an aggregate value of $15,901.41, (b) Biotechnology Development Fund IV, L.P. which purchased notes with an aggregate value of $3,795.62, (c) Biotechnology Development Fund IV Affiliates, L.P. which purchased notes with an aggregate value of $70.00, (d) Vivo Ventures Fund V, L.P. which purchased notes with an aggregate value of $3,163,863.39 and (e) Vivo Ventures Fund Affiliates V, LP which purchased notes with an aggregate value of $37,131.33. Edgar Engleman, M.D., a member of our board of directors is affiliated with BDF IV Annex Fund, L.P., Biotechnology Development Fund IV, L.P, Biotechnology Development Fund IV Affiliates, Vivo Ventures Fund V, L.P. and Vivo Ventures Fund Affiliates V, LP.

(2) The purchaser was Steinar J. Engelsen, a member of our board of directors who is affiliated with Teknoinvest VIII KS.

(3) The purchaser was Mario Family Partners LP. Ernest Mario, a member of our board of directors is affiliated with Mario Family Partners L.P.

Investor Rights Agreement

We are party to an investor rights agreement that provides holders of our convertible preferred stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, with certain registration rights, including the right to demand that we file a registration statement or request that their shares be covered by a registration statement that we are otherwise filing. The investor rights agreement also provides for a right of first refusal in favor of certain holders of our stock with regard to certain issuances of our capital stock. The rights of first refusal will not apply to, and will terminate upon, the closing of this offering. For a more detailed description of these registration rights, see the section of this prospectus entitled “Description of Securities—Registration Rights.”

Voting Agreement

We are party to a voting agreement under which certain holders of our capital stock, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, have agreed to vote in a

certain way on certain matters, including with respect to the election of directors. Upon the closing of this offering, the voting agreement will terminate, and none of our stockholders will have any special rights regarding the election or designation of members of our board of directors.

Right of First Refusal and Co-Sale Agreement

We are party to a right of first refusal and co-sale agreement with holders of our convertible preferred stock and our founders, including certain holders of 5% of our capital stock and entities affiliated with certain of our directors, pursuant to which the holders of convertible preferred stock have a right of first refusal and co-sale in respect of certain sales of securities by our founders. Upon the closing of this offering, the right of first refusal and co-sale agreement will terminate.

Indemnification Agreements

Our amended and restated certificate of incorporation, which will be effective upon the closing of this offering, will contain provisions limiting the liability of directors and our amended and restated bylaws will provide that we will indemnify each of our directors to the fullest extent permitted under Delaware law. Our amended and restated certificate of incorporation and amended and restated bylaws also will provide our board of directors with discretion to indemnify our officers and employees when determined appropriate by our board of directors. In addition, we have entered and expect to continue to enter into agreements to indemnify our directors and executive officers. For more information regarding these agreements, see the section of this prospectus entitled “Executive compensation—Limitations on liability and indemnification matters.”

Change in Control Arrangements

We have entered into change in control severance benefits arrangements with certain of our executive officers, as described in greater detail in the section of this prospectus titled “Executive compensation—Potential payments and benefits upon termination or change of control.”

Stock Option Grants to Executive Officers

We have granted stock options and committed to grant additional stock options to our executive officers and certain of our directors. For a description of the options that are currently outstanding, see “Executive Compensation— Outstanding equity awards at December 31, 2013,” “Executive Compensation—Employee Benefits and Stock Plans” and “Management—Non-Employee Director compensation.”

Offer Letters

We have entered into employment agreements or offer letters and other arrangements containing compensation, termination and change of control provisions, among others, with certain of our executive officers as described under the caption “Executive Compensation—Employee Offer Letters” above.

Other than as described above, there has not been, nor is there any currently proposed, transactions or series of similar transactions to which we have been or will be a party other than compensation arrangements, which are described where required under “Executive Compensation.”

Policies and Procedures for Related Party Transactions

Our board of directors will adopt a policy, effective upon the closing of this offering, that our executive officers, directors, nominees for election as a director, beneficial owners of more than 5% of any class of our common stock and any members of the immediate family of any of the foregoing persons are not permitted to enter into a related person transaction with us without the prior consent of our audit committee. Any request for us to enter into a transaction with an executive officer, director, nominee for election as a director, beneficial

owner of more than 5% of any class of our common stock or any member of the immediate family of any of the foregoing persons in which the amount involved exceeds $120,000 and such person would have a direct or indirect interest must first be presented to our audit committee for review, consideration and approval. In approving or rejecting any such proposal, our audit committee is to consider the material facts of the transaction, including, but not limited to, whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction. We did not have a formal review and approval policy for related party transactions at the time of any of the transactions described above. However, all of the transactions described above were entered into after presentation, consideration and approval by our board of directors, except as noted above.

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock at May 31, 2014 and as adjusted to reflect the sale of common stock in this offering, for:

- each of our directors;
- each of our named executive officers;
- all of our current directors and executive officers as a group; and
- each person, or group of affiliated persons, who beneficially owned more than 5% of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of common stock that they beneficially owned, subject to applicable community property laws.

Applicable percentage ownership is based on 16,814,111 shares of common stock outstanding at May 31, 2014 assuming the conversion of our convertible preferred stock into common stock. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares of common stock subject to options held by the person that are currently exercisable or exercisable within 60 days of May 31, 2014. However, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of such person, we included shares owned by a spouse, minor children and relatives sharing the same home, as well as other entities owned or controlled by the named person.

Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Capnia, Inc., 3 Twin Dolphin Drive, Suite 160, Redwood City, CA 94065.

	Shares Beneficially Owned Prior to the Offering		Shares Beneficially Owned After the Offering	
Name of Beneficial Owner	**Number of Shares**	**%**	**Number of Shares**	**%**
5% Stockholders				
Entities Associated with Vivo Ventures Fund V, L.P.(1)	6,656,742	39.59%		
Entities Associated with Teknoinvest VIII KS(2)	2,434,680	14.44%		
Ernest Mario(3)	1,796,627	10.11%		
Asset Management Partners(4)	1,089,323	6.48%		
Anish Bhatnagar(5)	1,066,030	5.96%		
Named Executive Officers and Directors:				
Ernest Mario(3)	1,796,627	10.11%		
Anish Bhatnagar(5)	1,066,030	5.96%		
Anthony Wondka(6)	35,479	*		
Antoun Nabhan	—	*		
Edgar G. Engleman(1)(7)	6,717,267	39.81%		
Steinar J. Engelsen(2)(8)	2,443,574	14.49%		
Stephen Kirnon(9)	60,000	*		
William James Alexander(10)	30,000	*		
William G. Harris	—	*		
All current directors and executive officers as a group (9 Persons)	12,138,977	71.11%		

* Represents beneficial ownership of less than one percent (1%).

(1) Represents: (a) 1,647,333 shares of common stock held by Vivo Ventures Fund, V, L.P.; (b) 19,333 shares of common stock held by Vivo Ventures V Affiliates Fund, LP.; (c) 2,388,490 shares of common stock held by BDF IV Annex Fund, L.P.; (d) 680,950 shares of common stock held by Biotechnology Development Fund II, L.P.; (e) 1,920,636 shares of common stock held by Biotechnology Development Fund IV, L.P., and (f) 35,495 shares of common stock held by Biotechnology Development Fund IV Affiliates, L.P. Vivo Ventures V LLC (Vivo V LLC), is the sole general partner of both of Vivo Ventures Fund V, L.P. and Vivo Ventures V Affiliates Fund, L.P. (Vivo V Funds), and may be deemed to beneficially own the Common Stock of Capnia owned by the Vivo V Funds. Vivo V LLC disclaims beneficial ownership of the shares of Capnia held by each of the Vivo V Funds, except to the extent of its pecuniary interest therein. BioAsia Investments IV, LLC (BAI IV), is the sole general partner of Biotechnology Development Fund IV , LP, Biotechnology Development Fund IV Affiliates , L.P., BDF IV Annex Fund, L.P. (BDF IV Funds) and may be deemed to beneficially own the Common Stock of Capnia owned by the BDF IV Funds. BAI IV disclaims beneficial ownership of the shares of Capnia held by each of the BDF IV Funds, except to the extent of its pecuniary interest therein. BioAsia Management, LLC (BAM), is the sole general partner of Biotechnology Development Fund II, L.P., (BDF II) may be deemed to beneficially own the Common Stock of Capnia owned by the BDF II. BAM disclaims beneficial ownership of the shares of Capnia held by each of the BDF II Funds, except to the extent of its pecuniary interest therein. Edgar G. Engleman M.D. is one of the managing members in Vivo V LLC, BAI IV and BAM and has the shared voting power with other managing members. The address for this stockholder is 575 High Street, Suite 201, Palo Alto, CA 94301.

(2) Represents: (a) 1,300,941 shares of common stock and 30,875 shares subject to options that are immediately exercisable or exercisable within 60 days of May 31, 2014 held by Teknoinvest VIII KS; and (b)1,081,864 shares of common stock and 21,0000 shares subject to options that are immediately exercisable or exercisable within 60 days of May 31, 2014 held by Teknoinvest VIII B (GP) AS. Steiner J. Engelsen is a Partner of Teknoinvest AS, that advises Teknoinvest VIII KS and Teknoinvest VIII B (GP) AS, and may be deemed to hold voting and dispositive control over the shares of Teknoinvest VIII KS and Teknoinvest VIII B (GP) AS.

(3) Represents 836,627 shares of common stock, 960,000 shares subject to options that are immediately exercisable or exercisable within 60 days of May 31, 2014 held by Dr. Mario.

(4) Represents 1,089,323 shares of common stock held by Asset Management Partners. The address for this stockholder is 2100 Geng Road, Palo Alto, CA 94303

(5) Represents 1,066,030 shares subject to option held by Dr. Bhatnagar that are immediately exercisable or exercisable within 60 days of May 31, 2014.

(6) Represents 35,479 shares subject to option held by Mr. Wondka that are immediately exercisable or exercisable within 60 days of May 31, 2014.

(7) Represents 60,000 shares subject to option held by Dr. Engleman that are immediately exercisable or exercisable within 60 days of May 31, 2014.

(8) Represents 8,894 shares of common stock held by Mr. Engelsen.

(9) Represents 60,000 shares subject to options held by Dr. Kirnon that are immediately exercisable or exercisable within 60 days of May 31, 2014.

(10) Represents 30,000 shares subject to options held by Dr. Alexander that are immediately exercisable or exercisable within 60 days of May 31, 2014.

DESCRIPTION OF SECURITIES

General

Upon the closing of this offering and the filing of our amended and restated certificate of incorporation, our authorized capital stock will consist of shares, all with a par value of $0.001 per share, all of which shall be designated as common stock.

The following description of our capital stock and certain provisions of our amended and restated certificate of incorporation and amended and restated bylaws are summaries and are qualified by reference to the amended and restated certificate of incorporation and the amended and restated bylaws that will be in effect upon the closing of this offering. Copies of these documents will be filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part. The descriptions of our capital stock reflect changes to our capital structure that will occur upon the closing of this offering.

As of May 31, 2014, we had outstanding 10,385,395 shares of convertible preferred stock, all of which will be converted into 10,385,395 shares of our common stock immediately prior to the closing of this offering, and 6,428,716 shares of our common stock. Our outstanding capital stock was held by 83 stockholders of record as of May 31, 2014. As of May 31, 2014, we also had outstanding options to acquire 2,891,125 shares of common stock held by employees, directors and consultants pursuant to our 1999 Plan, 2010 Plan, and certain stand-alone option agreements, having a weighted-average exercise price of $0.27358 per share, and warrants to purchase 111,111 shares of our convertible preferred stock. In addition, there are warrants outstanding that were issued in connection with our 2010/2012 convertible promissory notes that will be exercisable, following this offering, for shares of our common stock with an exercise price of 75% of the price of the common stock underlying the units sold in this offering.

Units

Each unit consists of one share of common stock and a warrant to purchase one share of common stock. The units will automatically separate and each of the common stock and warrants will trade separately on the closing date of the initial public offering.

Common Stock

As of May 31, 2014, there were 6,428,716 shares of common stock issued and outstanding that were held of record by 54 stockholders.

Holders of common stock are entitled to one vote per share on matters on which our stockholders vote. There are no cumulative voting rights. Subject to any preferential dividend rights of any outstanding shares of preferred stock, holders of common stock are entitled to receive dividends, if declared by our Board of Directors, out of funds that we may legally use to pay dividends. If we liquidate or dissolve, holders of common stock are entitled to share ratably in our assets once our debts and any liquidation preference owed to any then-outstanding preferred stockholders are paid. Our certificate of incorporation does not provide the common stock with any redemption, conversion or preemptive rights. All shares of common stock that are outstanding as of the date of this prospectus and, upon issuance and sale, all shares we are selling in this offering, will be fully-paid and nonassessable.

Warrants Issued as Part of the Units

Each warrant entitles the holder to purchase one share of our common stock at an initial exercise price of $ (which is equal to 110% of the offering price of the common stock underlying the units). Each warrant will become exercisable immediately following issuance and will expire on , 2019.

The warrants will be represented issued in registered form, in each case pursuant to a warrant agreement between , as warrant agent, and us.

The exercise price and number of shares issuable upon exercise of the warrants may be adjusted upon the occurrence of certain events, including but not limited to any stock split, stock dividend, recapitalization, reorganization, merger or consolidation. However, the warrants will not be adjusted for issuances of common stock or securities convertible or exercisable into common stock at a price below the then current exercise price of the warrants.

The warrants may be exercised, at the option of each holder, in whole or in part, upon surrender of the warrant certificate on or prior to the expiration date at the offices of the warrant agent, with the exercise form on the reverse side of the warrant certificate completed and executed as indicated, accompanied by full payment of the exercise price for the number of shares of our common stock purchased upon such exercise, by certified check payable to us or by wire transfer of immediately available funds to an account designated by us. Subject to applicable laws, the warrants may be transferred at the option of the holders upon surrender of the warrants to us together with the appropriate instruments of transfer.

The warrant holders do not have the rights or privileges of holders of common stock and any voting rights until they exercise their warrants and receive shares of common stock. After the issuance of shares of common stock upon exercise of the warrants, each holder will be entitled to one vote for each share of common stock held of record on all matters to be voted on by stockholders.

No warrants will be exercisable unless at the time of exercise a prospectus relating to common stock issuable upon exercise of the warrants is current and the common stock has been registered or qualified or deemed to be exempt under the securities laws of the state of residence of the holder of the warrants. Under the terms of the warrant agreement, we have agreed to meet these conditions and use our best efforts to maintain a current prospectus relating to common stock issuable upon exercise of the warrants until the expiration of the warrants. However, we cannot assure you that we will be able to do so, and if we do not maintain a current prospectus related to the common stock issuable upon exercise of the warrants, holders will be unable to exercise their warrants and we will not be required to settle any such warrant exercise. If the prospectus relating to the common stock issuable upon the exercise of the warrants is not current or if the common stock is not qualified or exempt from qualification in the jurisdictions in which the holders of the warrants reside, we will not be required to net cash settle or cash settle the warrant exercise, the warrants may have no value, the market for the warrants may be limited and the warrants may expire worthless.

Preferred Stock

Our amended and restated certificate of incorporation, which will be effective upon the completion of this offering, will not provide for any shares of preferred stock.

Other Warrants Outstanding Following the Offering

As of May 31, 2014, we had outstanding warrants to purchase an aggregate of 111,111 shares of our Series C convertible preferred stock with an exercise price of $1.80 per share. In lieu of the warrant being exercised, the warrant may instead be net exercised into a number of shares of Series C convertible preferred stock determined by dividing: (a) the aggregate fair market value of the Series C convertible preferred stock issuable upon exercise of the warrant minus the aggregate warrant exercise price of such shares of Series C convertible preferred stock; by (b) the fair market value of one share of Series C convertible preferred stock. Unless earlier exercised, this warrant will expire on January 28, 2019; provided that if the holder of the warrant does not notify us of the holder intent to exercise or not to exercise the warrant prior to the expiration date, and the fair market value of the underlying shares on the expiration date is greater than the exercise price, then the holder will be deemed to have net exercised the warrant immediately prior to the expiration date.

In addition, there are warrants outstanding that were issued in connection with our 2010/2012 convertible promissory notes that will be exercisable, following this offering, for shares of our common stock with an exercise price of 75% of the price of the common stock underlying the units sold in this offering.

Registration Rights

Stockholder registration rights

We are party to an investor rights agreement which provides that holders of shares of our convertible preferred stock have certain registration rights, as set forth below. The investor rights agreement has been amended or restated from time to time in connection with our preferred stock financings, most recently as of March 20, 2008. The registration of shares of our common stock pursuant to the exercise of registration rights described below would enable the holders to sell these shares without restriction under the Securities Act, when the applicable registration statement is declared effective. We will pay the registration expenses, other than underwriting discounts and commissions, of the shares registered pursuant to the demand, piggyback and Form S-3 registrations described below.

Generally, in an underwritten offering, the managing underwriter, if any, has the right, subject to specified conditions, to limit, or exclude entirely, the number of shares such holders may include. The demand, piggyback and Form S-3 registration rights described below terminate upon the earliest to occur of: (i) the date that is four years after the closing of this offering; (ii) with respect to each holder of convertible preferred stock, at such time as all such shares can be sold in a three-month period without registration in compliance with Rule 144; (iii) with respect to each stockholder, the date that the stockholder no longer holds any shares that carry these registration rights; or (iv) following termination of the investor rights agreement.

Demand registration rights

As of May 31, 2014, the holders of an aggregate of 10,496,506 shares of our common stock, issuable upon the conversion of outstanding convertible preferred stock and shares of convertible preferred stock currently subject to outstanding warrants will be entitled to certain demand registration rights. At any time beginning six months after the closing of our initial public offering, the holders of a majority of these shares may, on not more than two occasions, request that we file a registration statement having an aggregate offering price to the public of not less than $7,500,000 (net of underwriting discounts and commissions) to register all or a portion of their shares.

Piggyback registration rights

As of May 31, 2014, the holders of an aggregate of 10,496,506 shares of our common stock, issuable upon the conversion of outstanding convertible preferred stock and shares of convertible preferred stock currently subject to outstanding warrants were entitled to, and the necessary percentage of holders waived, their rights to include their shares of registrable securities in this offering. In the event that we propose to register any of our securities under the Securities Act, either for our own account or for the account of other security holders, the holders of these shares will be entitled to certain "piggyback" registration rights allowing them to include their shares in such registration, subject to certain marketing and other limitations. As a result, whenever we propose to file a registration statement under the Securities Act, including a registration statement on Form S-3 as discussed below, other than with respect to a demand registration or a registration statement on Forms S-4 or S-8, the holders of these shares are entitled to notice of the registration and have the right, subject to limitations that the underwriters may impose on the number of shares included in the registration, to include their shares in the registration. However, in no event shall the amount of securities of the selling stockholders included in the offering be reduced below thirty percent of the total amount of securities included in such offering, unless the offering is the initial public offering of our securities, in which case all shares may be excluded entirely.

Form S-3 registration rights

As of May 31, 2014, the holders of an aggregate of 10,496,506 shares of our common stock, issuable upon the conversion of outstanding convertible preferred stock and shares of convertible preferred stock currently subject to certain outstanding warrants, will be entitled to certain Form S-3 registration rights, provided that we have not already effected one such registration within the twelve-month period preceding the date of such request. Such holders may make a request that we register their shares on Form S-3 if we are qualified to file a registration statement on Form S-3. Such request for registration on Form S-3 must cover securities the aggregate offering price of which, net of underwriting discounts and commissions, is at least $1,000,000.

Anti-takeover provisions

Certificate of incorporation and bylaws to be in effect upon the closing of this offering

Our amended and restated certificate of incorporation to be in effect upon the completion of this offering will provide for our board of directors to be divided into three classes with staggered three-year terms. Only one class of directors will be elected at each annual meeting of our stockholders, with the other classes continuing for the remainder of their respective three-year terms. Because our stockholders do not have cumulative voting rights, our stockholders holding a majority of the voting power of our shares of common stock outstanding will be able to elect all of our directors. The directors may be removed by the stockholders only for cause upon the vote of holders of a majority of the shares then entitled to vote at an election of directors. Furthermore, the authorized number of directors may be changed only by resolution of our board of directors, and vacancies and newly created directorships on our board of directors may, except as otherwise required by law or determined by our board, only be filled by a majority vote of the directors then serving on our board of directors, even though less than a quorum. Our amended and restated certificate of incorporation and amended and restated bylaws will provide that all stockholder actions must be effected at a duly called meeting of stockholders and not by a consent in writing. A special meeting of stockholders may be called only by a majority of our whole board of directors, the chair of our board of directors, our chief executive officer or our president. Our amended and restated bylaws also will provide that stockholders seeking to present proposals before a meeting of stockholders to nominate candidates for election as directors at a meeting of stockholders must provide timely advance notice in writing, and will specify requirements as to the form and content of a stockholder's notice.

Our amended and restated certificate of incorporation will further provide that, immediately after this offering, the affirmative vote of holders of at least 66 2⁄3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, will be required to amend certain provisions of our certificate of incorporation, including provisions relating to the structure of our board of directors, the size of our board of directors, removal of directors, special meetings of stockholders, actions by written consent and cumulative voting. The affirmative vote of holders of at least 66 2⁄3% of the voting power of all of the then outstanding shares of voting stock, voting as a single class, will be required to amend or repeal our bylaws, although our bylaws may be amended by a simple majority vote of our board of directors; provided that any bylaw amendment adopted by our stockholders that specifies the votes necessary for the election of directors will not be further amended or repealed by our board of directors.

The foregoing provisions will make it more difficult for our existing stockholders to replace our board of directors as well as for another party to obtain control of our company by replacing our board of directors. Since our board of directors has the power to retain and discharge our officers, these provisions could also make it more difficult for existing stockholders or another party to effect a change in management. In addition, the authorization of undesignated preferred stock makes it possible for our board of directors to issue preferred stock with voting or other rights or preferences that could impede the success of any attempt to change the control of our company.

These provisions are intended to enhance the likelihood of continued stability in the composition of our board of directors and its policies and to discourage certain types of transactions that may involve an actual or threatened acquisition of our company. These provisions are also designed to reduce our vulnerability to an unsolicited acquisition proposal and to discourage certain tactics that may be used in proxy rights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and may have the effect of deterring hostile takeovers or delaying changes in control of our company or our management. As a consequence, these provisions also may inhibit fluctuations in the market price of our stock that could result from actual or rumored takeover attempts.

Section 203 of the Delaware General Corporation Law

We are subject to Section 203 of the Delaware General Corporation Law, or Section 203, which prohibits a Delaware corporation from engaging in any business combination with any interested stockholder for a period of three years after the date that such stockholder became an interested stockholder, with the following exceptions:

- before such date, our board of directors approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

- upon closing of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least eighty-five percent (85%) of the voting stock of the corporation outstanding at the time the transaction began, excluding for purposes of determining the voting stock outstanding (but not the outstanding voting stock owned by the interested stockholder) those shares owned by: (i) persons who are directors and also officers; and (ii) employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

- on or after such date, the business combination is approved by our board of directors and authorized at an annual or special meeting of the stockholders, and not by written consent, by the affirmative vote of at least 66 2⁄3% of the outstanding voting stock that is not owned by the interested stockholder.

In general, Section 203 defines business combination to include the following:

- any merger or consolidation involving the corporation and the interested stockholder;

- any sale, transfer, pledge or other disposition of ten percent (10%) or more of the assets of the corporation involving the interested stockholder;

- subject to certain exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- any transaction involving the corporation that has the effect of increasing the proportionate share of the stock or any class or series of the corporation beneficially owned by the interested stockholder; or

- the receipt by the interested stockholder of the benefit of any loss, advances, guarantees, pledges or other financial benefits by or through the corporation.

In general, Section 203 defines an “interested stockholder” as an entity or person who, together with the person’s affiliates and associates, beneficially owns, or within three years prior to the time of determination of interested stockholder status did own, fifteen percent (15%) or more of the outstanding voting stock of the corporation.

Limitations of liability and indemnification

See the section of this prospectus entitled "Executive Compensation—Limitation on liability and indemnification matters."

Listing

We have applied to list the units, the common stock and the warrants on the NASDAQ Capital Market, subject to notice of issuance, under the trading symbols "CAPNU," "CAPN" and "CAPNW," respectively.

Transfer agent and registrar

Upon the closing of this offering, the transfer agent and registrar for our common stock will be American Stock Transfer & Trust Company.

SHARES ELIGIBLE FOR FUTURE TRADING

Prior to this offering, there has been no public market for shares of our common stock and we cannot assure you that a liquid trading market for the shares of our common stock will develop or be sustained after this offering. Future sales of substantial amounts of shares of common stock, including shares issued upon the exercise of outstanding options, in the public market after this offering, or the possibility of these sales occurring, could adversely affect the prevailing market price for our common stock or impair our ability to raise equity capital.

Based on the number of shares outstanding as of , 2014, upon the closing of this offering, shares of our common stock will be outstanding, assuming no exercise of the underwriters' option to purchase additional shares of common stock (through the purchase of additional units) and no exercise of outstanding options or warrants. Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

The remaining outstanding shares of our common stock will be deemed "restricted securities" as defined in Rule 144. Restricted securities may be sold in the public market only if they are registered or if they qualify for an exemption from registration under Rule 144 or Rule 701 under the Securities Act, which rules are summarized below. In addition, holders of substantially all of our equity securities are subject to market stand-off agreements or have entered into lock-up agreements with the underwriters under which they have agreed, subject to specific exceptions, not to sell any of our stock for at least 180 days following the date of this prospectus, as described below. As a result of these agreements and the provisions of our amended and restated investors' rights agreement described above under "Description of Capital Stock—Registration Rights," subject to the provisions of Rule 144 or Rule 701, following the expiration of the lock-up period, all shares subject to such provisions and agreements will be available for sale in the public market only if registered or pursuant to an exemption from registration under Rule 144 or Rule 701 under the Securities Act.

Rule 144

In general, a person who has beneficially owned restricted shares of our common stock for at least six months would be entitled to sell their securities provided that: (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding a sale; and (ii) we are subject to the periodic reporting requirements of the Exchange Act, for at least 90 days before the sale. Persons who have beneficially owned restricted shares of our common stock for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares of our common stock outstanding after this offering, which will equal approximately shares immediately after the closing of this offering, based on the number of common stock outstanding as of , 2014 and assuming no exercise of the underwriters' option to purchase additional shares of our common stock; or

- the average weekly trading volume of our common stock on NASDAQ during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the periodic reporting requirements the Exchange Act for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701, as currently in effect, generally allows a stockholder who purchased shares of our common stock pursuant to a written compensatory plan or contract and who is not deemed to have been an affiliate of our company during the immediately preceding 90 days to sell these shares (subject to the requirements of the lock-up agreements, as described below) in reliance upon Rule 144, but without being required to comply with the public information, holding period, volume limitation, or notice provisions of Rule 144. Rule 701 also permits affiliates of our company to sell their Rule 701 shares under Rule 144 without complying with the holding period requirements of Rule 144. However, all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus (or until such later date that is required by the lock-up agreements, as described below) before selling such shares pursuant to Rule 701.

Lock-Up Agreements

We, our directors and officers, and the holders of 1% or more of our common stock have agreed with the underwriters that for a period of 180 days following the date of this prospectus, subject to certain exceptions, we will not offer, sell, assign, transfer, pledge, contract to sell or otherwise dispose of or hedge any shares of our common stock or any securities convertible into or exchangeable for shares of our common stock, subject to specified exceptions. Maxim Group LLC may, in its sole discretion, at any time, release all or any portion of the shares from the restrictions in this agreement.

Registration Rights

The holders of our convertible preferred stock and certain warrants to purchase shares of our convertible preferred stock, or their transferees, are entitled to certain rights with respect to the registration of those shares under the Securities. For a description of these registration rights, see the section of this prospectus entitled “Description of Securities—Registration Rights.” If these shares are registered, they will be freely tradable without restriction under the Securities Act.

Registration Statements on Form S-8

Upon the completion of this offering, we intend to file a registration statement on Form S-8 under the Securities Act to register all of the shares of common stock issued or reserved for issuance under our stock option plans. Shares covered by this registration statement will be eligible for sale in the public market, upon the expiration or release from the terms of the lock-up agreements and subject to vesting of such shares.

UNDERWRITING

Subject to the terms and conditions of the underwriting agreement, the underwriters named below, through their representative, Maxim Group LLC, referred to herein as Maxim, have severally agreed to purchase from us on a firm commitment basis the following respective number of units at a public offering price less the underwriting discounts and commissions set forth on the cover page of this prospectus:

Name	Number of Units
Maxim Group LLC	
Cantor Fitzgerald & Co.	
Total:	

The underwriting agreement provides that the obligation of the underwriters to purchase all of the units being offered to the public is subject to specific conditions, including the absence of any material adverse change in our business or in the financial markets and the receipt of certain legal opinions, certificates and letters from us, our counsel and the independent auditors. Subject to the terms of the underwriting agreement, the underwriters will purchase all of the units being offered to the public, other than those covered by the over-allotment option described below, if any of these units are purchased.

Over-Allotment Option

We have granted to the underwriters an option, exercisable not later than 45 days after the effective date of the registration statement, to purchase up to additional units at the public offering price less the underwriting discounts and commissions set forth on the cover of this prospectus. The underwriters may exercise this option only to cover over-allotments made in connection with the sale of the units offered by this prospectus. To the extent that the underwriters exercise this option, each of the underwriters will become obligated, subject to conditions, to purchase approximately the same percentage of these additional units as the number of units to be purchased by it in the above table bears to the total number of units offered by this prospectus. We will be obligated, pursuant to the option, to sell these additional units to the underwriters to the extent the option is exercised. If any additional units are purchased, the underwriters will offer the additional units on the same terms as those on which the other units are being offered hereunder. Prior to separation of the units, any exercise of the over-allotment will be settled in units, and subsequent to the separation of the units will be settled in shares of common stock and warrants, as applicable.

Commissions and Expenses

The underwriting discounts and commissions are 7% of the initial public offering price, except with respect to the first $2.5 million of units purchased by our shareholders and convertible promissory noteholders as of March 19, 2014 on which the underwriting discount and commission shall be 3.5%. We have agreed to pay the underwriters the discounts and commissions set forth below, assuming either no exercise or full exercise by the underwriters of the underwriters' over-allotment option. In addition, we have agreed to reimburse the underwriters for certain expenses incurred in connection with this offering, including but not limited to road show expenses, in an amount not to exceed $150,000 for all expenses.

We have been advised by the representative of the underwriters that the underwriters propose to offer the units to the public at the public offering price set forth on the cover of this prospectus and to dealers at a price that represents a concession not in excess of $ per unit under the public offering price of $ per unit. The underwriters may allow, and these dealers may re-allow, a concession of not more than $ per unit to other dealers. After the initial public offering, the representative of the underwriters may change the offering price and other selling terms.

The following table shows the per share and total public offering price, underwriting discounts and commissions, and proceeds before expenses to us. These amounts are shown assuming both no exercise and full exercise of the underwriters' over-allotment option.

		Total	
	Per share	No exercise	Full exercise
Public offering price	$	$	$
Underwriting discounts and commissions paid by us	$	$	$
Proceeds, before expenses, to us	$	$	$

The estimated offering expenses payable by us, exclusive of underwriting discounts and commissions, are approximately $.

Underwriter Compensation Warrants

We have also agreed to issue to Maxim warrants to purchase a number of our units equal to an aggregate of 5% of the units sold in this offering, including in connection with the exercise by the underwriters of the over-allotment option. The warrants will have an exercise price equal to 110% of the offering price of the common stock underlying the units sold in this offering and may be exercised on a cashless basis. The warrants are exercisable commencing 180 days after the effective date of the registration statement related to this offering, and will be exercisable for four and a half years thereafter. The warrants are not redeemable by us. The warrants also provide for one demand registration of the shares of common stock underlying the warrants at our expense, an additional demand at the warrant holder's expense and unlimited "piggyback" registration rights at our expense with respect to the underlying shares of common stock during the five year period commencing six months after the closing date. The warrants and the units (including the shares of common stock and warrants underlying the units), have been deemed compensation by FINRA and are therefore subject to a 180-day lock-up pursuant to Rule 5110(g)(1) of FINRA. Maxim (or permitted assignees under Rule 5110(g)(1) of FINRA) may not sell, transfer, assign, pledge, or hypothecate the warrants or the securities underlying the warrants, nor will it engage in any hedging, short sale, derivative, put, or call transaction that would result in the effective economic disposition of the warrants or the underlying securities for a period of 180 days from the date on which the Registration Statement on Form S-1 of which this prospectus forms a part is declared effective by the SEC, except to any FINRA member participating in the offering and their bona fide officers or partners. The warrants will provide for adjustment in the number and price of such warrants (and the shares of common stock and warrants underlying such warrants) in the event of recapitalization, merger or other structural transaction to prevent mechanical dilution.

Lock-Up Agreements

Prior to the completion of this offering, we and each of our officers, directors, and 1.0% or greater stockholders will agree, subject to certain exceptions, not to sell, offer, agree to sell, contract to sell, hypothecate, pledge, grant any option to purchase, make any short sale of, or otherwise dispose of or hedge, directly or indirectly, any units, shares of common stock or warrants, or any securities convertible into or exercisable or exchangeable for units, shares of common stock or warrants, whether any such transaction described above is to be settled by delivery of units, shares of common stock or warrants, in cash or otherwise, for a period of 180 days after the date of the final prospectus relating to this offering without the prior written consent of Maxim. This 180-day restricted period will be automatically extended if: (1) during the last 17 days of the 180-day restricted period we issue an earnings release or announce material news or a material event relating to us occurs; or (2) prior to the expiration of the 180-day restricted period, we announce that we will release earnings results during the 16-day period beginning on the last day of the 180-day period, in which case the restrictions described in the preceding sentence will continue to apply until the expiration of the 18-day period beginning on the issuance of the earnings release or the announcement of the material news or material event.

Pricing of this Offering

Prior to this offering, there has not been a public market for our securities and the public offering price for our units will be determined through negotiations between us and the underwriter. Among the factors to be considered in these negotiations will be prevailing market conditions, our financial information, market valuations of other companies that we and the underwriter believe to be comparable to us, estimates of our business potential, the present state of our development and other factors deemed relevant.

We offer no assurances that the initial public offering price will correspond to the price at which our units, common stock or warrants will trade in the public market subsequent to this offering or that an active trading market for our units, common stock or warrants will develop and continue after this offering.

Indemnification

The underwriting agreement provides that we will indemnify the underwriter against certain liabilities that may be incurred in connection with this offering, including liabilities under the Securities Act, or to contribute payments that the underwriter may be required to make in respect thereof.

Listing

We have applied to list the units, common stock and warrants on the NASDAQ Capital Market, subject to notice of issuance, under the trading symbols “CAPNU”, “CAPN” and “CAPNW”, respectively.

Electronic Distribution

A prospectus in electronic format may be made available on websites or through other online services maintained by the underwriter of this offering, or by its affiliates. Other than the prospectus in electronic format, the information on the underwriter’s website and any information contained in any other website maintained by an underwriter is not part of this prospectus or the registration statement of which this prospectus forms a part, has not been approved and/or endorsed by us or the underwriter in its capacity as underwriter, and should not be relied upon by investors.

Price Stabilization, Short Positions and Penalty Bids

In connection with the offering, the underwriters may engage in stabilizing transactions, over-allotment transactions, syndicate covering transactions and penalty bids in accordance with Regulation M under the Exchange Act:

- Stabilizing transactions permit bids to purchase securities so long as the stabilizing bids do not exceed a specified maximum.

- Over-allotment involves sales by the underwriters of securities in excess of the number of securities the underwriters are obligated to purchase, which creates a syndicate short position. The short position may be either a covered short position or a naked short position. In a covered short position, the number of securities over-allotted by the underwriters is not greater than the number of securities that it may purchase in the over-allotment option. In a naked short position, the number of securities involved is greater than the number of securities in the over-allotment option. The underwriters may close out any covered short position by either exercising the over-allotment option and/or purchasing securities in the open market.

- Syndicate covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. In determining the

source of securities to close out the short position, the underwriters will consider, among other things, the price of securities available for purchase in the open market as compared to the price at which it may purchase securities through the over-allotment option. If the underwriters sell more securities than could be covered by the over-allotment option, a naked short position, the position can only be closed out by buying securities in the open market. A naked short position is more likely to be created if the underwriters are concerned that there could be downward pressure on the price of the securities in the open market after pricing that could adversely affect investors who purchase in the offering.

- Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a stabilizing or syndicate covering transaction to cover syndicate short positions.

These stabilizing transactions, syndicate covering transactions and penalty bids may have the effect of raising or maintaining the market price of our securities or preventing or retarding a decline in the market price of our securities. As a result, the price of our securities may be higher than the price that might otherwise exist in the open market. Neither we nor the underwriters makes any representation or prediction as to the direction or magnitude of any effect that the transactions described above may have on the price of our securities. In addition, neither we nor the underwriters makes any representations that the underwriters will engage in these stabilizing transactions or that any transaction, once commenced, will not be discontinued without notice.

Other Terms

In addition, we have agreed to grant to Maxim, upon the consummation of this offering, a right of first refusal to act as lead managing underwriter and lead bookrunner and/or lead placement agent for any and all future public and private equity, equity-linked or debt offerings by us for a period of twelve (12) months from the effective date of the registration statement related to this offering. We shall give Maxim written notice of its intention to enter into such a proposed transaction and shall offer Maxim compensation no less favorable, as a proportion of the total offering amount, than that offered to Maxim in this offering. If Maxim fails to accept such engagement within five (5) business days after receipt of such written notice from us, then we will be free to pursue alternative underwriters for such proposed transaction.

Affiliations

The underwriters and their respective affiliates may in the future provide, various investment banking and other financial services for us for which services they may in the future receive, customary fees. Except for services provided in connection with this offering, none of the underwriters have provided any investment banking or other financial services to us and we do not expect to retain the underwriter to perform any investment banking or other financial services to us for at least 90 days after the date of this prospectus.

LEGAL MATTERS

Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, CA, will pass upon the validity of the shares of common stock offered hereby. The underwriters are being represented by Loeb & Loeb LLP, New York, NY, in connection with the offering. Certain members of, and investment partnerships comprised of members of, and persons associated with, Wilson Sonsini Goodrich & Rosati own an interest representing less than 0.5% of our common stock.

EXPERTS

The financial statements of Capnia, Inc. as of December 31, 2012 and 2013, and for each of the two years in the period ended December 31, 2013 and for the period from inception until December 31, 2013, included in this prospectus have been so included in reliance on the report of Marcum LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act in connection with this offering of our common stock. This prospectus, which constitutes a part of the registration statement, does not contain all of the information set forth in the registration statement, some items of which are contained in exhibits to the registration statement as permitted by the rules and regulations of the SEC. For further information with respect to us and our common stock, we refer you to the registration statement, including the exhibits and the financial statements and notes filed as a part of the registration statement. Statements contained in this prospectus concerning the contents of any contract or any other document are not necessarily complete. If a contract or document has been filed as an exhibit to the registration statement, please see the copy of the contract or document that has been filed. Each statement in this prospectus relating to a contract or document filed as an exhibit is qualified in all respects by the filed exhibit. The exhibits to the registration statement should be referenced for the complete contents of these contracts and documents. A copy of the registration statement and the exhibits filed therewith may be inspected without charge at the public reference room of the SEC, located at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. You may obtain information on the operation of the public reference rooms by calling the SEC at 1-800-SEC-0330. The SEC also maintains an Internet website that contains reports, proxy statements, and other information about issuers, like us, that file electronically with the SEC. The address of that website is *www.sec.gov*.

As a result of this offering, we will become subject to the information and reporting requirements of the Exchange Act and, in accordance with this law, we will file periodic reports, proxy statements, and other information with the SEC. These periodic reports, proxy statements, and other information will be available for inspection and copying at the SEC's public reference facilities and the website of the SEC referred to above. We also maintain a website at *www.capnia.com*. After the closing of this offering, you may access our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act with the SEC free of charge at our website (*www.capnia.com*) as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC. The information contained in, or that can be accessed through, our website is not incorporated by reference into this prospectus.

CAPNIA, INC.

INDEX TO FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Audit Committee of the
Board of Directors and Shareholders
of Capnia, Inc.

We have audited the accompanying balance sheets of Capnia, Inc. (the "Company") as of December 31, 2013 and 2012, and the related statements of operations and comprehensive loss, convertible preferred stock and stockholders' deficit and cash flows for the years then ended and for the period from August 25, 1999 (inception) to December 31, 2013. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audits included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion. An audit also includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Capnia, Inc., as of December 31, 2013 and 2012, and the results of its operations and its cash flows for the years then ended and the period from August 25, 1999 (inception) to December 31, 2013 in conformity with accounting principles generally accepted in the United States of America.

The accompanying financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the financial statements – Nature of Business and Management's Plans Regarding Financing of Future Operations, the Company's recurring losses from operations and its need for additional capital raise substantial doubt about its ability to continue as a going concern. Management's plans in regard to these matters are also described in Note 1 – Nature of Business and Management's Plans Regarding Financing of Future Operations. The financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ Marcum LLP
New York, NY
May 7, 2014

CAPNIA, INC.

BALANCE SHEETS

	As of December 31,		As of March 31,	Pro Forma As of March 31,
	2012	2013	2014	2014
			(unaudited)	
ASSETS				
Current assets				
Cash and cash equivalents	$ 2,155,262	$ 1,268,770	$ 763,911	
Restricted cash	20,000	20,000	20,000	
Accounts receivable	—	149,605	41,192	
Other receivables	150,782	—	—	
Prepaid expenses and other current assets	61,503	85,149	161,881	
Total current assets	2,387,547	1,523,524	986,984	—
Property and equipment, net	105,453	63,167	44,171	
Other assets	21,089	—	—	
Total assets	$ 2,514,089	$ 1,586,691	$ 1,031,155	$ —
LIABILITIES, CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT				
Current liabilities				
Accounts payable	$ 219,524	$ 57,721	$ 88,844	
Accrued expenses and other current liabilities	191,007	128,651	222,448	
Convertible promissory notes and accrued interest	11,131,590	13,991,857	14,379,407	
Total current liabilities	11,542,121	14,178,229	14,690,699	
Convertible preferred stock warrant liability	1,359,557	1,464,877	1,219,244	$ —
Commitments and contingencies				
Convertible Preferred Stock				
Series A convertible preferred stock, $0.001 par value, 459,375 shares authorized, 375,000 shares issued and outstanding at December 31, 2012 and 2013 and March 31, 2014 (unaudited); zero shares issued and outstanding, pro forma (aggregate liquidation preference of $1,500,000)	1,500,000	1,500,000	1,500,000	—
Series B convertible preferred stock, $0.001 par value, 3,743,053 shares authorized, 1,429,779 shares issued and outstanding at December 31, 2012 and 2013 and March 31, 2014 (unaudited); zero shares issued and outstanding, pro forma; (aggregate liquidation preference of $6,862,939)	6,862,939	6,862,939	6,862,939	—
Series C convertible preferred stock, $0.001 par value, 17,500,000 shares authorized, 8,580,616 shares issued and outstanding at December 31, 2012 and 2013 and March 31, 2014 (unaudited); zero shares issued and outstanding, pro forma; (aggregate liquidation preference of $15,445,109)	15,445,109	15,445,109	15,445,109	—
Stockholders' Deficit				
Common stock, $0.001 par value, 29,500,000 shares authorized, 6,268,811, 6,428,716 and 6,428,716 shares issued and outstanding at December 31, 2012 and 2013 and March 31, 2014 (unaudited), respectively; 16,814,111 shares issued and outstanding, pro forma	6,269	6,429	6,429	16,814
Additional paid-in capital	19,191,362	19,229,619	19,241,111	44,258,017
Deficit accumulated during development stage	(53,393,268)	(57,100,511)	(57,934,376)	(57,934,376)
Total stockholders' deficit	(34,195,637)	(37,864,463)	(38,686,836)	$ (13,659,545)
Total liabilities and stockholders' deficit	$ 2,514,089	$ 1,586,691	$ 1,031,155	

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)

	Year Ended December 31,		Three Months Ended March 31,		Period from August 25, 1999 (Inception) through December 31, 2013	Period from August 25, 1999 (Inception) through March 31, 2014
	2012	2013	2013	2014		
			(unaudited)			(unaudited)
Revenue	$ —	$ 3,000,000	$ 3,000,000	$ —	$ 3,000,000	$ 3,000,000
Expenses						
Research and development	2,469,913	2,379,832	702,920	372,054	36,652,458	37,024,512
General and administrative	1,127,193	1,466,951	415,857	312,434	15,959,784	16,272,218
Total expenses	3,597,106	3,846,783	1,118,777	684,488	52,612,242	53,296,730
Operating income (loss)	(3,597,106)	(846,783)	1,881,223	(684,488)	(49,612,242)	(50,296,730)
Therapeutic discovery grant proceeds	—	—	—	—	733,437	733,437
Interest and other income (expense)						
Interest income	3,096	1,772	479	275	814,273	814,548
Interest expense	(2,865,463)	(2,860,267)	(944,717)	(387,550)	(9,720,841)	(10,108,391)
Other income (expense), net	(22,411)	(1,965)	77,025	237,898	684,862	922,760
Net income (loss) and comprehensive income (loss)	$ (6,481,884)	$ (3,707,243)	$ 1,014,010	$ (833,865)	$ (57,100,511)	$ (57,934,376)
Weighted average common shares outstanding						
Basic	6,244,230	6,428,278	6,426,939	6,428,716		
Diluted	6,244,230	6,428,278	27,067,245	6,428,716		
Net income (loss) per share						
Basic	$ (1.04)	$ (0.58)	$ 0.16	$ (0.13)		
Diluted	$ (1.04)	$ (0.58)	$ 0.05	$ (0.13)		

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances at August 25, 1999 (Inception)	—	$ —	—	$ —	—	$ —	—	$ —	$ —	$ —	$ —
Issuance of restricted common stock to founders in consideration for intellectual property assigned to the Company	—	—	—	—	—	—	625,000	625	4,375	—	5,000
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	—	(7,447)	(7,447)
Balances at December 31, 1999	—	—	—	—	—	—	625,000	625	4,375	(7,447)	(2,447)
Net loss	—	—	—	—	—	—	—	—	—	(75,378)	(75,378)
Balances at December 31, 2000	—	—	—	—	—	—	625,000	625	4,375	(82,825)	(77,825)
Issuance of Series A convertible preferred stock for cash and conversion of convertible notes	459,375	1,837,500	—	—	—	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	—	—	—	—	975	1	77	—	78
Net loss	—	—	—	—	—	—	—	—	—	(833,441)	(833,441)
Balances at December 31, 2001	459,375	1,837,500	—	—	—	—	625,975	626	4,452	(916,266)	(911,188)
Issuance of warrants in connection with convertible notes	—	—	—	—	—	—	—	—	21,926	—	21,926
Issuance of common stock upon exercise of warrants	—	—	—	—	—	—	51,562	52	20,574	—	20,626
Net loss	—	—	—	—	—	—	—	—	—	(1,479,582)	(1,479,582)
Balances at December 31, 2002	459,375	1,837,500	—	—	—	—	677,537	678	46,952	(2,395,848)	(2,348,218)
Issuance of common stock upon exercise of options	—	—	—	—	—	—	10,154	10	2,046	—	2,056
Issuance of warrants in connection with convertible notes	—	—	—	—	—	—	—	—	4,911	—	4,911
Net loss	—	—	—	—	—	—	—	—	—	(2,218,360)	(2,218,360)
Balances at December 31, 2003	459,375	1,837,500	—	—	—	—	687,691	688	53,909	(4,614,208)	(4,559,611)
Issuance of restricted common stock	—	—	—	—	—	—	6,250	6	2,494	—	2,500
Issuance of warrants in connection with convertible notes	—	—	—	—	—	—	—	—	449,194	—	449,194
Issuance of Series B convertible preferred stock for cash and conversion of convertible notes	—	—	2,504,363	12,020,942	—	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	—	—	—	—	846	1	337	—	338
Net loss	—	—	—	—	—	—	—	—	—	(3,721,611)	(3,721,611)

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT (CONTINUED)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances at December 31, 2004	459,375	1,837,500	2,504,363	12,020,942	—	—	694,787	695	505,934	(8,335,819)	(7,829,190)
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	—	(3,444,465)	(3,444,465)
Balances at December 31, 2005	459,375	1,837,500	2,504,363	12,020,942	—	—	694,787	695	505,934	(11,780,284)	(11,273,655)
Issuance of Series B convertible preferred stock	—	—	1,093,638	5,249,463	—	—	—	—	—	—	—
Issuance of common stock upon exercise of options	—	—	—	—	—	—	26,852	27	11,962	—	11,989
Stock-based compensation	—	—	—	—	—	—	—	—	19,235	—	19,235
Reclassification of preferred stock warrants upon adoption of new accounting policy	—	—	—	—	—	—	—	—	(428,194)	—	(428,194)
Net loss	—	—	—	—	—	—	—	—	—	(3,364,419)	(3,364,419)
Balances at December 31, 2006	459,375	$ 1,837,500	3,598,001	17,270,405	—	—	721,639	722	108,937	(15,144,703)	(15,035,044)
Stock-based compensation	—	—	—	—	—	—	—	—	127,948	—	127,948
Issuance of common stock upon exercise of options	—	—	—	—	—	—	331,453	331	131,622	—	131,953
Issuance of common stock, net of issuance costs	—	—	—	—	—	—	617,608	618	531,215	—	531,833
Net loss	—	—	—	—	—	—	—	—	—	(5,806,829)	(5,806,829)
Balances at December 31, 2007	459,375	1,837,500	3,598,001	17,270,405	—	—	1,670,700	1,671	899,722	(20,951,532)	(20,050,139)
Issuance of common stock upon exercise of options	—	—	—	—	—	—	9,749	10	3,470	—	3,480
Issuance of common stock upon exercise of warrants	—	—	—	—	—	—	13,019	13	5,195	—	5,208
Issuance of Series C convertible preferred stock for cash and conversion of notes	—	—	—	—	10,694,189	19,249,540	—	—	—	—	—
Stock-based compensation	—	—	—	—	—	—	—	—	105,929	—	105,929
Net loss	—	—	—	—	—	—	—	—	—	(11,436,431)	(11,436,431)
Balances at December 31, 2008	459,375	1,837,500	3,598,001	17,270,405	10,694,189	19,249,540	1,693,468	1,694	1,014,316	(32,387,963)	(31,371,953)
Stock-based compensation	—	—	—	—	—	—	—	—	100,508	—	100,508
Net loss	—	—	—	—	—	—				(5,830,528)	(5,830,528)

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

STATEMENTS OF CONVERTIBLE PREFERRED STOCK AND STOCKHOLDERS' DEFICIT (CONTINUED)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Series C Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deficit Accumulated During Development Stage	Total Stockholders' Equity (Deficit)
	Shares	Amount	Shares	Amount	Shares	Amount	Shares	Amount			
Balances at December 31, 2009	459,375	1,837,500	3,598,001	17,270,405	10,694,189	19,249,540	1,693,468	1,694	1,114,824	(38,218,491)	(37,101,973)
Conversion of convertible preferred stock to common stock	(84,375)	(337,500)	(2,168,222)	(10,407,466)	(2,113,573)	(3,804,431)	4,366,147	4,365	14,545,032		14,549,397
Beneficial conversion feature in connection with related party convertible promissory notes	—	—	—	—	—	—	—	—	1,074,387	—	1,074,387
Issuance of restricted common stock in exchange for intellectual property	—	—	—	—	—	—	159,905	160	15,831	—	15,991
Issuance of common stock upon exercise of stock options	—	—	—	—	—	—	8,500	9	2,457	—	2,466
Stock-based compensation	—	—	—	—	—	—	—	—	63,383	—	63,383
Net loss										(4,118,336)	(4,118,336)
Balances at December 31, 2010	375,000	1,500,000	1,429,779	6,862,939	8,580,616	15,445,109	6,228,020	6,228	16,815,914	(42,336,827)	(25,514,685)
Stock-based compensation expense	—	—	—	—	—	—	—	—	23,757	—	23,757
Net loss and comprehensive loss										(4,574,557)	(4,574,557)
Balances at December 31, 2011	375,000	1,500,000	1,429,779	6,862,939	8,580,616	15,445,109	6,228,020	6,228	16,839,671	(46,911,384)	(30,065,485)
Issuance of common stock upon exercise of options	—	—	—	—	—	—	40,791	41	27,614	—	27,655
Beneficial conversion feature in connection with related party convertible promissory notes	—	—	—	—	—	—	—	—	2,299,662	—	2,299,662
Stock-based compensation	—	—	—	—	—	—	—	—	24,415	—	24,415
Net loss										(6,481,884)	(6,481,884)
Balances at December 31, 2012	375,000	1,500,000	1,429,779	6,862,939	8,580,616	15,445,109	6,268,811	6,269	19,191,362	(53,393,268)	(34,195,637)
Vesting of restricted common stock	—	—	—	—	—	—	159,905	160	23,826	—	23,986
Stock-based compensation	—	—	—	—	—	—		—	14,431	—	14,431
Net loss	—	—	—	—	—	—		—	—	(3,707,243)	(3,707,243)
Balances at December 31, 2013	375,000	$ 1,500,000	1,429,779	$ 6,862,939	8,580,616	$ 15,445,109	6,428,716	$ 6,429	$19,229,619	$(57,100,511)	$ (37,864,463)
Stock-based compensation (unaudited)	—	—	—	—	—	—	—	—	11,492		11,492
Net loss (unaudited)	—	—	—	—	—	—	—	—	—	(833,865)	(833,865)
Balances at March 31, 2014 (unaudited)	375,000	$ 1,500,000	1,429,779	$ 6,862,939	8,580,616	$ 15,445,109	6,428,716	$ 6,429	$19,241,111	$(57,934,376)	$ (38,686,836)

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

STATEMENTS OF CASH FLOWS

	Year Ended December 31,		Three Months Ended March 31,		Period from August 25, 1999 (Inception) through December 31, 2013	Period from August 25, 1999 (Inception) through March 31, 2014
	2012	2013	2013	2014		
			(Unaudited)			(Unaudited)
Cash flows from operating activities						
Net income (loss)	$(6,481,884)	$(3,707,243)	$1,014,010	$ (833,865)	$ (57,100,511)	$ (57,934,376)
Adjustments to reconcile net income (loss) to net cash used in operating activities:						
Depreciation and amortization	43,788	42,114	10,794	6,761	304,071	310,832
Loss on disposition of property and equipment	—	1,446	—	7,735	1,446	9,181
Change in fair value of preferred stock warrants	22,411	105,320	26,330	(245,633)	(470,838)	(716,471)
Stock-based compensation	24,415	38,417	27,594	11,492	479,606	491,098
Non-cash interest expense related to warrants and convertible promissory notes	2,865,961	2,860,267	944,717	387,550	9,577,541	9,965,091
Cumulative effect of change in accounting principle	—	—	—	—	—	—
Changes in operating assets and liabilities:						
Accounts receivable	—	(149,605)	—	149,605	(149,605)	—
Other receivables	(72,336)	150,782	37,254	(41,192)	—	(41,192)
Prepaid expenses and other assets	29,673	(2,557)	3,709	(76,733)	(85,149)	(161,882)
Accounts payable	45,470	(161,803)	14,559	31,123	57,721	88,844
Accrued expenses	26,070	(62,356)	5,928	93,798	128,650	222,448
Net cash provided by (used in) operating activities	(3,496,432)	(885,218)	2,084,895	(509,359)	(47,257,068)	(47,766,427)
Cash flows from investing activities						
Purchase of property and equipment	(2,490)	(1,274)	(1,274)	—	(368,684)	(368,684)
Restricted cash	—	—	—	—	(20,000)	(20,000)
Net cash used in investing activities	(2,490)	(1,274)	(1,274)	—	(388,684)	(388,684)
Cash flows from financing activities						
Proceeds from sale of property, plant and equipment	—	—	—	4,500	—	4,500
Proceeds from issuance of convertible preferred stock	—	—	—	—	31,657,269	31,657,269
Proceeds from issuance of common stock, net	—	—	—	—	531,833	531,833
Proceeds from issuance of common stock upon exercise of stock options	27,655	—	—	—	180,015	180,015
Proceeds from issuance of restricted common stock	—	—	—	—	2,500	2,500
Proceeds from exercise and issuance of warrants	—	—	—	—	25,834	25,834
Proceeds from issuance of convertible notes payable	4,999,243	—	—	—	16,517,071	16,517,071
Net cash provided by financing activities	5,026,898	—	—	4,500	48,914,522	48,919,022
Net increase (decrease) in cash and cash equivalents	$ 1,527,976	$ (886,492)	$2,083,621	$ (504,859)	$ 1,268,770	$ 763,911
Cash and cash equivalents, beginning of period	627,286	2,155,262	2,155,262	1,268,770	—	—
Cash and cash equivalents, end of period	$ 2,155,262	$ 1,268,770	$4,238,883	$ 763,911	$ 1,268,770	$ 763,911
Supplemental disclosures of cash flow information						
Cash paid for interest expense	$ 800	$ —	$ —	$ —	$ 23,403	$ 23,403
Supplemental schedule of non-cash financing activities						
Issuance of warrants for the purchase of convertible preferred stock in connection with notes payable	$ 633,248	$ —	$ —	$ —	$ 1,707,635	$ 1,707,635
Beneficial conversion feature related to the warrants to purchase shares of convertible preferred stock in connection with convertible promissory notes	$ 2,299,662	$ —	$ —	$ —	$ 3,374,049	$ 3,374,049
Issuance of warrants for the purchase of 111,111 shares of Series C convertible preferred stock in connection with note payable	$ —	$ —	$ —	$ —	$ 163,778	$ 163,778
Conversion of convertible promissory notes and accrued interest into shares of convertible preferred stock upon the adoption of new accounting policy	$ —	$ —	$ —	$ —	$ 6,700,176	$ 6,700,176
Issuance of restricted common stock in exchange for intellectual property	$ —	$ 23,986	$ —	$ —	$ 44,977	$ 44,977

The accompanying notes are an integral part of these financial statements.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS

1. Nature of Business and Management's Plans Regarding Financing of Future Operations

Formation and Business of the Company

Capnia, Inc. (a development stage enterprise) (the "Company") was incorporated in the State of Delaware on August 25, 1999 (inception date), and is located in Redwood City, California. The Company develops diagnostics and therapeutics based on our proprietary technology for precision metering of gas flow.

The Company's first product, CoSense, aids in diagnosis of excessive hemolysis in neonates, a dangerous condition in which red blood cells degrade rapidly, which can lead to long-term developmental disability. CoSense received initial 510(k) clearance for sale in the U.S. in the fourth quarter of 2012, with a more specific Indication for Use related to hemolysis issued in the first quarter of 2014, and received CE Mark approval for sale in the E.U. in the third quarter of 2013. The Company is preparing to commercialize CoSense using our own sales efforts. In addition, the Company is applying its research and development efforts to additional diagnostic products based on its Sensalyze Technology Platform, a portfolio of proprietary methods and devices which enables CoSense and can be applied to detect a variety of analytes in exhaled breath.

The Company has also obtained CE Mark approval in the E.U. for Serenz, a therapeutic product candidate for the treatment of symptoms related to allergic rhinitis. The Company out licensed Serenz to Block Drug Company, a wholly-owned subsidiary of GlaxoSmithKline ("GSK") in 2013, realizing revenue in the form of a non-refundable up-front payment of $3.0 million. In June 2014, the GSK agreement terminated and the licensed rights to Serenz were returned to the Company.

Management's Plans Regarding Financing of Future Operations

The Company has experienced losses since its inception and, as of March 31, 2014 (unaudited), has an accumulated deficit of approximately $57.9 million and cash and cash equivalents of approximately $0.8 million. Through the date of the independent auditors' report, the Company has received payments totaling approximately $3.0 million pursuant to the license agreement with GSK pertaining to Serenz. This agreement terminated in June 2014, and the Company does not expect additional revenue to result from it. The Company plans to commercialize Serenz in the E.U. via distributorship arrangements. In the U.S., the Company intends to determine the regulatory approval pathway for Serenz in dialogue with the FDA, and subsequently to seek partnership or distributorship arrangements for commercialization. The Company therefore expects to continue to incur losses from costs related to the continuation of research and development and administrative activities.

The Company intends to commercialize CoSense starting in 2014, and will likely achieve profitability only if it can generate sufficient revenue from sales of the Company's CoSense instruments and consumables, or from license fees, milestone payments, and research and development payments in connection with potential future strategic partnerships. Although management has been successful in raising capital in the past, most recently in April 2014 (See Note 14), there can be no assurance that the Company will be successful, or that any needed financing will be available in the future at terms acceptable to the Company.

The inability to obtain additional financing could adversely affect the Company's short and long-term ability to achieve its intended business objectives. These uncertainties raise substantial doubt as to the Company's ability to continue as a going concern. The financial statements do not include any adjustments that might be necessary if the Company were unable to continue as a going concern.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

2. Summary of Significant Accounting Policies

Basis of Presentation

From inception through March 31, 2014, the Company has devoted substantially all of its efforts to research, product development, raising capital, and building infrastructure. The Company has not generated significant revenues from its planned principal operations. Accordingly, the Company is considered to be in the development stage.

Unaudited Interim Financial Statements

The accompanying interim balance sheet as of March 31, 2014, the related interim statement of operations, and cash flows for the three month periods ended March 31, 2013 and 2014 and for the cumulative period from August 25, 1999 (date of inception) to March 31, 2014, the statement of stockholders' equity (deficit) for the three month period ended March 30, 2014 and the related footnote disclosures are unaudited. These unaudited interim financial statements have been prepared in accordance with accounting principles generally accepted in the United States of America ("U.S. GAAP"). In management's opinion, the unaudited interim financial statements have been prepared on the same basis as the annual financial statements and include all adjustments, which include only normal recurring adjustments, necessary for the fair presentation of the Company's financial position as of March 31, 2014 and its results of operations and cash flows for the three month periods ended March 31, 2013 and 2014 and for the cumulative period from August 25, 1999 (date of inception) to March 31, 2014. The results for the three month period ended March 31, 2014 are not necessarily indicative of the results expected for the full calendar year.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, disclosure of contingent assets and liabilities, and reported amounts of expenses in the financial statements and accompanying notes. Actual results could differ from those estimates. Key estimates included in the financial statements include the valuation of deferred income tax assets and valuation of debt and equity instruments and stock-based compensation.

Unaudited Pro Forma Balance Sheet

Upon the consummation of the initial public offering contemplated by us, all of the outstanding shares of convertible preferred stock will automatically convert into shares of common stock. The March 31, 2014 unaudited pro forma balance sheet data has been prepared assuming the conversion of the convertible preferred stock outstanding into 10,385,395 shares of common stock and the related conversion of the preferred stock underlying outstanding warrants, which results in the reclassification of the warrant liability to additional paid-in capital, in connection with the completion of the offering referred to in this prospectus.

Cash and Cash Equivalents

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company's cash and cash equivalents are held in institutions in the U.S. and include deposits in a money market fund which was unrestricted as to withdrawal or use.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

Restricted Cash

Restricted cash consists primarily of funds held in an interest bearing escrow account held to secure the Company's credit card facility with a financial institution.

Business Concentration

In 2013, 100% of the Company's revenue was generated pursuant to a license agreement with GSK. The Company had accounts receivable of approximately $150,000 from GSK at December 31, 2013 and approximately $41,000 as of March 31, 2014 (unaudited).

Concentration of Credit Risk

Financial instruments that potentially subject the Company to a concentration of credit risk consist of cash and cash equivalents at two commercial banks that management believes are of high credit quality. Cash and cash equivalents deposited with these commercial banks exceeded the Federal Deposit Insurance Corporation insurable limit at December 31, 2012 and 2013, and as of March 31, 2014 (unaudited). The Company expects this to continue.

Segments

The Company operates in one segment. Management uses one measurement of profitability and does not segregate its business for internal reporting, making operating decisions, and assessing financial performance. All long-lived assets are maintained in the United States of America.

Risk and Uncertainties

The Company's future results of operations involve a number of risks and uncertainties. Factors that could affect the Company's future operating results and cause actual results to vary materially from expectations include, but are not limited to, uncertainty of results of clinical trials and reaching milestones, uncertainty of regulatory approval of the Company's potential future products, uncertainty of market acceptance of the Company's products, competition from substitute products and larger companies, securing and protecting proprietary technology, strategic relationships and dependence on key individuals and sole source suppliers.

Products developed by the Company require clearances from the FDA or other international regulatory agencies prior to commercial sales. There can be no assurance that the products will receive the necessary clearances. If the Company was denied clearance, clearance was delayed or the Company was unable to maintain clearance, it could have a materially adverse impact on the Company.

The Company expects to incur substantial operating losses for the next several years and may, if it cannot generate sufficient product revenue or expands research and development into subsequent planned products, require additional financing. There can be no assurance that such financing will be available or will be at terms acceptable by the Company.

Accounts Receivable

Accounts receivable as of December 31, 2013 and March 31, 2014 (unaudited) consist of balances due from GSK pursuant to the license agreement executed in 2013. The Company did not record an allowance for doubtful accounts as this balance was deemed fully collectible as of each balance sheet date.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

Other Receivables

Other receivables as of December 31, 2012 consist of balances due for subcontracting services unrelated to the Company's core business operations. The Company did not record an allowance for doubtful accounts as this balance was deemed fully collectible as of December 31, 2012. There were no other receivables as of December 31, 2013 or March 31, 2014 (unaudited).

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of payments primarily related to insurance and short-term deposits. Prepaid expenses are initially recorded upon payment and are expensed as goods or services are received.

Property and Equipment, Net

Property and equipment are stated at cost and depreciated using the straight-line method over the estimated useful lives of the assets, generally between three and five years. Leasehold improvements are amortized on a straight-line basis over the lesser of their useful life or the term of the lease. Maintenance and repairs are charged to expense as incurred, and improvements are capitalized. When assets are retired or otherwise disposed of, the cost and accumulated depreciation are removed from the balance sheet and any resulting gain or loss is reflected in operations in the period realized.

Impairment of Long-Lived Assets

The Company reviews its long-lived assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets held and used is measured by comparison of the carrying amount of an asset to future net cash flows expected to be generated by the asset. If such assets are considered to be impaired, the impairment to be recognized is measured by the amount by which the carrying amount of the assets exceeds the fair value of the assets. Assets to be disposed of are reported at the lower of their carrying cost or fair value less cost to sell. The Company has not recognized losses related to impairment since inception.

Related-Party Convertible Promissory Notes

The Company has issued convertible promissory notes pursuant to a number of private placements since 2010. These convertible promissory notes were issued with separate warrants to purchase the Company's convertible preferred stock. These warrants are treated as liabilities. The convertible promissory notes and accrued interest is convertible into the Company's convertible preferred stock. The fair value of the warrants was determined using a Monte Carlo simulation and allocated as a debt discount using the intrinsic value allocation method. The discount has been amortized using the effective interest method over the term of the related convertible promissory notes.

The Company applies the accounting standards for derivatives and hedging and for distinguishing liabilities from equity when accounting for hybrid contracts that feature conversion options. The Company accounts for convertible debt instruments when the Company has determined that the embedded conversion options should not be bifurcated from their host instruments in accordance with ASC 470-20 *"Debt with Conversion and Other Options"*. The Company records, when necessary, discounts to convertible notes for the

intrinsic value of conversion options embedded in debt instruments based upon the differences between the fair value of the underlying stock at the commitment date of the note transaction and the effective conversion price embedded in the note. Debt discounts under these arrangements are amortized over the term of the related debt (see Note 5).

Convertible Preferred Stock Warrant Liability

The Company has issued freestanding warrants to purchase shares of its convertible preferred stock. The Company has classified the fair value of these warrants as liabilities on the balance sheet as they correspond to the treatment of the preferred stock as temporary equity. The Company accounts for the warrants as a derivative instrument. Changes in the fair value of the warrants are presented separately as changes in warrant liability in the Company's statements of operations for each reporting period. The Company uses the Monte Carlo simulation model to determine the fair value of the warrants. As a result, the valuation of this derivative instrument is subjective because the option-valuation model requires the input of highly subjective assumptions, including the expected stock price volatility and the probability of a future occurrence of a fundamental transaction. Changes in these assumptions can materially affect the fair value estimate and, such impacts can, in turn, result in material non-cash charges or credits, and related impacts on earnings or loss per share, in the statements of operations. The Company will continue to adjust the liability for changes in fair value until the earlier of the expiration of the warrants or their exercise, at which time the liability will be reclassified into stockholders' deficit. The Company records any change in fair value as a component of other income or expense.

Convertible Preferred Stock

Upon the occurrence of certain change in control events that are outside of the control of the Company, including sale or transfer of control of the Company, holders of the convertible preferred stock can force the Company to redeem these shares. The holders of convertible preferred stock are entitled to require the Company to redeem their shares upon the approval of at least two thirds of the holders of shares of the convertible preferred stock then outstanding. Accordingly, these shares are considered contingently redeemable and are classified as temporary equity on the accompanying balance sheets.

Revenue Recognition

The Company recognized revenue during the year ended December 31, 2013 pursuant to its license agreement with GSK. The revenue was recognized because there was persuasive evidence of an arrangement, the price was fixed or determinable, and collectability was reasonably assured. The up-front payment for revenue recognized in 2013 was received prior to December 31, 2013 and was nonrefundable. No revenue was recognized during the three months ended March 31, 2014 (unaudited). The agreement was terminated in the second quarter of 2014, and the Company does not have any further monetary obligations with respect to this agreement.

Research and Development

Research and development costs are charged to operations as incurred. Research and development costs consist primarily of salaries and benefits, consultant fees, prototype expenses, certain facility costs and other costs associated with clinical trials, net of reimbursed amounts.

Costs to acquire technologies to be used in research and development that have not reached technological feasibility and have no alternative future use are expensed to research and development costs when incurred.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

Income Taxes

The Company accounts for income taxes using the asset and liability method. Under this method, deferred income tax assets and liabilities are recorded based on the estimated future tax effects of differences between the amounts at which assets and liabilities are recorded for financial reporting purposes and the amounts recorded for income tax purposes. Deferred income taxes are classified as current or non-current, based on the classifications of the related assets and liabilities giving rise to the temporary differences. A valuation allowance is provided against the Company's deferred income tax assets when their realization is not reasonably assured.

The Company assesses all material positions taken in any income tax return, including all significant uncertain positions, in all tax years that are still subject to assessment or challenge by relevant taxing authorities. Assessing an uncertain tax position begins with the initial determination of the position's sustainability and is measured at the largest amount of benefit that is greater than fifty percent likely of being realized upon ultimate settlement. As of each balance sheet date, unresolved uncertain tax positions must be reassessed, and the Company will determine whether (i) the factors underlying the sustainability assertion have changed and (ii) the amount of the recognized tax benefit is still appropriate. The recognition and measurement of tax benefits requires significant judgment. Judgments concerning the recognition and measurement of a tax benefit might change as new information becomes available.

Stock-Based Compensation

For stock options granted to employees, the Company recognizes compensation expense for all stock-based awards based on the estimated fair value on the date of grant. The value of the portion of the award that is ultimately expected to vest is recognized as expense ratably over the requisite service period. The fair value of stock options is determined using the Black-Scholes option pricing model. The determination of fair value for stock-based awards on the date of grant using an option pricing model requires management to make certain assumptions regarding a number of complex and subjective variables.

Stock-based compensation expense related to stock options granted to non-employees is recognized based on the fair value of the stock options, determined using the Black-Scholes option pricing model, as they are earned. The awards generally vest over the time period the Company expects to receive services from the non-employee.

Comprehensive Income (Loss)

Comprehensive income (loss) is defined as a change in equity of a business enterprise during a period, resulting from transactions from non-owner sources. There have been no items qualifying as other comprehensive income (loss) and, therefore, for all periods presented, the Company's comprehensive income (loss) was the same as its reported net income (loss).

Net Income (Loss) per Share of Common Stock

Basic net income (loss) per common share is calculated by dividing the net income (loss) attributable to common stockholders by the weighted-average number of common stock outstanding during the period, without consideration for potentially dilutive securities. Diluted net income (loss) per share is computed by dividing the net income (loss) attributable to common stockholders by the weighted-average number of common stock and potentially dilutive securities outstanding for the period.

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For purposes of the diluted net income (loss) per share calculation, convertible preferred stock, convertible promissory notes, stock options and convertible preferred stock warrants are considered to be potentially dilutive securities. Because the Company has reported a net loss for the years ended December 31, 2012 and 2013 and for the three months ended March 31, 2014 (unaudited), diluted net loss per common share is the same as basic net loss per common share for those periods.

Government Grants

In 2010, the Company received three grants from the federal government. Proceeds of $733,437 related to the grants are presented on the accompanying statements of operations as non-operating income. There were no such grants in 2012, 2013, or 2014.

Recent Accounting Pronouncements

From time to time, new accounting pronouncements are issued by the Financial Accounting Standards Board, or FASB, or other standard setting bodies and adopted by us as of the specified effective date. Unless otherwise discussed, the impact of recently issued standards that are not yet effective will not have a material impact on the Company's financial position or results of operations upon adoption.

In July 2013, the FASB issued Accounting Standards Update (ASU) 2013-11, *Presentation of an Unrecognized Tax Benefit when a Net Operating Loss Carryforward, a Similar Tax Loss, or a Tax Credit Carryforward Exists (a consensus of the FASB Emerging Issues Task Force)*. The amendments in this ASU provide guidance on the financial statements presentation of an unrecognized tax benefit when a net operating loss carryforward, a similar tax loss, or a tax credit carryforward exists. An unrecognized tax benefit should be presented in the financial statements as a reduction to a deferred tax asset for a net operating loss carryforward, a similar tax loss, or a tax credit carryforward with certain exceptions, in which case such an unrecognized tax benefit should be presented in the financial statements as a liability. The amendments in this ASU do not require new recurring disclosures and are effective for fiscal years, and interim periods within those years, beginning after December 15, 2013. The Company is currently assessing the impact of this ASU on its financial statements.

The Company has considered all other recently issued accounting pronouncements and does not believe the adoption of such pronouncements will have a material impact on its consolidated financial statements.

3. Property and Equipment, Net

Property and equipment consisted of the following:

	December 31,		March 31,
	2012	2013	2014
			(unaudited)
Furniture and fixtures	$ 195,531	$ 180,238	$ 139,695
Computer hardware	115,373	27,555	27,555
Leasehold improvements	10,726	10,726	10,726
	$ 321,630	$ 218,519	$ 177,976
Less accumulated depreciation and amortization	(216,177)	(155,352)	(133,805)
Total	$ 105,453	$ 63,167	$ 44,171

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Depreciation expense for the years ended December 31, 2012 and 2013, was $43,788 and $42,114, respectively and $10,794 and $6,761 for the three months ended March 31, 2013 and 2014 (unaudited), respectively. Depreciation expense for the periods from August 25, 1999 (date of inception) to December 31, 2013 and March 31, 2014 (unaudited) was $304,071 and $310,832, respectively.

4. Fair Value Measurements

Fair Value of Financial Instruments

The carrying value of the Company's cash and cash equivalents, other receivable, prepaid expenses and other current assets, accounts payable, accrued liabilities, and convertible promissory notes approximate fair value due to the short-term nature of these items. Convertible preferred stock call option liability and convertible preferred stock warrant liability are carried at fair value. Based on the borrowing rates currently available to the Company for debt with similar terms and consideration of default and credit risk, the carrying value of the convertible promissory notes approximates their fair value.

Fair value is defined as the exchange price that would be received for an asset or an exit price paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs.

The fair value hierarchy defines a three-level valuation hierarchy for disclosure of fair value measurements as follows:

- Level I — Unadjusted quoted prices in active markets for identical assets or liabilities;
- Level II — Inputs other than quoted prices included within Level I that are observable, unadjusted quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the related assets or liabilities; and
- Level III — Unobservable inputs that are supported by little or no market activity for the related assets or liabilities.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement.

The following table sets forth the Company's financial instruments that were measured at fair value on a recurring basis by level within the fair value hierarchy:

	Fair Value Measurements at December 31, 2012			
	Total	Level 1	Level 2	Level 3
Assets				
Money market fund	$ 2,120,389	$ 2,120,389	$ —	$ —
Liabilities				
Convertible preferred stock warrant liability	$ 1,359,557	$ —	$ —	$ 1,359,557

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	Fair Value Measurements at December 31, 2013			
	Total	Level 1	Level 2	Level 3
Assets				
Money market fund	$ 1,256,752	$ 1,256,752	$ —	$ —
Liabilities				
Convertible preferred stock warrant liability	$ 1,464,877	$ —	$ —	$ 1,464,877

	Fair Value Measurements at March 31, 2014 (unaudited)			
	Total	Level 1	Level 2	Level 3
Assets				
Money market fund	$ 660,802	$ 660,802	$ —	$ —
Liabilities				
Convertible preferred stock warrant liability	$ 1,219,244	$ —	$ —	$ 1,219,244

The fair value measurement of the convertible preferred stock warrant liability is based on significant inputs not observed in the market and thus represents a Level 3 measurement. The Company's estimated fair value of the convertible preferred stock warrant liability is calculated using a Monte Carlo simulation and key assumptions including the probabilities of settlement scenarios, enterprise value, time to liquidity, risk-free interest rates, discount for lack of marketability and volatility (see Note 6). The estimates are based, in part, on subjective assumptions and could differ materially in the future. Generally, increases or decreases in the fair value of the underlying convertible preferred stock would result in a directionally similar impact in the fair value measurement of the warrant liability.

During the periods presented, the Company has not changed the manner in which it values liabilities that are measured at fair value using Level 3 inputs. The Company recognizes transfers between levels of the fair value hierarchy as of the end of the reporting period. There were no transfers within the hierarchy during the years ended December 31, 2012 or 2013 and during the three months ended March 31, 2014 (unaudited).

The following table sets forth a summary of the changes in the fair value of the Company's Level 3 financial instruments as follows:

	Convertible preferred stock warrant liability
Balance at January 1, 2012	$ 703,898
Issuance of convertible preferred stock warrants	633,248
Change in fair value recorded in other income (expense), net	22,411
Balance at December 31, 2012	1,359,557
Change in fair value recorded in other income (expense), net	105,320
Balance at December 31, 2013	$ 1,464,877
Change in fair value recorded in other income (expense), net (unaudited)	(245,633)
Balance at March 31, 2014 (unaudited)	$ 1,219,244

The change in fair value recorded in other income (expense) for the period from August 25, 1999 (inception) through March 31, 2014 (unaudited) was $255,205.

CAPNIA, INC.

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5. Related Party Convertible Promissory Notes

Convertible Promissory Notes Previously Converted to Preferred Stock

During 2000, the Company issued convertible promissory notes to certain stockholders with an interest rate of 8.00% per annum for cash of $87,500. During 2001, these notes were converted into Series A convertible preferred stock (See Note 8).

During 2002 and 2003, the Company issued convertible promissory notes to certain stockholders with an interest rate of 8.00% per annum in exchange for $2,785,000. In March 2003, the Company issued convertible promissory notes to certain stockholders with an interest rate of 6% per annum in exchange for $250,000 in cash. In April 2004, the convertible promissory notes issued in 2002, 2003 and 2004, and accrued interest related to these notes totaling $3,327,971, were converted into Series B convertible preferred stock (See Note 8).

During 2007, the Company issued convertible promissory notes to certain stockholders in the amount of $1,694,158, with an interest rate of 8.50% per annum. During 2008, the Company issued convertible promissory notes to certain stockholders in the amount of $1,500,000, with an interest rate of 8.5% per annum. In March 2008, the convertible promissory notes and accrued interest related to these notes totaling $3,284,705, were converted into shares of Series C convertible preferred stock (see Note 8).

2010 Convertible Promissory Notes

In February and March 2010, the Company entered into convertible promissory notes with various investors for a total principal amount of $3,308,896. These notes are collateralized by substantially all of the assets of the Company and bear interest at a compounded rate of 12% per annum with a maturity date in February 2011. At December 31, 2012, December 31, 2013 and March 31, 2014 (unaudited), accrued interest for these convertible promissory notes totaled $1,363,859, $1,956,479 and $2,113,816, respectively. In April, 2014, the Company amended these convertible promissory note agreements to extend the maturity date to September 30, 2015 (see Note 14). The outstanding principal and interest is convertible into (1) the number of shares of the equity sold by the Company in the next round of equity financing under certain conditions or (2) shares of Series C preferred stock. The number of shares issued from the conversion was to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing, which would result in $1.35 per share if converted into the Series C preferred stock.

In connection with the February and March 2010 convertible notes, the Company issued a warrant for the purchase of preferred stock. The number of shares issued for the warrant is to be determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in the next round of equity financing under certain conditions, which would result in $1.35 per share if converted into the Series C preferred stock. The exercise price for the warrant is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing, which would result in $1.35 per share if converted into the Series C preferred stock. The warrants are immediately exercisable and will expire 10 years from the original issuance date. The estimated fair value of the warrants at issuance was determined to be $686,446, which was recorded as a debt discount and amortized using the effective interest rate method over the term of the convertible notes.

After allocating $686,446 to the warrants issued in connection with the February and March 2010 notes as detailed above, the Company determined the fair value of the conversion option to be $686,446, which was recorded as a debt discount to the convertible notes and within additional paid-in capital. The debt discount was amortized using the effective interest rate method over the term of the convertible notes. The discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments is based upon the

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differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

In November 2010, the Company entered into convertible promissory notes with various investors for a total principal amount of $1,892,274. These notes are collateralized by substantially all of the assets of the Company and bear interest at a compounded rate of 12% per annum with a maturity date in February 2012. At December 31, 2012, December 31, 2013 and March 31, 2014 (unaudited), accrued interest for these convertible promissory notes totaled $551,653, $861,605 and $943,896, respectively. In April, 2014, the Company amended the convertible note agreements to extend the maturity date to September 30, 2015 (see Note 14). The outstanding principal and interest is convertible into (1) the number of shares of the preferred stock sold by the Company in the next round of equity financing under certain conditions or (2) shares of Series C preferred stock. The number of shares issued from the conversion was to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing, which would result in $1.35 per share if converted into the Series C preferred stock.

In connection with the November 2010 convertible notes, the Company issued a warrant for the purchase of preferred stock. The number of shares issued for the warrant is to be determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions, which would result in $1.35 per share if converted into the Series C preferred stock. The exercise price for the warrant is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing, which would result in $1.35 per share if converted into the Series C preferred stock. The warrants are immediately exercisable and will expire 10 years from the original issuance date. The estimated fair value of the warrants at issuance was determined to be $387,941, which was recorded as a debt discount and amortized using the effective interest rate method over the term of the convertible notes.

After allocating $387,941 to the warrants issued in connection with the November 2010 convertible notes as detailed above, the Company determined the fair value of the conversion option to be $387,942, which was recorded as a debt discount to the convertible notes and within additional paid-in capital. The debt discount was amortized using the effective interest rate method over the term of the convertible notes. The discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments is based upon the differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

As part of the November 2010 issuance, the Company amended the February and March 2010 convertible promissory notes to extend the maturity date from February 2011 to February 2012. The Company accounted for the amendment of the February and March convertible notes under the provision of debt modification accounting. The present value of the future cash flows, under the modified terms, did not exceed the present value of the future cash flows under the original terms by more than 10%. Subsequent to the modification, the Company determined the unamortized discount as of the amendment date should be amortized using the effective interest method over the extended maturity date of February 2012.

In relation to the 2010 convertible promissory notes, the Company recognized interest expense for the years ended December 31, 2012 and 2013, and for the period from August 25, 1999 (inception) through March 31, 2014 (unaudited) of $803,048, $902,570 and $3,057,712, respectively, which was included in the balance of convertible promissory notes and accrued interest on the accompanying balance sheets at December 31, 2012 and 2013 and March 31, 2014 (unaudited). Additionally, the Company recorded interest expense in connection with the amortization of the debt discount recorded for the years ended December 31, 2012 and 2013, and for the period

from August 25, 1999 (inception) through March 31, 2014 (unaudited) of $114,345, $0 and $2,148,774, respectively. The discounts to the convertible notes were fully amortized as of December 31, 2012.

2012 Convertible Promissory Notes

In January 2012, the Company entered into convertible promissory notes with various investors for a total principal amount of $1,893,012. These notes are collateralized by substantially all of the assets of the Company and bear interest at a non-compounded rate of 12% per annum with a maturity date in January 2013. At December 31, 2012 and 2013 and March 31, 2014 (unaudited), accrued interest for these convertible promissory notes totaled $217,204, $444,365 and $500,378, respectively. In April 2014, the Company amended the convertible note agreements to extend the maturity date to September 30, 2015 (see Note 14). The outstanding principal and interest is convertible into (1) the number of shares of the preferred stock sold by the Company in the next round of equity financing under certain conditions or (2) shares of Series C preferred stock. The number of shares issued from the conversion was to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions, which would result in $1.35 per share if converted into the Series C preferred stock.

In connection with the January 2012 convertible notes, the Company issued a warrant for the purchase of preferred stock. The number of shares issued for the warrant is to be determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions, which would result in $1.35 per share if converted into the Series C preferred stock. The exercise price for the warrant is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing, which would result in $1.35 per share if converted into the Series C preferred stock. The warrants are immediately exercisable and will expire 10 years from the original issuance date. The estimated fair value of the warrants at issuance was determined to be $239,786, which was recorded as a debt discount and amortized using the effective interest rate method over the term of the convertible notes. The Company estimated the fair value of its preferred stock warrant liability at issuance utilizing a Monte Carlo simulation based on expected volatility of 73% to 80%, expected time to liquidity of event of 2.00 to 7.50 years and risk-free interest rate of 0.23% to 1.07%.

After allocating $239,786 to the warrants issued in connection with the January 2012 convertible notes as discussed above, the Company determined the fair value of the conversion option to be $870,790, which was recorded as a debt discount to the convertible notes and within additional paid-in capital. The debt discount was amortized using the effective interest rate method over the term of the convertible notes. The discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments is based upon the differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

As part of the January 2012 issuance, the Company amended the 2010 convertible promissory notes to extend the maturity date from February 2012 to January 2013. The Company accounted for the amendment of the 2010 convertible notes under the provisions of debt modification accounting. The present value of the future cash flows, under the modified terms, did not exceed the present value of the future cash flows under the original terms by more than 10%. Subsequent to the modification, the Company determined the unamortized discount as of the amendment date should be amortized using the effective interest method over the extended maturity date of January 2013.

In July 2012, the Company entered into convertible promissory notes with various investors for a total principal amount of $3,106,230. The notes are collateralized by substantially all of the assets of the Company and

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bear interest at a non-compounded rate of 12% per annum with a maturity date in July 2013. At December 31, 2012 and 2013 and March 31, 2014 (unaudited), accrued interest for these convertible promissory notes totaled $156,248, $528,996 and $620,906, respectively. In April, 2014, the Company amended the convertible note agreements to extend the maturity date to September 30, 2015 (see Note 14). The outstanding principal and interest is convertible into (1) the number of shares of the preferred stock sold by the Company in the next round of equity financing under certain conditions or (2) shares of Series C preferred stock. The number of shares issued from the conversion was to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions or $1.35 per share if converted into the Series C preferred stock.

In connection with the July 2012 convertible notes, the Company issued a warrant for the purchase of preferred stock. The number of shares issued for the warrant is to be determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions or $1.35 per share if converted into the Series C preferred stock. The exercise price for the warrant is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing or $1.35 per share if converted into the Series C preferred stock. The warrants are immediately exercisable and will expire 10 years from the original issuance date. The estimated fair value of the warrants at issuance was determined to be $393,462, which was recorded as a debt discount and amortized using the effective interest rate method over the term of the convertible notes. The Company estimated the fair value of its preferred stock warrant liability at issuance utilizing a Monte Carlo simulation based on the expected volatility of 73% to 80%, expected time to liquidity of event of 2.00 to 7.50 years and risk-free interest rate of 0.23% to 1.07%.

After allocating $393,462 to the warrants issued in connection with the July 2012 convertible notes as discussed above, the Company determined the fair value of the conversion option to be $1,428,872, which was recorded as a debt discount to the convertible notes and within additional paid-in capital. The debt discount was amortized using the effective interest rate method over the term of the convertible notes. The discount to convertible notes for the intrinsic value of conversion options embedded in debt instruments is based upon the differences between the fair value of the underlying preferred stock at the commitment date of the note transaction and the effective conversion price embedded in the note.

As part of the July 2012 issuance, the Company amended the 2010 and January 2012 convertible promissory notes to extend the maturity date from January 2013 to July 2013. Additionally, the 2010 and January 2012 convertible promissory notes were amended such that the outstanding principal and interest is convertible into (1) the number of shares of the preferred stock sold by the Company in the next round of equity financing under certain conditions or (2) shares of Series C preferred stock. The number of shares issued from the conversion was to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions or $1.35 per share if converted into the Series C preferred stock. The exercise price for the warrant is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing or $1.35 per share if converted into the Series C preferred stock. The warrants issued in conjunction with the 2010 and January 2012 convertible notes were amended such that the shares issued for the warrant is to be determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of the next round of equity financing under certain conditions or $1.35 per share if converted into the Series C preferred stock.

The Company accounted for the amendment of the 2010 and January 2012 convertible notes under the provisions of debt modification accounting. The present value of the future cash flows, under the modified terms, did not exceed the present value of the future cash flows under the original terms by more than 10%. Subsequent

to the modification, the Company determined the unamortized discount as of the amendment date should be amortized using the effective interest method over the extended maturity date of July 2013.

In relation to the 2012 convertible notes payable, the Company recognized interest expense for the years ended December 31, 2012 and 2013, and for the period from August 25, 1999 (inception) through March 31, 2014 (unaudited) of $373,451, $599,909 and $147,923, respectively, which was included in the balance of convertible promissory notes and accrued interest on the accompanying balance sheets at December 31, 2012 and 2013 and March 31, 2014 (unaudited). Additionally, the Company recorded interest expense in connection with the amortization of the debt discount recorded for the years ended December 31, 2012 and 2013, and for the period from August 25, 1999 (inception) through March 31, 2014 (unaudited) of $1,575,123, $1,357,788 and $3,177,320, respectively. The discounts to the notes were fully amortized as of December 31, 2013. The Company recorded interest expense for the three months ended March 31, 2013 and 2014 (unaudited) of $185,096 and $128,553, respectively.

As of December 31, 2012 and 2013 and March 31, 2014 (unaudited), the entire amount of outstanding convertible notes and accrued interest was due to related parties consisting of investors and the Chairman of the Board of Directors.

As of December 31, 2013 and March 31, 2014 (unaudited), all the outstanding 2010 and 2012 convertible notes were in default as the original maturity date was in July 2013. In April 2014, the 2010 and 2012 notes were amended to extend the maturity date to September 2015 (see Note 14). Because the convertible promissory notes were technically in default as of December 31, 2013 and as of March 31, 2014 (unaudited), the amounts due have been classified as a short term liability on the Company's Balance Sheet.

6. Convertible Preferred Stock Warrants

In January 2009, the Company entered into a note payable agreement with a financial institution which allowed for initial borrowings of $500,000 with additional borrowings of $3,500,000 available based on the Company meeting specified business targets, with both tranches at an interest rate of 9.5% per annum. The Company borrowed $500,000 under the note and repaid the $500,000 when the agreement was terminated in July 2009.

In connection with the note payable, the Company issued a warrant for the purchase of 111,111 shares of Series C convertible preferred stock ("Series C") at $1.80 per share exercisable through March 2019. The Company determined the fair value of the warrant to be $163,778 using the Black-Scholes option pricing model with the following assumptions: contractual life of 10 years, risk-free interest rate of 2.52%, volatility of 80% and no dividends. The Company determined that using alternative valuation models, such as a Monte Carlo simulation model, would result in a *de minimus* difference. The Company recorded the fair value as a discount to the note payable and as a liability on the accompanying balance sheets. The Company amortized the entire discount to interest expense in 2009 in conjunction with the termination of the note payable agreement.

In 2010 and 2012, in conjunction with the related party convertible note financings described in Note 5, the Company issued preferred stock warrants. The Company re-measures the associated fair value of the convertible preferred stock warrant liability at each reporting period.

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As of December 31, 2012 and 2013 and as of March 31, 2014 (unaudited), the Company used a Monte Carlo simulation to calculate the fair value of its convertible preferred stock warrant liability using the following inputs:

	December 31,		March 31,
	2012	2013	2014
			(unaudited)
Volatility	63% - 80%	38% - 47%	32% - 43%
Expected Term (years)	1.50 – 7.00	0.75 – 2.00	0.50 – 1.75
Expected dividend yield	0.0%	0.0%	0.0%
Risk-free rate	0.21% - 1.18%	0.12% - 0.38%	0.07% - 0.36%

In addition to the assumptions above, the Company's estimated fair value of the convertible preferred stock warrant liability is calculated using other key assumptions including the probability and value of the next equity financing, enterprise value, and discount for lack of marketability. Management, with the assistance of an independent valuation firm, makes these subjective determinations based on all available current information; however, as such information changes, so might management's determinations and such changes could have a material impact of future operating results.

As of December 31, 2012 and 2013 and as of March 31, 2014 (unaudited), outstanding convertible preferred stock warrants consisted of:

Issuance date	Contractual Term	Exercise price per share	Number of shares outstanding underlying warrant	Fair Value at December 31, 2012	Fair Value at December 31, 2013	Fair Value at March 31, 2014
						(unaudited)
January 2009	10 years	$ 1.80	111,111	$ 43,247	$ 42,444	$ 24,444
February and March 2010	10 years	Adjustable	Adjustable	426,996	461,421	387,580
November 2010	10 years	Adjustable	Adjustable	244,188	263,875	221,647
January 2012	10 years	Adjustable	Adjustable	244,283	263,978	221,733
July 2012	10 years	Adjustable	Adjustable	400,843	433,159	363,840
Total				$ 1,359,557	$ 1,464,877	$ 1,219,244

For the above warrants issued between February 2010 and July 2012, the number of shares issued for the warrants are to be determined by dividing the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing or $1.35 per share if converted into the Series C preferred stock. The exercise price for these warrants is determined by dividing 25% of the unpaid principal and accrued interest by 75% of the price per share of preferred stock issued in such financing or $1.35 per share if converted into the Series C preferred stock.

As of December 31, 2012 and 2013 and as of March 31, 2014 (unaudited), all warrants issued from February 2010 through July 2012 by the Company were issued to related parties consisting of investors and the Chairman of the Board. No convertible preferred stock warrants expired or were exercised during 2012, 2013 or during the three months ended March 31, 2014 (unaudited).

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7. Commitments and Contingencies

Facility Leases

The Company leases its headquarters facility under a non-cancelable operating lease agreement set to expire in May 2015. The Company previously leased two other facilities under non-cancelable operating lease agreements that expired in January 2014 and May 2014, respectively. Rent expense was $179,000 in 2012, $304,000 in 2013, and $78,000 and $57,000 during the three months ended March 31, 2013 and March 31, 2014 (unaudited), respectively.

At December 31, 2013, the Company's future minimum commitments under non-cancelable operating leases are $111,000 for the year ended December 31, 2014. As of March 31, 2014 (unaudited), the Company's future minimum commitments under non-cancelable operating leases are $22,000.

Contingencies

In the normal course of business, the Company enters into contracts and agreements that contain a variety of representations and warranties and provide for general indemnifications. The Company's exposure under these agreements is unknown because it involves claims that may be made against the Company in the future, but have not yet been made. The Company accrues a liability for such matters when it is probable that future expenditures will be made and such expenditures can be reasonably estimated.

In 2010 the Company entered into an asset purchase agreement with BioMedical Drug Development, Inc. Pursuant to the agreement, the Company made a payment of $150,000 for the acquisition of intellectual property which the Company used to develop its product, CoSense. As part of the terms of the agreement, the Company is contingently committed to make development and sales-related milestone payments of up to $200,000 under certain circumstances, as well as single-digit-percentage royalties relating to potential planned product sales of CoSense. The amount, timing and likelihood of these payments are unknown, as they are dependent on the occurrence of future events that may or may not occur. In 2013 and during the three months ended March 31, 2014 (unaudited), the Company made no payments and incurred no liabilities in connection with the agreement, and there are no outstanding payments due as of December 31, 2013 and as of March 31, 2014 (unaudited).

Indemnification

In accordance with the Company's amended and restated Certificate of Incorporation and amended and restated bylaws, the Company has indemnification obligations to its officers and directors for certain events or occurrences, subject to certain limits, while they are serving at the Company's request in such capacity. There have been no claims to date and the Company has a director and officer insurance policy that may enable it to recover a portion of any amounts paid for future claims.

Litigation

The Company may from time to time be involved in legal proceedings arising from the normal course of business. There are no pending or threatened legal proceedings as of December 31, 2013 and as of March 31, 2014 (unaudited).

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

8. Capital Stock

Common Stock:

The Company is authorized to issue 29,500,000 shares of common stock with a par value of $0.001 per share. As of December 31, 2012 and 2013 and as of March 31, 2014 (unaudited), the Company had 6,268,834, 6,428,716 and 6,428,716 shares of common stock issued and outstanding.

The terms of the convertible promissory notes issued in 2010 included a mandatory conversion of all outstanding shares of preferred stock into shares of common stock at a conversion ratio of 1-for-1 for all holders of preferred stock who did not participate in this financing for their full pro-rata share of the funds raised in this transaction. This was implemented pursuant to an exchange agreement and stockholder vote of more than 2/3 of the then-outstanding shares of preferred stock. As a result of non-participation of certain stockholders in this financing in 2010, the Company issued 4,366,170 shares of common stock, resulting in a decrease in convertible preferred stock of $14,549,397, an increase in common stock of $4,365, and an increase in additional paid-in capital of $14,545,032.

Each share of common stock is entitled to one vote. The holders of common stock are also entitled to receive dividends whenever funds are legally available and when and if declared by the Board of Directors, subject to the prior rights of all classes of stock outstanding. The holders of common stock, voting as a separate class, are entitled to elect one member of the Board of Directors.

Convertible Preferred Stock:

The Company is authorized to issue 21,702,428 shares of convertible preferred stock as follows at December 31, 2012 and 2013 and March 31, 2014 (unaudited):

Series	Par Value	Shares Authorized	Shares Outstanding
A	$ 0.001	459,375	375,000
B	0.001	3,743,053	1,429,779
C	0.001	17,500,000	8,580,616
		21,702,428	10,385,395

In 2001, the Company issued 459,375 shares of Series A convertible stock in exchange for cash proceeds of $1,750,000 and conversion of convertible notes of $87,500. In 2004, the Company issued 2,504,363 shares of Series B convertible stock in exchange for cash proceeds of $8,692,971 and conversion of convertible notes and accrued interest of $3,327,971. In 2006, the Company issued 1,093,638 shares of Series B convertible stock in exchange for cash proceeds of $5,249,463. In 2008, the Company issued 10,694,189 shares of Series C convertible stock in exchange for cash proceeds of $15,964,835 and conversion of convertible notes and accrued interest of $3,284,705.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

The holders of Series A, Series B and Series C, have the rights, preferences, privileges and restrictions as follows:

Voting:

The holders of each share of Series A, Series B and Series C are entitled to voting rights equal to the number of shares of common stock into which each share of preferred stock could be converted. So long as at least 1,000,000 shares are outstanding, the holders of Series A, Series B and Series C, voting together as a single class, are entitled to elect three members of the Board of Directors. The holders of common stock, voting as a separate class, are entitled to elect one member of the Board of Directors. The holders of Series A, Series B, Series C and common stock, voting together as a single class on an as converted basis, are entitled to elect the remaining members of the Board of Directors.

Certain actions require the vote or written consent of at least two-thirds of the holders of preferred stock, including, but not limited to, the following: any amendment, alteration or appeal of the Certificate of Incorporation or the Bylaws of the Company that alters or changes the rights or restrictions of the preferred stock; any increase or decrease in the authorized number of shares of preferred stock; any distributions with respect to common stock or preferred stock; any agreement by the Company or its stockholders regarding asset transfer or acquisition; creation of any new class or series of shares having rights, preferences or privileges and voting rights for the Board of Directors, which are better than existing preferred stock.

Dividends:

The holders of Series A, Series B and Series C are entitled to receive non-cumulative dividends as adjusted for stock splits, dividends, reclassifications or the like, prior and in preference to any declaration or payment of any dividends to the holders of common stock, when and if declared by the Board of Directors, at a rate of $0.32, $0.384, and $0.144, respectively, per share, as adjusted, per annum. No dividends have been declared or paid as of and 2012.

Conversion:

Each share of Series A, Series B and Series C is convertible to common stock, at the option of the holder, at any time after the date of issuance. Each share of Series A, Series B and Series C converts into that number of shares of common stock determined in accordance with the conversion ratio (i) immediately prior to the closing of a public offering of common stock provided that the offering price per share is not less than $6.30 (adjusted for recapitalizations) and gross proceeds to the Company are not less than $30,000,000 or (ii) upon the written request by the Company from the holders of two thirds of the preferred stock outstanding. The initial conversion price is equal to the original issuance price of Series A, Series B and Series C, as adjusted. At December 31, 2012 and 2013 and March 31, 2014 (unaudited), the conversion price is $4.00, $4.80 and $1.80 per share, for Series A, Series B and Series C, respectively.

Liquidation:

In the event of any liquidation, dissolution, or winding up of the Company, either voluntary or involuntary, the holders of Series A, Series B and Series C are entitled to receive, prior to and in preference to holders of common stock, an amount per share equal to $4.00, $4.80 and $1.80, respectively, as adjusted for stock splits, stock dividends, reclassifications or the like. If, upon occurrence of such an event, the assets and

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

funds distributed among the holders of Series A, Series B and Series C are insufficient to permit the above payment to such holders, then the entire assets and funds of the Company legally available for distribution will be distributed ratably among the holders of Series A, Series B and Series C in proportion to the preferential amount each such holder is otherwise entitled to receive.

Following the above payments, the remaining assets and surplus funds of the Company, if any, will be distributed ratably among the holders of Series A, Series B, Series C and common stock based on the number of shares of common stock held on an as-if converted basis.

Redemption:

The holders of Series A, Series B and Series C are entitled to require the Company to redeem their shares, at any time after March 20, 2012, upon the approval of at least two thirds of the holders of shares of Series A, Series B and Series C then outstanding, voting together as a single class. The redemption will be effected in two annual payments beginning no later than 45 days after the Company receives the redemption notice. The redemption price is equal to $4.00, $4.80 and $1.80 per share for Series A, Series B and Series C, respectively, as adjusted, plus all declared or accrued but unpaid dividends. As of December 31, 2013 and as of March 31, 2014 (unaudited), the total redemption price for Series A, Series B and Series C shares outstanding was $23,808,048.

9. Stock Option Compensation

Stock Option Plan

The Company has adopted the 1999 Incentive Stock Plan, the 2010 Equity Incentive Plan, and the 2014 Equity Incentive Plan (together, the Plans). The 1999 Incentive Stock Plan expired in 2009, and the 2010 Equity Incentive Plan has been closed to new issuances. Therefore, the Company may issue options to purchase shares of common stock to employees, directors, and consultants only under the 2014 Equity Incentive Plan. Options granted under the 2010 Plan and 2014 Plan may be incentive stock options (“ISOs”) or nonqualified stock options (“NSOs”). ISOs may be granted only to Company employees and directors. NSOs may be granted to employees, directors, advisors, and consultants. The Board of Directors has the authority to determine to whom options will be granted, the number of options, the term, and the exercise price.

Options are to be granted at an exercise price not less than fair value for an ISO or 85% of fair value for an NSO. For individuals holding more than 10% of the voting rights of all classes of stock, the exercise price of an option will not be less than 110% of fair value. Fair value is determined by the Board of Directors. The vesting period is normally monthly over a period of four years from the vesting date. The term of an option is no longer than five years for ISOs for which the grantee owns greater than 10% of the voting power of all classes of stock and no longer than ten years for all other options.

The Company recognized stock-based compensation expense related to options granted to employees for the years ended December 31, 2012 and 2013, and for the period from August 25, 1999 (inception) through December 31, 2013 and through March 31, 2014 (unaudited) of $24,415, $14,431, $479,606 and $491,098, respectively. The compensation expense is allocated on a departmental basis, based on the classification of the option holder. No income tax benefits have been recognized in the statements of operations for stock-based compensation arrangements as of December 31, 2013 and March 31, 2014 (unaudited).

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

The Company did not grant any stock options in 2012 or 2013. The Company granted 152,200 options to purchase common stock in February 2014. The fair value of each award granted was estimated on the date of grant using the Black-Scholes option pricing model with the following assumptions for the period from August 25, 1999 (inception) through March 31, 2014 (unaudited):

	Three Months Ended March 31, 2014	August 25, 1999 (inception) through March 31, 2014
Expected life (years)	6.08	6.02 - 6.25
Risk-free interest rate	1.80%	1.9% - 4.9%
Volatility	80%	75% - 80%
Dividend rate	0%	0%

The most recent independent third-party valuation of the Company's common stock found $0.63 to be the fair market value as of December 31, 2013 and $0.76 per share to be the fair market value as of March 31, 2014 (unaudited).

Expected volatility is based on volatilities of public companies operating in the Company's industry. The expected life of stock options represents the average of the contractual term of the options and the weighted-average vesting period, as permitted under the simplified method. The Company has elected to use the simplified method, as the Company does not have enough historical exercise experience to provide a reasonable basis upon which to estimate the expected term and the stock option grants are considered "plain vanilla" options. The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

The following table summarizes stock option transactions from August 25, 1999 (inception) through March 31, 2014 (unaudited) as issued under the Plans:

		Options Outstanding	
	Options Available	Number of Shares	Average Exercise Price
Balances, August 25, 1999 (inception)	—	—	$ —
Authorized	4,755,324	—	—
Granted	(4,868,192)	4,868,192	0.37
Exercised	—	(341,153)	0.43
Cancelled	1,458,678	(1,458,678)	0.53
Balances, December 31, 2010	1,345,810	3,068,361	0.29
Granted	(115,000)	115,000	0.15
Cancelled	100,000	(100,000)	0.22
Balances, December 31, 2011	1,330,810	3,083,361	0.29
Exercised	—	(40,791)	0.68
Cancelled	85,520	(85,520)	0.31
Balances, December 31, 2012	1,416,330	2,957,050	$ 0.28
Cancelled	81,563	(81,563)	0.15
Balances, December 31, 2013	1,497,893	2,875,487	$ 0.28
Granted (unaudited)	(152,200)	152,200	0.63
Exercised (unaudited)	—	—	—
Cancelled (unaudited)	188,437	(188,437)	0.33
Balances, March 31, 2014 (unaudited)	1,534,130	2,839,250	$ 0.28

At December 31, 2012 and 2013 and as March 31, 2014 (unaudited), there were 2,647,996, 2,787,625 and 2,634,110 shares, respectively, vested with a weighted-average exercise price of $0.30, $0.29 and $0.28 per share, respectively, and a weighted average contractual life of 5.94, 4.86 and 5.07 years, respectively.

Future stock-based compensation for unvested employee options granted and outstanding as of December 31, 2012 and 2013 and as March 31, 2014 (unaudited) is $26,082, $8,287 and $43,543, respectively, to be recognized over a remaining requisite service period of 1.39, 0.42 and 0.46 years, respectively.

The fair value of an equity award granted to a non-employee generally is determined in the same manner as an equity award granted to an employee. In most cases, the fair value of the equity securities granted is more reliably determinable than the fair value of the goods or services received. Stock-based compensation related to its grant of options to non-employees has not been material to date.

In 2009, the Company granted options to non-employees to purchase 51,875 shares of common stock at $0.29 per share. These options were not granted under either of the stock option plans. As such, they are not included in the above option table. The options vest ratably over 48 months and expire in March 2019. In 2009, the Company determined the value of these options to be $10,567 using the Black-Scholes option pricing model, assuming a contractual life of 6.25 years, risk free rate from 2.02%, volatility of 80%, and no dividends during the expected life. The Company recognized $2,642 of stock-based compensation in 2012, and no stock-based compensation expense in 2013 or the first three months of 2014 (unaudited). At December 31, 2013, all of the 51,875 shares were vested.

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

Restricted Stock

In 2010, the Company granted 319,810 shares of restricted common stock to BDDI subject to an asset purchase agreement for intellectual property. Per the terms of the agreement, 50% of the shares were vested as of the effective date and the remaining 50% were to be released from the Company's repurchase option upon 510(k) clearance of CoSense. In late 2012, upon receiving 510(k) clearance for CoSense, this right of repurchase covering the remaining 50% of the shares lapsed, and in early 2013 we recorded the expense associated with this lapsing of the right of repurchase. Upon the issuance of 159,905 shares of common stock in 2010, the Company recognized $15,991 of compensation expense based on the fair value of common stock of $0.10 per share. Upon the issuance of 159,905 shares of common stock in 2013, the Company recognized compensation expense of $23,986 based on the fair value of common stock of $0.15 per share. The fair value of the common stock underlying stock-based awards was determined on each grant date by the Board of Directors, with input from management.

10. GSK License Agreement

In 2013, the Company entered into a license agreement with GSK in which GSK was to develop and commercialize the Company's product, Serenz, on a world-wide basis. In the first three months of 2013 (unaudited), the Company recognized license revenue of $3,000,000 due to a non-refundable payment upon execution of the agreement. In June 2014, the GSK agreement terminated and the licensed rights to Serenz were returned to the Company. Accordingly, the Company does not expect additional revenue to result from this agreement. Because the upfront payment was non-refundable, the Company is not obligated to return any of the funds as a result of the termination of the agreement. The Company does not have any continuing obligations under the GSK agreement.

11. Income Taxes

Due to net losses in each year, the Company had no material current, deferred, or total income tax expense in the years December 31, 2012 and 2013 and during the three months ended March 31, 2013 and 2014 (unaudited). A reconciliation of income tax expense with amounts determined by applying the statutory U.S. federal income tax rate to income before income taxes is as follows:

	Years Ended December 31,	
	2012	2013
Tax on the loss before income tax expense computed at the federal statutory rate of 34%	$(2,203,569)	$(1,260,190)
Tax on the loss before income tax expense computed at the state statutory rate of 8.84%	(321,703)	43,265
Change in Valuation Allowance	2,003,285	770,237
Change in research and development credits	(71,856)	(71,856)
Other	594,643	519,344
Income tax expenses	$ 800	$ 800
Effective income tax rate	0%	0%

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of the Company's deferred tax assets and liabilities are as follows for the years ended December 31, 2012 and 2013:

	Years Ended December 31,	
	2012	2013
Current Deferred Tax Assets:		
Accruals	$ 55,822	$ 36,571
Non-Current Deferred Tax Assets:		
Net Operating Loss Carryforwards	19,440,979	20,124,059
Research and development credits	1,675,423	1,792,798
Intangible Assets	57,323	48,733
Fixed Assets	1,741	(636)
Total Non-Current Deferred Tax Assets	21,175,466	21,964,954
Total Deferred Tax Assets	21,231,288	22,001,525
Valuation Allowance	(21,231,288)	(22,001,525)
Net Deferred Tax Assets	$ —	$ —

The Company recorded an increase in the valuation allowance of $2,003,285, and $779,869, to fully reserve the net deferred tax assets in the years ended December 31, 2012 and 2013, respectively.

The Company has federal and state net operating loss carry-forwards for income tax purposes at December 31, 2012 of $48,898,325 and $48,257,731, respectively. The Company has federal and state net operating loss carry-forwards for income tax purposes at December 31, 2013 of $51,155,500 and $46,811,824, respectively, both of which expire beginning in 2019. At December 31, 2012 the Company had federal and state research and development tax credits totaling $1,152,002 and $793,062, respectively. Additionally, at December 31, 2013, the Company had federal and state research and development tax credits totaling $1,223,857 and $862,032, respectively. The federal tax credits may be carried forward until 2024. The state tax credits may be carried forward indefinitely.

Section 382 of the Internal Revenue Code limits the use of net operating loss and income tax credit carry-forwards in certain situations where changes occur in the stock ownership of a company. If the Company should have an ownership change of more than 50% of the value of the Company's capital stock, utilization of the carryforwards could be restricted. The Company is currently assessing the impact of Section 382 on the future utilization of these carryforwards and believes that a significant amount of the carryforwards may be subject to the restrictions. The Company has established a full valuation allowance against its deferred tax assets.

The Company files income tax returns in the U.S. federal jurisdiction and certain state jurisdictions. In the normal course of business, the Company is subject to examination by federal, state and local jurisdictions, where applicable. In the U.S. federal jurisdiction, tax years 1999 forward remain open to examination, and in the state tax jurisdiction, years 2004 forward remain open to examination.

As a result of the expiration of the Company's net operating loss carry-forwards, the Company has adopted the provisions set forth in FASB ASC Topic 740, to account for uncertainty in income taxes. In the preparation of income tax returns in federal and state jurisdictions, the Company asserts certain tax positions

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

based on its understanding and interpretation of the income tax law. The taxing authorities may challenge such positions, and the resolution of such matters could result in recognition of income tax expense in the Company's financial statements. Management believes it has used reasonable judgments and conclusions in the preparation of its income tax returns.

The Company uses the "more likely than not" criterion for recognizing the tax benefit of uncertain tax positions and to establish measurement criteria for income tax benefits. The Company has determined it has no material unrecognized assets or liabilities related to uncertain tax positions as of December 31, 2012 and 2013. The Company does not anticipate any significant changes in such uncertainties and judgments during the next 12 months. In the event the Company should need to recognize interest and penalties related to unrecognized tax liabilities, this amount will be recorded as a component of other expense.

12. Defined Contribution Plan

The Company sponsors a 401(k) Plan, which stipulates that eligible employees can elect to contribute to the 401(k) Plan, subject to certain limitations of eligible compensation. The Company may match employee contributions in amounts to be determined at the Company's sole discretion. To date, the Company has not made any matching contributions.

13. Net income (loss) per share

Basic net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common stock actually outstanding during the period. Diluted net income (loss) per share is computed by dividing net income (loss) by the weighted-average number of common stock outstanding and dilutive potential common stock that would be issued upon the conversion of preferred stock. For the years ended December 31, 2012 and 2013, and for the three months ended March 31, 2014 (unaudited), the effect of issuing the potential common stock is anti-dilutive due to the net losses in those period and the number of shares used to compute basic and diluted earnings per share are the same for each of those periods.

The following is a reconciliation of the number of shares used in the calculation of basic earnings per share and diluted earnings per share in the years ended December 31, 2012 and 2013 and during the three months ended March 31, 2013 and 2014 (unaudited):

	December 31,		March 31,	
	2012	2013	2013	2014
			(unaudited)	
Net income (loss)	$(6,481,884)	$(3,707,243)	$ 1,014,010	$ (833,865)
Interest accrued on convertible notes	—	—	378,441	—
Net income (loss) as adjusted	$(6,481,884)	$(3,707,243)	$ 1,392,451	$ (833,865)
Weighted-average shares outstanding:				
Basic	6,244,230	6,428,278	6,426,939	6,428,716
Effect of dilutive common stock equivalents:				
Dilutive effect of conversion of convertible preferred stock	—	—	10,385,395	—
Dilutive effect of options to purchase common stock	—	—	386,202	—
Dilutive effect of stock issuable upon conversion of convertible notes	—	—	7,555,861	—
Dilutive effect of warrants to purchase convertible preferred stock	—	—	2,312,848	—
Shares used in computing diluted net income (loss) per common share	6,244,230	6,428,278	27,067,245	6,428,716
Basic net income (loss) per common share	$ (1.04)	$ (0.58)	$ 0.16	$ (0.13)
Diluted net income (loss) per common share	$ (1.04)	$ (0.58)	$ 0.05	$ (0.13)

CAPNIA, INC.

NOTES TO FINANCIAL STATEMENTS
(Continued)

The following are shares of common stock that would be issued if all options and warrants were exercised. These potential shares of common stock have not been included in the calculation of fully diluted shares outstanding, because the effect of including them would be anti-dilutive.

	December 31,		March 31,	
	2012	2013	2013	2014
			(unaudited)	
Convertible preferred stock	10,385,395	10,385,395	—	10,385,395
Options to purchase common stock	2,957,050	2,927,362	2,000,020	2,989,250
Warrants to purchase convertible preferred stock	111,111	111,111	111,111	111,111
	13,453,556	13,423,868	2,111,131	13,485,756

14. Subsequent Events (unaudited)

The Company evaluated subsequent events through June 7, 2014, the date of the issuance of these financial statements.

In April 2014, the Company received cash proceeds of $1,750,000 in exchange for convertible promissory notes issued to existing investors and warrants to purchase convertible preferred stock. The notes bear interest at the rate of 2% per annum. The convertible notes principal amount plus any accrued interest on the convertible notes is due on September 30, 2015 or upon an occurrence of demand by two-thirds of the holders of the total principal amounts of convertible promissory notes outstanding. The convertible notes participate pari passu with the 2010 and 2012 convertible promissory notes (see Note 5) upon repayment of the outstanding convertible promissory notes. In conjunction with the April 2014 issuance of convertible promissory notes, the Company amended the 2010 and 2012 convertible notes to provide for the extension of the maturity date to September 30, 2015.

Also in April 2014, GSK gave notice of their intention to terminate the license agreement with the Company, which became effective in June 2014, following which the licensed rights to Serenz were returned to the Company.

Subsequent to May 7, 2014, the Company signed a sublease for an office in Redwood City, California. The agreement is for one year commencing June 1, 2014, with an option to renew to June 2018. The company prepaid rent for the last four months of the initial lease term. Minimum payments under the agreement are $199,089 in calendar 2014 and $18,099 in calendar 2015.

Units, Each Consisting Of
One Share of Common Stock and a
Warrant to Purchase One Share of Common Stock

Sole Book-Running Manager
Maxim Group LLC

Co-Manager
Cantor Fitzgerald & Co.

The date of this prospectus is , 2014.

PART II

INFORMATION NOT REQUIRED IN THE PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all expenses to be paid by the Registrant, other than underwriting discounts and commissions, upon completion of this offering. All amounts shown are estimates except for the SEC registration fee and the FINRA filing fee.

	Amount To Be Paid
SEC registration fee	$ 2,962.40
FINRA filing fee	3,950
Exchange listing fee	*
Printing and engraving	*
Legal fees and expenses	*
Accounting fees and expenses	*
Blue sky fees and expenses (including legal fees)	*
Transfer agent and registrar fees	*
Miscellaneous	*
Total	$

* To be filed by amendment.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

Section 145 of the General Corporation Law of the State of Delaware, or DGCL, provides for the indemnification of officers, directors, and other corporate agents in terms sufficiently broad to indemnify such persons under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933. Article of the Registrant's Restated Certificate of Incorporation (Exhibit 3.1(b) hereto), and Article of the Registrant's Amended and Restated Bylaws (Exhibit 3.2(b) hereto), provide for indemnification of the Registrant's directors, officers, employees and other agents to the extent and under the circumstances permitted by the DGCL. The Registrant has also entered into agreements with its directors and officers that will require the Registrant, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors or officers to the fullest extent not prohibited by law.

The Underwriting Agreement (Exhibit 1.1 hereto) provides for indemnification by the Underwriters of us and our directors and officers for certain liabilities, including liabilities arising under the Securities Act of 1933, or Securities Act, and affords certain rights of contribution with respect thereto.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES.

Since January 1, 2011, the Registrant has issued the following unregistered securities:

- On January 17, 2012, January 20, 2012, July 31, 2012 and August 6, 2012, the Registrant: (i) issued and sold convertible promissory notes in the aggregate principal amount of $4,999,152.80 to 18 of its existing stockholders or their affiliates; and (ii) issued and sold warrants to purchase shares of capital stock of the Registrant to such existing stockholders or their affiliates.

- On April 28, 2014, the Registrant also: (i) issued and sold convertible promissory notes in the aggregate principal amount of $ $1,749,429.14 to 18 of its existing stockholders or their affiliates; and (ii) issued and sold warrants to purchase shares of capital stock of the Registrant to such existing stockholders or their affiliates.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions or any public offering. The Registrant believes that these transactions were exempt from the registration requirements of the Securities Act under Section 4(2) of the Securities Act as transactions by an issuer not involving any public offering. The recipients of securities in each of these transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and instruments issued in such transactions. All recipients had adequate access, through their relationships with us, to information about us.

- From January 1, 2011 to December 31, 2013, the Registrant granted to its officers, directors, employees, consultants and other service providers options to purchase an aggregate of 115,000 shares of common stock under its 2010 Equity Incentive Plan, each at an exercise price of $0.15 per share.

None of the foregoing transactions involved any underwriters, underwriting discounts or commissions or any public offering. The Registrant believes that these transactions were exempt from the registration requirements of the Securities Act under Rule 701 promulgated under the Securities Act as offers and sales of securities pursuant to certain compensatory benefit plans and contracts relating to compensation in compliance with Rule 701. The recipients of securities in these transactions represented their intention to acquire the securities for investment only and not with a view to or for sale in connection with any distribution thereof and appropriate legends were affixed to the stock certificates and instruments issued in such transactions. All recipients had adequate access, through their relationships with us, to information about us.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) Exhibits.

We have filed the exhibits listed on the accompanying Exhibit Index of this Registration Statement, which is incorporated by reference herein.

(b) Financial Statement Schedules.

All financial statement schedules are omitted because the information called for is not required or is shown either in the consolidated financial statements or in the notes thereto.

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the “Calculation of Registration Fee” table in the effective registration statement.

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) If the Registrant is relying on Rule 430B (§230.430B of this chapter):

(A) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(B) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date; or

(ii) If the Registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. Provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.

(5) That, for the purpose of determining liability of the Registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned Registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this

registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

(i) Any preliminary prospectus or prospectus of the undersigned Registrant relating to the offering required to be filed pursuant to Rule 424;

(ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned Registrant or used or referred to by the undersigned Registrant;

(iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned Registrant or its securities provided by or on behalf of the undersigned registrant; and

(iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.

The undersigned Registrant hereby undertakes to provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized in the City of Redwood City, State of California, on this 10th day of June, 2014.

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL MEN BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Anish Bhatnagar and Antoun Nabhan, and each of them, his or her true and lawful attorney-in-fact and agent, each with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments, including post-effective amendments, to this Registration Statement, and any registration statement relating to the offering covered by this Registration Statement and filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that each of said attorneys-in-fact and agents or their substitute or substitutes may lawfully so or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed below by the following persons in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Anish Bhatnagar Anish Bhatnagar	President, Chief Executive Officer and Director (Principal Executive Officer)	June 10, 2014
/s/ Antoun Nabhan Antoun Nabhan	Vice President of Corporate Development (Principal Financing and Accounting Officer)	June 10, 2014
/s/ Ernest Mario Ernest Mario	Chairman	June 10, 2014
/s/ Edgar G. Engleman Edgar G. Engleman	Director	June 10, 2014
/s/ Steinar J. Engelsen Steinar J. Engelsen	Director	June 10, 2014
/s/ Stephen Kirnon Stephen Kirnon	Director	June 10, 2014
/s/ William James Alexander William James Alexander	Director	June 10, 2014
/s/ William G. Harris William G. Harris	Director	June 10, 2014

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EXHIBIT INDEX

Exhibit Number	Description of Exhibit
1.1*	Form of Underwriting Agreement.
3.1*	Amended and Restated Certificate of Incorporation of the Registrant, as amended and currently in effect.
3.2*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect upon completion of the offering.
3.3*	Bylaws of the Registrant, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the Registrant, to be in effect upon completion of the offering.
4.1*	Form of the Registrant's common stock certificate.
4.2*	Amended And Restated Investors' Rights Agreement, dated March 20, 2008, by and among the Registrant and certain holders of the Registrant's capital stock named therein.
4.3*	Form of Warrant Agreement.
4.4*	Form of Warrant associated with item 4.3.
4.5*	Form of Underwriter Compensation Warrant.
4.6	Form of Convertible Promissory Note issued in February 2010 and March 2010 in connection with the Registrant's 2010 convertible note financing.
4.7	Form of Warrant to Purchase Shares issued in February 2010 and March 2010 in connection with the Registrant's 2010 convertible note financing.
4.8	Form of Convertible Promissory Note issued in November 2010 in connection with the Registrant's 2010 convertible note financing.
4.9	Form of Warrant to Purchase Shares issued in November 2010 in connection with the Registrant's 2010 convertible note financing.
4.10	Form of Convertible Promissory Note issued in January 2012 in connection with the Registrant's 2012 convertible note financing.
4.11	Form of Warrant to Purchase Shares issued in January 2012 in connection with the Registrant's 2012 convertible note financing.
4.12	Form of Convertible Promissory Note issued in July 2012 and August 2012 in connection with the Registrant's 2012 convertible note financing.
4.13	Form of Warrant to Purchase Shares issued in July 2012 and August 2012 in connection with the Registrant's 2012 convertible note financing.
4.14	Form of Convertible Promissory Note issued in April 2014 in connection with the Registrant's 2014 convertible note financing.
4.15	Form of Warrant to Purchase Shares issued in April 2014 in connection with the Registrant's 2014 convertible note financing.
5.1*	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation.
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and executive officers.
10.2	1999 Incentive Stock Plan and forms of agreements thereunder.
10.3	2010 Equity Incentive Plan and forms of agreements thereunder.
10.4*	2014 Equity Incentive Plan and forms of agreements thereunder.
10.5*	2014 Employee Stock Purchase Plan and forms of agreements thereunder.
10.6	Offer Letter, dated June 22, 2007, by and between the Registrant and Ernest Mario, Ph.D.
10.7	Employment Agreement, dated April 6, 2010, by and between the Registrant and Anish Bhatnagar.
10.8	Offer Letter, dated May 29, 2013, between the Registrant and Anthony Wondka.
10.9	Offer Letter, dated April 17, 2014, by and between the Registrant and Antoun Nabhan.
10.10	Asset Purchase Agreement dated May 11, 2010, by and between the Registrant and BioMedical Drug Development Inc.
10.11	Convertible Note and Warrant Purchase Agreement, dated February 10, 2010, by and among the Registrant and the investors named therein.

Exhibit Number	Description of Exhibit
10.12	Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated November 10, 2010, by and among the Registrant and the investors named therein.
10.13	Amendment No. 2 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated January 17, 2012, by and among the Registrant and the investors named therein.
10.14	Convertible Note and Warrant Purchase Agreement, dated January 16, 2012, by and among the Registrant and the investors named therein.
10.15	Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated July 31, 2012, by and among the Registrant and the investors named therein.
10.16	Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares, dated April 28, 2014, by and among the Registrant and the investors named therein.
10.17	Convertible Note and Warrant Purchase Agreement, dated April 28, 2014, by and among the Registrant and the investors named therein.
10.18	Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated May 5, 2014, by and among the Registrant and the investors named therein.
23.1*	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1).
23.2	Consent of Marcum LLP
24.1	Power of Attorney (included in the signature page of this Registration Statement).
99.1	Consent of Charles River Associates

* To be filed by amendment. All other exhibits are filed herewith.

Exhibit 4.6

THIS NOTE AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

CAPNIA, INC.

CONVERTIBLE PROMISSORY NOTE

Palo Alto, California

$,

FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two times the unpaid principal, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of (i) upon demand made after February 10, 2011 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"), or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Purchase Agreement.

THE OBLIGATIONS DUE UNDER THIS NOTE ARE SECURED BY A SECURITY AGREEMENT (THE "SECURITY AGREEMENT") DATED AS OF THE DATE HEREOF AND EXECUTED BY THE COMPANY FOR THE BENEFIT OF HOLDER. ADDITIONAL RIGHTS OF HOLDER ARE SET FORTH IN THE SECURITY AGREEMENT.

The following is a statement of the rights of the Holder of this Note and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. *Certain Definitions*.

(a) "Change of Control" means, unless otherwise determined in writing by the holders of at least two-thirds of the Company's Preferred Stock then outstanding, (X) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any merger, consolidation or other form of reorganization) in which outstanding shares of the Company are exchanged for or converted into securities or other consideration issued, or caused to be issued, by the acquiring entity or its affiliate, unless the Company's stockholders of record as constituted immediately prior to such transaction or series of related transactions will, immediately after such transaction or series of related transactions, hold at least a majority of the voting power of the surviving or acquiring entity on account of shares held by them prior to such transaction or series of related transactions, or (Y) a sale, lease or other disposition of all or substantially all of the assets of the Company.

(b) "Event of Default" has the meaning given in Section 4 of this Note.

(c) "Next Financing" is a transaction or series of related transactions after the date of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for aggregate gross proceeds of at least $1,500,000 (excluding any amounts received upon conversion or cancellation of the Notes).

(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing.

(e) "Note Conversion Price" means a price per share equal to 75% of the price per share paid by the other purchasers of the Next Financing Securities sold in the Next Financing.

(f) "Non-Qualified Financing" is a transaction or series of related transactions after the date of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for cash, conversion or cancellation of indebtedness, or any combination thereof, and which (i) does not constitute a Next Financing, or (ii) constitutes a Next Financing but occurs after the Maturity Date.

(g) "Purchase Agreement" has the meaning given in the preamble to this Note.

2. *Prepayment*. The Company may not prepay this Note in whole or in part, without the written consent of the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement; provided, however, that any such prepayment will be applied first to the payment of expenses due under the Notes, second to interest accrued on the Notes and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of the Notes, all on a pro-rata basis.

3. *Conversion*.

(a) *Automatic Conversion upon a Next Financing prior to Maturity Date*. If a Next Financing occurs on or prior to the Maturity Date, then the outstanding principal amount of this

Note and all accrued and unpaid interest under this Note shall automatically convert into fully paid and nonassessable shares of Next Financing Securities at the Note Conversion Price, with any fractional shares rounded down. Upon the automatic conversion of this Note, the Company shall give written notice to the Holder, notifying the Holder of such conversion and specifying the Note Conversion Price, the principal amount of the Note converted and the date on which such conversion occurred and calling upon such Holder to surrender the Note to the Company. Upon such conversion, the Holder shall surrender this Note at the Company's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Company shall, as soon as practicable thereafter, issue and deliver to Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of closing of the Next Financing, and on and after such date the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(b) *Voluntary Conversion*. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.80 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations), or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing. Before Holder shall be entitled to convert this Note under this Section 3(b), the Holder shall surrender this Note, duly endorsed, at the Company's principal executive office and shall give written notice to the Company of the election to convert the same pursuant to this Section, and shall state therein the amount of the unpaid principal amount of this Note to be converted and the name or names in which the certificate or certificates for shares are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver at Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon conversion (bearing such legends as are required by the Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company), together with a replacement Note (if any principal amount is not converted) and any other securities and property to which Holder is entitled upon such conversion under the terms of this Note, including a check payable to Holder for any cash amounts payable as described in Section 3(c). The conversion shall be deemed to have been made immediately prior to the close of business on the date of the surrender of this Note, and the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(c) *Fractional Shares; Nonassessable; Effect of Conversion*. No fractional shares shall be issued upon conversion of this Note, and in lieu of the Company issuing any fractional shares to the Holder upon the conversion of this Note, the Company shall pay to the Holder an

amount equal to the product obtained by multiplying the Note Conversion Price by the fraction of a share not issued pursuant to this sentence. The Company covenants that the shares of Next Financing Securities issuable upon the conversion of this Note will, upon conversion of this Note, be validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof. Upon conversion of this Note in full and the payment of the amounts specified in this Section 3(c), the Company shall be forever released from all its obligations and liabilities under this Note.

(d) *Further Assurances*. In connection with the conversion of this Note, the Holder, by acceptance of this Note, agrees to execute all agreements and other documents executed by the investors in the Next Financing.

4. *Events of Default*. The occurrence of any of the following shall constitute an "Event of Default" under this Note:

(a) *Failure to Pay*. The Company shall fail to pay (i) when due any principal payment on the due date hereunder or (ii) any interest or other payment required under the terms of this Note on the date due and such payment shall not have been made within five (5) days of the Company's receipt of the Holder's written notice to the Company of such failure to pay; or

(b) *Voluntary Bankruptcy or Insolvency Proceedings*. The Company shall (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property, (ii) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it, (iii) make an assignment for the benefit of creditors, or (iv) take any action for the purpose of effecting any of the foregoing; or

(c) *Involuntary Bankruptcy or Insolvency Proceedings*. Proceedings for the appointment of a receiver, trustee, liquidator or custodian of the Company or of all or a substantial part of the Company's property, or an involuntary case or other proceedings seeking liquidation, reorganization or other relief with respect to the Company or the Company's debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within thirty (30) days of commencement; or

(d) *Breach of Representations and Warranties*. Any material breach by the Company of any of the representations or warranties contained in Section 3 of the Purchase Agreement; or

(e) *Failure to Pay Obligations*. The Company generally fails to pay its obligations as and when due or if any judgment is secured against the Company, which judgment is not satisfied within ten (10) days.

Upon the occurrence or existence of any Event of Default described in Section 4(a), (d) and (e) and at any time thereafter during the continuance of such Event of Default, the Holder may, with the consent of the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement, by written notice to Company, declare this Note immediately due and payable without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 4(b) and (c), immediately and without notice, this Note shall automatically become immediately due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, the Holder may exercise any other right, power or remedy permitted to it by law.

5. *Miscellaneous*.

(a) *Loss, Theft, Destruction or Mutilation of Note*. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note and, in the case of loss, theft or destruction, delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Note, the Company shall execute and deliver, in lieu of this Note, a new Note executed in the same manner as this Note, in the same principal amount as the unpaid principal amount of this Note and dated the date to which interest shall have been paid on this Note or, if no interest shall have yet been so paid, dated the date of this Note.

(b) *Payment*. All payments under this Note shall be made in lawful tender of the United States.

(c) *Waivers*. The Company hereby waives notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor and all other notices or demands relative to this instrument.

(d) *Usury*. In the event any interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the principal of this Note.

(e) *Waiver and Amendment*. Any provision of this Note may be amended, waived or modified upon the written consent of the Company and the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement.

(f) *Notices*. Any notice, request or other communication required or permitted hereunder shall be given in accordance with the Purchase Agreement.

(g) *Expenses; Attorneys' Fees*. If action is instituted to collect this Note, the Company promises to pay all reasonable costs and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred in connection with such action.

(h) *Successors and Assigns*. This Note may be assigned or transferred by the Company only with the prior written approval of the Holder. Subject to the preceding sentence, the rights and obligations of the Company and the Holder of this Note shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(i) *Governing Law*. THIS NOTE SHALL BE GOVERNED IN ALL RESPECTS BY THE LAWS OF THE STATE OF CALIFORNIA AS SUCH LAWS ARE APPLIED TO AGREEMENTS BETWEEN CALIFORNIA RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN CALIFORNIA.

(signature page follows)

IN WITNESS WHEREOF, the Company has caused this Note to be executed by its duly authorized officer.

Capnia, Inc.

By: _____
Ernest Mario

Its: President and Chief Executive Officer

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

CAPNIA, INC.

WARRANT TO PURCHASE SHARES

Dated as of ,
Void after the date specified in Section 8

No. [ ]

THIS CERTIFIES THAT, for value received, , or its registered assigns (the "Holder"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Capnia, Inc., a Delaware corporation (the "Company"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010, by and among the Company and the purchasers described therein (the "Purchase Agreement"). This Warrant is one of the "Warrants" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Purchase Agreement and/or the form of convertible promissory note attached as Exhibit B to the Purchase Agreement (the "Note", and together with each other Note issued pursuant to the Purchase Agreement, the "Notes").

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) *Definition of Shares.* "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to February 10, 2011 (the "Note Maturity Date") and the Holder converts the Note issued to Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower.

(b) *Number of Shares.* Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by dividing (x) 25% of the principal amount of the Note delivered in connection with this Note pursuant to the Purchase Agreement by (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(c) *Exercise Price.* The exercise price per Share shall be equal to 75% of the price per share of the Next Securities issued in the Next Financing; provided, however, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.80 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

(d) *Exercise Period.* This Warrant shall be exercisable, in whole or in part, (A) after the earlier of (i) the closing date of a Next Financing or (ii) the Note Maturity Date, and (B) prior to (or in connection with) the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) *Exercise.* The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "Notice of Exercise"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to (x) the Exercise Price multiplied by (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) *Net Issue Exercise.* In lieu of exercising this Warrant pursuant to Section 2(a)(ii), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being canceled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where:

X	=	The number of Shares to be issued to the Holder
Y	=	The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)
A	=	The fair market value of one Share (at the date of such calculation)
B	=	The Exercise Price (as adjusted to the date of such calculation)

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith; *provided, however,* that:

(i) where a public market exists for the Company's common stock at the time of such exercise, the fair market value per Share shall be the product of (x) the average of the closing bid prices of the common stock or the closing price quoted on the national securities exchange on which the common stock is listed as published in the *Wall Street Journal*, as applicable, for the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable; and

(ii) if the Warrant is exercised in connection with the Company's initial public offering of common stock, the fair market value per Share shall be the product of (x) the per share offering price to the public of the Company's initial public offering and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) *Stock Certificates.* The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for that number of shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) *No Fractional Shares or Scrip.* No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

(e) *Conditional Exercise.* The Holder may exercise this Warrant conditioned upon (and effective immediately prior to) consummation of any transaction that would cause the expiration of this Warrant pursuant to Section 8 by so indicating in the notice of exercise.

(f) *Reservation of Stock.* The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of preferred stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of common stock for issuance on conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of preferred stock (and shares of common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use reasonable efforts to take such corporate action as may, in the opinion of counsel, be necessary to increase its authorized and unissued shares of its preferred stock (and shares of common stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes.

3. *Replacement of the Warrant.* Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) *Warrant Register.* The Company shall maintain a register (the "Warrant Register") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) *Warrant Agent.* The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) *Transferability of the Warrant.* Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "Securities Act") and limitations on assignments and transfers, including without limitation compliance with the restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached as Exhibit B (the "Assignment Form")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) *Exchange of the Warrant upon a Transfer.* On surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the

name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) *Taxes.* In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. *Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws.* By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) *Restrictions on Transfers.* This Warrant may not be transferred or assigned in whole or in part without the Company's prior written consent (which shall not be unreasonably withheld), and any attempt by Holder to transfer or assign any rights, duties or obligations that arise under this Warrant without such permission shall be void. Any transfer of this Warrant or the Shares or the shares of common stock issuable upon conversion of the Shares (the "Securities") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder, and

(i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement, or

(ii) (A) such Holder shall have given prior written notice to the Company of such Holder's intention to make such disposition and shall have furnished the Company with a detailed description of the manner and circumstances of the proposed disposition, (B) the transferee shall have confirmed to the satisfaction of the Company in writing that the Securities are being acquired (i) solely for the transferee's own account and not as a nominee for any other party, (ii) for investment and (iii) not with a view toward distribution or resale, and shall have confirmed such other matters related thereto as may be reasonably requested by the Company, and (C) if requested by the Company, such Holder shall have furnished the Company, at the Holder's expense, with evidence satisfactory to the Company that such disposition will not require registration of such Securities under the Securities Act, whereupon such Holder shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the Holder to the Company.

(b) *Securities Law Legend.* The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(c) *Market Stand-off Legend.* The Shares and common stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(d) *Instructions Regarding Transfer Restrictions.* The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(e) *Removal of Legend.* The legend referring to federal and state securities laws identified in Section 5(b) stamped on a certificate evidencing the Shares (and the common stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if (i) such securities are registered under the Securities Act, or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. *Adjustments.* Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) *Merger or Reorganization.* If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) *Reclassification of Shares.* If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) *Subdivisions and Combinations.* In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) *Redemption.* In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's certificate of incorporation, this Warrant shall thereafter be exercisable for a number of shares of the Company's

common stock equal to the number of shares of common stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the preferred stock received thereupon had been simultaneously converted into common stock.

(e) *Notice of Adjustments.* Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Exercise Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. *Notification of Certain Events.* Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 6, (ii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the holders of two-thirds of the Shares issuable upon exercise of the rights under the Warrants.

8. *Expiration of the Warrant.* This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on 10 year anniversary of Initial Closing under Purchase Agreement;

(b) A Change of Control, as defined in the Note; or

(c) Immediately prior to the closing of a Qualified IPO, as defined in the Company's Amended and Restated Certificate of Incorporation, as amended from time to time.

9. *No Rights as a Stockholder.* Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. *Market Stand-off.* The Holder hereby agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Shares and any shares issuable upon conversion of thereof.

11. Miscellaneous.

(a) *Amendments.* Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than two-thirds of the Shares issuable upon exercise of any and all outstanding Warrants, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 9(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of capital stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 9(a).

(b) *Waivers.* No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) *Notices*. All notices and other communications required or permitted under this Warrant shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed (a) if to an Investor, at such Investor's address, facsimile number or electronic mail address as shown in the Company's records, or as such Investor may designate by advance written notice to the Company in accordance with the provisions hereof or (b) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the President, or at such other address or facsimile number as the Company may designate by advance written notice to the Holder. All such notices and other communications shall be deemed given

upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address, of the last holder of this Warrant for which the Company has contact information in its records.

(d) *Governing Law.* This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) *Jurisdiction and Venue.* Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) *Titles and Subtitles.* The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) *Severability.* If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) *Waiver of Jury Trial.* **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this paragraph is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq.* before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This paragraph shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) *California Corporate Securities Law.* THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) *Rights and Obligations Survive Exercise of the Warrant.* Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(k) *Entire Agreement.* Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersede all prior agreements and understandings relating to the subject matter hereof.

(*signature page follows*)

The Company signs this Warrant as of the date stated on the first page.

CAPNIA, INC.

By: _____

Name: _____

Title: _____

Address:

2445 Faber Place
Suite 250
Palo Alto, CA 94303

EXHIBIT A

NOTICE OF EXERCISE

TO: **CAPNIA, INC. (the "*Company*")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached warrant pursuant to:

☐ A cash payment, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached warrant.

(3) **Conditional Exercise.** Is this a conditional exercise pursuant to Section 2(e):

☐ Yes ☐ No

If "Yes," indicate the applicable condition:

_____]

(4) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(5) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(6) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(7) **Investment Representation Statement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(8) **Market Standoff Agreement.** The undersigned acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the aforesaid shares and any shares issuable upon conversion thereof.

(9) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law §232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records), (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records), (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law §232.

_____

(Print name of the warrant holder)

_____

(Signature)

_____

(Name and title of signatory, if applicable)

_____

(Date)

_____

(Fax number)

_____

(Email address)

(*Signature page to the Notice of Exercise*)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: CAPNIA, INC.

WARRANT: THE WARRANT TO PURCHASE SHARES ISSUED ON , (THE "WARRANT")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("Assignor") assigns and transfers to the assignee named below ("Assignee") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint as attorney to make such transfer on the books of CAPNIA, INC., maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "Securities") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(4) **Investment Representation Statement.** Assignee has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(5) **Market Stand-Off Agreement.** Assignee acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Securities.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR	**ASSIGNEE**
(*Print name of Assignor*)	(*Print name of Assignee*)
(*Signature of Assignor*)	(*Signature of Assignee*)
(*Print name of signatory, if applicable*)	(*Print name of signatory, if applicable*)
(*Print title of signatory, if applicable*)	(*Print title of signatory, if applicable*)
Address:	Address:

EXHIBIT B

[Form of Convertible Promissory Note associated with November 2010 bridge financing extension and amendment to Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010]

THIS NOTE AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

CAPNIA, INC.

CONVERTIBLE PROMISSORY NOTE

Palo Alto, California

$,

FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two times the unpaid principal, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of (i) upon demand made after February 10, 2012 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"), or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Purchase Agreement.

THE OBLIGATIONS DUE UNDER THIS NOTE ARE SECURED BY A SECURITY AGREEMENT (THE "SECURITY AGREEMENT") DATED AS OF THE DATE HEREOF AND EXECUTED BY THE COMPANY FOR THE BENEFIT OF HOLDER. ADDITIONAL RIGHTS OF HOLDER ARE SET FORTH IN THE SECURITY AGREEMENT.

The following is a statement of the rights of the Holder of this Note and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. *Certain Definitions*.

(a) "Change of Control" means, unless otherwise determined in writing by the holders of at least two-thirds of the Company's Preferred Stock then outstanding, (X) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any merger, consolidation or other form of reorganization) in which outstanding shares of the Company are exchanged for or converted into securities or other consideration issued, or caused to be issued, by the acquiring entity or its affiliate, unless the Company's stockholders of record as constituted immediately prior to such transaction or series of related transactions will, immediately after such transaction or series of related transactions, hold at least a majority of the voting power of the surviving or acquiring entity on account of shares held by them prior to such transaction or series of related transactions, or (Y) a sale, lease or other disposition of all or substantially all of the assets of the Company.

(b) "Event of Default" has the meaning given in Section 4 of this Note.

(c) "Next Financing" is a transaction or series of related transactions after the date of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for aggregate gross proceeds of at least $1,500,000 (excluding any amounts received upon conversion or cancellation of the Notes).

(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing.

(e) "Note Conversion Price" means a price per share equal to 75% of the price per share paid by the other purchasers of the Next Financing Securities sold in the Next Financing.

(f) "Non-Qualified Financing" is a transaction or series of related transactions after the date of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for cash, conversion or cancellation of indebtedness, or any combination thereof, and which (i) does not constitute a Next Financing, or (ii) constitutes a Next Financing but occurs after the Maturity Date.

(g) "Purchase Agreement" has the meaning given in the preamble to this Note.

2. *Prepayment*. The Company may not prepay this Note in whole or in part, without the written consent of the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement; provided, however, that any such prepayment will be applied first to the payment of expenses due under the Notes, second to interest accrued on the Notes and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of the Notes, all on a pro-rata basis.

3. *Conversion*.

(a) *Automatic Conversion upon a Next Financing prior to Maturity Date*. If a Next Financing occurs on or prior to the Maturity Date, then the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall automatically convert into fully paid and nonassessable shares of Next Financing Securities at the Note Conversion Price, with any fractional shares rounded down. Upon the automatic conversion of this Note, the Company shall give written notice to the Holder, notifying the Holder of such conversion and specifying the Note Conversion Price, the principal amount of the Note converted and the date on which such conversion occurred and calling upon such Holder to surrender the Note to the Company. Upon such conversion, the Holder shall surrender this Note at the Company's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Company shall, as soon as practicable thereafter, issue and deliver to Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of closing of the Next Financing, and on and after such date the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(b) *Voluntary Conversion*. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.80 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations), or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing. Before Holder shall be entitled to convert this Note under this Section 3(b), the Holder shall surrender this Note, duly endorsed, at the Company's principal executive office and shall give written notice to the Company of the election to convert the same pursuant to this Section, and shall state therein the amount of the unpaid principal amount of this Note to be converted and the name or names in which the certificate or certificates for shares are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver at Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon conversion (bearing such legends as are required by the Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company), together with a replacement Note (if any principal amount is not converted) and any other securities and property to which Holder is entitled upon such conversion under the terms of this Note, including a check payable to Holder for any cash amounts payable as described in Section 3(c). The conversion shall be deemed to have been made immediately prior to the close of

business on the date of the surrender of this Note, and the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(c) *Fractional Shares; Nonassessable; Effect of Conversion*. No fractional shares shall be issued upon conversion of this Note, and in lieu of the Company issuing any fractional shares to the Holder upon the conversion of this Note, the Company shall pay to the Holder an amount equal to the product obtained by multiplying the Note Conversion Price by the fraction of a share not issued pursuant to this sentence. The Company covenants that the shares of Next Financing Securities issuable upon the conversion of this Note will, upon conversion of this Note, be validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof. Upon conversion of this Note in full and the payment of the amounts specified in this Section 3(c), the Company shall be forever released from all its obligations and liabilities under this Note.

(d) *Further Assurances*. In connection with the conversion of this Note, the Holder, by acceptance of this Note, agrees to execute all agreements and other documents executed by the investors in the Next Financing.

4. *Events of Default*. The occurrence of any of the following shall constitute an "Event of Default" under this Note:

(a) *Failure to Pay*. The Company shall fail to pay (i) when due any principal payment on the due date hereunder or (ii) any interest or other payment required under the terms of this Note on the date due and such payment shall not have been made within five (5) days of the Company's receipt of the Holder's written notice to the Company of such failure to pay; or

(b) *Voluntary Bankruptcy or Insolvency Proceedings*. The Company shall (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property, (ii) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it, (iii) make an assignment for the benefit of creditors, or (iv) take any action for the purpose of effecting any of the foregoing; or

(c) *Involuntary Bankruptcy or Insolvency Proceedings*. Proceedings for the appointment of a receiver, trustee, liquidator or custodian of the Company or of all or a substantial part of the Company's property, or an involuntary case or other proceedings seeking liquidation, reorganization or other relief with respect to the Company or the Company's debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within thirty (30) days of commencement; or

(d) *Breach of Representations and Warranties*. Any material breach by the Company of any of the representations or warranties contained in Section 3 of the Purchase Agreement; or

(e) *Failure to Pay Obligations*. The Company generally fails to pay its obligations as and when due or if any judgment is secured against the Company, which judgment is not satisfied within ten (10) days.

Upon the occurrence or existence of any Event of Default described in Section 4(a), (d) and (e) and at any time thereafter during the continuance of such Event of Default, the Holder may, with the consent of the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement, by written notice to Company, declare this Note immediately due and payable without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 4(b) and (c), immediately and without notice, this Note shall automatically become immediately due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, the Holder may exercise any other right, power or remedy permitted to it by law.

5. *Miscellaneous*.

(a) *Loss, Theft, Destruction or Mutilation of Note*. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note and, in the case of loss, theft or destruction, delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Note, the Company shall execute and deliver, in lieu of this Note, a new Note executed in the same manner as this Note, in the same principal amount as the unpaid principal amount of this Note and dated the date to which interest shall have been paid on this Note or, if no interest shall have yet been so paid, dated the date of this Note.

(b) *Payment*. All payments under this Note shall be made in lawful tender of the United States.

(c) *Waivers*. The Company hereby waives notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor and all other notices or demands relative to this instrument.

(d) *Usury*. In the event any interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the principal of this Note.

(e) *Waiver and Amendment*. Any provision of this Note may be amended, waived or modified upon the written consent of the Company and the Holders of at least two-thirds of the principal amount of all then outstanding Notes issued pursuant to the Purchase Agreement.

(f) *Notices*. Any notice, request or other communication required or permitted hereunder shall be given in accordance with the Purchase Agreement.

(g) *Expenses; Attorneys' Fees*. If action is instituted to collect this Note, the Company promises to pay all reasonable costs and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred in connection with such action.

(h) *Successors and Assigns*. This Note may be assigned or transferred by the Company only with the prior written approval of the Holder. Subject to the preceding sentence, the rights and obligations of the Company and the Holder of this Note shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(i) *Governing Law*. THIS NOTE SHALL BE GOVERNED IN ALL RESPECTS BY THE LAWS OF THE STATE OF CALIFORNIA AS SUCH LAWS ARE APPLIED TO AGREEMENTS BETWEEN CALIFORNIA RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN CALIFORNIA.

(signature page follows)

IN WITNESS WHEREOF, the Company has caused this Note to be executed by its duly authorized officer.

Capnia, Inc.

By: _____
Ernest Mario

Its: President and Chief Executive Officer

EXHIBIT C

[Form of Warrant to Purchase Shares associated with November 2010 bridge financing extension and amendment to Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010]

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "***ACT***"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

CAPNIA, INC.

WARRANT TO PURCHASE SHARES

Dated as of ,
Void after the date specified in Section 8

No. [ ]

THIS CERTIFIES THAT, for value received, , or its registered assigns (the "Holder"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Capnia, Inc., a Delaware corporation (the "Company"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010, by and among the Company and the purchasers described therein (the "Purchase Agreement"). This Warrant is one of the "Warrants" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Purchase Agreement and/or the form of convertible promissory note attached as Exhibit B to the Purchase Agreement (the "Note", and together with each other Note issued pursuant to the Purchase Agreement, the "Notes").

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) *Definition of Shares.* "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to February 10, 2012 (the "Note Maturity Date") and the Holder converts the Note issued to Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower.

(b) *Number of Shares.* Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by dividing (x) 25% of the principal amount of the Note delivered in connection with this Note pursuant to the Purchase Agreement by (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(c) *Exercise Price.* The exercise price per Share shall be equal to 75% of the price per share of the Next Securities issued in the Next Financing; provided, however, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.80 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

(d) *Exercise Period.* This Warrant shall be exercisable, in whole or in part, (A) after the earlier of (i) the closing date of a Next Financing or (ii) the Note Maturity Date, and (B) prior to (or in connection with) the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) *Exercise.* The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "Notice of Exercise"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to (x) the Exercise Price multiplied by (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) *Net Issue Exercise.* In lieu of exercising this Warrant pursuant to Section 2(a)(ii), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being canceled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where:

X	=	The number of Shares to be issued to the Holder
Y	=	The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation)
A	=	The fair market value of one Share (at the date of such calculation)
B	=	The Exercise Price (as adjusted to the date of such calculation)

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith; *provided, however,* that:

(i) where a public market exists for the Company's common stock at the time of such exercise, the fair market value per Share shall be the product of (x) the average of the closing bid prices of the common stock or the closing price quoted on the national securities exchange on which the common stock is listed as published in the *Wall Street Journal*, as applicable, for the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable; and

(ii) if the Warrant is exercised in connection with the Company's initial public offering of common stock, the fair market value per Share shall be the product of (x) the per share offering price to the public of the Company's initial public offering and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) *Stock Certificates.* The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for that number of shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) *No Fractional Shares or Scrip.* No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction.

(e) *Conditional Exercise.* The Holder may exercise this Warrant conditioned upon (and effective immediately prior to) consummation of any transaction that would cause the expiration of this Warrant pursuant to Section 8 by so indicating in the notice of exercise.

(f) *Reservation of Stock.* The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of preferred stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of common stock for issuance on conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of preferred stock (and shares of common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use reasonable efforts to take such corporate action as may, in the opinion of counsel, be necessary to increase its authorized and unissued shares of its preferred stock (and shares of common stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes.

3. *Replacement of the Warrant.* Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) *Warrant Register.* The Company shall maintain a register (the "Warrant Register") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) *Warrant Agent.* The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) *Transferability of the Warrant.* Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "Securities Act") and limitations on assignments and transfers, including without limitation compliance with the

restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached as Exhibit B (the "Assignment Form")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) *Exchange of the Warrant upon a Transfer.* On surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) *Taxes.* In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. *Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws.* By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) *Restrictions on Transfers.* This Warrant may not be transferred or assigned in whole or in part without the Company's prior written consent (which shall not be unreasonably withheld), and any attempt by Holder to transfer or assign any rights, duties or obligations that arise under this Warrant without such permission shall be void. Any transfer of this Warrant or the Shares or the shares of common stock issuable upon conversion of the Shares (the "Securities") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder, and

(i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement, or

(ii) (A) such Holder shall have given prior written notice to the Company of such Holder's intention to make such disposition and shall have furnished the Company with a detailed description of the manner and circumstances of the proposed disposition, (B) the transferee shall have confirmed to the satisfaction of the Company in writing that the Securities are being acquired (i) solely for the transferee's own account and not as a nominee for any other party, (ii) for

investment and (iii) not with a view toward distribution or resale, and shall have confirmed such other matters related thereto as may be reasonably requested by the Company, and (C) if requested by the Company, such Holder shall have furnished the Company, at the Holder's expense, with evidence satisfactory to the Company that such disposition will not require registration of such Securities under the Securities Act, whereupon such Holder shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the Holder to the Company.

(b) *Securities Law Legend.* The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(c) *Market Stand-off Legend.* The Shares and common stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(d) *Instructions Regarding Transfer Restrictions.* The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(e) *Removal of Legend.* The legend referring to federal and state securities laws identified in Section 5(b) stamped on a certificate evidencing the Shares (and the common stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if (i) such securities are registered under the Securities Act, or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. *Adjustments.* Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) *Merger or Reorganization.* If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) *Reclassification of Shares.* If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) *Subdivisions and Combinations.* In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) *Redemption.* In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's certificate of incorporation, this Warrant shall thereafter be exercisable for a number of shares of the Company's common stock equal to the number of shares of common stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the preferred stock received thereupon had been simultaneously converted into common stock.

(e) *Notice of Adjustments.* Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth (i) such adjustments, (ii) the Exercise Price at the time in effect and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. *Notification of Certain Events.* Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than (i) dividends or distributions otherwise provided for in Section 6, (ii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of common stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the consent of the holders of two-thirds of the Shares issuable upon exercise of the rights under the Warrants.

8. *Expiration of the Warrant.* This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on 10 year anniversary of Initial Closing under Purchase Agreement;

(b) A Change of Control, as defined in the Note; or

(c) Immediately prior to the closing of a Qualified IPO, as defined in the Company's Amended and Restated Certificate of Incorporation, as amended from time to time.

9. *No Rights as a Stockholder.* Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. *Market Stand-off.* The Holder hereby agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Shares and any shares issuable upon conversion of thereof.

11. Miscellaneous.

(a) *Amendments.* Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than two-thirds of the Shares issuable upon exercise of any and all outstanding Warrants, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 9(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of capital stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 9(a).

(b) *Waivers.* No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) *Notices*. All notices and other communications required or permitted under this Warrant shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed (a) if to an Investor, at such Investor's address, facsimile number or electronic mail address as shown in the Company's records, or as such Investor may designate by advance written notice to the Company in accordance with the provisions hereof or (b) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the

President, or at such other address or facsimile number as the Company may designate by advance written notice to the Holder. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address, of the last holder of this Warrant for which the Company has contact information in its records.

(d) *Governing Law.* This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) *Jurisdiction and Venue.* Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) *Titles and Subtitles.* The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) *Severability.* If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) *Waiver of Jury Trial.* **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this paragraph is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq.* before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This paragraph shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) *California Corporate Securities Law.* THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL,

UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) *Rights and Obligations Survive Exercise of the Warrant.* Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(k) *Entire Agreement.* Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersede all prior agreements and understandings relating to the subject matter hereof.

(*signature page follows*)

The Company signs this Warrant as of the date stated on the first page.

CAPNIA, INC.

By: _____

Name: _____

Title: _____

Address:

2445 Faber Place
Suite 250
Palo Alto, CA 94303

EXHIBIT A

NOTICE OF EXERCISE

TO: **CAPNIA, INC. (the "*Company*")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached warrant pursuant to:

☐ A cash payment, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached warrant.

(3) **Conditional Exercise.** Is this a conditional exercise pursuant to Section 2(e):

☐ Yes ☐ No

If "Yes," indicate the applicable condition:

_____]

(4) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(5) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(6) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(7) **Investment Representation Statement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(8) **Market Standoff Agreement.** The undersigned acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the aforesaid shares and any shares issuable upon conversion thereof.

(9) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law §232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records), (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records), (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law §232.

_____

(Print name of the warrant holder)

_____

(Signature)

_____

(Name and title of signatory, if applicable)

_____

(Date)

_____

(Fax number)

_____

(Email address)

(*Signature page to the Notice of Exercise*)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: CAPNIA, INC.

WARRANT: THE WARRANT TO PURCHASE SHARES ISSUED ON , (THE "WARRANT")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("Assignor") assigns and transfers to the assignee named below ("Assignee") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint as attorney to make such transfer on the books of CAPNIA, INC., maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "Securities") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(4) **Investment Representation Statement.** Assignee has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(5) **Market Stand-Off Agreement.** Assignee acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Securities.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR	**ASSIGNEE**
_____	_____
(Print name of Assignor)	(*Print name of Assignee*)
_____	_____
(Signature of Assignor)	*(Signature of Assignee)*
_____	_____
(Print name of signatory, if applicable)	(*Print name of signatory, if applicable*)
_____	_____
(Print title of signatory, if applicable)	*(Print title of signatory, if applicable)*
Address:	Address:
_____	_____
_____	_____

Exhibit 4.10

THIS NOTE AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

CAPNIA, INC.

CONVERTIBLE PROMISSORY NOTE

Palo Alto, California

$«Principal_Amount» «Closing_Date»

FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to «Holder» (the "Holder"), or its registered assigns, the principal amount of $«Principal_Amount», or such lesser amount as shall equal the outstanding principal amount hereof, together with simple interest from the date of this Note on the unpaid principal balance, at a rate equal to twelve percent (12%) per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal amount, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after «Maturity_Date» (the "Maturity Date") by Holders representing at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (as the same may from time to time be amended, modified or supplemented, the "2012 Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the 2012 Purchase Agreement.

THE OBLIGATIONS DUE UNDER THIS NOTE ARE SECURED BY A SECURITY AGREEMENT (THE "SECURITY AGREEMENT"), DATED AS OF THE DATE HEREOF, AND EXECUTED BY THE COMPANY FOR THE BENEFIT OF THE HOLDER. ADDITIONAL RIGHTS OF THE HOLDER ARE SET FORTH IN THE SECURITY AGREEMENT.

The following is a statement of the rights of the Holder of this Note and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. Certain Definitions.

(a) "Change of Control" means, unless otherwise determined in writing by the holders of at least two-thirds (2/3) of the Company's Preferred Stock then outstanding, (X) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any merger, consolidation or other form of reorganization) in which outstanding shares of the Company are exchanged for or converted into securities or other consideration issued, or caused to be issued, by the acquiring entity or its affiliate, unless the Company's stockholders of record as constituted immediately prior to such transaction or series of related transactions will, immediately after such transaction or series of related transactions, hold at least a majority of the voting power of the surviving or acquiring entity on account of shares held by them prior to such transaction or series of related transactions, or (Y) a sale, lease or other disposition of all or substantially all of the assets of the Company.

(b) "Event of Default" has the meaning given in Section 4 of this Note.

(c) "Next Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for aggregate gross proceeds of at least $1,500,000 (excluding any amounts received upon conversion or cancellation of the Notes or the 2010 Notes).

(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing.

(e) "Note Conversion Price" means a price per share equal to seventy-five percent (75%) of the price per share paid by the other purchasers of the Next Financing Securities sold in the Next Financing.

(f) "Non-Qualified Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for cash, conversion or cancellation of indebtedness, or any combination thereof, and which: (i) does not constitute a Next Financing; or (ii) constitutes a Next Financing but occurs after the Maturity Date.

(g) "2012 Purchase Agreement" has the meaning given in the preamble to this Note.

2. Prepayment. The Company may not prepay this Note in whole or in part, without the written consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement; *provided*, *however*, that any such prepayment will be applied first to the payment of expenses due under the Notes, second to interest accrued on the Notes and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of the Notes, all on a pro-rata basis.

3. Conversion.

(a) Automatic Conversion upon a Next Financing prior to Maturity Date. If a Next Financing occurs on or prior to the Maturity Date, then the outstanding principal amount of this Note, and all accrued and unpaid interest under this Note, shall automatically convert into fully paid and nonassessable shares of Next Financing Securities at the Note Conversion Price, with any fractional shares rounded down. Upon the automatic conversion of this Note, the Company shall give written notice to the Holder, notifying the Holder of such conversion and specifying the Note Conversion Price, the principal amount of the Note converted and the date on which such conversion occurred and calling upon such Holder to surrender the Note to the Company. Upon such conversion, the Holder shall surrender this Note at the Company's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the 2012 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of closing of the Next Financing, and on and after such date the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(b) Voluntary Conversion. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into: (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.80 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations); or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in such Non-Qualified Financing. Before the Holder shall be entitled to convert this Note under this Section 3(b), the Holder shall surrender this Note, duly endorsed, at the Company's principal executive office and shall give written notice to the Company of the election to convert the same pursuant to this Section 3(b), and shall state therein the amount of the unpaid principal amount of this Note to be converted and the name or names in which the certificate or certificates for shares are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon conversion (bearing such legends as are required by the 2012 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company), together with a replacement Note (if any principal amount is not converted) and any other securities and property to which the Holder is entitled upon such conversion under the terms of this Note, including a check payable to the Holder for any cash amounts payable as described in Section 3(c). The conversion shall be deemed to have been made immediately prior to the close of business on the date of the surrender of this Note, and the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(c) Fractional Shares; Nonassessable; Effect of Conversion. No fractional shares shall be issued upon conversion of this Note, and in lieu of the Company issuing any fractional shares to the Holder upon the conversion of this Note, the Company shall pay to the Holder an amount equal to the product obtained by multiplying the Note Conversion Price by the fraction of a share not issued pursuant to this sentence. The Company covenants that the shares of Next Financing Securities issuable upon the conversion of this Note will, upon conversion of this Note, be validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof. Upon conversion of this Note in full and the payment of the amounts specified in this Section 3(c), the Company shall be forever released from all its obligations and liabilities under this Note.

(d) Further Assurances. In connection with the conversion of this Note, the Holder, by acceptance of this Note, agrees to execute all agreements and other documents executed by the investors in the Next Financing.

4. Events of Default. The occurrence of any of the following shall constitute an "Event of Default" under this Note:

(a) Failure to Pay. The Company shall fail to pay: (i) when due any principal payment on the due date hereunder; or (ii) any interest or other payment required under the terms of this Note on the date due and such payment shall not have been made within five (5) days of the Company's receipt of the Holder's written notice to the Company of such failure to pay;

(b) Voluntary Bankruptcy or Insolvency Proceedings. The Company shall: (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property; (ii) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it; (iii) make an assignment for the benefit of creditors; or (iv) take any action for the purpose of effecting any of the foregoing;

(c) Involuntary Bankruptcy or Insolvency Proceedings. Proceedings for the appointment of a receiver, trustee, liquidator or custodian of the Company or of all or a substantial part of the Company's property, or an involuntary case or other proceedings seeking liquidation, reorganization or other relief with respect to the Company or the Company's debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within thirty (30) days of commencement;

(d) Breach of Representations and Warranties. Any material breach by the Company of any of the representations or warranties contained in Section 3 of the 2012 Purchase Agreement; or

(e) Failure to Pay Obligations. The Company generally fails to pay its obligations as and when due or if any judgment is secured against the Company, which judgment is not satisfied within ten (10) days.

Upon the occurrence or existence of any Event of Default described in Sections 4(a), (d) and (e) and at any time thereafter during the continuance of such Event of Default, the Holder may, with the consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement, by written notice to Company, declare this Note immediately due and payable without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 4(b) and (c), immediately and without notice, this Note shall automatically become immediately due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, the Holder may exercise any other right, power or remedy permitted to it by law.

5. Miscellaneous.

(a) Loss, Theft, Destruction or Mutilation of Note. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note and, in the case of loss, theft or destruction, delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Note, the Company shall execute and deliver, in lieu of this Note, a new Note executed in the same manner as this Note, in the same principal amount as the unpaid principal amount of this Note and dated the date to which interest shall have been paid on this Note or, if no interest shall have yet been so paid, dated the date of this Note.

(b) Payment. All payments under this Note shall be made in lawful tender of the United States.

(c) Waivers. The Company hereby waives notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor and all other notices or demands relative to this instrument.

(d) Usury. In the event any interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the principal of this Note.

(e) Waiver and Amendment. Any provision of this Note may be amended, waived or modified upon the written consent of the Company and the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement.

(f) Notices. Any notice, request or other communication required or permitted hereunder shall be given in accordance with the 2012 Purchase Agreement.

(g) Expenses; Attorneys' Fees. If action is instituted to collect this Note, the Company promises to pay all reasonable costs and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred in connection with such action.

(h) Successors and Assigns. This Note may be assigned or transferred by the Company only with the prior written approval of the Holder. Subject to the preceding sentence, the rights and obligations of the Company and the Holder of this Note shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(i) Governing Law. THIS NOTE SHALL BE GOVERNED IN ALL RESPECTS BY THE LAWS OF THE STATE OF CALIFORNIA AS SUCH LAWS ARE APPLIED TO AGREEMENTS BETWEEN CALIFORNIA RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN CALIFORNIA.

(j) Pari Passu Notes. The Holder acknowledges and agrees that the payment of all or any portion of the outstanding principal amount of this Note, and all accrued and unpaid interest under this Note, shall be pari passu in right of payment and in all other respects to: (i) the other Notes; and (ii) the 2010 Notes. In the event that the Holder receives payments in excess of such Holder's pro rata share of the Company's payments to the holders of all the Notes and the 2010 Notes, then the Holder shall hold in trust all such excess payments for the benefit of the holders of all the other Notes and the 2010 Notes, and shall pay such amounts held in trust to such other holders upon demand by such holders.

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Note to be executed by its duly authorized officer as of the date and year first indicated above.

CAPNIA, INC.

By: _____

Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

CAPNIA, INC.

WARRANT TO PURCHASE SHARES

Dated as of «Date»
Void after the date specified in Section 8

No. 2012-«Warrant_Number»

THIS CERTIFIES THAT, for value received, «Holder», or its registered assigns (the "Holder"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Capnia, Inc., a Delaware corporation (the "Company"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (the "2012 Purchase Agreement"). This Warrant is one of the "Warrants" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2012 Purchase Agreement and/or the form of convertible promissory note attached as Exhibit B to the 2012 Purchase Agreement (the "Note", and together with each other Note issued pursuant to the 2012 Purchase Agreement, the "Notes"), as applicable.

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) Definition of Shares. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to «Note_Maturity_Date» (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a

Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower.

(b) Number of Shares. Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by *dividing*: (x) 25% of the principal amount of the Note delivered in connection with this Note pursuant to the Purchase Agreement, *by* (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(c) Exercise Price. The exercise price per Share shall be equal to seventy-five percent (75%) of the price per share of the Next Financing Securities issued in the Next Financing; *provided*, *however*, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.80 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

(d) Exercise Period. This Warrant shall be exercisable, in whole or in part: (A) after the earlier of (i) the closing date of a Next Financing, or (ii) the Note Maturity Date; and (B) prior to (or in connection with) the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) Exercise. The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "Notice of Exercise"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to: (x) the Exercise Price *multiplied by* (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) Net Issue Exercise. In lieu of exercising this Warrant pursuant to Section 2(a), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being cancelled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y\,(A - B)}{A}$$

Where:

X = The number of Shares to be issued to the Holder.

Y = The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation).

A = The fair market value of one Share (at the date of such calculation).

B = The Exercise Price (as adjusted to the date of such calculation).

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith; *provided, however,* that:

(i) where a public market exists for the Company's common stock at the time of such exercise, the fair market value per Share shall be the product of: (x) the average of the closing bid prices of the Company's Common Stock or the closing price quoted on the national securities exchange on which the Common Stock is listed as published in the *Wall Street Journal*, as applicable, for the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value; and (y) the number of shares of Common Stock into which each Share is convertible at the time of such exercise, as applicable; and

(ii) if the Warrant is exercised in connection with the Company's initial public offering of Common Stock, the fair market value per Share shall be the product of: (x) the per share offering price to the public of the Company's initial public offering; and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) Stock Certificates. The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for that number of Shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction of a share.

(e) Conditional Exercise. The Holder may exercise this Warrant conditioned upon (and effective immediately prior to) consummation of any transaction that would cause the expiration of this Warrant pursuant to Section 8 by so indicating in the notice of exercise.

(f) Reservation of Stock. The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of Preferred Stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of Common Stock for issuance upon conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of Preferred Stock (and shares of Common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use reasonable efforts to take such corporate action as may, in the opinion of counsel, be necessary to increase its authorized and unissued shares of its Preferred Stock (and shares of Common Stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes.

3. Replacement of the Warrant. Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) Warrant Register. The Company shall maintain a register (the "Warrant Register") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) Warrant Agent. The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) Transferability of the Warrant. Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "Securities Act") and limitations on assignments and transfers, including, without limitation, compliance with the restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached as Exhibit B (the "Assignment Form")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) Exchange of the Warrant upon a Transfer. On surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) Taxes. In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws. By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) Restrictions on Transfers. This Warrant may not be transferred or assigned in whole or in part without the Company's prior written consent (which shall not be unreasonably withheld), and any attempt by the Holder to transfer or assign any rights, duties or obligations that arise under this Warrant without such permission shall be void. Any transfer of this Warrant or the Shares or the shares of Common Stock issuable upon conversion of the Shares (the "Securities") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder, and

(i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement, or

(ii) (A) such Holder shall have given prior written notice to the Company of such Holder's intention to make such disposition and shall have furnished the Company with a detailed description of the manner and circumstances of the proposed disposition, (B) the transferee shall have confirmed to the satisfaction of the Company in writing that the Securities are being acquired (i) solely for the transferee's own account and not as a nominee for any other party, (ii) for investment and (iii) not with a view toward distribution or resale, and shall have confirmed such other matters related thereto as may be reasonably requested by the Company, and (C) if requested by the Company, such Holder shall have furnished the Company, at the Holder's expense, with evidence satisfactory to the Company that such disposition will not require registration of such Securities under the Securities Act, whereupon such Holder shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the Holder to the Company.

(b) Securities Law Legend. The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by applicable state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(c) Market Stand-off Legend. The Shares and Common Stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(d) Instructions Regarding Transfer Restrictions. The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(e) Removal of Legend. The legend referring to federal and state securities laws identified in Section 5(b) stamped on a certificate evidencing the Shares (and the Common Stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if: (i) such securities are registered under the Securities Act; or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. Adjustments. Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) Subdivisions and Combinations. In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) Redemption. In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's Amended and Restated Certificate of Incorporation, as the same may be amended from time to time, this

Warrant shall thereafter be exercisable for a number of shares of Common Stock equal to the number of shares of Common Stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the Preferred Stock received thereupon had been simultaneously converted into Common Stock.

(e) Notice of Adjustments. Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth: (i) such adjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. Notification of Certain Events. Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than: (i) dividends or distributions otherwise provided for in Section 6; (ii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this Section 7 may be shortened or waived prospectively or retrospectively by the consent of the holders of two-thirds (2/3) of the Shares issuable upon exercise of the rights under the Warrants issued pursuant to the 2012 Purchase Agreement.

8. Expiration of the Warrant. This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on the 10-year anniversary of the Initial Closing under the 2012 Purchase Agreement;

(b) A Change of Control, as defined in the Note; or

(c) Immediately prior to the closing of a Qualified IPO, as defined in the Company's Amended and Restated Certificate of Incorporation, as the same may be amended from time to time.

9. No Rights as a Stockholder. Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. Market Stand-off. The Holder hereby agrees that Section 1.15 of the Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Shares and any shares issuable upon conversion thereof.

11. Miscellaneous.

(a) Amendments. Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than two-thirds (2/3) of the Shares issuable upon exercise of any and all outstanding Warrants issued pursuant to the 2012 Purchase Agreement, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 11(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of capital stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 11(a).

(b) Waivers. No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) Notices. All notices and other communications required or permitted under this Warrant shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed: (i) if to an Investor, at such Investor's address, facsimile number or electronic mail address as shown in the Company's records, or as such Investor may designate by advance written notice to the Company in accordance with the provisions hereof; or (ii) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the

President, or at such other address or facsimile number as the Company may designate by advance written notice to the Holder. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address, of the last holder of this Warrant for which the Company has contact information in its records.

(d) Governing Law. This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) Jurisdiction and Venue. Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) Titles and Subtitles. The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) Severability. If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) Waiver of Jury Trial. **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this Section 11(h) is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq*. before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This Section 11(h) shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) California Corporate Securities Law. THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL,

UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) Rights and Obligations Survive Exercise of the Warrant. Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(k) Entire Agreement. Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to the subject matter hereof.

(*Signature Page Follows*)

The Company signs this Warrant as of the date stated on the first page.

CAPNIA, INC.

By: _____
Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

EXHIBIT A

NOTICE OF EXERCISE

TO: **CAPNIA, INC. (the "Company")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached Warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached Warrant pursuant to:

☐ A cash payment, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached Warrant.

(3) **Conditional Exercise.** Is this a conditional exercise pursuant to Section 2(e):

☐ Yes ☐ No

If "Yes," indicate the applicable condition:

_____]

(4) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(5) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached Warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(6) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(7) **Investment Representation Statement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(8) **Market Standoff Agreement.** The undersigned acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the aforesaid shares and any shares issuable upon conversion thereof.

(9) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law § 232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by: (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records); (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records); (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting; or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law § 232.

_____

(*Print name of the warrant holder*)

_____

(*Signature*)

_____

(*Name and title of signatory, if applicable*)

_____

(*Date*)

_____

(*Fax number*)

_____

(*Email address*)

(*Signature page to the Notice of Exercise*)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: CAPNIA, INC.

WARRANT: THE WARRANT TO PURCHASE SHARES ISSUED ON , 2012 (THE "WARRANT")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("Assignor") assigns and transfers to the assignee named below ("Assignee") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint as attorney to make such transfer on the books of CAPNIA, INC., maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "Securities") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(4) **Investment Representation Statement.** Assignee has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(5) **Market Stand-Off Agreement.** Assignee acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Securities.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR	**ASSIGNEE**
(*Print name of Assignor*)	(*Print name of Assignee*)
(*Signature of Assignor*)	(*Signature of Assignee*)
(*Print name of signatory, if applicable*)	(*Print name of signatory, if applicable*)
(*Print title of signatory, if applicable*)	(*Print title of signatory, if applicable*)
Address:	Address:

Exhibit 4.12

[Form of Convertible Promissory Note associated with July 2012 bridge financing extension and amendment to Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012]

THIS NOTE AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

CAPNIA, INC.

CONVERTIBLE PROMISSORY NOTE

Palo Alto, California
$ July 31, 2012

FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with simple interest from the date of this Note on the unpaid principal balance at a rate equal to twelve percent (12%) per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal amount, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after July 31, 2013 (the "Maturity Date") by Holders representing at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (as the same may from time to time be amended, modified or supplemented, the "2012 Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the 2012 Purchase Agreement.

THE OBLIGATIONS DUE UNDER THIS NOTE ARE SECURED BY THAT CERTAIN SECURITY AGREEMENT (THE "SECURITY AGREEMENT"), DATED AS OF JANUARY 17, 2012, AND EXECUTED BY THE COMPANY FOR THE BENEFIT OF THE HOLDER. ADDITIONAL RIGHTS OF THE HOLDER ARE SET FORTH IN THE SECURITY AGREEMENT.

The following is a statement of the rights of the Holder of this Note and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. Certain Definitions.

(a) "Change of Control" means, unless otherwise determined in writing by the holders of at least two-thirds (2/3) of the Company's Preferred Stock then outstanding, (X) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any merger, consolidation or other form of reorganization) in which outstanding shares of the Company are exchanged for or converted into securities or other consideration issued, or caused to be issued, by the acquiring entity or its affiliate, unless the Company's stockholders of record as constituted immediately prior to such transaction or series of related transactions will, immediately after such transaction or series of related transactions, hold at least a majority of the voting power of the surviving or acquiring entity on account of shares held by them prior to such transaction or series of related transactions, or (Y) a sale, lease or other disposition of all or substantially all of the assets of the Company.

(b) "Event of Default" has the meaning given in Section 4 of this Note.

(c) "Next Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for aggregate gross proceeds of at least $1,500,000 (excluding any amounts received upon conversion or cancellation of the Notes or the 2010 Notes).

(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing.

(e) "Note Conversion Price" means a price per share equal to seventy-five percent (75%) of the price per share paid by the other purchasers of the Next Financing Securities sold in the Next Financing.

(f) "Non-Qualified Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for cash, conversion or cancellation of indebtedness, or any combination thereof, and which: (i) does not constitute a Next Financing; or (ii) constitutes a Next Financing but occurs after the Maturity Date.

(g) "2012 Purchase Agreement" has the meaning given in the preamble to this Note.

2. Prepayment. The Company may not prepay this Note in whole or in part, without the written consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement; *provided*, *however*, that any such prepayment will be applied first to the payment of expenses due under the Notes, second to interest accrued on the Notes and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of the Notes, all on a pro-rata basis.

3. Conversion.

(a) Automatic Conversion upon a Next Financing prior to Maturity Date. If a Next Financing occurs on or prior to the Maturity Date, then the outstanding principal amount of this Note, and all accrued and unpaid interest under this Note, shall automatically convert into fully paid and nonassessable shares of Next Financing Securities at the Note Conversion Price, with any fractional shares rounded down. Upon the automatic conversion of this Note, the Company shall give written notice to the Holder, notifying

the Holder of such conversion and specifying the Note Conversion Price, the principal amount of the Note converted and the date on which such conversion occurred and calling upon such Holder to surrender the Note to the Company. Upon such conversion, the Holder shall surrender this Note at the Company's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the 2012 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of closing of the Next Financing, and on and after such date the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(b) Voluntary Conversion. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into: (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.35 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations); or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing. Before the Holder shall be entitled to convert this Note under this Section 3(b), the Holder shall surrender this Note, duly endorsed, at the Company's principal executive office and shall give written notice to the Company of the election to convert the same pursuant to this Section 3(b), and shall state therein the amount of the unpaid principal amount of this Note to be converted and the name or names in which the certificate or certificates for shares are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon conversion (bearing such legends as are required by the 2012 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company), together with a replacement Note (if any principal amount is not converted) and any other securities and property to which the Holder is entitled upon such conversion under the terms of this Note, including a check payable to the Holder for any cash amounts payable as described in Section 3(c). The conversion shall be deemed to have been made immediately prior to the close of business on the date of the surrender of this Note, and the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(c) Fractional Shares; Nonassessable; Effect of Conversion. No fractional shares shall be issued upon conversion of this Note, and in lieu of the Company issuing any fractional shares to the Holder upon the conversion of this Note, the Company shall pay to the Holder an amount equal to the product obtained by multiplying the Note Conversion Price by the fraction of a share not issued pursuant to this sentence. The Company covenants that the shares of Next Financing Securities issuable upon the conversion of this Note will, upon conversion of this Note, be validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof. Upon conversion of this Note in full and the payment of the amounts specified in this Section 3(c), the Company shall be forever released from all its obligations and liabilities under this Note.

(d) Further Assurances. In connection with the conversion of this Note, the Holder, by acceptance of this Note, agrees to execute all agreements and other documents executed by the investors in the Next Financing.

4. Events of Default. The occurrence of any of the following shall constitute an "Event of Default" under this Note:

(a) Failure to Pay. The Company shall fail to pay: (i) when due any principal payment on the due date hereunder; or (ii) any interest or other payment required under the terms of this Note on the date due and such payment shall not have been made within five (5) days of the Company's receipt of the Holder's written notice to the Company of such failure to pay;

(b) Voluntary Bankruptcy or Insolvency Proceedings. The Company shall: (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property; (ii) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it; (iii) make an assignment for the benefit of creditors; or (iv) take any action for the purpose of effecting any of the foregoing;

(c) Involuntary Bankruptcy or Insolvency Proceedings. Proceedings for the appointment of a receiver, trustee, liquidator or custodian of the Company or of all or a substantial part of the Company's property, or an involuntary case or other proceedings seeking liquidation, reorganization or other relief with respect to the Company or the Company's debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within thirty (30) days of commencement; or

(d) Breach of Representations and Warranties. Any material breach by the Company of any of the representations or warranties contained in Section 3 of the 2012 Purchase Agreement; or

(e) Failure to Pay Obligations. The Company generally fails to pay its obligations as and when due or if any judgment is secured against the Company, which judgment is not satisfied within ten (10) days.

Upon the occurrence or existence of any Event of Default described in Sections 4(a), (d) and (e) and at any time thereafter during the continuance of such Event of Default, the Holder may, with the consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement, by written notice to Company, declare this Note immediately due and payable without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 4(b) and (c), immediately and without notice, this Note shall automatically become immediately due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, the Holder may exercise any other right, power or remedy permitted to it by law.

5. Miscellaneous.

(a) Loss, Theft, Destruction or Mutilation of Note. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note and, in the case of loss, theft or destruction, delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Note, the Company shall execute and deliver, in lieu of this Note, a new Note executed in the same manner as this Note, in the same principal amount as the unpaid principal amount of this Note and dated the date to which interest shall have been paid on this Note or, if no interest shall have yet been so paid, dated the date of this Note.

(b) Payment. All payments under this Note shall be made in lawful tender of the United States.

(c) Waivers. The Company hereby waives notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor and all other notices or demands relative to this instrument.

(d) Usury. In the event any interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the principal of this Note.

(e) Waiver and Amendment. Any provision of this Note may be amended, waived or modified upon the written consent of the Company and the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement.

(f) Notices. Any notice, request or other communication required or permitted hereunder shall be given in accordance with the Purchase Agreement.

(g) Expenses; Attorneys' Fees. If action is instituted to collect this Note, the Company promises to pay all reasonable costs and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred in connection with such action.

(h) Successors and Assigns. This Note may be assigned or transferred by the Company only with the prior written approval of the Holder. Subject to the preceding sentence, the rights and obligations of the Company and the Holder of this Note shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(i) Governing Law. THIS NOTE SHALL BE GOVERNED IN ALL RESPECTS BY THE LAWS OF THE STATE OF CALIFORNIA AS SUCH LAWS ARE APPLIED TO AGREEMENTS BETWEEN CALIFORNIA RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN CALIFORNIA.

(j) Pari Passu Notes. The Holder acknowledges and agrees that the payment of all or any portion of the outstanding principal amount of this Note, and all accrued and unpaid interest under this Note, shall be pari passu in right of payment and in all other respects to: (i) the other Notes; and (ii) the 2010 Notes. In the event that the Holder receives payments in excess of such Holder's pro rata share of the Company's payments to the holders of all the Notes and the 2010 Notes, then the Holder shall hold in trust all such excess payments for the benefit of the holders of all the other Notes and the 2010 Notes, and shall pay such amounts held in trust to such other holders upon demand by such holders.

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Note to be executed by its duly authorized officer as of the date and year first indicated above.

CAPNIA, INC.

By: _____
Name: Anish Bhatnagar
Title: President

Exhibit 4.13

[Form of Warrant to Purchase Shares associated with July 2012 bridge financing extension and amendment to Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012]

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

CAPNIA, INC.

WARRANT TO PURCHASE SHARES

Dated as of July 31, 2012
Void after the date specified in Section 8

No. [ ]

THIS CERTIFIES THAT, for value received, , or its registered assigns (the "Holder"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Capnia, Inc., a Delaware corporation (the "Company"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (the "2012 Purchase Agreement"). This Warrant is one of the "Warrants" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning ascribed to such terms in the 2012 Purchase Agreement and/or the form of convertible promissory note attached as Exhibit B to the 2012 Purchase Agreement (the "Note", and together with each other Note issued pursuant to the 2012 Purchase Agreement, the "Notes").

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) Definition of Shares. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to July 31, 2013 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower.

(b) Number of Shares. Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by *dividing*: (x) 25% of the principal amount of the Note delivered in connection with this Note pursuant to the Purchase Agreement, *by* (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(c) Exercise Price. The exercise price per Share shall be equal to seventy-five percent (75%) of the price per share of the Next Financing Securities issued in the Next Financing; *provided*, *however*, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.35 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

(d) Exercise Period. This Warrant shall be exercisable, in whole or in part: (A) after the earlier of (i) the closing date of a Next Financing, or (ii) the Note Maturity Date; and (B) prior to (or in connection with) the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) Exercise. The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "Notice of Exercise"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to: (x) the Exercise Price *multiplied by* (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) Net Issue Exercise. In lieu of exercising this Warrant pursuant to Section 2(a)(ii), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being cancelled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y(A-B)}{A}$$

Where:

X	=	The number of Shares to be issued to the Holder.
Y	=	The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation).
A	=	The fair market value of one Share (at the date of such calculation).
B	=	The Exercise Price (as adjusted to the date of such calculation).

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith; *provided, however,* that:

(i) where a public market exists for the Company's common stock at the time of such exercise, the fair market value per Share shall be the product of: (x) the average of the closing bid prices of the Common Stock or the closing price quoted on the national securities exchange on which the common stock is listed as published in the *Wall Street Journal*, as applicable, for the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value; and (y) the number of shares of Common Stock into which each Share is convertible at the time of such exercise, as applicable; and

(ii) if the Warrant is exercised in connection with the Company's initial public offering of Common Stock, the fair market value per Share shall be the product of: (x) the per share offering price to the public of the Company's initial public offering; and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) Stock Certificates. The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for that number of shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction of a share.

(e) Conditional Exercise. The Holder may exercise this Warrant conditioned upon (and effective immediately prior to) consummation of any transaction that would cause the expiration of this Warrant pursuant to Section 8 by so indicating in the notice of exercise.

(f) Reservation of Stock. The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of Preferred Stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of Common Stock for issuance on conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of Preferred Stock (and shares of Common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use reasonable efforts to take such corporate action as may, in the opinion of counsel, be necessary to increase its authorized and unissued shares of its Preferred Stock (and shares of Common Stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes.

3. Replacement of the Warrant. Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) Warrant Register. The Company shall maintain a register (the "Warrant Register") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) Warrant Agent. The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) Transferability of the Warrant. Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "Securities Act") and limitations on assignments and transfers, including, without limitation, compliance with the restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached as Exhibit B (the "Assignment Form")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) Exchange of the Warrant upon a Transfer. On surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) Taxes. In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws. By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) Restrictions on Transfers. This Warrant may not be transferred or assigned in whole or in part without the Company's prior written consent (which shall not be unreasonably withheld), and any attempt by the Holder to transfer or assign any rights, duties or obligations that arise under this Warrant without such permission shall be void. Any transfer of this Warrant or the Shares or the shares of Common

Stock issuable upon conversion of the Shares (the "Securities") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder, and

(i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement, or

(ii) (A) such Holder shall have given prior written notice to the Company of such Holder's intention to make such disposition and shall have furnished the Company with a detailed description of the manner and circumstances of the proposed disposition, (B) the transferee shall have confirmed to the satisfaction of the Company in writing that the Securities are being acquired (i) solely for the transferee's own account and not as a nominee for any other party, (ii) for investment and (iii) not with a view toward distribution or resale, and shall have confirmed such other matters related thereto as may be reasonably requested by the Company, and (C) if requested by the Company, such Holder shall have furnished the Company, at the Holder's expense, with evidence satisfactory to the Company that such disposition will not require registration of such Securities under the Securities Act, whereupon such Holder shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the Holder to the Company.

(b) Securities Law Legend. The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by state securities laws):

THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(c) Market Stand-off Legend. The Shares and Common Stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(d) Instructions Regarding Transfer Restrictions. The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(e) Removal of Legend. The legend referring to federal and state securities laws identified in Section 5(b) stamped on a certificate evidencing the Shares (and the Common Stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if: (i) such securities are registered under the Securities Act; or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. Adjustments. Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) Subdivisions and Combinations. In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) Redemption. In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's certificate of incorporation, this Warrant shall thereafter be exercisable for a number of shares of the Company's Common Stock equal to the number of shares of Common Stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the Preferred Stock received thereupon had been simultaneously converted into common stock.

(e) Notice of Adjustments. Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth: (i) such adjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. Notification of Certain Events. Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than: (i) dividends or distributions otherwise provided for in Section 6; (ii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this Section 7 may be shortened or waived prospectively or retrospectively by the consent of the holders of two-thirds (2/3) of the Shares issuable upon exercise of the rights under the Warrants issued pursuant to the 2012 Purchase Agreement.

8. Expiration of the Warrant. This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on the 10-year anniversary of the Initial Closing under Purchase Agreement;

(b) A Change of Control, as defined in the Note; or

(c) Immediately prior to the closing of a Qualified IPO, as defined in the Company's Amended and Restated Certificate of Incorporation, as the same may be amended from time to time.

9. No Rights as a Stockholder. Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. Market Stand-off. The Holder hereby agrees that Section 1.15 of the Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Shares and any shares issuable upon conversion thereof.

11. Miscellaneous.

(a) Amendments. Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than two-thirds (2/3) of the Shares issuable upon exercise of any and all outstanding Warrants issued pursuant to the 2012 Purchase Agreement, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 11(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of capital stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 11(a).

(b) Waivers. No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) Notices. All notices and other communications required or permitted under this Warrant shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed: (i) if to an Investor, at such Investor's address, facsimile number or electronic mail address as shown in the Company's records, or as such Investor may designate by advance written notice to the Company in accordance with the provisions hereof; or (ii) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the President, or at such other address or facsimile number as the Company may designate by advance written notice to the Holder. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address, of the last holder of this Warrant for which the Company has contact information in its records.

(d) Governing Law. This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) Jurisdiction and Venue. Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) Titles and Subtitles. The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) Severability. If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) Waiver of Jury Trial. **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this Section 11(h) is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq*. before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This Section 11(h) shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) California Corporate Securities Law. THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) Rights and Obligations Survive Exercise of the Warrant. Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(k) Entire Agreement. Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to the subject matter hereof.

(*Signature Page Follows*)

The Company signs this Warrant as of the date stated on the first page.

CAPNIA, INC.

By: _____
Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place,
Suite 250
Palo Alto, CA 94303

EXHIBIT A

NOTICE OF EXERCISE

TO: **CAPNIA, INC. (the "Company")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached Warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached Warrant pursuant to:

☐ A cash payment, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached Warrant.

(3) **Conditional Exercise.** Is this a conditional exercise pursuant to Section 2(e):

☐ Yes ☐ No

If "Yes," indicate the applicable condition:

_____]

(4) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(5) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached Warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(6) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(7) **Investment Representation Statement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(8) **Market Standoff Agreement.** The undersigned acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the aforesaid shares and any shares issuable upon conversion thereof.

(9) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law § 232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by: (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records); (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records); (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting; or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law § 232.

_____

(Print name of the warrant holder)

_____

(Signature)

_____

(Name and title of signatory, if applicable)

_____

(Date)

_____

(Fax number)

_____

(Email address)

(*Signature page to the Notice of Exercise*)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: CAPNIA, INC.

WARRANT: THE WARRANT TO PURCHASE SHARES ISSUED ON JULY 31, 2012 (THE "WARRANT")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("Assignor") assigns and transfers to the assignee named below ("Assignee") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint as attorney to make such transfer on the books of CAPNIA, INC., maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "Securities") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(4) **Investment Representation Statement.** Assignee has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(5) **Market Stand-Off Agreement.** Assignee acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Securities.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR	**ASSIGNEE**
_____	_____
(Print name of Assignor)	(*Print name of Assignee*)
_____	_____
(Signature of Assignor)	*(Signature of Assignee)*
_____	_____
(Print name of signatory, if applicable)	(*Print name of signatory, if applicable*)
_____	_____
(Print title of signatory, if applicable)	*(Print title of signatory, if applicable)*
Address:	Address:
_____	_____
_____	_____

Exhibit 4.14

THIS NOTE AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS.

CAPNIA, INC.

CONVERTIBLE PROMISSORY NOTE

Palo Alto, California
$ April 28, 2014

FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof (the "Principal Amount"), together with simple interest from the date of this Note on the unpaid balance of the Principal Amount at: (i) in the event that this Note is automatically converted into Units (as defined below) upon the Company's Contemplated IPO (as defined below) in accordance with Section 3(a) below on or prior to the Maturity Date (as defined below), a rate equal to two percent (2%) per annum; or (ii) in the event that either (A) this Note is automatically converted into Next Financing Securities (as defined below) upon the Company's Next Financing (as defined below) in accordance with Section 3(b) below on or prior to the Maturity Date, (B) upon the prior written election of the Holder, this Note is voluntarily converted into shares of the Company's Series C Preferred Stock or shares of equity securities issued by the Company in a Non-Qualified Financing (as defined below), as the case may be, in accordance with Section 3(c) below after the Maturity Date, or (C) no conversion of this Note below occurs prior to, on or after the Maturity Date, a rate equal to twelve percent (12%) per annum, in each case computed on the basis of the actual number of days elapsed and a year of 365 days (the "Interest"). Unless earlier converted upon the Contemplated IPO in accordance with Section 3(a) below on or prior to the Maturity Date, two (2) times the unpaid Principal Amount, together with any then accrued but unpaid Interest and any other amounts payable hereunder, shall be due and payable upon the earlier to occur of: (i) upon demand made after September 30, 2015 (the "Maturity Date") by Holders representing at least two-thirds (2/3) of the Principal Amount of all then outstanding Notes issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of April 28, 2014, by and among the Company and the Investors described therein (as the same may from time to time be amended, modified or supplemented, the "2014 Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the 2014 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2014 Purchase Agreement.

The following is a statement of the rights of the Holder of this Note and the conditions to which this Note is subject, and to which the Holder, by the acceptance of this Note, agrees:

1. Certain Definitions.

(a) "Change of Control" means, unless otherwise determined in writing by the holders of at least two-thirds (2/3) of the Company's Preferred Stock then outstanding: (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any merger, consolidation or other form of reorganization) in which outstanding shares of the Company are exchanged for or converted into securities or other consideration issued, or caused to be issued, by the acquiring entity or its affiliate, unless the Company's stockholders of record as constituted immediately prior to such transaction or series of related transactions will, immediately after such transaction or series of related transactions, hold at least a majority of the voting power of the surviving or acquiring entity on account of shares held by them prior to such transaction or series of related transactions; or (ii) a sale, lease or other disposition of all or substantially all of the assets of the Company.

(b) "Contemplated IPO" means the closing of the Company's firm commitment underwritten initial public offering of Units pursuant to the Company's registration statement on Form S-1 filed under the Securities Act.

(c) "Contemplated IPO Conversion Price" means a price per Unit equal to seventy percent (70%) of the price per Unit offered by the Company for sale to the public in connection with the Contemplated IPO.

(d) "Event of Default" has the meaning given in Section 4 of this Note.

(e) "Interest" "has the meaning given in the preamble to this Note.

(f) "Next Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for aggregate gross proceeds of at least $1,500,000 (excluding any amounts received upon conversion or cancellation of the Notes, the 2012 Notes or the 2010 Notes); *provided*, *however*, that the Contemplated IPO shall not be deemed a Next Financing for purposes of this Note or the other Notes.

(g) "Next Financing Conversion Price" means a price per share equal to seventy-five percent (75%) of the price per share paid by the other purchasers of the Next Financing Securities issued and sold in the Next Financing.

(h) "Next Financing Securities" are the equity securities issued and sold by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing.

(i) "Non-Qualified Financing" is a transaction or series of related transactions after the date of issuance of this Note that is approved by the board of directors of the Company in which the Company issues and sells shares of its capital stock in exchange for cash, conversion or cancellation of indebtedness, or any combination thereof, and which: (i) does not constitute the Contemplated IPO; (ii) does not constitute a Next Financing; or (iii) constitutes a Next Financing but occurs after the Maturity Date.

(j) "Principal Amount" has the meaning given in the preamble to this Note.

(k) "2014 Purchase Agreement" has the meaning given in the preamble to this Note.

(l) "Units" means the units to be offered for sale to the public in connection with the Contemplated IPO, which shall consist of: (1) one (1) share of Common Stock; and (2) a warrant to purchase one (1) share of Common Stock.

2. Prepayment. The Company may not prepay this Note in whole or in part, without the written consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2012 Purchase Agreement; *provided*, *however*, that any such prepayment will be applied first to the payment of expenses due under the Notes, second to interest accrued on the Notes and third, if the amount of prepayment exceeds the amount of all such expenses and accrued interest, to the payment of principal of the Notes, all on a pro-rata basis.

3. Conversion.

(a) Automatic Conversion upon Contemplated IPO. If the Company consummates the Contemplated IPO on or prior to the Maturity Date, then the outstanding Principal Amount, and accrued and unpaid Interest, shall automatically convert into a number of Units at the Contemplated IPO Conversion Price, with any fractional Units rounded down, and otherwise upon the terms and conditions offered to purchasers of Units in connection with the Contemplated IPO.

(b) Automatic Conversion upon a Next Financing prior to Contemplated IPO or Maturity Date. If a Next Financing occurs on or prior to: (i) the consummation of the Contemplated IPO; or (ii) the Maturity Date, then the outstanding Principal Amount, and all accrued and unpaid Interest, shall automatically convert into fully paid and nonassessable shares of Next Financing Securities at the Next Financing Conversion Price, with any fractional shares rounded down, and otherwise upon the terms and conditions offered to purchasers of the Next Financing Securities in the Next Financing. Upon the automatic conversion of this Note pursuant to this Section 3(b), the Company shall give written notice to the Holder, notifying the Holder of such conversion and specifying the Next Financing Conversion Price, the Principal Amount of the Note converted and the date upon which such conversion occurred and calling upon such Holder to surrender the Note to the Company. Upon such conversion, the Holder shall surrender this Note at the Company's principal executive office, or, if this Note has been lost, stolen, destroyed or mutilated, then, in the case of loss, theft or destruction, the Holder shall deliver an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, the Holder shall surrender and cancel this Note. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares of Next Financing Securities to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the 2014 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company). Such conversion shall be deemed to have been made immediately prior to the close of business on the date of the closing of the Next Financing, and on and after such date the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(c) Voluntary Conversion. If neither the Contemplated IPO nor a Next Financing occurs on or prior to the Maturity Date, then all or a portion of the outstanding Principal Amount, and all accrued and unpaid Interest, shall be convertible at the option of the Holder at any time after the Maturity Date into: (i) a number of shares of the Company's Series C Preferred Stock at a price of $1.35 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations); or (ii) a number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to seventy five percent (75%) of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing. Before the Holder shall be entitled to convert this Note under this Section 3(c), the Holder shall surrender this Note, duly endorsed, at the Company's principal executive office and shall

give written notice to the Company of the election to convert the same pursuant to this Section 3(c), and shall state therein the amount of the unpaid Principal Amount to be converted and the name or names in which the certificate or certificates for shares are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver to the Holder at such principal executive office a certificate or certificates for the number of shares to which the Holder shall be entitled upon such conversion (bearing such legends as are required by the 2014 Purchase Agreement and applicable state and federal securities laws in the opinion of counsel to the Company), together with a replacement Note (if any principal amount is not converted) and any other securities and property to which the Holder is entitled upon such conversion under the terms of this Note, including a check payable to the Holder for any cash amounts payable as described in Section 3(d) below. The conversion shall be deemed to have been made immediately prior to the close of business on the date of the surrender of this Note, and the person entitled to receive the shares issuable upon such conversion shall be treated for all purposes as the record holder of such shares as of such date.

(d) Fractional Shares; Nonassessable; Effect of Conversion. Subject to Section 3(a) above, no fractional shares shall be issued upon conversion of this Note, and in lieu of the Company issuing any fractional shares to the Holder upon the conversion of this Note, the Company shall pay to the Holder an amount equal to the product obtained by multiplying the Next Financing Conversion Price by the fraction of a share not issued pursuant to this sentence. The Company covenants that the shares of Next Financing Securities issuable upon the conversion of this Note will, upon conversion of this Note, be validly issued, fully paid and nonassessable and free from all taxes, liens and charges in respect of the issue thereof. Upon conversion of this Note in full and the payment of the amounts specified in this Section 3(d), the Company shall be forever released from all its obligations and liabilities under this Note.

(e) Further Assurances. In connection with the conversion of this Note, the Holder, by acceptance of this Note, agrees to execute all agreements and other documents executed by the investors in the Contemplated IPO, the Next Financing, a Non-Qualified Financing or in connection with the purchase of shares of the Company's Series C Preferred Stock, as the case may be.

4. Events of Default. The occurrence of any of the following shall constitute an "Event of Default" under this Note:

(a) Failure to Pay. The Company shall fail to pay: (i) when due any Principal Amount payment on the due date hereunder; or (ii) any Interest or other payment required under the terms of this Note on the date due and such payment shall not have been made within five (5) days of the Company's receipt of the Holder's written notice to the Company of such failure to pay;

(b) Voluntary Bankruptcy or Insolvency Proceedings. The Company shall: (i) apply for or consent to the appointment of a receiver, trustee, liquidator or custodian of itself or of all or a substantial part of its property; (ii) commence a voluntary case or other proceeding seeking liquidation, reorganization or other relief with respect to itself or its debts under any bankruptcy, insolvency or other similar law now or hereafter in effect or consent to any such relief or to the appointment of or taking possession of its property by any official in an involuntary case or other proceeding commenced against it; (iii) make an assignment for the benefit of creditors; or (iv) take any action for the purpose of effecting any of the foregoing;

(c) Involuntary Bankruptcy or Insolvency Proceedings. Proceedings for the appointment of a receiver, trustee, liquidator or custodian of the Company or of all or a substantial part of the Company's property, or an involuntary case or other proceedings seeking liquidation, reorganization or other relief with respect to the Company or the Company's debts under any bankruptcy, insolvency or other similar law now or hereafter in effect shall be commenced and an order for relief entered or such proceeding shall not be dismissed or discharged within thirty (30) days of commencement;

(d) Breach of Representations and Warranties. Any material breach by the Company of any of the representations or warranties contained in Section 3 of the 2014 Purchase Agreement; or

(e) Failure to Pay Obligations. The Company generally fails to pay its obligations as and when due or if any judgment is secured against the Company, which judgment is not satisfied within ten (10) days.

Upon the occurrence or existence of any Event of Default described in Sections 4(a), (d) and (e) and at any time thereafter during the continuance of such Event of Default, the Holder may, with the consent of the Holders of at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the 2014 Purchase Agreement, by written notice to Company, declare this Note immediately due and payable without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. Upon the occurrence or existence of any Event of Default described in Sections 4(b) and (c), immediately and without notice, this Note shall automatically become immediately due and payable, without presentment, demand, protest or any other notice of any kind, all of which are hereby expressly waived, anything contained in this Note to the contrary notwithstanding. In addition to the foregoing remedies, upon the occurrence or existence of any Event of Default, the Holder may exercise any other right, power or remedy permitted to it by law.

5. Miscellaneous.

(a) Loss, Theft, Destruction or Mutilation of Note. Upon receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Note and, in the case of loss, theft or destruction, delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Note, the Company shall execute and deliver, in lieu of this Note, a new Note executed in the same manner as this Note, in the same principal amount as the unpaid principal amount of this Note and dated the date to which interest shall have been paid on this Note or, if no interest shall have yet been so paid, dated the date of this Note.

(b) Payment. All payments under this Note shall be made in lawful tender of the United States.

(c) Waivers. The Company hereby waives notice of default, presentment or demand for payment, protest or notice of nonpayment or dishonor and all other notices or demands relative to this instrument.

(d) Usury. In the event any Interest is paid on this Note which is deemed to be in excess of the then legal maximum rate, then that portion of the Interest payment representing an amount in excess of the then legal maximum rate shall be deemed a payment of principal and applied against the Principal Amount of this Note.

(e) Waiver and Amendment. Any provision of this Note may be amended, waived or modified upon the written consent of the Company and the Holders of at least two-thirds (2/3) of the Principal Amount of all then outstanding Notes issued pursuant to the 2014 Purchase Agreement.

(f) Notices. Any notice, request or other communication required or permitted hereunder shall be given in accordance with the 2014 Purchase Agreement.

(g) Expenses; Attorneys' Fees. If action is instituted to collect this Note, the Company promises to pay all reasonable costs and expenses, including, without limitation, reasonable attorneys' fees and costs, incurred in connection with such action.

(h) Successors and Assigns. This Note may be assigned or transferred by the Company only with the prior written approval of the Holder. Subject to the preceding sentence, the rights and obligations of the Company and the Holder of this Note shall be binding upon and benefit the successors, assigns, heirs, administrators and transferees of the parties.

(I) Governing Law. THIS NOTE SHALL BE GOVERNED IN ALL RESPECTS BY THE LAWS OF THE STATE OF CALIFORNIA AS SUCH LAWS ARE APPLIED TO AGREEMENTS BETWEEN CALIFORNIA RESIDENTS ENTERED INTO AND TO BE PERFORMED ENTIRELY WITHIN CALIFORNIA, BUT WITHOUT REGARD TO THE CONFLICTS OF LAW PROVISIONS OF CALIFORNIA, OR OF ANY OTHER STATE.

(j) Pari Passu Notes. The Holder acknowledges and agrees that the payment of all or any portion of the outstanding Principal Amount of this Note, and all accrued and unpaid Interest, shall be *pari passu* in right of payment and in all other respects (other than with respect to the priority of any security interest in the assets of the Company) to: (i) the other Notes; (ii) the 2012 Notes; and (iii) the 2010 Notes. In the event that the Holder receives payments in excess of such Holder's pro rata share of the Company's payments to the holders of all the Notes, the 2012 Notes and the 2010 Notes, then the Holder shall hold in trust all such excess payments for the benefit of the holders of all the other Notes, the 2012 Notes and the 2010 Notes, and shall pay such amounts held in trust to such other holders upon demand by such holders.

(Signature Page Follows)

IN WITNESS WHEREOF, the Company has caused this Note to be executed by its duly authorized officer as of the date and year first indicated above.

COMPANY:

CAPNIA, INC.

By: _____
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

THIS WARRANT AND THE UNDERLYING SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF ANY STATE. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE, TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS WARRANT MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

CAPNIA, INC.

WARRANT TO PURCHASE SHARES

Dated as of April 28, 2014
Void after the date specified in Section 8

No. 2014-

THIS CERTIFIES THAT, for value received, , or its registered assigns (the "Holder"), is entitled, subject to the provisions and upon the terms and conditions set forth herein, to purchase from Capnia, Inc., a Delaware corporation (the "Company"), Shares (as defined below), in the amounts, at such times and at the price per share set forth in Section 1. The term "Warrant" as used herein shall include this Warrant and any warrants delivered in substitution or exchange therefor as provided herein. This Warrant is issued in connection with the transactions described in the Convertible Note and Warrant Purchase Agreement, dated as of April 28, 2014, by and among the Company and the Investors described therein (the "2014 Purchase Agreement"). This Warrant is one of the "Warrants" issued pursuant to the 2014 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning ascribed to such terms in the 2014 Purchase Agreement and/or the form of convertible promissory note attached as Exhibit B to the 2014 Purchase Agreement (the "Note", and together with each other Note issued pursuant to the 2014 Purchase Agreement, the "Notes"), as applicable.

The following is a statement of the rights of the Holder and the conditions to which this Warrant is subject, and to which Holder, by acceptance of this Warrant, agrees:

1. Number and Price of Shares; Exercise Period.

(a) Definition of Shares. "Shares" shall mean Next Financing Securities in the event that either a Next Financing occurs prior to the earlier of: (i) the Company's consummation of the Contemplated IPO; or (ii) September 30, 2015 (the "Note Maturity Date"), and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the earlier of the Company's consummation of the Contemplated IPO or the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower.

(b) Number of Shares. Subject to any previous exercise of the Warrant, the Holder shall have the right to purchase up to the number of Shares that equals the quotient obtained by *dividing*: (x) 25% of the Principal Amount of the Note delivered in connection with this Warrant pursuant to the Purchase Agreement; *by* (y) the Exercise Price (as defined below), prior to (or in connection with) the expiration of this Warrant as provided in Section 8.

(c) Exercise Price. The exercise price per Share shall be equal to seventy-five percent (75%) of the price per share of the Next Financing Securities issued in the Next Financing; *provided*, *however*, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.35 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

(d) Exercise Period. This Warrant shall be exercisable, in whole or in part: (A) after the earlier of: (i) the closing date of a Next Financing that occurs prior to the Company's consummation of the Contemplated IPO; or (ii) the Note Maturity Date; and (B) prior to (or in connection with) the expiration of this Warrant as set forth in Section 8.

2. Exercise of the Warrant.

(a) Exercise. The purchase rights represented by this Warrant may be exercised at the election of the Holder, in whole or in part, in accordance with Section 1, by:

(i) the tender to the Company at its principal office (or such other office or agency as the Company may designate) of a notice of exercise in the form of Exhibit A (the "Notice of Exercise"), duly completed and executed by or on behalf of the Holder, together with the surrender of this Warrant; and

(ii) the payment to the Company of an amount equal to: (x) the Exercise Price; *multiplied by* (y) the number of Shares being purchased, by wire transfer or certified, cashier's or other check acceptable to the Company and payable to the order of the Company.

(b) Net Issue Exercise. In lieu of exercising this Warrant pursuant to Section 2(a)(ii), if the fair market value of one Share is greater than the Exercise Price (at the date of calculation as set forth below), the Holder may elect to receive a number of Shares equal to the value of this Warrant (or of any portion of this Warrant being cancelled) by surrender of this Warrant at the principal office of the Company (or such other office or agency as the Company may designate) together with a properly completed and executed Notice of Exercise reflecting such election, in which event the Company shall issue to the Holder that number of Shares computed using the following formula:

$$X = \frac{Y\,(A - B)}{A}$$

Where:

X = The number of Shares to be issued to the Holder.

Y = The number of Shares purchasable under this Warrant or, if only a portion of the Warrant is being exercised, the portion of the Warrant being canceled (at the date of such calculation).

A = The fair market value of one Share (at the date of such calculation).

B = The Exercise Price (as adjusted to the date of such calculation).

For purposes of the calculation above, the fair market value of one Share shall be determined by the Board of Directors of the Company, acting in good faith; *provided, however,* that:

(i) where a public market exists for the Company's common stock at the time of such exercise, the fair market value per Share shall be the product of: (x) the average of the closing bid prices of the Common Stock or the closing price quoted on the national securities exchange on which the common stock is listed as published in the *Wall Street Journal*, as applicable, for the ten (10) trading day period ending five (5) trading days prior to the date of determination of fair market value; and (y) the number of shares of Common Stock into which each Share is convertible at the time of such exercise, as applicable; and

(ii) if the Warrant is exercised in connection with the Company's initial public offering of Common Stock (other than the Contemplated IPO), the fair market value per Share shall be the product of: (x) the per share offering price to the public of such initial public offering by the Company; and (y) the number of shares of common stock into which each Share is convertible at the time of such exercise, as applicable.

(c) Stock Certificates. The rights under this Warrant shall be deemed to have been exercised and the Shares issuable upon such exercise shall be deemed to have been issued immediately prior to the close of business on the date this Warrant is exercised in accordance with its terms, and the person entitled to receive the Shares issuable upon such exercise shall be treated for all purposes as the holder of record of such Shares as of the close of business on such date. As promptly as reasonably practicable on or after such date, the Company shall issue and deliver to the person or persons entitled to receive the same a certificate or certificates for that number of shares issuable upon such exercise. In the event that the rights under this Warrant are exercised in part and have not expired, the Company shall execute and deliver a new Warrant reflecting the number of Shares that remain subject to this Warrant.

(d) No Fractional Shares or Scrip. No fractional shares or scrip representing fractional shares shall be issued upon the exercise of the rights under this Warrant. In lieu of such fractional share to which the Holder would otherwise be entitled, the Company shall make a cash payment equal to the Exercise Price multiplied by such fraction of a share.

(e) Conditional Exercise. The Holder may exercise this Warrant conditioned upon (and effective immediately prior to) consummation of any transaction that would cause the expiration of this Warrant pursuant to Section 8 by so indicating in the notice of exercise.

(f) Reservation of Stock. The Company agrees during the term the rights under this Warrant are exercisable to take all reasonable action to reserve and keep available from its authorized and unissued shares of Preferred Stock for the purpose of effecting the exercise of this Warrant such number of shares (and shares of Common Stock for issuance on conversion of such shares) as shall from time to time be sufficient to effect the exercise of the rights under this Warrant; and if at any time the number of authorized but unissued shares of Preferred Stock (and shares of Common stock for issuance on conversion of such shares) shall not be sufficient for purposes of the exercise of this Warrant in accordance with its terms and the conversion of the Shares, without limitation of such other remedies as may be available to the Holder, the Company will use reasonable efforts to take such corporate action as may, in the opinion of counsel, be

necessary to increase its authorized and unissued shares of its Preferred Stock (and shares of Common Stock for issuance on conversion of such shares) to a number of shares as shall be sufficient for such purposes.

3. Replacement of the Warrant. Subject to the receipt of evidence reasonably satisfactory to the Company of the loss, theft, destruction or mutilation of this Warrant and, in the case of loss, theft or destruction, on delivery of an indemnity agreement reasonably satisfactory in form and substance to the Company or, in the case of mutilation, on surrender and cancellation of this Warrant, the Company at the expense of the Holder shall execute and deliver, in lieu of this Warrant, a new warrant of like tenor and amount.

4. Transfer of the Warrant.

(a) Warrant Register. The Company shall maintain a register (the "Warrant Register") containing the name and address of the Holder or Holders. Until this Warrant is transferred on the Warrant Register in accordance herewith, the Company may treat the Holder as shown on the Warrant Register as the absolute owner of this Warrant for all purposes, notwithstanding any notice to the contrary. Any Holder of this Warrant (or of any portion of this Warrant) may change its address as shown on the Warrant Register by written notice to the Company requesting a change.

(b) Warrant Agent. The Company may appoint an agent for the purpose of maintaining the Warrant Register referred to in Section 4(a), issuing the Shares or other securities then issuable upon the exercise of the rights under this Warrant, exchanging this Warrant, replacing this Warrant or conducting related activities.

(c) Transferability of the Warrant. Subject to the provisions of this Warrant with respect to compliance with the Securities Act of 1933, as amended (the "Securities Act") and limitations on assignments and transfers, including, without limitation, compliance with the restrictions on transfer set forth in Section 5, title to this Warrant may be transferred by endorsement (by the transferor and the transferee executing the assignment form attached hereto as Exhibit B (the "Assignment Form")) and delivery in the same manner as a negotiable instrument transferable by endorsement and delivery.

(d) Exchange of the Warrant upon a Transfer. Upon surrender of this Warrant (and a properly endorsed Assignment Form) for exchange, subject to the provisions of this Warrant with respect to compliance with the Securities Act and limitations on assignments and transfers, the Company shall issue to or on the order of the Holder a new warrant or warrants of like tenor, in the name of the Holder or as the Holder (on payment by the Holder of any applicable transfer taxes) may direct, for the number of shares issuable upon exercise hereof, and the Company shall register any such transfer upon the Warrant Register. This Warrant (and the securities issuable upon exercise of the rights under this Warrant) must be surrendered to the Company or its warrant or transfer agent, as applicable, as a condition precedent to the sale, pledge, hypothecation or other transfer of any interest in any of the securities represented hereby.

(e) Taxes. In no event shall the Company be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of any certificate in a name other than that of the Holder, and the Company shall not be required to issue or deliver any such certificate unless and until the person or persons requesting the issue thereof shall have paid to the Company the amount of such tax or shall have established to the satisfaction of the Company that such tax has been paid or is not payable.

5. Restrictions on Transfer of the Warrant and Shares; Compliance with Securities Laws. By acceptance of this Warrant, the Holder agrees to comply with the following:

(a) Restrictions on Transfers. This Warrant may not be transferred or assigned in whole or in part without the Company's prior written consent (which shall not be unreasonably withheld), and any attempt by the Holder to transfer or assign any rights, duties or obligations that arise under this Warrant without such permission shall be void. Any transfer of this Warrant or the Shares or the shares of Common Stock issuable upon conversion of the Shares (the "Securities") must be in compliance with all applicable federal and state securities laws. The Holder agrees not to make any sale, assignment, transfer, pledge or other disposition of all or any portion of the Securities, or any beneficial interest therein, unless and until the transferee thereof has agreed in writing for the benefit of the Company to take and hold such Securities subject to, and to be bound by, the terms and conditions set forth in this Warrant to the same extent as if the transferee were the original Holder hereunder, and

(i) there is then in effect a registration statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such registration statement (excluding, for purposes hereof, any registration statement on Form S-1 under the Securities Act that becomes effective in connection with the Contemplated IPO), or

(ii) (A) such Holder shall have given prior written notice to the Company of such Holder's intention to make such disposition and shall have furnished the Company with a detailed description of the manner and circumstances of the proposed disposition, (B) the transferee shall have confirmed to the satisfaction of the Company in writing that the Securities are being acquired (1) solely for the transferee's own account and not as a nominee for any other party, (2) for investment and (3) not with a view toward distribution or resale, and shall have confirmed such other matters related thereto as may be reasonably requested by the Company, and (C) if requested by the Company, such Holder shall have furnished the Company, at the Holder's expense, with evidence satisfactory to the Company that such disposition will not require registration of such Securities under the Securities Act, whereupon such Holder shall be entitled to transfer such Securities in accordance with the terms of the notice delivered by the Holder to the Company.

(b) Securities Law Legend. The Securities shall (unless otherwise permitted by the provisions of this Warrant) be stamped or imprinted with a legend substantially similar to the following (in addition to any legend required by state securities laws):

> THE SECURITIES REPRESENTED HEREBY HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "ACT"), OR UNDER THE SECURITIES LAWS OF CERTAIN STATES. THESE SECURITIES MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED EXCEPT AS PERMITTED UNDER THE ACT AND APPLICABLE STATE SECURITIES LAWS IN ACCORDANCE WITH APPLICABLE REGISTRATION REQUIREMENTS OR AN EXEMPTION THEREFROM. THE ISSUER OF THESE SECURITIES MAY REQUIRE AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE ISSUER THAT SUCH OFFER, SALE OR TRANSFER, PLEDGE OR HYPOTHECATION OTHERWISE COMPLIES WITH THE ACT AND ANY APPLICABLE STATE SECURITIES LAWS. THIS CERTIFICATE MUST BE SURRENDERED TO THE COMPANY OR ITS TRANSFER AGENT AS A CONDITION PRECEDENT TO THE SALE, TRANSFER, PLEDGE OR HYPOTHECATION OF ANY INTEREST IN ANY OF THE SECURITIES REPRESENTED HEREBY.

(c) Market Stand-off Legend. The Shares and Common Stock issued upon exercise hereof or conversion thereof shall also be stamped or imprinted with a legend in substantially the following form:

THE SHARES REPRESENTED BY THIS CERTIFICATE ARE SUBJECT TO RESTRICTIONS ON TRANSFERABILITY AND RESALE, INCLUDING A LOCK-UP PERIOD IN THE EVENT OF A PUBLIC OFFERING, AS SET FORTH IN THE WARRANT PURSUANT TO WHICH THESE SHARES WERE ISSUED, A COPY OF WHICH MAY BE OBTAINED AT THE PRINCIPAL OFFICE OF THE COMPANY.

(d) Instructions Regarding Transfer Restrictions. The Holder consents to the Company making a notation on its records and giving instructions to any transfer agent in order to implement the restrictions on transfer established in this Section 5.

(e) Removal of Legend. The legend referring to federal and state securities laws identified in Section 5(b) stamped on a certificate evidencing the Shares (and the Common Stock issuable upon conversion thereof) and the stock transfer instructions and record notations with respect to such securities shall be removed and the Company shall issue a certificate without such legend to the holder of such securities if: (i) such securities are registered under the Securities Act; or (ii) such holder provides the Company with an opinion of counsel reasonably acceptable to the Company to the effect that a sale or transfer of such securities may be made without registration or qualification.

6. Adjustments. Subject to the expiration of this Warrant pursuant to Section 8, the number and kind of shares purchasable hereunder and the Exercise Price therefor are subject to adjustment from time to time, as follows:

(a) Merger or Reorganization. If at any time there shall be any reorganization, recapitalization, merger or consolidation (a "Reorganization") involving the Company (other than as otherwise provided for herein or as would cause the expiration of this Warrant under Section 8) in which shares of the Company's stock are converted into or exchanged for securities, cash or other property, then, as a part of such Reorganization, lawful provision shall be made so that the Holder shall thereafter be entitled to receive upon exercise of this Warrant, the kind and amount of securities, cash or other property of the successor corporation resulting from such Reorganization, equivalent in value to that which a holder of the Shares deliverable upon exercise of this Warrant would have been entitled in such Reorganization if the right to purchase the Shares hereunder had been exercised immediately prior to such Reorganization. In any such case, appropriate adjustment (as determined in good faith by the Board of Directors of the successor corporation) shall be made in the application of the provisions of this Warrant with respect to the rights and interests of the Holder after such Reorganization to the end that the provisions of this Warrant shall be applicable after the event, as near as reasonably may be, in relation to any shares or other securities deliverable after that event upon the exercise of this Warrant.

(b) Reclassification of Shares. If the securities issuable upon exercise of this Warrant are changed into the same or a different number of securities of any other class or classes by reclassification, capital reorganization, conversion of all outstanding shares of the relevant class or series (other than in connection with the Contemplated IPO or as would cause the expiration of this Warrant pursuant to Section 8) or otherwise (other than as otherwise provided for herein) (a "Reclassification"), then, in any such event, in lieu of the number of Shares which the Holder would otherwise have been entitled to receive, the Holder shall have the right thereafter to exercise this Warrant for a number of shares of such other class or classes of stock that a holder of the number of securities deliverable upon exercise of this Warrant immediately before that change would have been entitled to receive in such Reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(c) Subdivisions and Combinations. In the event that the outstanding shares of the securities issuable upon exercise of this Warrant are subdivided (by stock split, by payment of a stock dividend or otherwise) into a greater number of shares of such securities, the number of Shares issuable upon

exercise of the rights under this Warrant immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately increased, and the Exercise Price shall be proportionately decreased, and in the event that the outstanding shares of the securities issuable upon exercise of this Warrant are combined (by reclassification or otherwise) into a lesser number of shares of such securities, the number of Shares issuable upon exercise of the rights under this Warrant immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately decreased, and the Exercise Price shall be proportionately increased.

(d) Redemption. In the event that all of the outstanding shares of the securities issuable upon exercise of this Warrant are redeemed in accordance with the Company's certificate of incorporation, this Warrant shall thereafter be exercisable for a number of shares of the Company's Common Stock equal to the number of shares of Common Stock that would have been received if this Warrant had been exercised in full immediately prior to such redemption and the Preferred Stock received thereupon had been simultaneously converted into common stock.

(e) Notice of Adjustments. Upon any adjustment in accordance with this Section 6, the Company shall give notice thereof to the Holder, which notice shall state the event giving rise to the adjustment, the Exercise Price as adjusted and the number of securities or other property purchasable upon the exercise of the rights under this Warrant, setting forth in reasonable detail the method of calculation of each. The Company shall, upon the written request of any Holder, furnish or cause to be furnished to such Holder a certificate setting forth: (i) such adjustments; (ii) the Exercise Price at the time in effect; and (iii) the number of securities and the amount, if any, of other property that at the time would be received upon exercise of this Warrant.

7. Notification of Certain Events. Prior to the expiration of this Warrant pursuant to Section 8, in the event that the Company shall authorize:

(a) the issuance of any dividend or other distribution on the capital stock of the Company (other than: (i) dividends or distributions otherwise provided for in Section 6; (ii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase; (iii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Company or its subsidiaries pursuant to rights of first refusal or first offer contained in agreements providing for such rights; or (iv) repurchases of capital stock of the Company in connection with the settlement of disputes with any stockholder), whether in cash, property, stock or other securities;

(b) the voluntary liquidation, dissolution or winding up of the Company; or

(c) any transaction resulting in the expiration of this Warrant pursuant to Section 8(b) or 8(c);

the Company shall send to the Holder of this Warrant at least ten (10) days prior written notice of the date on which a record shall be taken for any such dividend or distribution specified in clause (a) or the expected effective date of any such other event specified in clause (b) or (c), as applicable. The notice provisions set forth in this Section 7 may be shortened or waived prospectively or retrospectively by the consent of the holders of two-thirds (2/3) of the Shares issuable upon exercise of the rights under the Warrants issued pursuant to the 2014 Purchase Agreement.

8. Expiration of the Warrant. This Warrant shall expire and shall no longer be exercisable as of the earlier of:

(a) 5:00 p.m., Pacific time, on the ten (10)-year anniversary of the First Tranche Initial Closing under 2014 Purchase Agreement;

(b) A Change of Control (as defined in the Note); or

(c) Immediately prior to the closing of a Qualified IPO (as defined in the Company's Amended and Restated Certificate of Incorporation, as the same may be amended from time to time).

9. No Rights as a Stockholder. Nothing contained herein shall entitle the Holder to any rights as a stockholder of the Company or to be deemed the holder of any securities that may at any time be issuable on the exercise of the rights hereunder for any purpose nor shall anything contained herein be construed to confer upon the Holder, as such, any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action (whether upon any recapitalization, issuance of stock, reclassification of stock, change of par value or change of stock to no par value, consolidation, merger, conveyance or otherwise) or to receive notice of meetings, or to receive dividends or subscription rights or any other rights of a stockholder of the Company until the rights under the Warrant shall have been exercised and the Shares purchasable upon exercise of the rights hereunder shall have become deliverable as provided herein.

10. Market Stand-off. The Holder hereby agrees that Section 1.15 of the Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Shares and any shares issuable upon conversion thereof.

11. Miscellaneous.

(a) Amendments. Except as expressly provided herein, neither this Warrant nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument referencing this Warrant and signed by the Company and the holders of warrants representing not less than two-thirds (2/3) of the Shares issuable upon exercise of any and all outstanding Warrants issued pursuant to the 2014 Purchase Agreement, which majority does not need to include the consent of the Holder. Any amendment, waiver, discharge or termination effected in accordance with this Section 11(a) shall be binding upon each holder of the Warrants, each future holder of such Warrants and the Company; *provided, however,* that no special consideration or inducement may be given to any such holder in connection with such consent that is not given ratably to all such holders, and that such amendment must apply to all such holders equally and ratably in accordance with the number of shares of capital stock issuable upon exercise of the Warrants. The Company shall promptly give notice to all holders of Warrants of any amendment effected in accordance with this Section 11(a).

(b) Waivers. No waiver of any single breach or default shall be deemed a waiver of any other breach or default theretofore or thereafter occurring.

(c) Notices. All notices and other communications required or permitted under this Warrant shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed: (i) if to an Investor, at such Investor's address, facsimile number or electronic mail address as shown in the Company's records, or as such Investor may designate by advance written notice to the Company in accordance with the provisions hereof; or (ii) if to the Company, to its address or facsimile number set forth on its signature page to this

Agreement and directed to the attention of the President, or at such other address or facsimile number as the Company may designate by advance written notice to the Holder. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address, of the last holder of this Warrant for which the Company has contact information in its records.

(d) Governing Law. This Warrant and all actions arising out of or in connection with this Warrant shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California, or of any other state.

(e) Jurisdiction and Venue. Each of the Holder and the Company irrevocably consents to the exclusive jurisdiction and venue of any court within Santa Clara County, State of California, in connection with any matter based upon or arising out of this Warrant or the matters contemplated herein, and agrees that process may be served upon them in any manner authorized by the laws of the State of California for such persons.

(f) Titles and Subtitles. The titles and subtitles used in this Warrant are used for convenience only and are not to be considered in construing or interpreting this Warrant. All references in this Warrant to sections, paragraphs and exhibits shall, unless otherwise provided, refer to sections and paragraphs hereof and exhibits attached hereto.

(g) Severability. If any provision of this Warrant becomes or is declared by a court of competent jurisdiction to be illegal, unenforceable or void, portions of such provision, or such provision in its entirety, to the extent necessary, shall be severed from this Warrant, and such illegal, unenforceable or void provision shall be replaced with a valid and enforceable provision that will achieve, to the extent possible, the same economic, business and other purposes of the illegal, unenforceable or void provision. The balance of this Warrant shall be enforceable in accordance with its terms.

(h) Waiver of Jury Trial. **EACH OF THE HOLDER AND THE COMPANY WAIVES, TO THE FULLEST EXTENT PERMITTED BY LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING (WHETHER BASED ON CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATED TO THIS WARRANT.** If the waiver of jury trial set forth in this Section 11(h) is not enforceable, then any claim or cause of action arising out of or relating to this Warrant shall be settled by judicial reference pursuant to California Code of Civil Procedure Section 638 *et seq*. before a referee sitting without a jury, such referee to be mutually acceptable to the parties or, if no agreement is reached, by a referee appointed by the Presiding Judge of the California Superior Court for Santa Clara County. This Section 11(h) shall not restrict the Holder or the Company from exercising remedies under the Uniform Commercial Code or from exercising pre-judgment remedies under applicable law.

(i) California Corporate Securities Law. THE SALE OF THE SECURITIES THAT ARE THE SUBJECT OF THIS WARRANT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA AND THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION THEREFOR PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM QUALIFICATION BY SECTION 25100, 25102, OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS WARRANT ARE EXPRESSLY CONDITIONED UPON THE QUALIFICATION BEING OBTAINED, UNLESS THE SALE IS SO EXEMPT.

(j) Rights and Obligations Survive Exercise of the Warrant. Except as otherwise provided herein, the rights and obligations of the Company and the Holder under this Warrant shall survive exercise of this Warrant.

(k) Entire Agreement. Except as expressly set forth herein, this Warrant (including the exhibits attached hereto) constitutes the entire agreement and understanding of the Company and the Holder with respect to the subject matter hereof and supersedes all prior agreements and understandings relating to the subject matter hereof.

(*Signature Page Follows*)

The Company signs this Warrant as of the date stated on the first page.

COMPANY:

CAPNIA, INC.

By: _____
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

EXHIBIT A

NOTICE OF EXERCISE

TO: **CAPNIA, INC. (the "Company")**

Attention: **President**

(1) **Exercise.** The undersigned elects to purchase the following pursuant to the terms of the attached Warrant:

Number of shares: _____

Type of security: _____

(2) **Method of Exercise.** The undersigned elects to exercise the attached Warrant pursuant to:

☐ A cash payment, and tenders herewith payment of the purchase price for such shares in full, together with all applicable transfer taxes, if any.

☐ The net issue exercise provisions of Section 2(b) of the attached Warrant.

(3) **Conditional Exercise.** Is this a conditional exercise pursuant to Section 2(e):

☐ Yes ☐ No

If "Yes," indicate the applicable condition:

_____]

(4) **Stock Certificate.** Please issue a certificate or certificates representing the shares in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

(5) **Unexercised Portion of the Warrant.** Please issue a new warrant for the unexercised portion of the attached Warrant in the name of:

☐ The undersigned

☐ Other—Name: _____

Address: _____

_____

☐ Not applicable

(6) **Investment Intent.** The undersigned represents and warrants that the aforesaid shares are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that the undersigned has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(7) **Investment Representation Statement.** The undersigned has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(8) **Market Standoff Agreement.** The undersigned acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the aforesaid shares and any shares issuable upon conversion thereof.

(9) **Consent to Receipt of Electronic Notice.** Subject to the limitations set forth in Delaware General Corporation Law § 232(e), the undersigned consents to the delivery of any notice to stockholders given by the Company under the Delaware General Corporation Law or the Company's certificate of incorporation or bylaws by: (i) facsimile telecommunication to the facsimile number provided below (or to any other facsimile number for the undersigned in the Company's records); (ii) electronic mail to the electronic mail address provided below (or to any other electronic mail address for the undersigned in the Company's records); (iii) posting on an electronic network together with separate notice to the undersigned of such specific posting; or (iv) any other form of electronic transmission (as defined in the Delaware General Corporation Law) directed to the undersigned. This consent may be revoked by the undersigned by written notice to the Company and may be deemed revoked in the circumstances specified in Delaware General Corporation Law § 232.

_____

(*Print name of the warrant holder*)

_____

(*Signature*)

_____

(*Name and title of signatory, if applicable*)

_____

(*Date*)

_____

(*Fax number*)

_____

(*Email address*)

(*Signature page to the Notice of Exercise*)

EXHIBIT B

ASSIGNMENT FORM

ASSIGNOR: _____

COMPANY: CAPNIA, INC.

WARRANT: THE WARRANT TO PURCHASE SHARES ISSUED ON APRIL 28, 2014 (THE "WARRANT")

DATE: _____

(1) **Assignment.** The undersigned registered holder of the Warrant ("Assignor") assigns and transfers to the assignee named below ("Assignee") all of the rights of Assignor under the Warrant, with respect to the number of shares set forth below:

Name of Assignee: _____

Address of Assignee: _____

_____

Number of Shares Assigned: _____

and does irrevocably constitute and appoint as attorney to make such transfer on the books of CAPNIA, INC., maintained for the purpose, with full power of substitution in the premises.

(2) **Obligations of Assignee.** Assignee agrees to take and hold the Warrant and any shares of stock to be issued upon exercise of the rights thereunder (and any shares issuable upon conversion thereof) (the "Securities") subject to, and to be bound by, the terms and conditions set forth in the Warrant to the same extent as if Assignee were the original holder thereof.

(3) **Investment Intent.** Assignee represents and warrants that the Securities are being acquired for investment for its own account, not as a nominee or agent, and not with a view to, or for resale in connection with, the distribution thereof, and that Assignee has no present intention of selling, granting any participation in, or otherwise distributing the shares, nor does it have any contract, undertaking, agreement or arrangement for the same.

(4) **Investment Representation Statement.** Assignee has executed, and delivers herewith, an Investment Representation Statement in a form satisfactory to the Company.

(5) **Market Stand-Off Agreement.** Assignee acknowledges and agrees that Section 1.15 of that certain Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (as amended from time to time in accordance with the terms thereof) shall govern the Securities.

Assignor and Assignee are signing this Assignment Form on the date first set forth above.

ASSIGNOR	**ASSIGNEE**
(*Print name of Assignor*)	(*Print name of Assignee*)
(*Signature of Assignor*)	(*Signature of Assignee*)
(*Print name of signatory, if applicable*)	(*Print name of signatory, if applicable*)
(*Print title of signatory, if applicable*)	(*Print title of signatory, if applicable*)
Address:	Address:

Exhibit 10.1

CAPNIA, INC.

INDEMNIFICATION AGREEMENT

This Indemnification Agreement (this "***Agreement***") is dated as of May __, 2014, and is between Capnia, Inc., a Delaware corporation (the "***Company***"), and _____ ("***Indemnitee***").

RECITALS

A. Indemnitee's service to the Company substantially benefits the Company.

B. Individuals are reluctant to serve as directors or officers of corporations or in certain other capacities unless they are provided with adequate protection through insurance or indemnification against the risks of claims and actions against them arising out of such service.

C. Indemnitee does not regard the protection currently provided by applicable law, the Company's governing documents and any insurance as adequate under the present circumstances, and Indemnitee may not be willing to serve as a director or officer without additional protection.

D. In order to induce Indemnitee to continue to provide services to the Company, it is reasonable, prudent and necessary for the Company to contractually obligate itself to indemnify, and to advance expenses on behalf of, Indemnitee as permitted by applicable law.

E. This Agreement is a supplement to and in furtherance of the indemnification provided in the Company's certificate of incorporation and bylaws, and any resolutions adopted pursuant thereto, and this Agreement shall not be deemed a substitute therefor, nor shall this Agreement be deemed to limit, diminish or abrogate any rights of Indemnitee thereunder.

The parties therefore agree as follows:

1. **Definitions.**

(a) "***Corporate Status***" describes the status of a person who is or was a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise.

(b) "***DGCL***" means the General Corporation Law of the State of Delaware.

(c) "***Disinterested Director***" means a director of the Company who is not and was not a party to the Proceeding in respect of which indemnification is sought by Indemnitee.

(d) "***Enterprise***" means the Company and any other corporation, partnership, limited liability company, joint venture, trust, employee benefit plan or other enterprise of which Indemnitee is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary.

(e) "***Expenses***" include all reasonable attorneys' fees, retainers, court costs, transcript costs, fees and costs of experts, witness fees, travel expenses, duplicating costs, printing and binding costs, telephone charges, postage, delivery service fees, and all other disbursements or expenses of the types

customarily incurred in connection with prosecuting, defending, preparing to prosecute or defend, investigating, being or preparing to be a witness in, or otherwise participating in, a Proceeding. Expenses also include (i) Expenses incurred in connection with any appeal resulting from any Proceeding, including without limitation the premium, security for, and other costs relating to any cost bond, supersedeas bond or other appeal bond or their equivalent, and (ii) for purposes of Section 12(c), Expenses incurred by Indemnitee in connection with the interpretation, enforcement or defense of Indemnitee's rights under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company. Expenses, however, shall not include amounts paid in settlement by Indemnitee or the amount of judgments or fines against Indemnitee.

(f) "***Independent Counsel***" means a law firm, or a partner or member of a law firm, that is experienced in matters of corporation law and neither presently is, nor in the past five years has been, retained to represent (i) the Company or Indemnitee in any matter material to either such party (other than as Independent Counsel with respect to matters concerning Indemnitee under this Agreement, or other indemnitees under similar indemnification agreements), or (ii) any other party to the Proceeding giving rise to a claim for indemnification hereunder. Notwithstanding the foregoing, the term "***Independent Counsel***" shall not include any person who, under the applicable standards of professional conduct then prevailing, would have a conflict of interest in representing either the Company or Indemnitee in an action to determine Indemnitee's rights under this Agreement.

(g) "***Proceeding***" means any threatened, pending or completed action, suit, arbitration, mediation, alternate dispute resolution mechanism, investigation, inquiry, administrative hearing or proceeding, whether brought in the right of the Company or otherwise and whether of a civil, criminal, administrative or investigative nature, including any appeal therefrom and including without limitation any such Proceeding pending as of the date of this Agreement, in which Indemnitee was, is or will be involved as a party, a potential party, a non-party witness or otherwise by reason of (i) the fact that Indemnitee is or was a director or officer of the Company, (ii) any action taken by Indemnitee or any action or inaction on Indemnitee's part while acting as a director or officer of the Company, or (iii) the fact that he or she is or was serving at the request of the Company as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company or any other Enterprise, in each case whether or not serving in such capacity at the time any liability or Expense is incurred for which indemnification or advancement of expenses can be provided under this Agreement.

(h) Reference to "***other enterprises***" shall include employee benefit plans; references to "***fines***" shall include any excise taxes assessed on a person with respect to any employee benefit plan; references to "***serving at the request of the Company***" shall include any service as a director, officer, employee or agent of the Company which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner he or she reasonably believed to be in the best interests of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "***not opposed to the best interests of the Company***" as referred to in this Agreement.

2. **Indemnity in Third-Party Proceedings.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 2 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding, other than a Proceeding by the Company. Pursuant to this Section 2, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses, judgments, fines and amounts paid in settlement actually incurred by Indemnitee or on his or her behalf in connection with such Proceeding or any claim, issue or matter therein, except those which are finally judicially determined, by a court of competent jurisdiction within the United States, to have resulted primarily from the gross negligence or willful misconduct of the Indemnitee.

3. **Indemnity in Proceedings by or in the Right of the Company.** The Company shall indemnify Indemnitee in accordance with the provisions of this Section 3 if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding by the Company. Pursuant to this Section 3, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually incurred by Indemnitee or on Indemnitee's behalf in connection with such Proceeding or any claim, issue or matter therein, except those which are finally judicially determined, by a court of competent jurisdiction within the United States, to have resulted primarily from the gross negligence or willful misconduct of the Indemnitee. No indemnification for Expenses shall be made under this Section 3 in respect of any claim, issue or matter as to which Indemnitee shall have been adjudged by a court of competent jurisdiction to be liable to the Company, unless and only to the extent that the Delaware Court of Chancery or any court in which the Proceeding was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, Indemnitee is fairly and reasonably entitled to indemnification for such expenses as the Delaware Court of Chancery or such other court shall deem proper.

4. **Indemnification for Expenses of a Party Who is Wholly or Partly Successful.** To the extent that Indemnitee is a party to or a participant in and is successful (on the merits or otherwise) in defense of any Proceeding or any claim, issue or matter therein, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith. To the extent permitted by applicable law, if Indemnitee is not wholly successful in such Proceeding but is successful, on the merits or otherwise, in defense of one or more but less than all claims, issues or matters in such Proceeding, the Company shall indemnify Indemnitee against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection with (a) each successfully resolved claim, issue or matter and (b) any claim, issue or matter related to any such successfully resolved claim, issue or matter. For purposes of this section, the termination of any claim, issue or matter in such a Proceeding by dismissal, with or without prejudice, shall be deemed to be a successful result as to such claim, issue or matter.

5. **Indemnification for Expenses of a Witness.** To the extent that Indemnitee is, by reason of his or her Corporate Status, a witness in any Proceeding to which Indemnitee is not a party, Indemnitee shall be indemnified to the fullest extent permitted by applicable law against all Expenses actually and reasonably incurred by Indemnitee or on Indemnitee's behalf in connection therewith.

6. **Additional Indemnification.**

(a) Notwithstanding any limitation in Sections 2, 3 or 4, the Company shall indemnify Indemnitee to the fullest extent permitted by applicable law if Indemnitee is, or is threatened to be made, a party to or a participant in any Proceeding (including a Proceeding by or in the right of the Company to procure a judgment in its favor) against all Expenses, judgments, fines and amounts paid in settlement actually and reasonably incurred by Indemnitee or on his or her behalf in connection with the Proceeding or any claim, issue or matter therein.

(b) For purposes of Section 6(a), the meaning of the phrase "***to the fullest extent permitted by applicable law***" shall include, but not be limited to:

(i) the fullest extent permitted by the provision of the DGCL that authorizes or contemplates additional indemnification by agreement, or the corresponding provision of any amendment to or replacement of the DGCL; and

(ii) the fullest extent authorized or permitted by any amendments to or replacements of the DGCL adopted after the date of this Agreement that increase the extent to which a corporation may indemnify its officers and directors.

7. **Exclusions.** Notwithstanding any provision in this Agreement, the Company shall not be obligated under this Agreement to make any indemnity in connection with any Proceeding (or any part of any Proceeding):

(a) Subject to the subrogation rights set forth in Section 15 below for which payment has actually been made to or on behalf of Indemnitee under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b) for an accounting or disgorgement of profits pursuant to Section 16(b) of the Securities Exchange Act of 1934, as amended, or similar provisions of federal, state or local statutory law or common law, if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(c) for any reimbursement of the Company by Indemnitee of any bonus or other incentive-based or equity-based compensation or of any profits realized by Indemnitee from the sale of securities of the Company, as required in each case under the Securities Exchange Act of 1934, as amended (including any such reimbursements that arise from an accounting restatement of the Company pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "***Sarbanes-Oxley Act***"), or the payment to the Company of profits arising from the purchase and sale by Indemnitee of securities in violation of Section 306 of the Sarbanes-Oxley Act), if Indemnitee is held liable therefor (including pursuant to any settlement arrangements);

(d) initiated by Indemnitee, including any Proceeding (or any part of any Proceeding) initiated by Indemnitee against the Company or its directors, officers, employees, agents or other indemnitees, unless (i) the Company's board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (ii) the Company provides the indemnification, in its sole discretion, pursuant to the powers vested in the Company under applicable law, (iii) otherwise authorized in Section 12(c) or (iv) otherwise required by applicable law; or

(e) if prohibited by applicable law.

8. **Advances of Expenses.** The Company shall advance the Expenses incurred by Indemnitee in connection with any Proceeding, and such advancement shall be made as soon as reasonably practicable, but in any event no later than 60 days, after the receipt by the Company of a written statement or statements requesting such advances from time to time (which shall include invoices received by Indemnitee in connection with such Expenses but, in the case of invoices in connection with legal services, any references to legal work performed or to expenditure made that would cause Indemnitee to waive any privilege accorded by applicable law shall not be included with the invoice). Advances shall be unsecured and interest free and made without regard to Indemnitee's ability to repay such advances. Indemnitee hereby undertakes to repay any advance to the extent that it is ultimately determined that Indemnitee is not entitled to be indemnified by the Company. This Section 8 shall not apply to the extent advancement is prohibited by law and shall not apply to any Proceeding for which indemnity is not permitted under this Agreement, but shall apply to any Proceeding referenced in Section 7(b) or 7(c) prior to a determination that Indemnitee is not entitled to be indemnified by the Company.

9. **Procedures for Notification and Defense of Claim.**

(a) Indemnitee shall notify the Company in writing of any matter with respect to which Indemnitee intends to seek indemnification or advancement of Expenses as soon as reasonably practicable following the receipt by Indemnitee of notice thereof. The written notification to the Company shall include, in reasonable detail, a description of the nature of the Proceeding and the facts underlying the Proceeding. The failure by Indemnitee to notify the Company will not relieve the Company from any liability which it may have to Indemnitee hereunder or otherwise than under this Agreement, and any delay in so notifying the Company shall not constitute a waiver by Indemnitee of any rights, except to the extent that such failure or delay materially prejudices the Company.

(b) If, at the time of the receipt of a notice of a Proceeding pursuant to the terms hereof, the Company has directors' and officers' liability insurance in effect, the Company shall give prompt notice of the commencement of the Proceeding to the insurers in accordance with the procedures set forth in the applicable policies. The Company shall thereafter take all commercially reasonable action to cause such insurers to pay, on behalf of Indemnitee, all amounts payable as a result of such Proceeding in accordance with the terms of such policies.

(c) In the event the Company may be obligated to make any indemnity in connection with a Proceeding, the Company shall be entitled to assume the defense of such Proceeding with counsel approved by Indemnitee, upon the delivery to Indemnitee of written notice of its election to do so. Notwithstanding the Company's assumption of the defense of any such Proceeding, the Company shall be obligated to pay the fees and expenses of Indemnitee's counsel to the extent (i) the employment of counsel by Indemnitee is authorized by the Company, (ii) counsel for the Company or Indemnitee shall have reasonably concluded that there is a conflict of interest between the Company and Indemnitee in the conduct of any such defense such that Indemnitee needs to be separately represented, (iii) the Company is not financially or legally able to perform its indemnification obligations or (iv) the Company shall not have retained, or shall not continue to retain, such counsel to defend such Proceeding. The Company shall have the right to conduct such defense as it sees fit in its sole discretion. Regardless of any provision in this Agreement, Indemnitee shall have the right to employ counsel in any Proceeding at Indemnitee's personal expense. The Company shall not be entitled, without the consent of Indemnitee, to assume the defense of any claim brought by or in the right of the Company.

(d) Indemnitee shall give the Company such information and cooperation in connection with the Proceeding as may be reasonably appropriate.

(e) The Company shall not be liable to indemnify Indemnitee for any settlement of any Proceeding (or any part thereof) without the Company's prior written consent, which shall not be unreasonably withheld.

(f) The Company shall not settle any Proceeding (or any part thereof) without Indemnitee's prior written consent, which shall not be unreasonably withheld, unless such settlement includes an express release of the Indemnitee.

10. **Procedures upon Application for Indemnification.**

(a) To obtain indemnification, Indemnitee shall submit to the Company a written request, including therein or therewith such documentation and information as is reasonably available to Indemnitee and as is reasonably necessary to determine whether and to what extent Indemnitee is entitled to indemnification following the final disposition of the Proceeding. The Company shall, as soon as reasonably practicable after receipt of such a request for indemnification, advise the board of directors that Indemnitee has requested indemnification. Any delay in providing the request will not relieve the Company from its obligations under this Agreement, except to the extent such failure is prejudicial.

(b) Upon written request by Indemnitee for indemnification pursuant to Section 10(a), a determination, if required by applicable law, with respect to Indemnitee's entitlement thereto shall be made in the specific case (A) by a majority vote of the Disinterested Directors, even though less than a quorum of the Company's board of directors, (B) by a committee of Disinterested Directors designated by a majority vote of

the Disinterested Directors, even though less than a quorum of the Company's board of directors, (C) if there are no such Disinterested Directors or, if such Disinterested Directors so direct, by Independent Counsel in a written opinion to the Company's board of directors, a copy of which shall be delivered to Indemnitee or (D) if so directed by the Company's board of directors, by the stockholders of the Company. If it is so determined that Indemnitee is entitled to indemnification, payment to Indemnitee shall be made within ten days after such determination. Indemnitee shall cooperate with the person, persons or entity making the determination with respect to Indemnitee's entitlement to indemnification, including providing to such person, persons or entity upon reasonable advance request any documentation or information that is not privileged or otherwise protected from disclosure and that is reasonably available to Indemnitee and reasonably necessary to such determination. Any costs or expenses (including attorneys' fees and disbursements) reasonably incurred by Indemnitee in so cooperating with the person, persons or entity making such determination shall be borne by the Company, to the fullest extent permitted by applicable law.

11. **Presumptions and Effect of Certain Proceedings.**

(a) The termination of any Proceeding or of any claim, issue or matter therein, by judgment, order, settlement or conviction, or upon a plea of *nolo contendere* or its equivalent, shall not (except as otherwise expressly provided in this Agreement) of itself create a presumption that Indemnitee did not act in good faith and in a manner which he or she reasonably believed to be in or not opposed to the best interests of the Company or, with respect to any criminal Proceeding, that Indemnitee had reasonable cause to believe that his or her conduct was unlawful.

(b) For purposes of any determination of good faith, Indemnitee shall be deemed to have acted in good faith to the extent Indemnitee relied in good faith on (i) the records or books of account of the Enterprise, including financial statements, (ii) information supplied to Indemnitee by the officers of the Enterprise in the course of their duties, (iii) the advice of legal counsel for the Enterprise or its board of directors or counsel selected by any committee of the board of directors or (iv) information or records given or reports made to the Enterprise by an independent certified public accountant, an appraiser, investment banker or other expert selected with reasonable care by the Enterprise or its board of directors or any committee of the board of directors. The provisions of this Section 11(b) shall not be deemed to be exclusive or to limit in any way the other circumstances in which Indemnitee may be deemed to have met the applicable standard of conduct set forth in this Agreement.

(c) Neither the knowledge, actions nor failure to act of any other director, officer, agent or employee of the Enterprise shall be imputed to Indemnitee for purposes of determining the right to indemnification under this Agreement.

12. **Remedies of Indemnitee.**

(a) Subject to Section 12(d), in the event that (i) a determination is made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification under this Agreement, (ii) advancement of Expenses is not timely made pursuant to Section 8 or 12(c) of this Agreement, (iii) no determination of entitlement to indemnification shall have been made pursuant to Section 10 of this Agreement within 90 days after the later of the receipt by the Company of the request for indemnification or the final disposition of the Proceeding, (iv) payment of indemnification pursuant to this Agreement is not made (A) within ten days after a determination has been made that Indemnitee is entitled to indemnification or (B) with respect to indemnification pursuant to Sections 4, 5 and 12(c) of this Agreement, within 30 days after receipt by the Company of a written request therefor, or (v) the Company or any other person or entity takes or threatens to take any action to declare this Agreement void or unenforceable, or institutes any litigation or other action or proceeding designed to deny, or to recover from, Indemnitee the benefits provided or intended

to be provided to Indemnitee hereunder, Indemnitee shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of Expenses. Alternatively, Indemnitee, at his or her option, may seek an award in arbitration with respect to his or her entitlement to such indemnification or advancement of Expenses, to be conducted by a single arbitrator pursuant to the Commercial Arbitration Rules of the American Arbitration Association. Indemnitee shall commence such proceeding seeking an adjudication or an award in arbitration within 180 days following the date on which Indemnitee first has the right to commence such proceeding pursuant to this Section 12(a); *provided, however,* that the foregoing clause shall not apply in respect of a proceeding brought by Indemnitee to enforce his or her rights under Section 4 of this Agreement. The Company shall not oppose Indemnitee's right to seek any such adjudication or award in arbitration in accordance with this Agreement.

(b) Neither (i) the failure of the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders to have made a determination that indemnification of Indemnitee is proper in the circumstances because Indemnitee has met the applicable standard of conduct, nor (ii) an actual determination by the Company, its board of directors, any committee or subgroup of the board of directors, Independent Counsel or stockholders that Indemnitee has not met the applicable standard of conduct, shall be a defense to the action or create a presumption that Indemnitee has or has not met the applicable standard of conduct. In the event that a determination shall have been made pursuant to Section 10 of this Agreement that Indemnitee is not entitled to indemnification, any judicial proceeding or arbitration commenced pursuant to this Section 12 shall be conducted in all respects as a *de novo* trial, or arbitration, on the merits, and Indemnitee shall not be prejudiced by reason of that adverse determination. In any judicial proceeding or arbitration commenced pursuant to this Section 12, the Company shall, to the fullest extent not prohibited by law, have the burden of proving Indemnitee is not entitled to indemnification or advancement of Expenses, as the case may be.

(c) To the fullest extent permissible under applicable law, the Company shall indemnify Indemnitee against all Expenses that are incurred by Indemnitee in connection with any action for indemnification or advancement of Expenses from the Company under this Agreement or under any directors' and officers' liability insurance policies maintained by the Company to the extent Indemnitee is successful in such action, and, if requested by Indemnitee, shall (as soon as reasonably practicable, but in any event no later than 60 days, after receipt by the Company of a written request therefor) advance such Expenses to Indemnitee, subject to the provisions of Section 8.

(d) Notwithstanding anything in this Agreement to the contrary, no determination as to entitlement to indemnification shall be required to be made prior to the final disposition of the Proceeding.

13. **Contribution.** To the fullest extent permissible under applicable law, if the indemnification provided for in this Agreement is unavailable to Indemnitee, the Company, in lieu of indemnifying Indemnitee, shall contribute to the amounts incurred by Indemnitee, whether for Expenses, judgments, fines or amounts paid or to be paid in settlement, in connection with any claim relating to an indemnifiable event under this Agreement, in such proportion as is deemed fair and reasonable in light of all of the circumstances of such Proceeding in order to reflect (i) the relative benefits received by the Company and Indemnitee as a result of the events and transactions giving rise to such Proceeding; and (ii) the relative fault of Indemnitee and the Company (and its other directors, officers, employees and agents) in connection with such events and transactions.

14. **Non-exclusivity.** The rights of indemnification and to receive advancement of Expenses as provided by this Agreement shall not be deemed exclusive of any other rights to which Indemnitee may at any time be entitled under applicable law, the Company's certificate of incorporation or bylaws, any agreement, a vote of stockholders or a resolution of directors, or otherwise. To the extent that a change in Delaware law,

whether by statute or judicial decision, permits greater indemnification or advancement of Expenses than would be afforded currently under the Company's certificate of incorporation and bylaws and this Agreement, it is the intent of the parties hereto that Indemnitee shall enjoy by this Agreement the greater benefits so afforded by such change, subject to the restrictions expressly set forth herein or therein. Except as expressly set forth herein, no right or remedy herein conferred is intended to be exclusive of any other right or remedy, and every other right and remedy shall be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. Except as expressly set forth herein, the assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other right or remedy.

15. **Primary Responsibility.** The Company acknowledges that Indemnitee may have certain rights to indemnification and advancement of expenses provided by the fund and/or certain affiliates thereof with whom Indemnitee may be affiliated (collectively, the "***Secondary Indemnitors***"). The Company agrees that, as between the Company and the Secondary Indemnitors, the Company is primarily responsible for amounts required to be indemnified or advanced under the Company's certificate of incorporation or bylaws or this Agreement and any obligation of the Secondary Indemnitors to provide indemnification or advancement for the same amounts is secondary to those Company obligations. To the extent not in the contravention of any insurance policy or policies providing liability or other insurance for the Company or any director, trustee, general partner, managing member, officer, employee, agent or fiduciary of the Company, the Company waives any right of contribution or subrogation against the Secondary Indemnitors with respect to the liabilities for which the Company is primarily responsible under this Section 15. In the event of any payment by the Secondary Indemnitors of amounts otherwise required to be indemnified or advanced by the Company under the Company's certificate of incorporation or bylaws or this Agreement, the Secondary Indemnitors shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee for indemnification or advancement of expenses under the Company's certificate of incorporation or bylaws or this Agreement or, to the extent such subrogation is unavailable and contribution is found to be the applicable remedy, shall have a right of contribution with respect to the amounts paid. The Secondary Indemnitors are express third-party beneficiaries of the terms of this Section 15.

16. **No Duplication of Payments.** Subject to the subrogation rights set forth in Section 15 above, the Company shall not be liable under this Agreement to make any payment of amounts otherwise indemnifiable hereunder (or for which advancement is provided hereunder) if and to the extent that Indemnitee has otherwise actually received payment for such amounts under any insurance policy, contract, agreement or otherwise.

17. **Insurance.** The Company shall maintain an insurance policy or policies providing liability insurance for directors, trustees, general partners, managing members, officers, employees, agents or fiduciaries of the Company or any other Enterprise, and Indemnitee shall be covered by such policy or policies to the same extent as the most favorably-insured persons under such policy or policies in a comparable position.

18. **Subrogation.** In the event of any payment under this Agreement, the Company shall be subrogated to the extent of such payment to all of the rights of recovery of Indemnitee, who shall execute all papers required and take all action necessary to secure such rights, including execution of such documents as are necessary to enable the Company to bring suit to enforce such rights.

19. **Services to the Company.** Indemnitee agrees to serve as a director or officer of the Company or, at the request of the Company, as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of another Enterprise, for so long as Indemnitee is duly elected or appointed or until Indemnitee tenders his or her resignation or is removed from such position. Indemnitee may at any time and

for any reason resign from such position (subject to any other contractual obligation or any obligation imposed by operation of law), in which event the Company shall have no obligation under this Agreement to continue Indemnitee in such position. This Agreement shall not be deemed an employment contract between the Company (or any of its subsidiaries or any Enterprise) and Indemnitee. Indemnitee specifically acknowledges that any employment with the Company (or any of its subsidiaries or any Enterprise) is at will, and Indemnitee may be discharged at any time for any reason, with or without cause, with or without notice, except as may be otherwise expressly provided in any executed, written employment contract between Indemnitee and the Company (or any of its subsidiaries or any Enterprise), any existing formal severance policies adopted by the Company's board of directors or, with respect to service as a director or officer of the Company, the Company's certificate of incorporation or bylaws or the DGCL. No such document shall be subject to any oral modification thereof.

20. **Duration.** This Agreement shall continue until and terminate upon the later of (a) ten years after the date that Indemnitee shall have ceased to serve as a director or officer of the Company or as a director, trustee, general partner, managing member, officer, employee, agent or fiduciary of any other Enterprise, as applicable; or (b) one year after the final termination of any Proceeding, including any appeal, then pending in respect of which Indemnitee is granted rights of indemnification or advancement of Expenses hereunder and of any proceeding commenced by Indemnitee pursuant to Section 12 of this Agreement relating thereto.

21. **Successors.** This Agreement shall be binding upon the Company and its successors and assigns, including any direct or indirect successor by purchase, merger, consolidation or otherwise to all or substantially all of the business or assets of the Company, and shall inure to the benefit of Indemnitee and Indemnitee's heirs, executors and administrators.

22. **Severability.** Nothing in this Agreement is intended to require or shall be construed as requiring the Company to do or fail to do any act in violation of applicable law. The Company's inability, pursuant to court order or other applicable law, to perform its obligations under this Agreement shall not constitute a breach of this Agreement. If any provision or provisions of this Agreement shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (i) the validity, legality and enforceability of the remaining provisions of this Agreement (including without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby and shall remain enforceable to the fullest extent permitted by law; (ii) such provision or provisions shall be deemed reformed to the extent necessary to conform to applicable law and to give the maximum effect to the intent of the parties hereto; and (iii) to the fullest extent possible, the provisions of this Agreement (including, without limitation, each portion of any section of this Agreement containing any such provision held to be invalid, illegal or unenforceable, that is not itself invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested thereby.

23. **Enforcement.** The Company expressly confirms and agrees that it has entered into this Agreement and assumed the obligations imposed on it hereby in order to induce Indemnitee to serve as a director or officer of the Company, and the Company acknowledges that Indemnitee is relying upon this Agreement in serving as a director or officer of the Company.

24. **Entire Agreement.** This Agreement constitutes the entire agreement between the parties hereto with respect to the subject matter hereof and supersedes all prior agreements and understandings, oral, written and implied, between the parties hereto with respect to the subject matter hereof; *provided*, *however*, that this Agreement is a supplement to and in furtherance of the Company's certificate of incorporation and bylaws and applicable law.

25. **Modification and Waiver.** No supplement, modification or amendment to this Agreement shall be binding unless executed in writing by the parties hereto. No amendment, alteration or repeal of this Agreement shall adversely affect any right of Indemnitee under this Agreement in respect of any action taken or omitted by such Indemnitee in his or her Corporate Status prior to such amendment, alteration or repeal. No waiver of any of the provisions of this Agreement shall constitute or be deemed a waiver of any other provision of this Agreement nor shall any waiver constitute a continuing waiver.

26. **Notices.** All notices and other communications required or permitted hereunder shall be in writing and shall be mailed by registered or certified mail, postage prepaid, sent by facsimile or electronic mail or otherwise delivered by hand, messenger or courier service addressed:

(a) if to Indemnitee, to Indemnitee's address, facsimile number or electronic mail address as shown on the signature page of this Agreement or in the Company's records, as may be updated in accordance with the provisions hereof; or if to the Company, to the attention of the Chief Executive Officer of the Company at such current address as the Company shall have furnished to the Indemnitee, with a copy (which shall not constitute notice) to J. Casey McGlynn, Wilson Sonsini Goodrich & Rosati, P.C., 650 Page Mill Road, Palo Alto, California 94304.

Each such notice or other communication shall for all purposes of this Agreement be treated as effective or having been given (i) if delivered by hand, messenger or courier service, when delivered (or if sent *via* a nationally-recognized overnight courier service, freight prepaid, specifying next-business-day delivery, one business day after deposit with the courier), (ii) if sent *via* mail, at the earlier of its receipt or five days after the same has been deposited in a regularly-maintained receptacle for the deposit of the United States mail, addressed and mailed as aforesaid, or (iii) if sent *via* facsimile, upon confirmation of facsimile transfer or, if sent *via* electronic mail, when directed to the relevant electronic mail address, if sent during normal business hours of the recipient, or if not sent during normal business hours of the recipient, then on the recipient's next business day.

27. **Applicable Law and Consent to Jurisdiction.** This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to its conflict of laws rules. Except with respect to any arbitration commenced by Indemnitee pursuant to Section 12(a) of this Agreement, the Company and Indemnitee hereby irrevocably and unconditionally (i) agree that any action or proceeding arising out of or in connection with this Agreement shall be brought only in the Delaware Court of Chancery, and not in any other state or federal court in the United States of America or any court in any other country, (ii) consent to submit to the exclusive jurisdiction of the Delaware Court of Chancery for purposes of any action or proceeding arising out of or in connection with this Agreement, (iii) appoint, to the extent such party is not otherwise subject to service of process in the State of Delaware, The Corporation Trust Company, Wilmington, Delaware as its agent in the State of Delaware as such party's agent for acceptance of legal process in connection with any such action or proceeding against such party with the same legal force and validity as if served upon such party personally within the State of Delaware, (iv) waive any objection to the laying of venue of any such action or proceeding in the Delaware Court of Chancery, and (v) waive, and agree not to plead or to make, any claim that any such action or proceeding brought in the Delaware Court of Chancery has been brought in an improper or inconvenient forum.

28. **Counterparts.** This Agreement may be executed in one or more counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. This Agreement may also be executed and delivered by facsimile signature and in counterparts, each of which shall for all purposes be deemed to be an original but all of which together shall constitute one and the same Agreement. Only one such counterpart signed by the party against whom enforceability is sought needs to be produced to evidence the existence of this Agreement.

29. **Captions.** The headings of the paragraphs of this Agreement are inserted for convenience only and shall not be deemed to constitute part of this Agreement or to affect the construction thereof.

(*Signature Page Follows*)

The parties are signing this Indemnification Agreement as of the date stated in the introductory sentence.

COMPANY

CAPNIA, INC.

_____

(*Signature*)

_____

(*Print name*)

_____

(*Title*)

INDEMNITEE

_____

_____

(*Signature*)

_____

(*Print name*)

_____

(*Street address*)

_____

(*City, State and ZIP*)

Exhibit 10.2

CAPNIA, INC.

1999 INCENTIVE STOCK PLAN

(as Amended June 14, 2001, May 29, 2003, April 23, 2004, July 21, 2005, October 23, 2006, August 3, 2007, September 7, 2007, and March 6, 2008)

1. Purposes of the Plan. The purposes of this Stock Plan are to attract and retain the best available personnel for positions of substantial responsibility, to provide additional incentive to Employees, Directors and Consultants and to promote the success of the Company's business. Options granted under the Plan may be Incentive Stock Options or Nonstatutory Stock Options, as determined by the Administrator at the time of grant. Stock Purchase Rights may also be granted under the Plan.

2. Definitions. As used herein, the following definitions shall apply:

(a) "Administrator" means the Board or any of its Committees as shall be administering the Plan in accordance with Section 4 hereof.

(b) "Applicable Laws" means the requirements relating to the administration of stock option plans under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any other country or jurisdiction where Options or Stock Purchase Rights are granted under the Plan.

(c) "Board" means the Board of Directors of the Company.

(d) "Code" means the Internal Revenue Code of 1986, as amended.

(e) "Committee" means a committee of Directors appointed by the Board in accordance with Section 4 hereof.

(f) "Common Stock" means the Common Stock of the Company.

(g) "Company" means Capnia, Inc., a Delaware corporation.

(h) "Consultant" means any person who is engaged by the Company or any Parent or Subsidiary to render consulting or advisory services to such entity.

(i) "Director" means a member of the Board of Directors of the Company.

(j) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code.

(k) "Employee" means any person, including Officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. A Service Provider shall not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between

locations of the Company or between the Company, its Parent, any Subsidiary, or any successor. For purposes of Incentive Stock Options, no such leave may exceed ninety days, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, on the 181st day of such leave any Incentive Stock Option held by the Optionee shall cease to be treated as an Incentive Stock Option and shall be treated for tax purposes as a Nonstatutory Stock Option. Neither service as a Director nor payment of a director's fee by the Company shall be sufficient to constitute "employment" by the Company.

(l) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(m) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq National Market or The Nasdaq SmallCap Market of The Nasdaq Stock Market, its Fair Market Value shall be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system for the last market trading day prior to the time of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, its Fair Market Value shall be the mean between the high bid and low asked prices for the Common Stock on the last market trading day prior to the day of determination; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value thereof shall be determined in good faith by the Administrator.

(n) "Incentive Stock Option" means an Option intended to qualify as an incentive stock option within the meaning of Section 422 of the Code.

(o) "Nonstatutory Stock Option" means an Option not intended to qualify as an Incentive Stock Option.

(p) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(q) "Option" means a stock option granted pursuant to the Plan.

(r) "Option Agreement" means a written or electronic agreement between the Company and an Optionee evidencing the terms and conditions of an individual Option grant. The Option Agreement is subject to the terms and conditions of the Plan.

(s) "Option Exchange Program" means a program whereby outstanding Options are exchanged for Options with a lower exercise price.

(t) "Optioned Stock" means the Common Stock subject to an Option or a Stock Purchase Right.

(u) "Optionee" means the holder of an outstanding Option or Stock Purchase Right granted under the Plan.

(v) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(w) "Plan" means this 1999 Incentive Stock Plan.

(x) "Restricted Stock" means shares of Common Stock acquired pursuant to a grant of a Stock Purchase Right under Section 11 below.

(y) "Service Provider" means an Employee, Director or Consultant.

(z) "Share" means a share of the Common Stock, as adjusted in accordance with Section 12 below.

(aa) "Stock Purchase Right" means a right to purchase Common Stock pursuant to Section 11 below.

(bb) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

3. Stock Subject to the Plan. Subject to the provisions of Section 12 of the Plan, the maximum aggregate number of Shares that may be subject to option and sold under the Plan is 2,755,345 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

If an Option or Stock Purchase Right expires or becomes unexercisable without having been exercised in full, or is surrendered pursuant to an Option Exchange Program, the unpurchased Shares which were subject thereto shall become available for future grant or sale under the Plan (unless the Plan has terminated). However, Shares that have actually been issued under the Plan, upon exercise of either an Option or Stock Purchase Right, shall not be returned to the Plan and shall not become available for future distribution under the Plan, except that if Shares of Restricted Stock are repurchased by the Company at their original purchase price, such Shares shall become available for future grant under the Plan.

4. Administration of the Plan.

(a) Administrator. The Plan shall be administered by the Board or a Committee appointed by the Board, which Committee shall be constituted to comply with Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan and, in the case of a Committee, the specific duties delegated by the Board to such Committee, and subject to the approval of any relevant authorities, the Administrator shall have the authority in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Options and Stock Purchase Rights may from time to time be granted hereunder;

(iii) to determine the number of Shares to be covered by each such award granted hereunder;

(iv) to approve forms of agreement for use under the Plan;

(v) to determine the terms and conditions, of any Option or Stock Purchase Right granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Options or Stock Purchase Rights may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Option or Stock Purchase Right or the Common Stock relating thereto, based in each case on such factors as the Administrator, in its sole discretion, shall determine;

(vi) to determine whether and under what circumstances an Option may be settled in cash under subsection 9(e) instead of Common Stock;

(vii) to reduce the exercise price of any Option to the then current Fair Market Value if the Fair Market Value of the Common Stock covered by such Option has declined since the date the Option was granted;

(viii) to initiate an Option Exchange Program;

(ix) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of qualifying for preferred tax treatment under foreign tax laws;

(x) to allow Optionees to satisfy withholding tax obligations by electing to have the Company withhold from the Shares to be issued upon exercise of an Option or Stock Purchase Right that number of Shares having a Fair Market Value equal to the amount required to be withheld. The Fair Market Value of the Shares to be withheld shall be determined on the date that the amount of tax to be withheld is to be determined. All elections by Optionees to have Shares withheld for this purpose shall be made in such form and under such conditions as the Administrator may deem necessary or advisable; and

(xi) to construe and interpret the terms of the Plan and awards granted pursuant to the Plan.

(c) Effect of Administrator's Decision. All decisions, determinations and interpretations of the Administrator shall be final and binding on all Optionees.

5. Eligibility.

(a) Nonstatutory Stock Options and Stock Purchase Rights may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

(b) Each Option shall be designated in the Option Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. However, notwithstanding such designation, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Optionee during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options shall be treated as Nonstatutory Stock Options. For purposes of this Section 5(b), Incentive Stock Options shall be taken into account in the order in which they were granted. The Fair Market Value of the Shares shall be determined as of the time the Option with respect to such Shares is granted.

(c) Neither the Plan nor any Option or Stock Purchase Right shall confer upon any Optionee any right with respect to continuing the Optionee's relationship as a Service Provider with the Company, nor shall it interfere in any way with his or her right or the Company's right to terminate such relationship at any time, with or without cause.

6. Term of Plan. The Plan shall become effective upon its adoption by the Board. It shall continue in effect for a term of ten (10) years unless sooner terminated under Section 14 of the Plan.

7. Term of Option. The term of each Option shall be stated in the Option Agreement; provided, however, that the term shall be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to an Optionee who, at the time the Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Option shall be five (5) years from the date of grant or such shorter term as may be provided in the Option Agreement.

8. Option Exercise Price and Consideration.

(a) The per share exercise price for the Shares to be issued upon exercise of an Option shall be such price as is determined by the Administrator, but shall be subject to the following:

(i) In the case of an Incentive Stock Option

(1) granted to an Employee who, at the time of grant of such Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(2) granted to any other Employee, the per Share exercise price shall be no less than 100% of the Fair Market Value per Share on the date of grant.

(ii) In the case of a Nonstatutory Stock Option

(1) granted to a Service Provider who, at the time of grant of such Option, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the exercise price shall be no less than 110% of the Fair Market Value per Share on the date of grant.

(2) granted to any other Service Provider, the per Share exercise price shall be no less than 85% of the Fair Market Value per Share on the date of grant.

(iii) Notwithstanding the foregoing, Options may be granted with a per Share exercise price other than as required above pursuant to a merger or other corporate transaction.

(b) The consideration to be paid for the Shares to be issued upon exercise of an Option, including the method of payment, shall be determined by the Administrator (and, in the case of an Incentive Stock Option, shall be determined at the time of grant). Such consideration may consist of (1) cash, (2) check, (3) promissory note, (4) other Shares which (x) in the case of Shares acquired upon exercise of an Option, have been owned by the Optionee for more than six months on the date of surrender, and (y) have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option shall be exercised, (5) consideration received by the Company under a cashless exercise program implemented by the Company in connection with the Plan, or (6) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator shall consider if acceptance of such consideration may be reasonably expected to benefit the Company.

9. Exercise of Option.

(a) Procedure for Exercise; Rights as a Shareholder. Any Option granted hereunder shall be exercisable according to the terms hereof at such times and under such conditions as determined by the Administrator and set forth in the Option Agreement. Except in the case of Options granted to Officers, Directors and Consultants, Options shall become exercisable at a rate of no less than 20% per year over five (5) years from the date the Options are granted. Unless the Administrator provides otherwise, vesting of Options granted hereunder to Officers and Directors shall be tolled during any unpaid leave of absence. An Option may not be exercised for a fraction of a Share.

An Option shall be deemed exercised when the Company receives: (i) written or electronic notice of exercise (in accordance with the Option Agreement) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised. Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Option Agreement and the Plan. Shares issued upon exercise of an Option shall be issued in the name of the Optionee or, if requested by the Optionee, in the name of the Optionee and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a shareholder shall exist with respect to the Shares, notwithstanding the exercise of the Option. The Company shall issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 12 of the Plan.

Exercise of an Option in any manner shall result in a decrease in the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(b) Termination of Relationship as a Service Provider. If an Optionee ceases to be a Service Provider, such Optionee may exercise his or her Option within such period of time as is specified in the Option Agreement (of at least thirty (30) days) to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of the Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for three (3) months following the Optionee's termination. If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified by the Administrator, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(c) Disability of Optionee. If an Optionee ceases to be a Service Provider as a result of the Optionee's Disability, the Optionee may exercise his or her Option within such period of time as is specified in the Option Agreement (of at least six (6) months) to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement). In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Optionee's termination. If, on the date of termination, the Optionee is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option shall revert to the Plan. If, after termination, the Optionee does not exercise his or her Option within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(d) Death of Optionee. If an Optionee dies while a Service Provider, the Option may be exercised within such period of time as is specified in the Option Agreement (of at least six (6) months) to the extent that the Option is vested on the date of death (but in no event later than the expiration of the term of such Option as set forth in the Option Agreement) by the Optionee's estate or by a person who acquires the right to exercise the Option by bequest or inheritance. In the absence of a specified time in the Option Agreement, the Option shall remain exercisable for twelve (12) months following the Optionee's termination. If, at the time of death, the Optionee is not vested as to the entire Option, the Shares covered by the unvested portion of the Option shall immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option shall terminate, and the Shares covered by such Option shall revert to the Plan.

(e) Buyout Provisions. The Administrator may at any time offer to buy out for a payment in cash or Shares, an Option previously granted, based on such terms and conditions as the Administrator shall establish and communicate to the Optionee at the time that such offer is made.

10. Non-Transferability of Options and Stock Purchase Rights. The Options and Stock Purchase Rights may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Optionee, only by the Optionee.

11. Stock Purchase Rights.

(a) Rights to Purchase. Stock Purchase Rights may be issued either alone, in addition to, or in tandem with other awards granted under the Plan and/or cash awards made outside of the Plan. After the Administrator determines that it will offer Stock Purchase Rights under the Plan, it shall advise the offeree in writing or electronically of the terms, conditions and restrictions related to the offer, including the number of Shares that such person shall be entitled to purchase, the price to be paid, and the time within which such person must accept such offer. The terms of the offer shall comply in all respects with Section 260.140.42 of Title 10 of the California Code of Regulations. The offer shall be accepted by execution of a Restricted Stock purchase agreement in the form determined by the Administrator.

(b) Repurchase Option. Unless the Administrator determines otherwise, the Restricted Stock purchase agreement shall grant the Company a repurchase option exercisable upon the voluntary or involuntary termination of the purchaser's service with the Company for any reason (including death or disability). The purchase price for Shares repurchased pursuant to the Restricted Stock purchase agreement shall be the original price paid by the purchaser and may be paid by cancellation of any indebtedness of the purchaser to the Company. The repurchase option shall lapse at such rate as the Administrator may determine. Except with respect to Shares purchased by Officers, Directors and Consultants, the repurchase option shall in no case lapse at a rate of less than 20% per year over five (5) years from the date of purchase.

(c) Other Provisions. The Restricted Stock purchase agreement shall contain such other terms, provisions and conditions not inconsistent with the Plan as may be determined by the Administrator in its sole discretion.

(d) Rights as a Shareholder. Once the Stock Purchase Right is exercised, the purchaser shall have rights equivalent to those of a shareholder and shall be a shareholder when his or her purchase is entered upon the records of the duly authorized transfer agent of the Company. No adjustment shall be made for a dividend or other right for which the record date is prior to the date the Stock Purchase Right is exercised, except as provided in Section 12 of the Plan.

12. Adjustments Upon Changes in Capitalization, Merger or Asset Sale.

(a) Changes in Capitalization. Subject to any required action by the shareholders of the Company, the number of shares of Common Stock covered by each outstanding Option or Stock Purchase Right, and the number of shares of Common Stock which have been authorized for issuance under the Plan but as to which no Options or Stock Purchase Rights have yet been granted or which have been returned to the Plan upon cancellation or expiration of an Option or Stock Purchase Right, as well as the price per share of Common Stock covered by each such outstanding Option or Stock Purchase Right, shall be proportionately adjusted for any increase or decrease in the number of issued shares of Common Stock resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock, or any other increase or decrease in the number of issued shares of Common Stock effected without receipt of consideration by the Company. The conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive. Except as expressly provided herein, no issuance by the Company of shares of stock of any class, or securities convertible into shares of stock of any class, shall affect, and no adjustment by reason thereof shall be made with respect to, the number or price of shares of Common Stock subject to an Option or Stock Purchase Right.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator shall notify each Optionee as soon as practicable prior to the effective date of such proposed transaction. The Administrator in its discretion may provide for an Optionee to have the right to exercise his or her Option or Stock Purchase Right until fifteen (15) days prior to such transaction as to all of the Optioned Stock covered thereby, including Shares as to which the Option or Stock Purchase Right would not otherwise be exercisable. In addition, the Administrator may provide that any Company repurchase option applicable to any Shares purchased upon exercise of an Option or Stock Purchase Right shall lapse as to all such Shares, provided the proposed dissolution or liquidation takes place at the time and in the manner contemplated. To the extent it has not been previously exercised, an Option or Stock Purchase Right will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Asset Sale. In the event of a merger of the Company with or into another corporation, or the sale of substantially all of the assets of the Company, each outstanding Option and Stock Purchase Right shall be assumed or an equivalent option or right substituted by the successor corporation or a Parent or Subsidiary of the successor corporation. In the event that the successor corporation refuses to assume or substitute for the Option or Stock Purchase Right, the Optionee shall fully vest in and have the right to exercise the Option or Stock Purchase Right as to all of the Optioned Stock, including Shares as to which it would not otherwise be vested or exercisable. If an Option or Stock Purchase Right becomes fully vested and exercisable in lieu of assumption or substitution in the event of a merger or sale of assets, the Administrator shall notify the Optionee in writing or electronically that the Option or Stock Purchase Right shall be fully exercisable for a period of fifteen (15) days from the date of such notice, and the Option or Stock Purchase Right shall terminate upon the expiration of such period. For the purposes of this paragraph, the Option or Stock Purchase Right shall be considered assumed if, following the merger or sale of assets, the option or right confers the right to purchase or receive, for each Share of Optioned Stock subject to the Option or Stock Purchase Right immediately prior to the merger or sale of assets, the consideration (whether stock, cash, or other securities or property) received in the merger or sale of assets by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or sale of assets is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of the Option or Stock Purchase Right, for each Share of Optioned Stock subject to the Option or Stock Purchase Right, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or sale of assets.

13. Time of Granting Options and Stock Purchase Rights. The date of grant of an Option or Stock Purchase Right shall, for all purposes, be the date on which the Administrator makes the determination granting such Option or Stock Purchase Right, or such other date as is determined by the Administrator. Notice of the determination shall be given to each Service Provider to whom an Option or Stock Purchase Right is so granted within a reasonable time after the date of such grant.

14. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Shareholder Approval. The Board shall obtain shareholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan shall impair the rights of any Optionee, unless mutually agreed otherwise between the Optionee and the Administrator, which agreement must be in writing and signed by the Optionee and the Company. Termination of the Plan shall not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Options granted under the Plan prior to the date of such termination.

15. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares shall not be issued pursuant to the exercise of an Option unless the exercise of such Option and the issuance and delivery of such Shares shall comply with Applicable Laws and shall be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Option, the Administrator may require the person exercising such Option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

16. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, shall relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority shall not have been obtained.

17. Reservation of Shares. The Company, during the term of this Plan, shall at all times reserve and keep available such number of Shares as shall be sufficient to satisfy the requirements of the Plan.

18. Shareholder Approval. The Plan shall be subject to approval by the shareholders of the Company within twelve (12) months after the date the Plan is adopted. Such shareholder approval shall be obtained in the degree and manner required under Applicable Laws.

19. Information to Optionees and Purchasers. The Company shall provide to each Optionee and to each individual who acquires Shares pursuant to the Plan, not less frequently than annually during the period such Optionee or purchaser has one or more Options or Stock Purchase Rights outstanding, and, in the case of an individual who acquires Shares pursuant to the Plan, during the period such individual owns such Shares, copies of annual financial statements. The Company shall not be required to provide such statements to key employees whose duties in connection with the Company assure their access to equivalent information.

Exhibit 10.3

CAPNIA, INC.

2010 EQUITY INCENTIVE PLAN

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide additional incentive to Employees, Directors and Consultants, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock and Restricted Stock Units.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(c) "Award" means, individually or collectively, a grant under the Plan of Options, Stock Appreciation Rights, Restricted Stock, or Restricted Stock Units.

(d) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(e) "Board" means the Board of Directors of the Company.

(f) "Change in Control" means the occurrence of any of the following events:

(i) Change in Ownership of the Company. A change in the ownership of the Company which occurs on the date that any one person, or more than one person acting as a group ("Person"), acquires ownership of the stock of the Company that, together with the stock held by such Person, constitutes more than 50% of the total voting power of the stock of the Company, except that any change in the ownership of the stock of the Company as a result of a private financing of the Company that is approved by the Board will not be considered a Change in Control; or

(ii) Change in Effective Control of the Company. If the Company has a class of securities registered pursuant to Section 12 of the Exchange Act, a change in the effective control of the Company which occurs on the date that a majority of members of the Board is replaced during any twelve (12) month period by Directors whose appointment or election is not endorsed by a majority of the members of the Board prior to the date of the appointment or election. For purposes of this clause (ii), if any Person is considered to be in effective control of the Company, the acquisition of additional control of the Company by the same Person will not be considered a Change in Control; or

(iii) Change in Ownership of a Substantial Portion of the Company's Assets. A change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than 50% of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions. For purposes of this subsection (iii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

For purposes of this Section 2(f), persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company.

Notwithstanding the foregoing, a transaction will not be deemed a Change in Control unless the transaction qualifies as a change in control event within the meaning of Code Section 409A, as it has been and may be amended from time to time, and any proposed or final Treasury Regulations and Internal Revenue Service guidance that has been promulgated or may be promulgated thereunder from time to time.

Further and for the avoidance of doubt, a transaction will not constitute a Change in Control if: (i) its sole purpose is to change the jurisdiction of the Company's incorporation, or (ii) its sole purpose is to create a holding company that will be owned in substantially the same proportions by the persons who held the Company's securities immediately before such transaction.

(g) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(h) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board, or by the compensation committee of the Board, in accordance with Section 4 hereof.

(i) "Common Stock" means the common stock of the Company.

(j) "Company" means Capnia, Inc., a Delaware corporation, or any successor thereto.

(k) "Consultant" means any person, including an advisor, engaged by the Company or a Parent or Subsidiary to render services to such entity.

(l) "Director" means a member of the Board.

(m) "Disability" means total and permanent disability as defined in Code Section 22(e)(3), provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(n) "Employee" means any person, including officers and Directors, employed by the Company or any Parent or Subsidiary of the Company. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(o) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(p) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for Awards of the same type (which may have higher or lower exercise prices and different terms), Awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is reduced or increased. The Administrator will determine the terms and conditions of any Exchange Program in its sole discretion.

(q) "Fair Market Value" means, as of any date, the value of Common Stock determined as follows:

(i) If the Common Stock is listed on any established stock exchange or a national market system, including without limitation the Nasdaq Global Select Market, the Nasdaq Global Market or the Nasdaq Capital Market of The Nasdaq Stock Market, its Fair Market Value will be the closing sales price for such stock (or the closing bid, if no sales were reported) as quoted on such exchange or system on the day of determination, as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable;

(ii) If the Common Stock is regularly quoted by a recognized securities dealer but selling prices are not reported, the Fair Market Value of a Share will be the mean between the high bid and low asked prices for the Common Stock on the day of determination (or, if no bids and asks were reported on that date, as applicable, on the last trading date such bids and asks were reported), as reported in *The Wall Street Journal* or such other source as the Administrator deems reliable; or

(iii) In the absence of an established market for the Common Stock, the Fair Market Value will be determined in good faith by the Administrator.

(r) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Code Section 422 and the regulations promulgated thereunder.

(s) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(t) "Option" means a stock option granted pursuant to the Plan.

(u) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Code Section 424(e).

(v) "Participant" or "Optionee" means the holder of an outstanding Award.

(w) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(x) "Plan" means this 2010 Equity Incentive Plan.

(y) "Restricted Stock" means Shares issued pursuant to an Award of Restricted Stock under Section 8 of the Plan, or issued pursuant to the early exercise of an Option.

(z) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 9. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(aa) "Service Provider" means an Employee, Director or Consultant.

(bb) "Share" means a share of the Common Stock, as adjusted in accordance with Section 13 of the Plan.

(cc) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 7 is designated as a Stock Appreciation Right.

(dd) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Code Section 424(f).

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 13 of the Plan, the maximum aggregate number of Shares that may be subject to Awards and sold under the Plan is the sum of (i) 1,475,048 Shares, including 1,475,048 Shares that, as of termination of the Capnia, Inc. 1999 Incentive Stock Plan (the "1999 Incentive Stock Plan"), have been reserved but not issued pursuant to any awards granted under the 1999 Incentive Stock Plan and are not subject to any awards granted thereunder, and (ii) any Shares subject to stock options or similar awards granted under the 1999 Incentive Stock Plan that expire or otherwise terminate without having been exercised in full and Shares issued pursuant to awards granted under the 1999 Incentive Stock Plan that are forfeited to or repurchased by the Company, with the maximum number of Shares to be added to the Plan pursuant to this clause (ii) equal to 2,947,625 Shares. The Shares may be authorized but unissued, or reacquired Common Stock.

(b) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, is surrendered pursuant to an Exchange Program, or, with respect to Restricted Stock or Restricted Stock Units, is forfeited to or repurchased by the Company due to the failure to vest, the unpurchased Shares (or for Awards other than Options or Stock Appreciation Rights the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, only Shares actually issued pursuant to a Stock Appreciation Right will cease to be available under the Plan; all remaining Shares under Stock Appreciation Rights will remain available for future grant or sale under the Plan (unless the Plan has terminated). Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if Shares issued pursuant to Awards of Restricted Stock or Restricted Stock Units are repurchased by the Company or are forfeited to the Company due to the failure to vest, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price of an Award or to satisfy the tax withholding obligations related to an Award will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment as provided in Section 13, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Code Section 422 and the Treasury Regulations promulgated thereunder, any Shares that become available for issuance under the Plan pursuant to Section 3(b).

(c) Share Reserve. The Company, during the term of this Plan, will at all times reserve and keep available such number of Shares as will be sufficient to satisfy the requirements of the Plan.

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which Committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the number of Shares to be covered by each Award granted hereunder;

(iv) to approve forms of Award Agreements for use under the Plan;

(v) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(vi) to institute and determine the terms and conditions of an Exchange Program;

(vii) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(viii) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws or for qualifying for favorable tax treatment under applicable foreign laws;

(ix) to modify or amend each Award (subject to Section 18(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards and to extend the maximum term of an Option (subject to Section 6(d));

(x) to allow Participants to satisfy withholding tax obligations in a manner prescribed in Section 14;

(xi) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(xii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that otherwise would be due to such Participant under an Award; and

(xiii) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Stock Appreciation Rights, Restricted Stock, and Restricted Stock Units may be granted to Service Providers. Incentive Stock Options may be granted only to Employees.

6. Stock Options.

(a) Grant of Options. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Options in such amounts as the Administrator, in its sole discretion, will determine.

(b) Option Agreement. Each Award of an Option will be evidenced by an Award Agreement that will specify the exercise price, the term of the Option, the number of Shares subject to the Option, the exercise restrictions, if any, applicable to the Option, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Limitations. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option. Notwithstanding such designation, however, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds one hundred thousand dollars ($100,000), such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(c), Incentive Stock Options will be taken into account in the order in which they were granted, the Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted, and calculation will be performed in accordance with Code Section 422 and Treasury Regulations promulgated thereunder.

(d) Term of Option. The term of each Option will be stated in the Award Agreement; provided, however, that the term will be no more than ten (10) years from the date of grant thereof. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(e) Option Exercise Price and Consideration.

(i) Exercise Price. The per Share exercise price for the Shares to be issued pursuant to the exercise of an Option will be determined by the Administrator, but will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. In addition, in the case of an Incentive Stock Option granted to an Employee who owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company

or any Parent or Subsidiary, the per Share exercise price will be no less than one hundred ten percent (110%) of the Fair Market Value per Share on the date of grant. Notwithstanding the foregoing provisions of this Section 6(e)(i), Options may be granted with a per Share exercise price of less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Code Section 424(a).

(ii) Waiting Period and Exercise Dates. At the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form of consideration for exercising an Option, including the method of payment. In the case of an Incentive Stock Option, the Administrator will determine the acceptable form of consideration at the time of grant. Such consideration may consist entirely of: (1) cash; (2) check; (3) promissory note, to the extent permitted by Applicable Laws, (4) other Shares, provided that such Shares have a Fair Market Value on the date of surrender equal to the aggregate exercise price of the Shares as to which such Option will be exercised and provided further that accepting such Shares will not result in any adverse accounting consequences to the Company, as the Administrator determines in its sole discretion; (5) consideration received by the Company under cashless exercise program (whether through a broker or otherwise) implemented by the Company in connection with the Plan; (6) by net exercise, (7) such other consideration and method of payment for the issuance of Shares to the extent permitted by Applicable Laws, or (8) any combination of the foregoing methods of payment. In making its determination as to the type of consideration to accept, the Administrator will consider if acceptance of such consideration may be reasonably expected to benefit the Company.

(f) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator may specify from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with applicable tax withholding). Full payment may consist of any consideration and method of payment authorized by the Administrator and permitted by the Award Agreement and the Plan. Shares issued upon exercise of an Option will be issued in the name of the Participant or, if requested by the Participant, in the name of the Participant and his or her spouse. Until the Shares are issued (as evidenced by the appropriate entry on the books of the Company or of a duly authorized transfer agent of the Company), no right to vote or receive dividends or any other rights as a stockholder will exist with respect to the Shares subject to an Option, notwithstanding the exercise of the Option. The Company will issue (or cause to be issued) such Shares promptly after the Option is exercised. No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 13 of the Plan.

Exercising an Option in any manner will decrease the number of Shares thereafter available, both for purposes of the Plan and for sale under the Option, by the number of Shares as to which the Option is exercised.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination as the result of the Participant's death or Disability, the Participant may exercise his or her Option within thirty (30) days of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested on the date of termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within six (6) months of termination, or such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent the Option is vested on the date of termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised within six (6) months following the Participant's death, or within such longer period of time as is specified in the Award Agreement (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement) to the extent that the Option is vested on the date of death, by the Participant's designated beneficiary, provided such beneficiary has been designated prior to the Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

7. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. The Administrator will have complete discretion to determine the number of Shares subject to any Award of Stock Appreciation Rights.

(c) Exercise Price and Other Terms. The per Share exercise price for the Shares that will determine the amount of the payment to be received upon exercise of a Stock Appreciation Right as set forth in Section 7(f) will be determined by the Administrator and will be no less than one hundred percent (100%) of the Fair Market Value per Share on the date of grant. Otherwise, the Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan.

(d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. A Stock Appreciation Right granted under the Plan will expire upon the date determined by the Administrator, in its sole discretion, and set forth in the Award Agreement. Notwithstanding the foregoing, the rules of Section 6(d) relating to the maximum term and Section 6(f) relating to exercise also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

8. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares

granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, the Company as escrow agent will hold Shares of Restricted Stock until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 8 or as the Administrator determines, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 8, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction or at such other time as the Administrator may determine. The Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares, unless the Administrator provides otherwise. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

9. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. After the Administrator determines that it will grant Restricted Stock Units, it will advise the Participant in an Award Agreement of the terms, conditions, and restrictions related to the grant, including the number of Restricted Stock Units.

(b) Vesting Criteria and Other Terms. The Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. The Administrator may set vesting criteria based upon the achievement of Company-wide, business unit, or individual goals (including, but not limited to, continued employment or service), or any other basis determined by the Administrator in its discretion.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as determined by the Administrator.

Notwithstanding the foregoing, at any time after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) determined by the Administrator and set forth in the Award Agreement. The Administrator, in its sole discretion, may settle earned Restricted Stock Units in cash, Shares, or a combination of both.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

10. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Code Section 409A, except as otherwise determined in the sole discretion of the Administrator. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Code Section 409A and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Code Section 409A the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Code Section 409A, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Code Section 409A.

11. Leaves of Absence/Transfer Between Locations. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant will not cease to be an Employee in the case of (i) any leave of absence approved by the Company or (ii) transfers between locations of the Company or between the Company, its Parent, or any Subsidiary. For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months following the first (1st) day of such leave, any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

12. Limited Transferability of Awards.

(a) Unless determined otherwise by the Administrator, Awards may not be sold, pledged, assigned, hypothecated, or otherwise transferred in any manner other than by will or by the laws of descent and distribution, and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award may only be transferred (i) by will, (ii) by the laws of descent and distribution, or (iii) as permitted by Rule 701 of the Securities Act of 1933, as amended (the "Securities Act").

(b) Further, until the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, or after the Administrator determines that it is, will, or may no longer be relying upon the exemption from registration under the Exchange Act as set forth in Rule 12h-1(f) promulgated under the Exchange Act, an Option, or prior to exercise, the Shares

subject to the Option, may not be pledged, hypothecated or otherwise transferred or disposed of, in any manner, including by entering into any short position, any "put equivalent position" or any "call equivalent position" (as defined in Rule 16a-1(h) and Rule 16a-1(b) of the Exchange Act, respectively), other than to (i) persons who are "family members" (as defined in Rule 701(c)(3) of the Securities Act) through gifts or domestic relations orders, or (ii) to an executor or guardian of the Participant upon the death or disability of the Participant. Notwithstanding the foregoing sentence, the Administrator, in its sole discretion, may determine to permit transfers to the Company or in connection with a Change in Control or other acquisition transactions involving the Company to the extent permitted by Rule 12h-1(f).

13. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award; provided, however, that the Administrator will make such adjustments to an Award required by Section 25102(o) of the California Corporations Code to the extent the Company is relying upon the exemption afforded thereby with respect to the Award.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Merger or Change in Control. In the event of a merger or Change in Control, each outstanding Award will be treated as the Administrator determines (subject to the provisions of the proceeding paragraph) without a Participant's consent, including, without limitation, that (i) Awards will be assumed, or substantially equivalent Awards will be substituted, by the acquiring or succeeding corporation (or an affiliate thereof) with appropriate adjustments as to the number and kind of shares and prices; (ii) upon written notice to a Participant, that the Participant's Awards will terminate upon or immediately prior to the consummation of such merger or Change in Control; (iii) outstanding Awards will vest and become exercisable, realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation of such merger or Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control; (iv) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or (v) any

combination of the foregoing. In taking any of the actions permitted under this subsection 13(c), the Administrator will not be obligated to treat all Awards, all Awards held by a Participant, or all Awards of the same type, similarly.

In the event that the successor corporation does not assume or substitute for the Award (or portion thereof), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock and Restricted Stock Units will lapse, and, with respect to Awards with performance-based vesting, all performance goals or other vesting criteria will be deemed achieved at one hundred percent (100%) of target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right is not assumed or substituted in the event of a merger or Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection 13(c), an Award will be considered assumed if, following the merger or Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the merger or Change in Control, the consideration (whether stock, cash, or other securities or property) received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the merger or Change in Control is not solely common stock of the successor corporation or its Parent, the Administrator may, with the consent of the successor corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, for each Share subject to such Award, to be solely common stock of the successor corporation or its Parent equal in fair market value to the per share consideration received by holders of Common Stock in the merger or Change in Control.

Notwithstanding anything in this Section 13(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the successor corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 13(c) to the contrary, if a payment under an Award Agreement is subject to Code Section 409A and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Code Section 409A, then any payment of an amount that is otherwise accelerated under this Section will be delayed until the earliest time that such payment would be permissible under Code Section 409A without triggering any penalties applicable under Code Section 409A.

14. Tax Withholding.

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (without limitation) (i) paying cash, (ii) electing to have the Company withhold otherwise deliverable Shares having a Fair Market Value equal to the minimum statutory amount required to be withheld, (iii) delivering to the Company already-owned Shares having a Fair Market Value equal to the statutory amount required to be withheld, provided the delivery of such Shares will not result in any adverse accounting consequences, as the Administrator determines in its sole discretion, or (iv) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. The amount of the withholding requirement will be deemed to include any amount which the Administrator agrees may be withheld at the time the election is made, not to exceed the amount determined by using the maximum federal, state or local marginal income tax rates applicable to the Participant with respect to the Award on the date that the amount of tax to be withheld is to be determined. The Fair Market Value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

15. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

16. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

17. Term of Plan. Subject to Section 21 of the Plan, the Plan will become effective upon its adoption by the Board. Unless sooner terminated under Section 18, it will continue in effect for a term of ten (10) years from the later of (a) the effective date of the Plan, or (b) the earlier of the most recent Board or stockholder approval of an increase in the number of Shares reserved for issuance under the Plan.

18. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Board may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

19. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

20. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

21. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted by the Board. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

22. Information to Participants. Beginning on the earlier of (i) the date that the aggregate number of Participants under this Plan is five hundred (500) or more and the Company is relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act and (ii) the date that the Company is required to deliver information to Participants pursuant to Rule 701 under the Securities Act, and until such time as the Company becomes subject to the reporting requirements of Section 13 or 15(d) of the Exchange Act, is no longer relying on the exemption provided by Rule 12h-1(f)(1) under the Exchange Act or is no longer required to deliver information to Participants pursuant to Rule 701 under the Securities Act, the Company shall provide to each Participant the information described in paragraphs (e)(3), (4), and (5) of Rule 701 under the Securities Act not less frequently than every six (6) months with the financial statements being not more than 180 days old and with such information provided either by physical or electronic delivery to the Participants or by written notice to the Participants of the availability of the information on an Internet site that may be password-protected and of any password needed to access the information. The Company may

request that Participants agree to keep the information to be provided pursuant to this section confidential. If a Participant does not agree to keep the information to be provided pursuant to this section confidential, then the Company will not be required to provide the information unless otherwise required pursuant to Rule 12h-1(f)(1) under the Exchange Act or Rule 701 of the Securities Act.

Exhibit 10.6

June 22, 2007

Capnia, Inc.

June 22, 2007

Dr. Ernest Mario
Via E-Mail

Dear Ernie:

1. *Offer*. I am pleased to offer you a position with Capnia, Inc. (the "**Company**"), as its President and Chief Executive Officer.

2. *Reporting to the Board of Directors*. During such time as you act the Company's President and Chief Executive Officer, you shall also hold a position as Chairman of the Company's board of directors (the "**Board**"). You shall report directly to the Board or any committees of the Board that may be created from time to time.

3. *Stock Grants*.

a. *Initial Stock Grant.* If you join the Company, the Company will issue to you 4,000,000 shares of the Company's Common Stock at a price per share equal to the fair market value per share of the Common Stock on the date of grant, as determined by the Board, and which is currently $0.11/share. You agree to purchase these shares of Common Stock in cash at the applicable fair market value. The Company shall have a lapsing right to repurchase the shares at cost if you are terminated by the Company for Cause (as defined below) or if you resign your employment, such that 1/48th of the shares shall be released from the Company's right of repurchase at the end of each month following your start date. Additionally, in the event of a Change of Control (as defined below), 100% of the shares shall be released from the Company's right of repurchase.

b. *Definitions.*

i. "**Cause**" means: (i) your willful and continued failure to substantially perform your reasonable assigned duties (other than any such failure resulting from incapacity due to physical or mental illness), which failure is not cured within 30 days after a written demand for substantial performance is received by you from the Board which specifically identifies the manner in which the Board believes you have not substantially performed your duties; (ii) your engaging in knowing and intentional illegal conduct that was or is materially injurious to the Company or its affiliates; (iii) your willful violation of a federal or state law or regulation directly or indirectly applicable to the business of the Company or its affiliates; or (iv) your being convicted of, or entering a plea of *nolo contendere* to a felony, committing any act of moral turpitude, dishonesty or fraud, or the misappropriation of material property belonging to the Company or its affiliates.

ii. "**Change of Control**" means the consummation of (i) the sale or disposition by the Company of all or substantially all of the Company's assets; or (ii) a merger or consolidation of the Company with any other corporation, other than a merger or consolidation which would result in the voting securities of the Company outstanding immediately prior thereto continuing to represent (either by remaining outstanding or by being converted into voting securities of the surviving entity or its parent) at least fifty percent (50%) of the total voting power represented by the voting securities of the Company or such surviving entity or its parent outstanding immediately after such merger or consolidation.

c. *Financing Stock Grant.* Immediately following the closing of the Company's next preferred stock equity financing, on terms as may be approved by the Board, with gross aggregate proceeds to the Company of at least $20 million ("**Qualified Financing**"), the Company will issue to you an additional 4,000,000 shares of the Company's Common Stock at a price per share equal to the fair market value per share of the Common Stock on the date of grant, as determined by the Board. You agree to purchase these shares of Common Stock in cash at the applicable fair market value. The stock grant shall be subject to vesting (i.e., a lapsing Company right of repurchase) as follows: (i) 1/3 of the stock shall be vested immediately upon grant; (ii) 1/3 of the stock shall vest on the completion of at least two board-approved Phase II or Phase III clinical trials for rhinitis and/or migraine within 18 months of the closing of the Qualified Financing; and (iv) all then remaining unvested stock shall vest on the closing of an initial public offering or an acquisition of the Company, on terms as may be approved by the Board, occurring within five years of your start date.

d. *No right to continue vesting or employment.* No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continue vesting or employment.

4. *Financing Participation*. You shall be permitted to invest in the Company's next preferred stock equity financing.

5. *280G "Parachute Tax."* As you are likely already aware, Section 280G of the Internal Revenue Code may impose a 20% excise tax on payments received by officers in connection with a sale of the Company. This could include the value associated with the acceleration of vesting. For private companies, this excise tax may be avoided by obtaining a requisite percentage approval of the stockholders at the time of the acquisition. In the event that such approvals are not obtained, the Company will reimburse you the amount of any such 280G excise tax obligation that you are required to pay to the IRS.

6. *At-Will Employment.* The Company is excited about your joining and looks forward to a beneficial and productive relationship. Nevertheless, you should be aware that your employment with the Company is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice. We request that, in the event of resignation, you give the Company at least two weeks notice.

7. *At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement.* As a condition of your employment, you are also required to sign and comply with an At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of Company proprietary information.

To accept the Company's offer, please sign and date this letter in the space provided below. A duplicate original is enclosed for your records. If you accept our offer, your first day of employment will be July 15, 2007. This letter agreement, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews or pre-employment negotiations, whether written or oral. This letter agreement, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed by an authorized representative of the Board and you.

We look forward to your favorable reply and to working with you at Capnia, Inc.

Sincerely,

/s/ Edgar G. Engelman
Dr. Edgar G. Engleman,
On behalf of the Board of Capnia

Agreed to and accepted:

Signature: /s/ Ernest Mario

Printed Name: Dr. Ernest Mario

Date: 7/15/2007

Enclosures:

Duplicate Original Letter
At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement

Exhibit 10.7

CAPNIA, INC.

ANISH BHATNAGAR EMPLOYMENT AGREEMENT

This Employment Agreement (the "Agreement") is made and entered into by and between Anish Bhatnagar ("Executive") and Capnia, Inc., a Delaware corporation (the "Company"), effective as of April 6, 2010 (the "Effective Date").

1. Duties and Scope of Employment.

(a) Position and Duties. Executive will continue to serve as the Company's President and Chief Operating Officer reporting to the Chief Executive Officer. Executive will continue to render such business and professional services in the performance of Executive's duties, consistent with Executive's position within the Company, as will reasonably be assigned to him by the Company's Board of Directors (the "Board"). The period of Executive's employment under this Agreement is referred to herein as the "Employment Term."

(b) Obligations. During the Employment Term, Executive will perform Executive's duties faithfully and to the best of Executive's ability and will devote Executive's full business efforts and time to the Company.

2. At-Will Employment. The parties agree that Executive's employment with the Company will be "at-will" employment and may be terminated at any time with or without cause or notice. Executive understands and agrees that neither Executive's job performance nor promotions, commendations, bonuses or the like from the Company give rise to or in any way serve as the basis for modification, amendment, or extension, by implication or otherwise, of Executive's employment with the Company. However, as described in this Agreement, Executive may be entitled to severance benefits depending on the circumstances of Executive's termination of employment with the Company.

3. Term of Agreement. This Agreement will have an initial term of three (3) years from the Effective Date, unless terminated earlier under this Agreement's provisions. On the third anniversary of the Effective Date, this Agreement will automatically renew for additional one (1) year terms unless either party provides the other party with written notice of non-renewal at least three (3) months prior to the date of automatic renewal. If Executive becomes entitled to severance benefits pursuant to Section 8 hereof, this Agreement will not terminate until all of the obligations under this Agreement have been satisfied.

4. Compensation.

(a) Base Salary. During the Employment Term, the Company will pay Executive an annual salary of $315,000 as compensation for Executive's services (the "Base Salary"). The Base Salary will be paid periodically in accordance with the Company's normal payroll practices and be subject to the usual, required withholdings. Executive's salary will be subject to review and adjustments will be made based upon the Company's normal performance review practices.

(b) Target Bonus. Executive will be eligible to receive an annual bonus of up to 25% Executive's Base Salary, less applicable withholdings, upon achievement of performance objectives to be determined by the Board in its sole discretion (the "Target Bonus"). The Target Bonus, or any portion thereof, will be paid as soon as practicable after the Board determines that the Target Bonus has been earned, but in no event shall the Target Bonus be paid after the later of (i) the fifteenth (15th) day of the third (3rd) month following the close of the Company's fiscal year in which the Target Bonus is earned or (ii) March 15 following the calendar year in which the Target Bonus is earned.

(c) Equity Awards. Executive will continue to be eligible to receive awards of stock options, restricted stock, restricted stock units, stock appreciation rights, performance units and performance shares or other equity awards pursuant to any plans or arrangements the Company may have in effect from time to time. The Board or the Compensation Committee of the Board will determine in its discretion whether Executive will be granted any such equity awards and its terms in accordance with the terms of any applicable plan or arrangement that may be in effect from time to time. In connection with the signing of this agreement the Company will issue additional Common Stock (the "Shares") equivalent to achieve a total of 5% of the equity pool on a fully diluted basis at the end of the bridge financing scheduled for later this year. The options will vest over 4 years in accord with the company's employment stock option plan.

5. Employee Benefits. Executive will continue to be entitled to participate in the employee benefit plans currently and hereafter maintained by the Company of general applicability to other senior executives of the Company. The Company reserves the right to cancel or change the benefit plans and programs it offers to its employees at any time.

6. Vacation. Executive will continue to be entitled to paid vacation, in accordance with the Company's vacation policy for senior executive officers, with the timing and duration of specific vacations mutually and reasonably agreed to by the parties hereto. Upon Executive's termination of employment, Executive will be entitled to receive Executive's accrued but unpaid vacation through the date of Executive's termination.

7. Expenses. The Company will reimburse Executive for reasonable travel, entertainment or other expenses incurred by Executive in the furtherance of or in connection with the performance of Executive's duties hereunder, in accordance with the Company's expense reimbursement policy as in effect from time to time.

8. Severance.

(a) Termination for other than Cause, Death or Disability Apart from a Change of Control. During the Employment Term, if earlier than two (2) months prior to a Change of Control or after twelve (12) months following a Change of Control, the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment other than for Cause, death or disability, then, subject to Section 9 below, Executive will receive the following severance from the Company:

(i) Severance Payment. Executive will receive: (A) a lump sum severance payment in an amount equal to twelve (12) months of Executive's Base Salary (as in effect immediately prior to Executive's termination).

(ii) Continued Employee Benefits. Executive will receive Company-paid coverage for the cost of continuation coverage for Executive and Executive's eligible dependents under the Company's Benefit Plans until the earlier of (i) a period of twelve (12) months from the date of Executive's termination of employment with the Company, or (ii) the date upon which Executive and/or Executive's eligible dependents becomes covered under similar plans.

(b) Termination for other than Cause, Death or Disability or Resignation for Good Reason upon or within Two Months Prior to, or Twelve Months Following, a Change of Control. During the Employment Term, if upon or within two (2) months prior to, or twelve (12) months following, a Change of Control, (i) the Company (or any parent or subsidiary or successor of the Company) terminates Executive's employment other than for Cause, death or disability, or (ii) upon Executive's resignation with the Company (or any parent or subsidiary or successor of the Company) for Good Reason, then, subject to Section 9 below, Executive will receive the following severance from the Company:

(i) Severance Payment. Executive will receive: (A) a lump-sum severance payment in an amount equal to eighteen (18) months of Executive's Base Salary (as in effect immediately prior to Executive's termination), and (B) a lump-sum pro-rated amount of Executive's Target Bonus for the year in which the termination occurs (adjusted as appropriate based on the extent to which any applicable performance objectives have then been achieved and the relative weightings thereof, each as determined in the sole and absolute discretion of the Board acting in good faith).

(ii) Continued Employee Benefits. Executive will receive Company-paid coverage for the cost of continuation coverage for Executive and Executive's eligible dependents under the Company's Benefit Plans until the earlier of (A) a period of eighteen (18) months from the date of Executive's termination of employment with the Company, or (B) the date upon which Executive and/or Executive's eligible dependents becomes covered under similar plans.

(iii) Accelerated Vesting. One hundred percent (100%) of Executive's outstanding equity awards will immediately vest prior to Executive's termination and become exercisable. The equity awards will remain exercisable, to the extent applicable, following the date of termination for the period prescribed in the stock or equity plan and award agreement.

(c) Termination for Cause, Death or Disability: Resignation without Good Reason. If Executive's employment with the Company (or any parent or subsidiary or successor of the Company) terminates voluntarily by Executive (except upon resignation for Good Reason upon or within two (2) months prior to, or twelve (12) months following, a Change of Control), for Cause by the Company or due to Executive's death or disability, then (i) all vesting will terminate immediately with respect to Executive's outstanding equity awards, (ii) all payments of compensation by the Company to Executive hereunder will terminate immediately (except as to amounts already earned), and (iii) Executive will only be eligible for severance benefits in accordance with the Company's established policies, if any, as then in effect.

(d) Exclusive Remedy. In the event of a termination of Executive's employment with the Company (or any parent or subsidiary or successor of the Company), the provisions of this Section 8 are intended to be and are exclusive and in lieu of any other rights or remedies to which Executive or the Company may otherwise be entitled, whether at law, tort or contract, in equity, or under this Agreement. Executive will be entitled to no severance or other benefits upon termination of employment with respect to acceleration of award vesting or severance pay other than those benefits expressly set forth in this Section 8.

9. Conditions to Receipt of Severance, No Duty to Mitigate.

(a) Separation Agreement and Release of Claims. The receipt of any severance pursuant to Section 8(a) or (b) will be subject to Executive signing and not revoking a separation agreement and release of claims in a form reasonably satisfactory to the Company (the "Release") and provided that such Release becomes effective and irrevocable no later than sixty (60) days following the termination date (such deadline, the "Release Deadline"). If the Release does not become effective and irrevocable by the Release Deadline, Executive will forfeit any rights to severance or benefits under this Agreement. In no event will severance payments or benefits be paid or provided until the Release becomes effective and irrevocable.

(b) Non-Solicitation. The receipt of any severance benefits pursuant to Section 8(a) or (b) will be subject to Executive not violating the provisions of Section 16. In the event Executive breaches the provisions of Section 16, all continuing payments and benefits to which Executive may otherwise be entitled pursuant to Section 8(a) or (b) will immediately cease.

(c) Section 409A.

(i) Notwithstanding anything to the contrary in this Agreement, no severance pay or benefits to be paid or provided to Executive, if any, pursuant to this Agreement that, when considered together with any other severance payments or separation benefits, are considered deferred compensation under Code Section 409A, and the final regulations and any guidance promulgated thereunder ("Section 409A") (together, the "Deferred Payments") will be paid or otherwise provided until Executive has a "separation from service" within the meaning of Section 409A. Similarly, no severance payable to Executive, if any, pursuant to this Agreement that otherwise would be exempt from Section 409A pursuant to Treasury Regulation Section 1.409A-1(b)(9) will be payable until Executive has a "separation from service" within the meaning of Section 409A.

(ii) Any severance payments or benefits under this Agreement that would be considered Deferred Payments will be paid on, or, in the case of installments, will not commence until, the sixtieth (60th) day following Executive's separation from service, or, if later, such time as required by Section 9(c)(iii). Except as required by Section 9(c)(iii), any installment payments that would have been made to Executive during the sixty (60) day period immediately following Executive's separation from service but for the preceding sentence will be paid to Executive on the sixtieth (60th) day following Executive's separation from service and the remaining payments shall be made as provided in this Agreement.

(iii) Notwithstanding anything to the contrary in this Agreement, if Executive is a "specified employee" within the meaning of Section 409A at the time of Executive's termination (other than due to death), then the Deferred Payments that are payable within the first six (6) months following Executive's separation from service, will become payable on the first payroll date that occurs on or after the date six (6) months and one (1) day following the date of Executive's separation from service. All subsequent Deferred Payments, if any, will be payable in accordance with the payment schedule applicable to each payment or benefit. Notwithstanding anything herein to the contrary, if Executive dies following Executive's separation from service, but prior to the six (6) month anniversary of the separation from service, then any payments delayed in accordance with this paragraph will be payable in a lump sum as soon as administratively practicable after the date of Executive's death and all other Deferred Payments will be payable in accordance with the payment schedule applicable to each payment or benefit. Each payment and benefit payable under this Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations.

(iv) Any amount paid under this Agreement that satisfies the requirements of the "short-term deferral" rule set forth in Section 1.409A-1(b)(4) of the Treasury Regulations will not constitute Deferred Payments for purposes of clause (i) above.

(v) Any amount paid under this Agreement that qualifies as a payment made as a result of an involuntary separation from service pursuant to Section 1.409A-1(b)(9)(iii) of the Treasury Regulations that does not exceed the Section 409A Limit (as defined below) will not constitute Deferred Payments for purposes of clause (i) above.

(vi) The foregoing provisions are intended to comply with the requirements of Section 409A so that none of the severance payments and benefits to be provided hereunder will be subject to the additional tax imposed under Section 409A, and any ambiguities herein will be interpreted to so comply. The Company and Executive agree to work together in good faith to consider amendments to this Agreement and to take such reasonable actions which are necessary, appropriate or desirable to avoid imposition of any additional tax or income recognition prior to actual payment to Executive under Section 409A.

(d) Confidential Information Agreement. Executive's receipt of any payments or benefits under Section 8 will be subject to Executive continuing to comply with the terms of the Confidential Information Agreement (as defined in Section 15).

(e) No Duty to Mitigate. Executive will not be required to mitigate the amount of any payment contemplated by this Agreement, nor will any earnings that Executive may receive from any other source reduce any such payment.

10. Limitation on Payments. In the event that the severance and other benefits provided for in this Agreement or otherwise payable to Executive (i) constitute "parachute payments" within the meaning of Section 280G of the Code and (ii) but for this Section 10, would be subject to the excise tax imposed by Section 4999 of the Code, then Executive's severance benefits will be either:

(a) delivered in full, or

(b) delivered as to such lesser extent which would result in no portion of such severance benefits being subject to the excise tax under Section 4999 of the Code,

whichever of the foregoing amounts, taking into account the applicable federal, state and local income taxes and the excise tax imposed by Section 4999, results in the receipt by Executive on an after-tax basis, of the greatest amount of severance benefits, notwithstanding that all or some portion of such severance benefits may be taxable under Section 4999 of the Code. If a reduction in the severance and other benefits constituting "parachute payments" is necessary so that no portion of such severance benefits is subject to the excise tax under Section 4999 of the Code, the reduction shall occur in the following order unless the Company determines in writing a different order: (1) reduction of the severance payments under Sections 8(a)(i) or 8(b)(i); (2) cancellation of accelerated vesting of equity awards; and (3) reduction of continued employee benefits. In the event that acceleration of vesting of equity award compensation is to be reduced, such acceleration of vesting shall be cancelled in the reverse order of the date of grant of Executive's equity awards.

Unless the Company and Executive otherwise agree in writing, any determination required under this Section 10 will be made in writing by an independent firm immediately prior to Change of Control (the "Firm"), whose determination will be conclusive and binding upon Executive and the Company for all purposes. For purposes of making the calculations required by this Section 10, the Firm may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Company and Executive will furnish to the Firm such information and documents as the Firm may reasonably request in order to make a determination under this Section 10. The Company will bear all costs the Firm may reasonably incur in connection with any calculations contemplated by this Section 10.

11. Definition of Terms. The following tell is referred to in this Agreement will have the following meanings:

(a) Benefit Plans. For purposes of this Agreement, "Benefit Plans" means plans, policies or arrangements that the Company sponsors (or participates in) and that immediately prior to Executive's termination of employment provide Executive and/or Executive's eligible dependents with medical, dental, and/or vision benefits. Benefit Plans do not include any other type of benefit (including, but not by way of limitation, disability, life insurance or retirement benefits). A requirement that the Company provide Executive and Executive's eligible dependents with coverage under the Benefit Plans will not be satisfied unless the coverage is no less favorable than that provided to senior executives of the Company at any applicable time during the period Executive is entitled to receive severance pursuant to Section 8(a) or 8(b). The Company may, at its option, satisfy any requirement that the Company provide coverage under any Benefit Plan by (i) reimbursing Executive's premiums under Title X of the Consolidated Budget Reconciliation Act of 1985, as amended ("COBRA") after Executive has properly elected continuation coverage under

COBRA (in which case Executive will be solely responsible for electing such coverage for Executive's eligible dependents), or (ii) providing coverage under a separate plan or plans providing coverage that is no less favorable.

(b) Cause. For purposes of this Agreement, "Cause" is defined as (i) any material act of personal dishonesty made by Executive in connection with Executive's responsibilities as an employee, (ii) Executive's conviction of, or plea of nolo contendere to, a felony or any crime involving fraud, embezzlement or any other act of moral turpitude, (iii) Executive's gross misconduct, (iv) Executive's unauthorized use or disclosure of any proprietary information or trade secrets of the Company or any other party to whom Executive owes an obligation of nondisclosure as a result of Executive's relationship with the Company; (v) Executive's willful breach of any obligations under any written agreement or covenant with the Company; or (vi) Executive's continued failure to perform Executive's employment duties after Executive has received a written demand of performance from the Company which specifically sets forth the factual basis for the Company's belief that Executive has not substantially performed his or her duties and has failed to cure such non-performance to the Company's satisfaction within ten (10) business days after receiving such notice.

(c) Change of Control. For purposes of this Agreement, "Change of Control" means the occurrence of any of the following events:

(i) the acquisition by any one person, or more than one person acting as a group (for these purposes, persons will be considered to be acting as a group if they are owners of a corporation that enters into a merger, consolidation, purchase or acquisition of stock, or similar business transaction with the Company), ("Person") that becomes the owner, directly or indirectly, of securities of the Company representing more than fifty percent (50%) of the total voting power represented by the Company's then outstanding securities; provided, however, that for purposes of this subsection (i), the acquisition of additional securities by any one Person, who is considered to own more than fifty percent (50%) of the total voting power of the securities of the Company shall not be considered a Change of Control; or

(ii) a change in the ownership of a substantial portion of the Company's assets which occurs on the date that any Person acquires (or has acquired during the twelve (12) month period ending on the date of the most recent acquisition by such person or persons) assets from the Company that have a total gross fair market value equal to or more than fifty percent (50%) of the total gross fair market value of all of the assets of the Company immediately prior to such acquisition or acquisitions; provided, however, that for purposes of this Section 11(c)(ii) the following shall not constitute a change in the ownership of a substantial portion of the Company's assets: (1) a transfer to an entity that is controlled by the Company's shareholders immediately after the transfer; or (2) a transfer of assets by the Company to: (A) a shareholder of the Company (immediately before the asset transfer) in exchange for or with respect to the Company's securities; (B) an entity, fifty percent (50%) or more of the total value or voting power of which is owned, directly or indirectly, by the Company; (C) a Person, that owns, directly or indirectly, fifty percent (50%) or more of the total value or voting power of all the outstanding stock of the Company; or (D) an entity, at least fifty percent (50%) of the total value or voting power of which is owned, directly or indirectly, by a Person described in subsection (C). For purposes of this Section 11(c)(ii), gross fair market value means the value of the assets of the Company, or the value of the assets being disposed of, determined without regard to any liabilities associated with such assets.

Notwithstanding the foregoing, a transaction shall not constitute a Change of Control unless the transaction qualifies as a "change in control event" within the meaning of Section 409A.

(d) Code. For purposes of this Agreement, "Code" means the Internal Revenue Code of 1986, as amended.

(e) Good Reason. For purposes of this Agreement, "Good Reason" means Executive's resignation within thirty (30) days following the expiration of any Company cure period (discussed below) following the occurrence of one or more of the following, without Executive's express written consent: (i) the assignment to Executive of any duties, the reduction of Executive's duties or the removal of Executive from his or her position and responsibilities, either of which must result in a material diminution of Executive's authority, duties, or responsibilities with the Company in effect immediately prior to such assignment, unless Executive is provided with a comparable position (i.e., a position of equal or greater organizational level, duties, authority, compensation and status); provided, however, that a reduction in duties, position or responsibilities solely by virtue of the Company being acquired and made part of a larger entity (as, for example, when the Chief Executive Officer of the Company remains as such following a Change of Control but is not made the Chief Executive Officer of the acquiring corporation) will not constitute "Good Reason"; (ii) a material reduction in Executive's Base Salary; provided, however, that a reduction in Executive's Base Salary of ten percent (10%) or less in any one year will not be deemed a material reduction; (iii) a material change in the geographic location of Executive's primary work facility or location; provided, however, that a relocation of less than fifty (50) miles from Executive's then present location will not be considered a material change in geographic location; or (iv) the failure of the Company to obtain assumption of this Agreement by any successor, which shall be deemed a material breach by the Company of this Agreement. Executive will not resign for Good Reason without first providing the Company with written notice of the acts or omissions constituting the grounds for "Good Reason" within ninety (90) days of the initial existence of the grounds for "Good Reason" and a reasonable cure period of not less than thirty (30) days following the date of such notice.

(f) Section 409A Limit. For purposes of this Agreement, "Section 409A Limit" will mean two (2) times the lesser of: (i) Executive's annualized compensation based upon the annual rate of pay paid to Executive during the Executive's taxable year preceding the Executive's taxable year of his or her separation from service as determined under Treasury Regulation Section 1.409A-1(b)(9)(iii)(A)(1) and any Internal Revenue Service guidance issued with respect thereto; or (ii) the maximum amount that may be taken into account under a qualified plan pursuant to Section 401(a)(17) of the Internal Revenue Code for the year in which Executive's separation from service occurred.

12. Assignment. This Agreement will be binding upon and inure to the benefit of (a) the heirs, executors and legal representatives of Executive upon Executive's death and (b) any successor of the Company. Any such successor of the Company will be deemed substituted for the Company under the terms of this Agreement for all purposes. For this purpose, "successor" means any person,

firm, corporation or other business entity which at any time, whether by purchase, merger or otherwise, directly or indirectly acquires all or substantially all of the assets or business of the Company. None of the rights of Executive to receive any form of compensation payable pursuant to this Agreement may be assigned or transferred except by will or the laws of descent and distribution. Any other attempted assignment, transfer, conveyance or other disposition of Executive's right to compensation or other benefits will be null and void.

13. Notice. All notices, requests, demands and other communications called for hereunder will be in writing and will be deemed given (i) on the date of delivery if delivered personally, (ii) one (1) day after being sent by a well established commercial overnight service, or (iii) four (4) days after being mailed by registered or certified mail, return receipt requested, prepaid and addressed to the parties or their successors at the following addresses, or at such other addresses as the parties may later designate in writing.

If to the Company:

Capnia, Inc.
2445 Faber Place Suite 250
Palo Alto, CA 94303
Attn: Ernest Mario, PhD (Chief Executive Officer)

If to Executive:

at the last residential address known by the Company.

14. Arbitration.

(a) Arbitration. In consideration of Executive's employment with the Company, its promise to arbitrate all employment-related disputes, and Executive's receipt of the compensation, pay raises and other benefits paid to Executive by the Company, at present and in the future, Executive agrees that any and all controversies, claims, or disputes with anyone (including the Company and any employee, officer, director, shareholder or benefit plan of the Company in their capacity as such or otherwise) arising out of, relating to, or resulting from Executive's employment with the Company or termination thereof, including any breach of this Agreement, will be subject to binding arbitration under the Arbitration Rules set forth in California Code of Civil Procedure Section 1280 through 1294.2, including Section 1281.8 (the "Act"), and pursuant to California law. The Federal Arbitration Act shall also apply with full force and effect, notwithstanding the application of procedural rules set forth under the Act.

(b) Dispute Resolution. **Disputes that Executive agrees to arbitrate, and thereby agrees to waive any right to a trial by jury, include any statutory claims under local, state, or federal law**, including, but not limited to, claims under Title VII of the Civil Rights Act of 1964, the Americans with Disabilities Act of 1990, the Age Discrimination in Employment Act of 1967, the Older Workers Benefit Protection Act, the Sarbanes Oxley Act, the Worker Adjustment and Retraining Notification Act, the California Fair Employment and Housing Act, the Family and Medical Leave Act, the California Family Rights Act, the California Labor Code, claims of

harassment, discrimination, and wrongful termination, and any statutory or common law claims. Executive further understands that this Agreement to arbitrate also applies to any disputes that the Company may have with Executive.

(c) Procedure. Executive agrees that any arbitration will be administered by the Judicial Arbitration & Mediation Services, Inc. ("JAMS"), pursuant to its Employment Arbitration Rules & Procedures (the "JAMS Rules"). The arbitrator shall have the power to decide any motions brought by any party to the arbitration, including motions for summary judgment and/or adjudication, motions to dismiss and demurrers, and motions for class certification, prior to any arbitration hearing. The arbitrator shall have the power to award any remedies available under applicable law, and the arbitrator shall award attorneys' fees and costs to the prevailing party, except as prohibited by law. The Company will pay for any administrative or hearing fees charged by the administrator or JAMS, and all arbitrator's fees, except that Executive shall pay any filing fees associated with any arbitration that Executive initiates, but only so much of the filing fee as Executive would have instead paid had Executive filed a complaint in a court of law. Executive agrees that the arbitrator shall administer and conduct any arbitration in accordance with California law, including the California Code of Civil Procedure and the California Evidence Code, and that the arbitrator shall apply substantive and procedural California law to any dispute or claim, without reference to the rules of conflict of law. To the extent that the JAMS Rules conflict with California law, California law shall take precedence. The decision of the arbitrator shall be in writing. Any arbitration under this Agreement shall be conducted in Santa Clara County, California.

(d) Remedy. Except as provided by the Act, arbitration shall be the sole, exclusive, and final remedy for any dispute between Executive and the Company. **Accordingly, except as provided by the Act and this Agreement, neither Executive nor the Company will be permitted to pursue court action regarding claims that are subject to arbitration.** Notwithstanding, the arbitrator will not have the authority to disregard or refuse to enforce any lawful Company policy, and the arbitrator will not order or require the Company to adopt a policy not otherwise required by law which the Company has not adopted.

(e) Administrative Relief. Executive is not prohibited from pursuing an administrative claim with a local, state, or federal administrative body or government agency that is authorized to enforce or administer laws related to employment, including, but not limited to, the Department of Fair Employment and Housing, the Equal Employment Opportunity Commission, the National Labor Relations Board, or the Workers' Compensation Board. However, Executive may not pursue court action regarding any such claim, except as permitted by law.

(f) Voluntary Nature of Agreement. Executive acknowledges and agrees that Executive is executing this Agreement voluntarily and without any duress or undue influence by the Company or anyone else. Executive further acknowledges and agrees that Executive has carefully read this Agreement and that Executive has asked any questions needed for Executive to understand the terms, consequences and binding effect of this Agreement and fully understands it, including that ***EXECUTIVE IS WAIVING EXECUTIVE'S RIGHT TO A JURY TRIAL***. Finally, Executive agrees that Executive has been provided an opportunity to seek the advice of an attorney of Executive's choice before signing this Agreement.

15. Confidential Information. Executive agrees to enter into the Company's standard At-Will Employment, Confidential Information, Invention and Assignment Agreement] (the "Confidential Information Agreement") in connection with the execution of this Agreement.

16. Non-Solicitation. Until the date one (1) year after the termination of Executive's employment with the Company for any reason, Executive agrees not, either directly or indirectly, to solicit, induce, attempt to solicit, recruit, or encourage any employee of the Company (or any parent or subsidiary of the Company) to leave his or her employment either for Executive or for any other entity or person. Executive represents that he (i) is familiar with the foregoing covenant not to solicit, and (ii) is fully aware of his or her obligations hereunder, including, without limitation, the reasonableness of the length of time, scope and geographic coverage of these covenants.

17. Miscellaneous Provisions.

(a) Amendment. No provision of this Agreement will be modified, waived or discharged unless the modification, waiver or discharge is agreed to in writing and signed by Executive and by an authorized officer of the Company (other than Executive) that is expressly designated as an amendment to this Agreement.

(b) Waiver. No waiver by either party of any breach of, or of compliance with, any condition or provision of this Agreement by the other party will be considered a waiver of any other condition or provision or of the same condition or provision at another time.

(c) Headings. All captions and section headings used in this Agreement are for convenient reference only and do not form a part of this Agreement.

(d) Entire Agreement. This Agreement, together with the Confidential Information Agreement represents the entire agreement and understanding between the parties as to the subject matter herein and supersedes all prior or contemporaneous agreements whether written or oral. With respect to equity awards granted on or after the date of this Agreement, the acceleration of vesting provisions provided herein will apply to such equity awards except to the extent otherwise explicitly provided in the applicable award agreement. This Agreement may be modified only by agreement of the parties by a written instrument executed by the parties that is designated as an amendment to this Agreement.

(e) Governing Law. This Agreement will be governed by the laws of the State of California (with the exception of its conflict of laws provisions).

(f) Severability. The invalidity or unenforceability of any provision or provisions of this Agreement will not affect the validity or enforceability of any other provision hereof, which will remain in full force and effect.

(g) Withholding. All payments made pursuant to this Agreement will be subject to all applicable withholdings, including all applicable income and employment taxes, as determined in the Company's reasonable judgment.

(h) Acknowledgment. Executive acknowledges that he has had the opportunity to discuss this matter with and obtain advice from he private attorney, has had sufficient time to, and has carefully read and fully understands all the provisions of this Agreement, and is knowingly and voluntarily entering into this Agreement.

(i) Counterparts. This Agreement may be executed in counterparts, and each counterpart will have the same force and effect as an original and will constitute an effective, binding agreement on the part of each of the undersigned.

[Signature Page Follows]

IN WITNESS WHEREOF, each of the parties has executed this Agreement, in the case of the Company by its duly authorized officer, as of the day and year set forth below.

COMPANY

CAPNIA, INC.

By: /s/ Ernest Mario

Title: Chairman & CEO

EXECUTIVE

By: /s/ Anish Bhatnagar

Title: President & COO

Exhibit 10.8

29 May 2013

Mr. Tony Wondka

Dear Tony:

I am pleased to offer you a position with Capnia, Inc., a Delaware corporation (the "**Company**"), as its Vice President, CoSense Project. You shall report to the President and Chief Operating Officer of the Company. If you decide to join us, you will receive an annual base salary of $235,000, which will be paid in accordance with the Company's normal payroll procedures, less applicable withholding taxes. As an employee, you will also be eligible to receive certain employee benefits.

At the first Board of Directors' meeting after you begin employment, the Company will recommend that you be granted an option to purchase 131,000 shares of the Company's common stock. All option grants are subject to approval by the Company's Board of Directors. The Board will determine the exercise price per share when it grants the option. This option grant shall be subject to the terms and conditions of the Company's Stock Option Plan and Stock Option Agreement, including vesting and repurchase requirements. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continued vesting or employment. This option shall vest, subject to your continued employment with the Company, as to one fourth (1/4) of the shares on the first anniversary of the date of your employment, and as to an additional one forty-eight (1/48th) of the total number of shares subject to the option on the first day of each calendar month thereafter.

The Company is excited about your joining and looks forward to a beneficial and productive relationship. Nevertheless, you should be aware that your employment with the Company is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without notice. We request that, in the event of resignation, you give the Company at least a two-week notice.

For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

We also ask that, if you have not already done so, you disclose to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed. It is the Company's understanding that any such agreements will not prevent you from performing the duties of your position and you represent that such is the case. Moreover, you agree that, during the term of your employment with the Company, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to the Company. Similarly, you agree not to bring any third party confidential information to the Company, including that of your former employer, and that in performing your duties for the Company you will not in any way utilize any such information.

As a Company employee, you will be expected to abide by the Company's rules and standards.

As a condition of your employment, you are also required to sign and comply with an At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement (the "**At-Will Employment Agreement**") which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of Company proprietary information. In the event of any dispute or claim relating to or arising out of our employment relationship, you and the Company agree that (i) any and all disputes between you and the Company shall be fully and finally resolved by binding arbitration, (ii) you are waiving any and all rights to a jury trial but all court remedies will be available in arbitration, (iii) all disputes shall be resolved by a neutral arbitrator who shall issue a written opinion, (iv) the arbitration shall provide for adequate discovery, and (v) the Company shall pay all but the first $125 of the arbitration fees. Please note that we must receive your signed At-Will Employment Agreement before your first day of employment.

To accept the Company's offer, please sign and date this letter in the space provided below. If you accept our offer, your first day of employment will be 3 June 2013. This letter, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews or pre-employment negotiations, whether written or oral. This letter, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed by a designated officer of the Company and you. This offer of employment will terminate if it is not accepted, signed and returned within one week of the date set forth at the top of this letter.

We look forward to your favorable reply and to working with you at Capnia, Inc.

Sincerely,

/s/ Anish Bhatnagar
Anish Bhatnagar, President and COO

Agreed to and accepted:

Signature: /s/ Anthony Wondka

Printed Name: Anthony (Tony) Wondka

Date: May 31, 2013

Enclosure:

At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement

CAPNIA, INC.
EMPLOYMENT, CONFIDENTIAL INFORMATION,
INVENTION ASSIGNMENT,
AND ARBITRATION AGREEMENT

As a condition of my employment with CAPNIA, Inc., its subsidiaries, affiliates, successors or assigns (together the "Company"), and in consideration of my employment with the Company and my receipt of the compensation now and hereafter paid to me by Company, I, , agree to the following:

1. **At-Will Employment**. I UNDERSTAND AND ACKNOWLEDGE THAT MY EMPLOYMENT WITH THE COMPANY IS FOR AN UNSPECIFIED DURATION AND CONSTITUTES "AT-WILL" EMPLOYMENT. I ALSO UNDERSTAND THAT ANY REPRESENTATION TO THE CONTRARY IS UNAUTHORIZED AND NOT VALID UNLESS OBTAINED IN WRITING AND SIGNED BY THE PRESIDENT OF THE COMPANY. I ACKNOWLEDGE THAT THIS EMPLOYMENT RELATIONSHIP MAY BE TERMINATED AT ANY TIME, WITH OR WITHOUT GOOD CAUSE OR FOR ANY OR NO CAUSE, AT THE OPTION EITHER OF THE COMPANY OR MYSELF, WITH OR WITHOUT NOTICE.

2. **Confidential Information**.

(a) **Company Information**. I agree at all times during the term of my employment and thereafter, to hold in strictest confidence, and not to use, except for the benefit of the Company, or to disclose to any person, firm or corporation without written authorization of the Board of Directors of the Company, any Confidential Information of the Company. I understand that "Confidential Information" means any Company proprietary information, technical data, trade secrets or know-how, including, but not limited to, research, product plans, products, services, customer lists and customers (including, but not limited to, customers of the Company on whom I called or with whom I became acquainted during the term of my employment), markets, software, developments, inventions, processes, formulas, technology, designs, drawings, engineering, hardware configuration information, marketing, finances or other business information disclosed to me by the Company either directly or indirectly in writing, orally or by drawings or observation of parts or equipment. I further understand that Confidential Information does not include any of the foregoing items which have become publicly known and made generally available through no wrongful act of mine or of others who were under confidentiality obligations as to the item or items involved or improvements or new versions thereof

(b) **Former Employer Information**. I agree that I will not, during my employment with the Company, improperly use or disclose any proprietary information or trade secrets of any former or concurrent employer or other person or entity and that I will not bring onto the premises of the Company any unpublished document or proprietary information belonging to any such employer, person or entity unless consented to in writing by such employer, person or entity.

(c) **Third Party Information**. I recognize that the Company has received and in the future will receive from third parties their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality of such information and to use it only for

certain limited purposes. I agree to hold all such confidential or proprietary information in the strictest confidence and not to disclose it to any person, firm or corporation or to use it except as necessary in carrying out my work for the Company consistent with the Company's agreement with such third party.

3. **Inventions**.

(a) **Inventions Retained and Licensed**. I have attached hereto, as Exhibit A, a list describing all inventions, original works of authorship, developments, improvements, and trade secrets which were made by me prior to my employment with the Company (collectively referred to as "Prior Inventions"), which belong to me, which relate to the Company's proposed business, products or research and development, and which are not assigned to the Company hereunder; or, if no such list is attached, I represent that there are no such Prior Inventions. If in the course of my employment with the Company, I incorporate into a Company product, process or machine a Prior Invention owned by me or in which I have an interest, the Company is hereby granted and shall have a nonexclusive, royalty-free, irrevocable, perpetual, worldwide license to make, have made, modify, use and sell such Prior Invention as part of or in connection with such product, process or machine.

(b) **Assignment of Inventions**. I agree that I will promptly make full written disclosure to the Company, will hold in trust for the sole right and benefit of the Company, and hereby assign to the Company, or its designee, all my right, title, and interest in and to any and all inventions, original works of authorship, developments, concepts, improvements, designs, discoveries, ideas, trademarks or trade secrets, whether or not patentable or registrable under copyright or similar laws, which I may solely or jointly conceive or develop or reduce to practice, or cause to be conceived or developed or reduced to practice, during the period of time I am in the employ of the Company (collectively referred to as "Inventions"), except as provided in Section 3(f) below. I further acknowledge that all original works of authorship which are made by me (solely or jointly with others) within the scope of and during the period of my employment with the Company and which are protectible by copyright are "works made for hire," as that term is defined in the United States Copyright Act. I understand and agree that the decision whether or not to commercialize or market any invention developed by me solely or jointly with others is within the Company's sole discretion and for the Company's sole benefit and that no royalty will be due to me as a result of the Company's efforts to commercialize or market any such invention.

(c) **Inventions Assigned to the United States**. I agree to assign to the United States government all my right, title, and interest in and to any and all Inventions whenever such full title is required to be in the United States by a contract between the Company and the United States or any of its agencies.

(d) **Maintenance of Records**. I agree to keep and maintain adequate and current written records of all Inventions made by me (solely or jointly with others) during the term of my employment with the Company. The records will be in the form of notes, sketches, drawings, and any other format that may be specified by the Company. The records will be available to and remain the sole property of the Company at all times.

(e) **Patent and Copyright Registrations**. I agree to assist the Company, or its designee, at the Company's expense, in every proper way to secure the Company's rights in the Inventions and any copyrights, patents, mask work rights or other intellectual property rights relating thereto in any and all countries, including the disclosure to the Company of all pertinent information and data with respect thereto, the execution of all applications, specifications, oaths, assignments and all other instruments which the Company shall deem necessary in order to apply for and obtain such rights and in order to assign and convey to the Company, its successors, assigns, and nominees the sole and exclusive rights, title and interest in and to such Inventions, and any copyrights, patents, mask work rights or other intellectual property rights relating thereto. I further agree that my obligation to execute or cause to be executed, when it is in my power to do so, any such instrument or papers shall continue after the termination of this Agreement. If the Company is unable because of my mental or physical incapacity or for any other reason to secure my signature to apply for or to pursue any application for any United States or foreign patents or copyright registrations covering Inventions or original works of authorship assigned to the Company as above, then I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents as my agent and attorney in fact, to act for and in my behalf and stead to execute and file any such applications and to do all other lawfully permitted acts to further the prosecution and issuance of letters patent or copyright registrations thereon with the same legal force and effect as if executed by me.

(f) **Exception to Assignments**. I understand that the provisions of this Agreement requiring assignment of Inventions to the Company do not apply to any invention which qualifies fully under the provisions of California Labor Code Section 2870 (attached hereto as Exhibit B). I will advise the Company promptly in writing of any inventions that I believe meet the criteria in California Labor Code Section 2870 and not otherwise disclosed on Exhibit A.

4. **Conflicting Employment**. I agree that, during the term of my employment with the Company, I will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of my employment, nor will I engage in any other activities that conflict with my obligations to the Company.

5. **Returning Company Documents**. I agree that, at the time of leaving the employ of the Company, I will deliver to the Company (and will not keep in my possession, recreate or deliver to anyone else) any and all devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items developed by me pursuant to my employment with the Company or otherwise belonging to the Company, its successors or assigns, including, without limitation, those records maintained pursuant to paragraph 3(d). In the event of the termination of my employment, I agree to sign and deliver the "Termination Certification" attached hereto as Exhibit C.

6. **Notification of New Employer**. In the event that I leave the employ of the Company, I hereby grant consent to notification by the Company to my new employer about my rights and obligations under this Agreement.

7. **Solicitation of Employees**. I agree that for a period of twelve (12) months immediately following the termination of my relationship with the Company for any reason, whether with or without cause, I shall not either directly or indirectly solicit, induce, recruit or encourage any of the Company's employees to leave their employment, or take away such employees, or attempt to solicit, induce, recruit, encourage or take away employees of the Company, either for myself or for any other person or entity.

8. **Representations**. I agree to execute any proper oath or verify any proper document required to carry out the terms of this Agreement. I represent that my performance of all the terms of this Agreement will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I agree I will not enter into, any oral or written agreement in conflict herewith.

9. **Arbitration and Equitable Relief**.

(a) **Arbitration**. IN CONSIDERATION OF MY EMPLOYMENT WITH THE COMPANY, ITS PROMISE TO ARBITRATE ALL EMPLOYMENT-RELATED DISPUTES AND MY RECEIPT OF THE COMPENSATION, PAY RAISES AND OTHER BENEFITS PAID TO ME BY THE COMPANY, AT PRESENT AND IN THE FUTURE, I AGREE THAT ANY AND ALL CONTROVERSIES, CLAIMS, OR DISPUTES WITH ANYONE (INCLUDING THE COMPANY AND ANY EMPLOYEE, OFFICER, DIRECTOR, SHAREHOLDER OR BENEFIT PLAN OF THE COMPANY IN THEIR CAPACITY AS SUCH OR OTHERWISE) ARISING OUT OF, RELATING TO, OR RESULTING FROM MY EMPLOYMENT WITH THE COMPANY OR THE TERMINATION OF MY EMPLOYMENT WITH THE COMPANY, INCLUDING ANY BREACH OF THIS AGREEMENT, SHALL BE SUBJECT TO BINDING ARBITRATION UNDER THE ARBITRATION RULES SET FORTH IN CALIFORNIA CODE OF CIVIL PROCEDURE SECTION 1280 THROUGH 1294.2, INCLUDING SECTION 1283.05 (THE "RULES") AND PURSUANT TO CALIFORNIA LAW. DISPUTES WHICH I AGREE TO ARBITRATE, AND THEREBY AGREE TO WAIVE ANY RIGHT TO A TRIAL BY JURY, INCLUDE ANY STATUTORY CLAIMS UNDER STATE OR FEDERAL LAW, INCLUDING, BUT NOT LIMITED TO, CLAIMS UNDER TITLE VII OF THE CIVIL RIGHTS ACT OF 1964, THE AMERICANS WITH DISABILITIES ACT OF 1990, THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967, THE OLDER WORKERS BENEFIT PROTECTION ACT, THE CALIFORNIA FAIR EMPLOYMENT AND HOUSING ACT, THE CALIFORNIA LABOR CODE, CLAIMS OF HARASSMENT, DISCRIMINATION OR WRONGFUL TERMINATION AND ANY STATUTORY CLAIMS. I FURTHER UNDERSTAND THAT THIS AGREEMENT TO ARBITRATE ALSO APPLIES TO ANY DISPUTES THAT THE COMPANY MAY HAVE WITH ME.

(b) **Procedure**. I AGREE THAT ANY ARBITRATION WILL BE ADMINISTERED BY THE AMERICAN ARBITRATION ASSOCIATION ("AAA") AND THAT THE ARBITRATOR WILL BE SELECTED IN A MANNER CONSISTENT WITH ITS NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES. I AGREE THAT THE ARBITRATOR SHALL HAVE THE POWER TO DECIDE ANY MOTIONS BROUGHT BY ANY PARTY TO THE ARBITRATION, INCLUDING MOTIONS FOR SUMMARY JUDGMENT AND/OR ADJUDICATION AND MOTIONS TO DISMISS AND

DEMURRERS, PRIOR TO ANY ARBITRATION HEARING. I ALSO AGREE THAT THE ARBITRATOR SHALL HAVE THE POWER TO AWARD ANY REMEDIES, INCLUDING ATTORNEYS' FEES AND COSTS, AVAILABLE UNDER APPLICABLE LAW. I UNDERSTAND THE COMPANY WILL PAY FOR ANY ADMINISTRATIVE OR HEARING FEES CHARGED BY THE ARBITRATOR OR AAA EXCEPT THAT I SHALL PAY THE FIRST $200.00 OF ANY FILING FEES ASSOCIATED WITH ANY ARBITRATION I INITIATE. I AGREE THAT THE ARBITRATOR SHALL ADMINISTER AND CONDUCT ANY ARBITRATION IN A MANNER CONSISTENT WITH THE RULES AND THAT TO THE EXTENT THAT THE AAA'S NATIONAL RULES FOR THE RESOLUTION OF EMPLOYMENT DISPUTES CONFLICT WITH THE RULES, THE RULES SHALL TAKE PRECEDENCE.

(c) **Remedy**. EXCEPT AS PROVIDED BY THE RULES, ARBITRATION SHALL BE THE SOLE, EXCLUSIVE AND FINAL REMEDY FOR ANY DISPUTE BETWEEN ME AND THE COMPANY. ACCORDINGLY, EXCEPT AS PROVIDED FOR BY THE RULES, NEITHER I NOR THE COMPANY WILL BE PERMITTED TO PURSUE COURT ACTION REGARDING CLAIMS THAT ARE SUBJECT TO ARBITRATION. NOTWITHSTANDING, THE ARBITRATOR WILL NOT HAVE THE AUTHORITY TO DISREGARD OR REFUSE TO ENFORCE ANY LAWFUL COMPANY POLICY, AND THE ARBITRATOR SHALL NOT ORDER OR REQUIRE THE COMPANY TO ADOPT A POLICY NOT OTHERWISE REQUIRED BY LAW WHICH THE COMPANY HAS NOT ADOPTED.

(d) **Availability of Injunctive Relief**. IN ADDITION TO THE RIGHT UNDER THE RULES TO PETITION THE COURT FOR PROVISIONAL RELIEF, I AGREE THAT ANY PARTY MAY ALSO PETITION THE COURT FOR INJUNCTIVE RELIEF RESTRAINING A BREACH OR THREATENED BREACH AND TO SPECIFIC PERFORMANCE WHERE EITHER PARTY ALLEGES OR CLAIMS A VIOLATION OF THE EMPLOYMENT, CONFIDENTIAL INFORMATION, INVENTION ASSIGNMENT AGREEMENT BETWEEN I AND THE COMPANY OR ANY OTHER AGREEMENT REGARDING TRADE SECRETS, CONFIDENTIAL INFORMATION, NONSOLICITATION OR LABOR CODE §2870. IN THE EVENT EITHER PARTY SEEKS INJUNCTIVE RELIEF, THE PREVAILING PARTY SHALL BE ENTITLED TO RECOVER REASONABLE COSTS AND ATTORNEYS FEES. I FURTHER AGREE THAT NO BOND OR OTHER SECURITY SHALL BE REQUIRED IN OBTAINING SUCH INJUNCTION AND TO THE ORDERING OF SPECIFIC PERFORMANCE.

(e) **Administrative Relief**. I UNDERSTAND THAT THIS AGREEMENT DOES NOT PROHIBIT ME FROM PURSUING AN ADMINISTRATIVE CLAIM WITH A LOCAL, STATE OR FEDERAL ADMINISTRATIVE BODY SUCH AS THE DEPARTMENT OF FAIR EMPLOYMENT AND HOUSING, THE EQUAL EMPLOYMENT OPPORTUNITY COMMISSION OR THE WORKERS COMPENSATION BOARD. THIS AGREEMENT DOES, HOWEVER, PRECLUDE ME FROM PURSUING COURT ACTION REGARDING ANY SUCH CLAIM.

(f) **Voluntary Nature of Agreement**. I ACKNOWLEDGE AND AGREE THAT I AM EXECUTING THIS AGREEMENT VOLUNTARILY AND WITHOUT ANY DURESS OR UNDUE INFLUENCE BY THE COMPANY OR ANYONE ELSE. I FURTHER

ACKNOWLEDGE AND AGREE THAT I HAVE CAREFULLY READ THIS AGREEMENT AND THAT I HAVE ASKED ANY QUESTIONS NEEDED FOR ME TO UNDERSTAND THE TERMS, CONSEQUENCES AND BINDING EFFECT OF THIS AGREEMENT AND FULLY UNDERSTAND IT, INCLUDING THAT ***I AM WAIVING MY RIGHT TO A JURY TRIAL***. FINALLY, I AGREE THAT I HAVE BEEN PROVIDED AN OPPORTUNITY TO SEEK THE ADVICE OF AN ATTORNEY OF MY CHOICE BEFORE SIGNING THIS AGREEMENT.

10. **General Provisions**.

(a) **Governing Law; Consent to Personal Jurisdiction**. This Agreement will be governed by the laws of the State of California. I hereby expressly consent to the personal jurisdiction of the state and federal courts located in California for any lawsuit filed there against me by the Company arising from or relating to this Agreement.

(b) **Entire Agreement**. This Agreement sets forth the entire agreement and understanding between the Company and me relating to the subject matter herein and supersedes all prior discussions between us. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement, will be effective unless in writing signed by the party to be charged. Any subsequent change or changes in my duties, salary or compensation will not affect the validity or scope of this Agreement.

(c) **Severability**. If one or more of the provisions in this Agreement are deemed void by law, then the remaining provisions will continue in full force and effect.

(d) **Successors and Assigns**. This Agreement will be binding upon my heirs, executors, administrators and other legal representatives and will be for the benefit of the Company, its successors, and its assigns.

Date:

/s/ Anthony Wondka
Signature

Anthony (Tony) Wondka
Name of Employee (typed or printed)

Exhibit A

LIST OF PRIOR INVENTIONS
AND ORIGINAL WORKS OF AUTHORSHIP

Title	Date	Identifying Number or Brief Description

☐ No inventions or improvements

☑ Additional Sheets Attached

Signature of Employee: /s/ Anthony Wondka

Print Name of Employee: Anthony (Tony) Wondka

Date: 5/31/2013

Exhibit B

CALIFORNIA LABOR CODE SECTION 2870
INVENTION ON OWN TIME ☐ EXEMPTION FROM AGREEMENT

"(a) Any provision in an employment agreement which provides that an employee shall assign, or offer to assign, any of his or her rights in an invention to his or her employer shall not apply to an invention that the employee developed entirely on his or her own time without using the employer's equipment, supplies, facilities, or trade secret information except for those inventions that either:

(1) Relate at the time of conception or reduction to practice of the invention to the employer's business, or actual or demonstrably anticipated research or development of the employer; or

(2) Result from any work performed by the employee for the employer.

(b) To the extent a provision in an employment agreement purports to require an employee to assign an invention otherwise excluded from being required to be assigned under subdivision (a), the provision is against the public policy of this state and is unenforceable."

Exhibit C

CAPNIA, INC.

TERMINATION CERTIFICATION

This is to certify that I do not have in my possession, nor have I failed to return, any devices, records, data, notes, reports, proposals, lists, correspondence, specifications, drawings, blueprints, sketches, materials, equipment, other documents or property, or reproductions of any aforementioned items belonging to Capnia, Inc., its subsidiaries, affiliates, successors or assigns (together, the "Company").

I further certify that I have complied with all the terms of the Company's Employment, Confidential Information, Invention Assignment and Arbitration Agreement signed by me, including the reporting of any inventions and original works of authorship (as defined therein), conceived or made by me (solely or jointly with others) covered by that agreement.

I further agree that, in compliance with the Employment, Confidential Information, Invention Assignment, and Arbitration Agreement, I will preserve as confidential all trade secrets, confidential knowledge, data or other proprietary information relating to products, processes, know-how, designs, formulas, developmental or experimental work, computer programs, data bases, other original works of authorship, customer lists, business plans, financial information or other subject matter pertaining to any business of the Company or any of its employees, clients, consultants or licensees.

I further agree that for twelve (12) months from this date, I will not hire any employees of the Company and I will not solicit, induce, recruit or encourage any of the Company's employees to leave their employment.

Date:

_____

(Employee's Signature)

_____

(Type/Print Employee's Name)

LIST OF PRIOR INVENTIONS

T.Wondka

May 31, 2013

Other Business:

1. Principle at Guardian Angel Medical LLC. (life-critical equipment monitoring and data management). Status: company in-active waiting for IP to mature.
2. Director at Ascension Lifescience Investments (small lifescience investment firm). Status: active
3. Principle at Menlo LifeSciences LLC (medical technology incubator). Status: in-active, in process of dissolving company.

Invention Disclosures:

1. Patents and Patent Applications owned by Pulmonx Inc. Field: interventional pulmonology.
2. Patents and Patent Applications owned by Breathe Technologies Inc. Field: minimally invasive and non-invasive respiratory support systems and sleep apnea systems.
3. Patents and Patent Applications owned by Guardian Angel Medical LLC. Field: life-critical equipment monitoring and data management.
4. Patents, Patent Applications, and invention disclosures owned by Tony Wondka
    1) 20130092165; Nasal Ventilation Cannula System and Methods
    2) 8,082,921; Methods, systems and devices for desufflating a lung area
    3) Anti-VAP tracheal tube
    4) Broncho-alveolar sampling system (Note: relates to obtaining liquid or tissue sample for analysis)
    5) Humidification system
    6) Inter-vertebral body
    7) Medical gas cylinder (Note: relates to shape and manufacturing method of cylinder)
    8) Medium pressure ventilation system
    9) Non-invasive respiratory support system
    10) Phonation assist device
    11) Respiratory support implant
    12) Retrograde transcutaneous access device/method
    13) Sleep Apnea diagnostic method (Note: this is a tissue compliance measurement technique)
    14) Technique for virtual imaging of implant placement
    15) Venturi Nasal ventilation mask (nasal mask with venture and sound reducing features)

Exhibit 10.9

Capnia, Inc.
2445 Faber Place, Suite 250
Palo Alto CA 94303
650-213-8444 Main
650-213-8383 Fax

17 April 2014

Antoun Nabhan, JD

Dear Antoun:

I am pleased to offer you a position with Capnia, Inc., a Delaware corporation (the "**Company**"), as its Vice President, Corporate Development. You shall report to the Chief Executive Officer of the Company. If you decide to join us, you will receive an annual base salary of $225,000, which will be paid in accordance with the Company's normal payroll procedures, less applicable withholding taxes. As an employee, you will also be eligible to receive certain employee benefits. The Company will re-assess your compensation within 60 days of a successful IPO transaction.

At the first Board of Directors' meeting after you begin employment, the Company will recommend that you be granted an option to purchase 126,000 shares of the Company's common stock. All option grants are subject to approval by the Company's Board of Directors. The Board will determine the exercise price per share when it grants the option. This option grant shall be subject to the terms and conditions of the Company's Stock Option Plan and Stock Option Agreement, including vesting and repurchase requirements. No right to any stock is earned or accrued until such time that vesting occurs, nor does the grant confer any right to continued vesting or employment. This option shall vest, subject to your continued employment with the Company, as to one fourth (1/4) of the shares on the first anniversary of the date of your employment, and as to an additional one forty-eight ($1/48^{th}$) of the total number of shares subject to the option on the first day of each calendar month thereafter.

Upon the closing of an IPO in which at least $15 million of net cash proceeds is received by the Company, you will be awarded, at the first meeting of the Board of Directors following such closing, a fully-vested option to purchase up to 27,262 shares of the Company's common stock pursuant to the above mentioned Plan, Agreement and pricing.

The Company is excited about your joining and looks forward to a beneficial and productive relationship. Nevertheless, you should be aware that your employment with the Company is for no specified period and constitutes at-will employment. As a result, you are free to resign at any time, for any reason or for no reason. Similarly, the Company is free to conclude its employment relationship with you at any time, with or without cause, and with or without

notice. We request that, in the event of resignation, you give the Company at least a two-week notice.

For purposes of federal immigration law, you will be required to provide to the Company documentary evidence of your identity and eligibility for employment in the United States. Such documentation must be provided to us within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

We also ask that, if you have not already done so, you disclose to the Company any and all agreements relating to your prior employment that may affect your eligibility to be employed by the Company or limit the manner in which you may be employed. It is the Company's understanding that any such agreements will not prevent you from performing the duties of your position and you represent that such is the case. Moreover, you agree that, during the term of your employment with the Company, you will not engage in any other employment, occupation, consulting or other business activity directly related to the business in which the Company is now involved or becomes involved during the term of your employment, nor will you engage in any other activities that conflict with your obligations to the Company which would result in you devoting less than 100% of your professional efforts to the Company. Similarly, you agree not to bring any third party confidential information to the Company, including that of your former employer, and that in performing your duties for the Company you will not in any way utilize any such information.

As a Company employee, you will be expected to abide by the Company's rules and standards.

As a condition of your employment, you are also required to sign and comply with an At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement (the "**At-Will Employment Agreement**") which requires, among other provisions, the assignment of patent rights to any invention made during your employment at the Company, and non-disclosure of Company proprietary information. In the event of any dispute or claim relating to or arising out of our employment relationship, you and the Company agree that (i) any and all disputes between you and the Company shall be fully and finally resolved by binding arbitration, (ii) you are waiving any and all rights to a jury trial but all court remedies will be available in arbitration, (iii) all disputes shall be resolved by a neutral arbitrator who shall issue a written opinion, (iv) the arbitration shall provide for adequate discovery, and (v) the Company shall pay all but the first $125 of the arbitration fees. Please note that we must receive your signed At-Will Employment Agreement before your first day of employment.

To accept the Company's offer, please sign and date this letter in the space provided below. If you accept our offer, your first day of employment will be 11 April 2014. This letter, along with any agreements relating to proprietary rights between you and the Company, set forth the terms of your employment with the Company and supersede any prior representations or agreements including, but not limited to, any representations made during your recruitment, interviews, pre-employment negotiations or the Consulting Agreement between you and the Company dated October 10, 2013, whether written or oral. This letter, including, but not limited to, its at-will employment provision, may not be modified or amended except by a written agreement signed

by a designated officer of the Company and you. This offer of employment will terminate if it is not accepted, signed and returned within one week of the date set forth at the top of this letter.

We look forward to your favorable reply and to working with you at Capnia, Inc.

Sincerely,

/s/ Anish Bhatnagar
Anish Bhatnagar, CEO

Agreed to and accepted:

Signature: /s/ Antoun A. Nabhan

Printed Name: Antoun A. Nabhan

Date: 04/17/2014

Enclosure:

At-Will Employment, Confidential Information, Invention Assignment and Arbitration Agreement

Exhibit 10.10

ASSET PURCHASE AGREEMENT

THIS ASSET PURCHASE AGREEMENT ("Agreement") is made and entered into as of May 11, 2010 (the "Effective Date") by and between Capnia, Inc., a Delaware corporation ("Buyer"), and BioMedical Drug Development Inc., a Delaware corporation ("Seller"). Buyer and Seller are referred to herein collectively as the "Parties".

RECITALS

Seller entered into that certain Asset Purchase Agreement with Stryker Corporation, a Michigan corporation ("Stryker") and Everest Biomedical Instruments Company, a Delaware corporation ("Everest", and together with Stryker, "Original Holders") dated as of May 7, 2010 (the "Original Agreement").

Pursuant to the Original Agreement, Seller acquired from the Original Holders certain intellectual property relating to non-invasive end tidal breath gas monitor medical technology known as the COCO2Puff (the "Technology").

Buyer desires to engage in the business of developing, manufacturing, and selling a product utilizing the Technology. Seller wishes to sell, and Buyer wishes to purchase from Seller, all assets of Seller that were acquired under the Original Agreement or are otherwise used in connection with the Technology (as more particularly described in Section 1 hereof).

NOW, THEREFORE, in consideration of the foregoing and of the terms set forth below, the Parties agree as follows:

TERMS

1. Purchased Assets. Seller hereby sells, assigns, transfers, and sets over to Buyer all of its right, title and interest in, to and under the following patent applications:

- PCT/US2003/19310, entitled "Breath End Tidal Gas Monitor," filed on June 19, 2003; and
- U.S. Patent Application No. 10/561561, entitled "Breath End Tidal Gas Monitor," filed on December 19, 2005

(collectively, the "Patent Applications"), through the execution of the Assignment attached to this Agreement as **Exhibit 1**, and which is incorporated in its entirety into this Agreement. Seller also hereby sells, assigns, transfers and sets over to Buyer all of its right, title and interest in, to and under the assets, if any, listed in **Exhibit 2** of this Agreement that are used, or held for use, in the design and development of the Technology (collectively, with the Patent Applications, the "Purchased Assets").

2. Buyer Payment Obligations. Subject to the terms and conditions of this Agreement, if an event occurs that gives rise to a payment obligation under Section 2 of the Original Agreement in connection with the Cash Consideration or the Regulatory Milestone (each such term, as defined in

the Original Agreement, and each such event, a "Payment Condition", and the date of such event, a "Payment Condition Date"), Buyer shall pay Seller the requisite amount within thirty (30) business days of the Payment Condition Date, except that payment with respect to the Cash Consideration shall be made immediately after execution of this Agreement in accordance with Section 5 below. Buyer shall make such payments to Seller by check or wire of immediately available funds to a bank account designated by Seller. The payments to be made under Section 2 shall be independent of the royalty payments that may become payable under Section 5. Upon receipt of Buyer's payment pursuant to this section (each, a "Buyer Payment"), Seller shall immediately remit such Buyer Payment to the Original Holders, without any deduction or setoff, and provide Buyer with a notice confirming that such Buyer Payment has been remitted to the Original Holders, all within fifteen (15) days of Seller's receipt of the Buyer Payment. In the event that Seller does not remit a Buyer Payment to the Original Holders and confirm that such remittance has been made in accordance with this section, Buyer shall give Seller written notice of such failure (the "Buyer Payment Final Notice"). In the event that Seller does not remit a Buyer Payment to the Original Holders and confirm that such remittance has been made within fifteen (15) days of the date of the Buyer Payment Final Notice, (x) all of Buyer's then future payment obligations to Seller under this Agreement shall immediately terminate and be no longer enforceable, (y) Buyer shall assume the obligations under Section 2 of the Original Agreement and make any then payments remaining due, directly to the Original Holders, and (z) Buyer shall have the right but not the obligation to acquire Seller in a transaction of Buyer's choosing (including without limitation, a stock acquisition, reorganization, merger, consolidation or otherwise) at an aggregate consideration of $10, in which event Buyer shall transfer the Shares to George Tidmarsh immediately prior to the closing of such transaction provided George Tidmarsh, in his capacity as a director, officer and/or stockholder of Seller, has taken all action necessary or desirable to effect such transaction.

3. Seller Payment Obligations. Subject to the terms and conditions of this Agreement, if the First Sales Milestone or the Second Sales Milestone (each such term, as defined in the Original Agreement) becomes payable, including upon an applicable anniversary of the Effective Date of the Original Agreement (any such event, a "Seller Payment Condition", and the date of such event, a "Seller Payment Condition Date") Seller shall remit payment (each, a "Seller Payment") to the Original Holders and provide Buyer with a notice confirming that such Seller Payment has been remitted to the Original Holders, all within forty five (45) days of the Seller Payment Condition Date; provided, however, that if an amount becomes payable upon an applicable anniversary of the Effective Date of the Original Agreement, such amount shall be paid on such anniversary date and Seller shall provide Buyer with a notice confirming that such Seller Payment has been remitted to the Original Holders, within fifteen (15) days of the applicable anniversary date. In the event that Seller does not remit a Seller Payment to the Original Holders and confirm that such remittance has been made in accordance with this section, Buyer shall give Seller written notice of such failure (the "Seller Payment Final Notice"). In the event that Seller does not remit a Seller Payment to the Original Holders and confirm that such remittance has been made within fifteen (15) days of the date of the Seller Payment Final Notice, all of Buyer's then future payment obligations to Seller under this Agreement shall immediately terminate and be no longer enforceable.

4. Reversion Right. In the event Buyer fails to make the requisite payment in connection with (x) a Payment Condition as set forth in Section 2, or (y) as set forth in Sections 5 or 6, Seller

will have sixty (60) days from the Payment Condition Date or other applicable event (the "Notification Period") to request in writing that Buyer transfer back to Seller, all Buyer's right, title and interest in, to and under the Purchased Assets. Upon receipt by Buyer of such written request, Buyer shall have sixty (60) business days to arrange payment of such amount that is due and payable in connection with the applicable Payment Condition (the "Cure Period"). In the event that Buyer receives such written notification within the Notification Period and does not pay Seller within the Cure Period the amount that has become due and payable, Buyer hereby agrees and covenants to transfer back to Seller the Purchased Assets, free of any liens or encumbrances created or imposed upon by Buyer during the period Buyer owned the Purchased Assets, pursuant to an assignment agreement in a form consistent with **Exhibit 1**. If Seller fails to provide written notification within the Notification Period as required herein, Seller's rights under this Section 3 will expire, and no transfer of ownership of the Purchased Assets by Buyer to Seller will occur hereunder.

5. Payments. In addition to Buyer's obligations to make the payments set forth in Section 2 above, Buyer shall pay to Seller an aggregate amount of $150,000 to be paid upon execution and delivery of this Agreement by Seller to Buyer on the Effective Date; provided, however, that the Cash Consideration described in Section 2 shall be deemed paid upon receipt of the Buyer's payment under this section.

6. Royalty Payments. Buyer further agrees to make the following royalty payments to Seller:

(a) a one time cash payment of $100,000 upon aggregate Net Product Sales first exceeding $5,000,000; and

(b) a one time cash payment of $100,000 upon aggregate Net Product Sales first exceeding $10,000,000; and

(c) 2% of Net Product Sales until such time that Annual Net Product Sales first exceeds $10,000,000; and

(d) 3% of Net Product Sales from such time that Annual Net Product Sales first exceeds $10,000,000 until such time that Annual Net Product Sales first exceeds $25,000,000; and

(e) 4% of Net Product Sales from such time that Annual Net Product Sales first exceeds $25,000,000 until such time that Annual Net Product Sales first exceeds $50,000,000; and

(f) 5% of Net Product Sales from such time that Annual Net Product Sales first exceeds $50,000,000.

For the purposes of this Agreement, "Net Product Sales" shall have the meaning given in the Original Agreement; provided however, that Net Product Sales shall include only (x) sales of products which are covered by claims contained in the Patent Applications or by any claim in patents that issue from or claim priority to the Patent Applications (and for the purposes of the royalty

payments under sections (c) through (I) above, sales in the United States only), and any improvements or modifications to the Technology or (y) sales of products embodying technology directly related to the Purchased Assets, as specifically identified by Seller and disclosed to Buyer prior to the Effective Date, and any improvements or modifications to the Technology. "Annual Net Product Sales" shall mean the Net Product Sales for a particular calendar year, as measured following the end of such calendar year. Payments due under (a) and (b) above shall be made within thirty days of the event giving rise to such payment, respectively, and payments due under (c) through (f) above shall be made within 45 days of the end of the applicable calendar year.

7. Equity Grant. As soon as practicable after the Effective Date, Buyer shall issue Seller 319,810 shares of restricted Common Stock of Buyer (the "Shares") representing 1.5% of the fully-diluted capitalization of Buyer as of the Effective Date, assuming exercise and/or conversion of all outstanding equity securities convertible into or exchangeable for Common Stock of Buyer, all shares reserved for issuance under any stock option or similar plan and any other obligations or commitments to issue shares of capital stock of the Company as of the Effective Date. The Shares shall be subject to a right of repurchase in favor of Buyer (the "Repurchase Option") subject to the following vesting requirements: 50% of the total number of Shares shall be released from the Repurchase Option upon the Effective Date, and the remaining 50% of the total number of Shares shall be released from the Repurchase Option upon the 510k Approval, subject to Seller continuing to provide without charge consulting services to Buyer through George Tidmarsh or such other individual(s) as mutually agreed, through such time.

8. Seller Representations and Warranties. Seller represents and warrants to Buyer that (a) Seller is the sole and exclusive owner of all rights, if any, title, and interest in and to the Purchased Assets, (b) Seller, and its undersigned representative, have full power and authority to enter into this Agreement, (c) U.S. Patent Application No. 10/561561 is currently pending before the United States Patent and Trademark Office, (d) Seller will pay the Original Holders the "Cash Consideration" due to the Original Holders under the Original Agreement as set forth in Section 2 above; and (e) from the date of the Original Agreement to the Effective Date, Seller has not taken any action or omitted to take any action that could reasonably be expected to have an adverse effect on the Purchased Assets, the Technology, or Seller's ability to consummate the transactions contemplated by this Agreement. Subject to the foregoing, nothing in this Agreement shall be construed as (i) a warranty or representation by Seller as to the status, patentability, registrability, validity, enforceability, or scope or rights included in the Patent Applications or any other intellectual property right, if any, within the Purchased Assets; or (b) a warranty or representation that anything made, used, sold or otherwise disposed of under this Agreement will or will not infringe intellectual property rights of third parties. SUBJECT TO THE FOREGOING, SELLER MAKES NO REPRESENTATIONS, EXTENDS NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, AND SELLER ASSUMES NO RESPONSIBILITIES WHATSOEVER WITH RESPECT TO THE USE, SALE, OR OTHER DISPOSITION BY BUYER OR ITS CUSTOMERS OR OTHER TRANSFEREES OF THE TECHNOLOGY OR PURCHASED ASSETS TRANSFERRED UNDER THIS AGREEMENT.

9. Buyer's Representations and Warranties. Buyer represents and warrants to Seller that Buyer is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware and that Buyer, and its undersigned representative, have full corporate power and authority to enter into this Agreement and to carry out, and perform in accordance with the terms of this Agreement. Buyer acknowledges that the Technology and the Purchased Assets are not cleared for commercial sale by the FDA or any other regulatory body and that Buyer will assume all responsibility for any and all FDA (and other applicable regulatory) compliance and maintenance activities.

10. Closing Conditions. The obligations of Buyer under this Agreement shall be subject to the fulfillment on or before the Effective Date of each of the following conditions, the waiver of which shall not be effective unless consented to in writing thereto:

(a) Seller shall have delivered to Buyer all regulatory filings, documentations, registrations, permits, licenses, certificates, variances, clearances, consents, commissions, franchises, exemptions, orders and other authorizations and approvals of the FDA or other regulatory body, related to the Technology and owned by or in the possession of Seller, including without limitation, documentation related to FDA registration, CE Mark approval, design history files and quality control information, and all correspondence related thereto.

(b) All consents, waivers, approvals, authorizations and notices necessary for Seller to enter into this Agreement shall have been obtained and shall be in full force and effect.

11. Non-Competition. In consideration of Buyer entering into this Agreement and in order that Buyer may enjoy the full benefit of the Purchased Assets, for a period of five (5) years from the Effective Date, neither Seller nor any of its affiliates will directly or indirectly engage in a Noncompete Business anywhere in the Territory without the prior written consent of Buyer, provided that nothing herein will prevent Seller or its affiliates from owning for passive investment purposes less than two percent (2%) of the outstanding equity of a person or entity engaged in a Noncompete Business. For purposes of this Section 11, "Noncompete Business" shall mean a business in the field of non-invasive end tidal breath gas monitor medical technology.

12. Termination. Buyer may terminate this Agreement at any time by giving ten (10) days' written notice to Seller.

13. Confidentiality. The Parties will not disclose the terms of this Agreement or any other information that is designated by any Party as confidential or which a receiving Party reasonably should know that such information is confidential. The Parties will not disclose confidential information to any third party without prior written authorization of the disclosing Party, except as may be required by law or by lawful order of any applicable government agency.

14. Notices. Any notice, demand, request or other communication under this Agreement shall be in writing and shall be deemed to have been given on the date of service if personally served or on the fifth (5th) day after mailing if mailed by registered or certified mail, return receipt requested, addressed as follows (or to such other address of which either of the Parties shall have notified the other Party):

To Buyer:

Capnia, Inc.
2445 Faber Place, Suite 250
Palo Alto, CA 94303

With copy to:

Wilson Sonsini Goodrich & Rosati, P.C.
650 Page Mill Road
Palo Alto, CA 94304
Attn: Michael J. Danaher / Elton Satusky

To Seller:

BioMedical Drug Development Inc.
533 Bryant St. #6
Palo Alto, CA 94028

15. Governing Law and Venue. This Agreement will be governed by and construed in accordance with the laws of the State of California as applicable to contracts made and to be performed in that state, without regard to conflicts of laws principles.

16. Counterparts. This Agreement may be executed in any number of counterparts, each of which shall constitute an original and all of which shall constitute one agreement

17. Assignment and Successors. Either Party may assign this Agreement at any time.

18. No Third Party Beneficiaries. Except as expressly permitted by this Agreement, nothing in this Agreement will confer any rights upon any person or entity which is not a party or permitted assignee of a party to this Agreement.

19. Severability. If any provision of this Agreement is held by any court of competent jurisdiction to be illegal, void or unenforceable, such provision will be of no force and effect, but the illegality or unenforceability will have no effect upon and will not impair the enforceability of any other provision of this Agreement.

20. Integration, Amendments, and Interpretation. This Agreement, together with its exhibits, constitutes the entire Agreement between the Parties and supersedes any prior expression of intent or agreement of the Parties with respect to the subject matter of this Agreement. No representation, promise, inducement or statement of intention has been made by either Party that is not embodied in this Agreement or in the documents referred to in this Agreement, and neither Party will be bound by or liable for any alleged representation, promise, inducement or statement of intention not set forth in this Agreement. This Agreement may not be modified or amended except by a written instrument duly executed by each of the Parties. The headings of the sections and subsections of this Agreement are inserted for convenience only and shall not constitute a part of this Agreement. The Parties agree that no term or provision of this Agreement shall be construed against any party solely in whole or in part because that party drafted or modified that term or provision.

21. Expenses. Within two weeks of execution and delivery of this Agreement by Seller to Buyer on the Effective Date, Buyer shall reimburse the reasonable documented fees of counsel for Seller, such amount not to exceed $5,000.

22. Seller Covenant. Seller hereby covenants and agrees that it will not agreed to amend the Original Agreement without Buyer's written consent, which consent Buyer may withhold in its sole and absolute discretion.

[Signature Page Follows]

IN WITNESS WHEREOF, the Parties, in the presence of and by their respective duly authorized officers, have caused this Agreement to be made effective as of the date, set forth above.

BioMedical Drug Development Inc.		**Capnia, Inc.**	
Signature:	/s/ George Tidmarsh	Signature:	/s/ Anish Bhatnagar, MD
Name:	George Tidmarsh	Name:	Anish Bhatnagar, MD
Title:	CEO	Title:	President

EXHIBIT 1

PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT (this "Assignment"), effective as of May 11, 2010 (the "Effective Date"), is made by and between Capnia, Inc., a Delaware corporation located at 2445 Faber Place, Suite 250, Palo Alto, CA 94303 ("Assignee") and BioMedical Drug Development Inc., a Delaware corporation located at 533 Bryant Street #6, Palo Alto, CA 94028 ("Assignor").

WHEREAS, pursuant to an Asset Purchase Agreement dated concurrently herewith between Assignor and Assignee, Assignor agreed to sell and transfer and sold and transferred to Assignee all of Assignor's rights, if any, title, benefit and interest in and to all inventions, granted Patents and any reissues thereof, and all applications for Letters Patent listed below:

- PCT/US2003/19310, entitled "Breath End Tidal Gas Monitor," filed on June 19, 2003; and
- U.S. Patent Application No. 10/561561, entitled "Breath End Tidal Gas Monitor," filed on December 19, 2005

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged the parties hereto, intending to *be* legally bound, agree as follows:

1. Assignor has assigned, sold and set over, and by these presents assign, sell and set over unto the Assignee, its successors, legal representatives and assigns, for the territory of the United States of America and all foreign countries, the entire rights, if any, title and interest in and to said inventions, said Patents, including the right to sue for past infringements thereof, and said applications for Letters Patent, including the right to file foreign patent applications corresponding to said applications, and the right to claim the priority date of said patent applications and any legal equivalents thereof, and any and all Letters Patent or Patents in the United States of America and all foreign countries which may be granted therefor and thereon, and to any and all divisions, continuations, and continuations-in-part of said applications, or re-issues or extensions of said Letters Patent or Patents prepared and executed by Assignor on even date herewith, the same to be held and enjoyed by the Assignee, as fully and entirely as the same would have been held by Assignor had this Assignment and sale not been made.

2. Assignor hereby covenants and agrees that Assignor will at any time upon the request and at the expense of the Assignee execute and deliver any and all papers and do all reasonable lawful acts that may be necessary or desirable to perfect the title to said inventions and to obtain Letters Patent therefor, and Assignor hereby authorizes and requests the Commissioner of Patents to issue said Letters Patent to the said Assignee in accordance with this Agreement.

3. This Assignment may be executed in one or more counterparts, all of which will be considered one and the same agreement, and will become effective when one or more counterparts have been signed by each of the parties and delivered to the other party. This Assignment may be executed and delivered by facsimile or e-mail transmission with the same effect as if a manually signed original was personally delivered.

[Signature Page Follows]

IN WITNESS WHEREOF, Assignor and Assignee have caused this Assignment to be made effective as of the date above as executed on the dates indicated below.

ASSIGNOR BioMedical Drug Development Inc.

Signature: /s/ George Tidmarsh

Name: George Tidmarsh

Title: CEO

Date: 11 May 10

ASSIGNEE: Capnia, Inc.

Signature: /s/ Anish Bhatnagar, M.D.

Name: Anish Bhatnagar, MD

Title: President

Date: May 11, 2010

EXHIBIT 2
OTHER PURCHASED ASSETS

Hardware:

Item Description	Quantity
CoCoPuff Devices	
Complete prototypes with Vreman/Crestline	14
Complete CoCoPuff prototype (St. Louis)	1
Partially complete CoCoPuff prototypes	3
CoCoPuff AC adaptors	4
CoCoPuff Nasal Cannula	250
CoCoPuff components	
BCI Capnometer of unknown condition	3
Expired A5H CO sensors	4
Membrane keypad prototypes	5
CoCoPuff battery packs	18
CO Sensor Manifolds complete	3
CO Sensor manifold parts and gaskets	10
CO Sensor metal shields	21
Assembled CoCoPuff mainboard	1
LCD Displays	2
partial boxes of tygon tubing	2
Lee co LHLX0500350BB valves	16
CoCoPuff valve PCB unstuffed	13
Components for CoCoPuff enclosure	5
enclosure rubber feet	40
Misc Pneumatic and mechanical components	
Test and Development Equipment and Supplies	
5ppm CO reference gas cylinder	1
CO Sensor biasing fixture	1
Box of prototyping scraps - wire, tubing, mechanical	1
Other Devices	
Natus CO-stat device	1
Natus CO-stat disposables	50
Biologic thermal printer and paper	1
Crestline etCO prototypes (without palm)	2
Microstream cannula	1
Respironics BiliCheck Disposables	220
Misc Cannula Engineering samples	3
Criticare Poet EtCO2 meter	1
pnumotrace sensor	1
Cardiopulminary Tech CO2 Module Evaluation Module and software	1
BCI Evaluation kit and software	1

Technical Drawings and Information:

Title	Description
Chesterfield Project	Engineering Datasheets
COCO2 Puff End-tidal Breath Analyzer	Project documents (unsigned copies) (MRD, BCD, PRS, PP, Cost, IFU, Marketing lit, Articles, Abstracts)
Neonatal Jaundice Reviews	Articles and clinical papers
Blood Gas Monitor	Articles and clinical papers
Oregon Health Science University — Clinical Data	OSHU clinical study data — raw forms
Untitled Engineering Binder	A5H CO sensor characterization studies
Chesterfield Project — Clinical Trials	Daily reports and communication (OSHU)
Biliruben Studies	Natus and related articles
Design Review	Engineering design review
COCO2 Puff "One Breath Makes a Difference"	Clinical evidence
Chesterfield Project Engineering Notebook	Engineering notebook of R. Walden 1/15/02 — 9/1/06
COCO2 Puff Clinical Sites	OHSU and Hennepin
COCO2 Puff Clinical Manual	Info and procedures for clinical studies
Chesterfield Project	
Standards	
Design Reviews	
Hazard Analysis	
SW V&V Plan	
HW V&V Plan	
QA Procedures	
Sample Chamber Design	
Enclosure Design	
Schematics Revisions	
Shield Design	
Battery Specs	
Charger Specs	
Keypad Design	
UL Test Reports	
Bench Test Reports	

Exhibit 10.11

CAPNIA, INC.

CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT

This Convertible Note and Warrant Purchase Agreement (this "Agreement") is made as of February 10, 2010, by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303 and the persons and entities listed on the Schedule of Investors attached hereto as Exhibit A (the "Investors").

RECITALS

WHEREAS, on the terms and subject to the conditions set forth herein, each Investor is willing to purchase from the Company, and the Company is willing to sell to such Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A hereto (the "Schedule of Investors"), together with a related warrant to acquire shares of the Company's capital stock.

WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the meaning set forth in the form of Note (as defined below).

WHEREAS, in order to induce the Investors to purchase the Notes and Warrants, the Company and the Investors are entering into an Exchange Agreement that provides for the exchange of certain shares of Common Stock into Preferred Stock following the Conversion Event (as defined below), a form of which is attached hereto as Exhibit D (the "Exchange Agreement"); and

WHEREAS, immediately before the effectiveness of this Agreement, the holders of at least two-thirds of the outstanding Preferred Stock shall request in writing the conversion on or before the Initial Closing (the "Conversion Event") of all outstanding shares of Preferred Stock into shares of Common Stock pursuant to Section 4(B) of Article V of the Company's Amended and Restated Certificate of Incorporation (the "Restated Certificate").

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Issuance of Convertible Promissory Notes and Warrants to Purchase Stock.

1.1 Convertible Promissory Notes. Each Investor, severally and not jointly, agrees, on the terms and conditions specified in this Agreement, to lend to the Company the sum set forth in Exhibit A opposite such Investor's name (individually a "Loan" and collectively the "Loans") at the Closing (as defined below). Each Investor's Loan shall be evidenced by a convertible promissory note (individually a "Note" and collectively the "Notes") dated as of the date of the Closing in the form of Exhibit B attached hereto.

1.2 Warrant to Purchase Shares. Concurrently with the sale and issuance of the Notes to the Investors, the Company will issue to each Investor a warrant in the form attached hereto as Exhibit C (each, a "Warrant" and, collectively, the "Warrants") to purchase up to that number of shares of Preferred Stock as set forth in the Warrant, for a purchase price equal to $0.0001 times the principal amount of the corresponding Note.

1.3 Place and Date of Closing. Subject to the terms and conditions hereof, the purchase, sale and issuance of the Notes and the Warrants (collectively, the "Securities") shall take place at one or more closings (each of which is referred to in this agreement as a "Closing"). The initial Closing (the "Initial Closing") will be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Rd., Palo Alto, California at 3:00 p.m. on February 10, 2010, or at such other time and place as the parties shall mutually agree. If less than $4,700,000 face amount of the Notes are sold and issued at the Initial Closing, then subject to the terms and conditions hereof, the Company may sell and issue Notes (but in no event for an aggregate face amount along with Notes sold at the Initial Closing greater than $4,700,000) at one or more subsequent Closings, within 30 days of the Initial Closing (the last day of such period, the "Final Closing Date"). Should any such sales be made, the Company shall prepare and distribute to the Investors, either before or after any such subsequent Closing, a revised Exhibit A (Schedule of Investors) to this Agreement. Each subsequent Investor shall become a party to this Agreement.

1.4 Delivery. At each Closing, the Company will deliver to each applicable Investor a Note and Warrant to be purchased by such Investor, against receipt by the Company of the corresponding purchase price set forth on Exhibit A (the "Purchase Price"). At each Closing, each applicable Investor shall deliver to the Company the Purchase Price in respect of the Note and Warrant being purchased by such Investor as set forth on Exhibit A.

2. Authorization. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $4,700,000.

3. Representations and Warranties of the Company. The Company represents and warrants to the Investors as follows:

3.1 Organization; Good Standing; Qualification. The Company is a corporation duly organized and validly existing and in good standing under the laws of the State of Delaware. The Company is duly qualified and is authorized to transact business and is in good standing as a foreign corporation in the State of California and each jurisdiction in which the failure to so qualify would have a material adverse effect on the Company's business, properties or financial condition.

3.2 Corporate Power. The Company has all requisite legal and corporate power and authority (i) to own and operate its properties and assets and to carry on its business as presently conducted and as contemplated to be conducted in the future, (ii) to execute and deliver this Agreement, (iii) to sell and issue the Securities, and (iv) to carry out and perform the provisions of this Agreement.

3.3 Authorization. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution, delivery of this Agreement, the

performance of all obligations of the Company hereunder, and the authorization, issuance, sale and delivery of the Securities has been taken or will be taken prior to the Closing. This Agreement, when executed and delivered by the Company, will constitute a valid and binding obligation of the Company, enforceable in accordance with its terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies. The Securities, when issued in compliance with the provisions of this Agreement will be validly issued, fully paid and nonassessable and will be free of any liens or encumbrances, other than any liens or encumbrances created by the Investors; provided, however, that the Securities may be subject to restrictions on transfer under state and/or federal securities laws.

3.4 Capitalization. The authorized capital of the Company consists, or will consist immediately prior to the Closing, of 21,702,428 shares of Preferred Stock, 459,375 of which shares have been designated Series A Preferred Stock, all of which are issued and outstanding, and 3,743,053 of which shares have been designated Series B Preferred Stock, 3,597,990 of which are issued and outstanding, 17,500,000 of which shares have been designated Series C Preferred Stock, 10,694,189 of which are issued and outstanding and 29,500,000 shares of Common Stock ("Common Stock"), 1,693,456 of which shares are issued and outstanding. Except for (a) the conversion privileges of the Preferred Stock, (b) options exercisable for 51,875 shares of Common Stock, (c) the Company's 1999 Stock Plan, as described below, and (d) the rights as set forth in that certain Amended and Restated Investor Rights Agreement dated as of March 20, 2008 by and among the Company and certain of the Company's stockholders (the "Rights Agreement"), there are no outstanding options, warrants, rights (including conversion or preemptive rights) for the purchase or acquisition from the Company of any of its securities. The Company has reserved 4,755,324 shares of Common Stock for issuance pursuant to the Company's 1999 Stock Plan, as amended, of which 2,947,625 shares are subject to outstanding options or stock purchase rights, 1,475,048 shares remain available for future grant and 332,651 shares have been issued upon exercise of options or stock purchases.

3.5 Compliance with Other Instruments. The Company is not in violation or default of any provision of its charter or bylaws (both as amended to date) or in any material respect of any provision of any mortgage, indenture, agreement, instrument or contract to which it is a party or by which it is bound or, to the best of its knowledge, of any federal or state judgment, order, writ, decree, statute, rule or regulation applicable to the Company. The execution, delivery and performance by the Company of this Agreement, and the consummation of the transactions contemplated hereby, will not result in any such violation or be in material conflict with or constitute, with or without the passage of time or giving of notice, either a material default under any such provision or an event that results in the creation of any material lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, impairment, forfeiture or nonrenewal of any material permit, license, authorization or approval applicable to the Company, its business or operations or any of its assets or properties.

3.6 Governmental Consent, etc. No consent, approval, qualification, order or authorization of, or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the Company's execution, delivery or performance of this

Agreement, the offer, sale or issuance of the Securities, except such filings as have been made prior to the Closing, except any notices of sale required to be filed with the Securities and Exchange Commission under Regulation D of the Securities Act of 1933, as amended (the "Securities Act"), or such post-Closing filings as may be required under applicable state securities laws, which will be timely filed with the applicable periods therefor.

3.7 Offering. Subject in part to the truth and accuracy of the Investors' representations set forth in Section 4, the offer, sale and issuance of the Securities as contemplated by this Agreement are exempt from the registration requirements of Section 5 of the Securities Act, and all applicable state securities laws, and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

3.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company that might result, either individually or in the aggregate, in any adverse change in the Company's business, properties or financial condition, or in any change in the current equity ownership of the Company, nor, to the Company's knowledge is there any reasonable basis therefor. The foregoing includes, without limitation, any action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened involving the prior employment of any of the Company's employees, their use in connection with the Company's business of any information or techniques allegedly proprietary to any of their former employers or their obligations under any agreement with their former employers. The Company is not a party to or, to its knowledge, named in or subject to any order, writ, injunction, judgment or decree of any court, government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or that the Company currently intends to initiate.

3.9 Brokers or Finders; Other Offers. The Company has not incurred, and will not incur, directly or indirectly, as a result of any action taken by the Company, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

3.10 Disclosure. Neither this Agreement nor any other written statements or certificates made or delivered in connection herewith, when taken as a whole, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading in light of the circumstances under which they were made.

4. Representations and Warranties of the Investors. Each Investor hereby represents and warrants, severally and not jointly, and only with respect to itself, to the Company with respect to the purchase of the Securities:

4.1 Power; Authorization. Such Investor has all requisite power and authority to execute and deliver this Agreement. This Agreement, when executed and delivered by such Investor, will constitute a valid and legally binding obligation of such Investor, enforceable in accordance with its respective terms, except (i) as limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally, and (ii) as limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.2 Purchase Entirely for Own Account. This Agreement is made with such Investor in reliance upon such Investor's representation to the Company, which by such Investor's execution of this Agreement such Investor hereby confirms, that the Securities will be acquired for investment for such Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof.

4.3 Reliance upon Investors' Representations. Such Investor understands that the Securities are not registered under the Securities Act on the ground that the sale provided for in this Agreement and the issuance of the Securities hereunder is exempt from registration under the Securities Act pursuant to Section 4(2) thereof, and that the Company's reliance on such exemption is predicated on the Investors' representations set forth herein.

4.4 Disclosure of Information. Such Investor believes it has received all the information such Investor considers necessary or appropriate for deciding whether to purchase the Securities. Such Investor has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Securities and the Company's business, properties, prospects and financial condition and to obtain additional information necessary to verify the accuracy of any information furnished to such Investor or to which such Investor had access. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 3 or the right of such Investor to rely thereon.

4.5 Investment Experience; Economic Risk. Such Investor understands that the Company has a limited financial and operating history and that an investment in the Company involves substantial risks. Such Investor represents to the Company that except as otherwise disclosed to the Company, in writing, prior to such Investor's execution of this Agreement, such Investor is an Accredited Investor (as defined in Rule 501 of the Securities Act) or such Investor is experienced in evaluating and investing in private placement transactions of securities of companies in a similar stage of development to that of the Company and acknowledges that such Investor is able to fend for himself, herself or itself. Such Investor has such knowledge and experience in financial and business matters that such Investor is capable of evaluating the merits and risks of the investment in the Securities. Such Investor can bear the economic risk of such Investor's investment and is able, without impairing such Investor's financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of such Investor's investment. If other than an individual, Investor also represents such Investor has not been organized for the purpose of acquiring the Securities.

4.6 Residency. In the case of an Investor who is an individual, the state of such Investor's residency, or, in the case of an Investor that is a corporation, partnership or other entity, the state of such Investor's principal place of business, is correctly set forth on the Schedule of Investors.

4.7 Restricted Securities. Such Investor understands that the Securities are characterized as "restricted securities" under the federal securities laws inasmuch as they are being

acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such the Securities may be resold without registration under the Securities Act only in certain limited circumstances. In this connection, such Investor represents that it is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions, including, among other things, the existence of a public market for the shares, the availability of certain current public information about the Company, the resale occurring not less than one year after a party has purchased and paid for the security to be sold, the sale being effected through a "broker's transaction" or in transactions directly with a "market maker" and the number of shares being sold during any three-month period not exceeding specified limitations.

4.8 Brokers or Finders. The Company has not, and will not, incur, directly or indirectly, as a result of any action taken by such Investor, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

4.9 Market Standoff. The Investor agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering or first secondary public offering, as applicable, and ending on the date specified by the Company and the managing underwriter (such period not to initially exceed one hundred eighty (l80) calendar days and as may be extended for up to two additional 17 day periods) (the "Lock-Up Period") (i) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any securities of the Company, including (without limitation) shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired) or (ii) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any securities of the Company, including (without limitation) shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired), whether any such transaction described in clause (i) or (ii) above is to be settled by delivery of securities, in cash or otherwise, provided that all officers and directors of the Company and holders of at least one percent (1%) of the Company's voting securities are bound by and have entered into similar agreements. The foregoing covenants shall apply to the Company's initial public offering of equity securities and to the Company's first secondary public offering of equity securities, but it shall not apply to the sale of any shares by an Investor to an underwriter pursuant to an underwriting agreement. The Investor agrees to execute an agreement(s) reflecting (i) and (ii) above as may be requested by the managing underwriters at the time of the initial public offering, and further agrees that the Company may impose stop transfer instructions with its transfer agent in order to enforce the covenants in (i) and (ii) above. The underwriters in connection with the Company's initial public offering are intended third party beneficiaries of the covenants in this Section 4.9 and shall have the right, power and authority to enforce such covenants as though they were a party hereto. Any release from the Lock-Up Period shall be on a pro rata basis based upon the number of Registrable Securities (as defined in the Rights Agreement) held; provided, however, that one or more selective releases from the Lock-Up Period not on a pro rata basis may be made with the written consent of the holders of a majority of the Registrable Securities not so released.

5. Conditions to Closing.

5.1 Conditions to Obligations of the Investors. The obligations of each Investor to purchase Securities hereunder are subject to the fulfillment on or before the Initial Closing of each of the following conditions, the waiver of which shall not be effective against the Investor unless consented to in writing thereto:

(a) Representations and Warranties Correct. The representations and warranties made by the Company in Section 3 shall be true and correct in all material respects as of the Initial Closing, with the same effect as if made on and as of the Initial Closing.

(b) Covenants. All covenants, agreements and conditions contained in this Agreement to be performed by the Company on or prior to the Initial Closing shall have been performed or complied with in all material respects.

(c) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(d) Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated hereby and all documents and instruments incident to such transactions shall be reasonably satisfactory in substance and form to the Investor.

(e) Transaction Documents. The Company shall have duly executed and delivered to the Investors the following documents:

(i) This Agreement;

(ii) Each Note and Warrant issued hereunder;

(iii) The Exchange Agreement;

(iv) The Security Agreement in the form of Exhibit E hereto (the "Security Agreement"); and

(v) The Amended and Restated Voting Agreement in the form of Exhibit F hereto (the "Voting Agreement").

(f) Conversion Event. On or prior to the Initial Closing, the Conversion Event shall have occurred.

(g) Minimum Investment. At the Initial Closing, the Investors shall purchase Notes with an aggregate principal amount of at least $2,500,000.

5.2 Conditions to Obligations of the Company. The obligations of the Company to each Investor under this Agreement are subject to fulfillment on or before the Closing of each of the following conditions by that Investor:

(a) Representations. The representations made by the Investors in Section 4 shall be true and correct when made, and shall be true and correct on the Closing.

(b) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(c) Transaction Documents. Each Investor shall have duly executed and delivered to the Company this Agreement, the Exchange Agreement the Security Agreement, and the Voting Agreement.

6. Miscellaneous.

6.1 Waivers and Amendments. Except as expressly provided herein, neither this Agreement, the Notes, the Warrants, the Exchange Agreement nor any term hereof or thereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of at least two-thirds in interest of the Notes may, with the Company's prior written consent, waive, modify or amend any provisions hereof and thereof on behalf of all Investors.

6.2 Governing Law. This Agreement shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California.

6.3 Survival. The representations, warranties, covenants and agreements made herein shall survive any investigation made by any Investor and the Closing of the transactions contemplated hereby.

6.4 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

6.5 Entire Agreement. This Agreement (including the exhibits attached hereto) and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

6.6 Notices, etc. All notices and other communications required or permitted under this Agreement shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed (a) if to an Investor, at such Investor's address, facsimile number or electronic mail address set forth on the Schedule of Investors, or at such other address, facsimile number or electronic mail address as such Investor may designate by advance written notice to the Company or (b) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the President, or at such other address or facsimile number as the Company may designate by advance written notice to each Investor. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon

confirmation of facsimile transfer or when directed to the electronic mail address set forth on the Schedule of Investors. With respect to any notice given by the Company under any provision of the Delaware General Corporation Law or the Company's charter or bylaws, each Investor agrees that such notice may given by facsimile or by electronic mail.

6.7 Fees and Expenses. Each of the Company and each Investor shall each bear its own expenses incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

6.8 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument.

6.9 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Agreement, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

6.10 Exculpation Among Investors. Each Investor acknowledges that it is not relying upon any person, firm or corporation, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Investor agrees that no Investor nor the respective controlling persons, officers, directors, partners, agents, or employees of any Investor shall be liable for any action heretofore or hereafter taken or omitted to be taken by any of them in connection with the Securities.

6.11 Waiver of Anti Dilution Adjustment. The undersigned Investors who are the holders of the requisite outstanding shares of Preferred Stock, on behalf of themselves and all other holders of Preferred Stock, hereby waive any price-based anti-dilution adjustment under Article V, Section 3(D) of the Restated Certificate with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.12 Waiver of Right of First Refusal. Pursuant to Section 4.2 of the Rights Agreement, the undersigned Investors, who are the holders of at least two-thirds of the Registrable Securities (as defined in the Rights Agreement), on behalf of themselves and all other holders of Registrable Securities granted the right of first offer pursuant to Section 2.3 of the Rights Agreement, hereby agree to waive such right of first offer and any notice requirement contained therein with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.13 Treatment of Notes. The Company and each Investor agree to (i) treat the Notes as equity for U.S. federal, state and local tax purposes within the meaning of Internal Revenue Code Section 385(c), and (ii) not take any position inconsistent with such treatment for purposes of tax or information returns filed with the Internal Revenue Service or any other relevant taxing authority. Notwithstanding the foregoing, the Company makes no assurances that it will complete a Next Financing or a Non-Qualified Financing.

(signature page follows)

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

CAPNIA, INC.

By: /s/ Ernest Mario
Ernest Mario
Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:
Biotechnology Development Fund IV, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

Biotechnology Development Fund IV Affiliates, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

Vivo Ventures Fund V, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC, its General Partner

Vivo Ventures V Affiliates Fund, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures, LLC, its General Partner

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:
BDF IV Annex Fund, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Hadar Cars
(Signature of individual investor or individual signing for entity)

Hadar Cars AB
(Please print name of investor)

Chairman
(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Steinar J. Engelsen
(Signature of individual investor or individual signing for entity)

Steinar J. Engelsen
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ronald P. Haak
(Signature of individual investor or individual signing for entity)

Ronald P. Haak
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Robert K. Steel
(Signature of individual investor or individual signing for entity)

Robert K. Steel
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ John J. Mack
(Signature of individual investor or individual signing for entity)

John J. Mack
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ernest Mario
(Signature of individual investor or individual signing for entity)

Ernest Mario
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Anastasios Parafestas
(Signature of individual investor or individual signing for entity)

Triremes 16 LLC
(Please print name of investor)

Anastasios Parafestas
(If signing on behalf of an entity, print your title)

Manager of Spinnaker Capital 2007 GP LLC, its Managing Member

[Signature Page to Convertible Note and Warrant Purchase Agreement]

EXHIBIT A

Schedule of Investors

Investor	Principal Amount
Initial Closing: February 10, 2010	
BDF IV Annex Fund, L.P.	$ 60,000.00
Biotechnology Development Fund IV, L.P.	$ 14,321.71
Biotechnology Development Fund IV Affiliates, L.P.	$ 264.70
Vivo Ventures Fund V, L.P.	$1,913,739.97
Vivo Ventures Fund Affiliates V, LP	$ 22,459.54
Steinar J. Engelsen	$ 2,666.45
Ron Haak	$ 17,700.41
Hadar Cars AB	$ 2,666.45
John J. Mack	$ 265,508.64
Ernest Mario	$ 266,558.14
Robert K. Steel	$ 265,508.64
Triremes 16 LLC	$ 265,508.64
	$3,096,903.29
Final Closing: March 12, 2010	
Michael Danaher and Carol Danaher, TTEES Danaher Family Trust dtd. 6/29/04	$ 1,221.23
Mario Rosati	$ 271.46
Shalavi Irrevocable Trust UAD 12/16/99 FBO Alexander Shalavi	$ 44,251.18
Shalavi Irrevocable Trust UAD 12/16/99 FBO Gina Shalavi	$ 44,251.18
Clyde D. Wagner Living Trust dated June 6, 2001	$ 8,850.04

Investor	Principal Amount
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 8,850.04
A. Morris Williams, Jr.	$ 88,502.67
WS Investment Company, LLC (2010A)	$ 15,794.83
	$ 211,992.63
Total:	**$3,308,895.92**

EXHIBIT B

Form of Convertible Promissory Note

EXHIBIT C

Form of Warrant to Purchase Shares

EXHIBIT D

Form of Exchange Agreement

EXHIBIT E

Form of Security Agreement

EXHIBIT F

Form of Voting Agreement

CAPNIA, INC.

Convertible Note and Warrant

Purchase Agreement

February 10, 2010

Exhibit 10.12

CAPNIA, INC.

AMENDMENT NO. 1 TO CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT, CONVERTIBLE PROMISSORY NOTES AND WARRANTS TO PURCHASE SHARES

This Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares (this "Amendment") is made as of November 10, 2010, by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303 and the persons and entities who are signatories hereto (the "Investors").

RECITALS

A. WHEREAS, the Company and the Investors are parties to that certain Convertible Note and Warrant Purchase Agreement dated as of February 10, 2010 (the "Agreement") pursuant to which the Company sold and issued to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A thereto (together with all such convertible promissory notes sold and issued pursuant to the Agreement, the "Notes") together with a related warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares issued pursuant to the Agreement, the "Warrants");

B. WHEREAS, Section 6.1 of the Agreement provides that the holders of at least two-thirds in interest of the Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the Agreement, the Notes and the Warrants on behalf of all Investors (as defined in the Agreement).

C. WHEREAS, the Company and the undersigned Investors wish to amend the Agreement, the Notes and the Warrants to: (i) authorize the Company to sell and issue additional Notes with an aggregate principal amount of up to $2,000,000, together with related Warrants, (ii) extend the Maturity Date of the Notes to February 10, 2012, (iii) amend the definition of Shares under the Warrants to reflect the extended Maturity Date of the Notes, and (iv) make certain other changes.

D. WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the meaning set forth in the Agreement, Notes and Warrants, as applicable.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Amendments.

1.1 Amendments to Convertible Note and Warrant Purchase Agreement.

(a) The following section is inserted as a new Section 1.5 of the Agreement:

"1.5 Extension Closing.

Notwithstanding Section 1.3 of the Agreement, one or more additional subsequent Closings may take place following the Final Closing Date and on or before thirty (30) days following November 10, 2010 (each, an "Extension Closing" and also a "Closing") at which the Company may sell and issue Notes with an aggregate principal amount of up to $2,000,000 to Investors who have participated in one or more prior Closings, or such other persons or entities acceptable to the Company. The purchase, sale and issuance of the Notes and Warrants at an Extension Closing shall be subject to all terms and conditions of this Agreement."

(b) Section 2 of the Agreement is hereby amended and restated in its entirety to read as follows:

"2. Authorization. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $4,700,000 with respect to the Initial Closing and the Final Closing. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $2,000,000 with respect to all Extension Closings."

1.2 Schedule of Investors. Exhibit A to the Agreement is hereby replaced in its entirety with Exhibit A to this Amendment.

1.3 Amendment to Convertible Promissory Notes. The first paragraph of each Note is hereby amended and restated in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two times the unpaid principal, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of (i) upon demand made after February 10, 2012 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"), or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meaning set forth in the Purchase Agreement."

1.4 Form of Convertible Promissory Note. Exhibit B to the Agreement is hereby replaced in its entirety with Exhibit B to this Amendment.

1.5 Amendment to Warrant to Purchase Shares. Section 1(a) of each Warrant is hereby amended and restated in its entirety to read as follows:

"(a) *Definition of Shares*. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to February 10, 2012 (the "Note Maturity Date") and the Holder converts the Note issued to Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

1.6 Form of Warrant to Purchase Shares. Exhibit C to the Agreement is hereby replaced in its entirety with Exhibit C to this Amendment.

2. Miscellaneous.

2.1 Waivers and Amendments. This Amendment nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of at least two-thirds in interest of the Notes issued pursuant to the Agreement may, with the Company's prior written consent, waive, modify or amend any provisions hereof on behalf of all Investors.

2.2 Governing Law. This Amendment shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. This Amendment (including the exhibits attached hereto and the other documents delivered pursuant hereto) and, to the extent not amended hereby, the Agreement, the Notes, the Warrants and the exhibits attached thereto and the other documents delivered pursuant thereto, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument.

2.6 Facsimile Execution and Delivery. A facsimile or other reproduction of this Amendment may be executed by one or more parties hereto and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes. At the request of any party hereto, all parties hereto agree to execute and deliver an original of this Amendment as well as any facsimile, telecopy or other reproduction hereof.

2.7 Waiver of Anti Dilution Adjustment. The undersigned Investors who are the holders of the requisite outstanding shares of Preferred Stock, on behalf of themselves and all other holders of Preferred Stock, hereby waive any price-based anti-dilution adjustment under Article V, Section 3(D) of the Restated Certificate with respect to the Company's sale and issuance of the Securities pursuant to the Agreement, as hereby amended.

2.8 Waiver of Right of First Refusal. Pursuant to Section 4.2 of the Rights Agreement, the undersigned Investors, who are the holders of at least two-thirds of the Registrable Securities (as defined in the Rights Agreement), on behalf of themselves and all other holders of Registrable Securities granted the right of first offer pursuant to Section 2.3 of the Rights Agreement, hereby agree to waive such right of first offer and any notice requirement contained therein with respect to the Company's sale and issuance of the Securities pursuant to the Agreement, as hereby amended.

(signature page follows)

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

CAPNIA, INC.

By: /s/ Ernest Mario
Ernest Mario
Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Biotechnology Development Fund IV, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

Biotechnology Development Fund IV Affiliates, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

BDF IV Annex Fund, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC, its General Partner

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Vivo Ventures Fund V, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC, its General Partner

Vivo Ventures V Affiliates Fund, LP

/s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures, LLC, its General Partner

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ernest Mario
(Signature of individual investor or individual signing for entity)

Ernest Mario
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ John J. Mack
(Signature of individual investor or individual signing for entity)

John J. Mack
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ James I. Black III, Trustee
(Signature of individual investor or individual signing for entity)

James I. Black III, Trustee
(Please print name of investor)

The Robert K. Steel Blind Trust B
(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Anastasios Parafestas
(Signature of individual investor or individual signing for entity)

Anastasios Parafestas
(Please print name of investor)

Triremes 16 LLC
(If signing on behalf of an entity, print your title)

Manager of Spinnaker Capital 2007 GP LLC, its Managing Member

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ron Haak
(Signature of individual investor or individual signing for entity)

Ron Haak
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Clyde D. Wagner
(Signature of individual investor or individual signing for entity)

Clyde D. Wagner Living Trust
(Please print name of investor)

Trustee
(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Shifteh K. Wagner
(Signature of individual investor or individual signing for entity)

Shifteh K. Wagner Living Trust
(Please print name of investor)

Trustee
(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Steinar J. Engelsen
(Signature of individual investor or individual signing for entity)

Steinar J. Engelsen
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Hadar Cars
(Signature of individual investor or individual signing for entity)

Hadar Cars AB
(Please print name of investor)

Chairman
(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Mario Rosati
(Signature of individual investor or individual signing for entity)

Mario Rosati
(Please print name of investor)

(If signing on behalf of an entity, print your title)

[Signature Page to Amendment No. 1 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

EXHIBIT A

Schedule of Investors

Investor	Principal Amount
Initial Closing: February 10, 2010	
BDF IV Annex Fund, L.P.	$ 60,000.00
Biotechnology Development Fund IV, L.P.	$ 14,321.71
Biotechnology Development Fund IV Affiliates, L.P.	$ 264.70
Vivo Ventures Fund V, L.P.	$1,913,739.97
Vivo Ventures V Affiliates Fund, LP	$ 22,459.54
Steinar J. Engelsen	$ 2,666.45
Ron Haak	$ 17,700.41
Hadar Cars AB	$ 2,666.45
John J. Mack	$ 265,508.64
Ernest Mario	$ 266,558.14
Robert K. Steel	$ 265,508.64
Triremes 16 LLC	$ 265,508.64
	$3,096,903.29
Final Closing: March 12, 2010	
Michael Danaher and Carol Danaher, TTEES Danaher Family Trust dtd. 6/29/04	$ 1,221.23
Mario Rosati	$ 271.46
Shalavi Irrevocable Trust UAD 12/16/99 FBO Alexander Shalavi	$ 44,251.18
Shalavi Irrevocable Trust UAD 12/16/99 FBO Gina Shalavi	$ 44,251.18
Clyde D. Wagner Living Trust dated June 6, 2001	$ 8,850.04

Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 8,850.04
A. Morris Williams, Jr.	$ 88,502.67
WS Investment Company, LLC (2010A)	$ 15,794.83
	$ 211,992.63
Extension Closing: November 10, 2010	
BDF IV Annex Fund, L.P.	$ 6,000.00
Biotechnology Development Fund IV, L.P.	$ 1,433.00
Vivo Ventures Fund V, L.P.	$1,193,911.14
Biotechnology Development Fund IV Affiliates, L.P.	$ 26.00
Vivo Ventures V Affiliates Fund, L.P.	$ 14,011.67
Mario 2002 Grandchildren's Trust	$ 161,116.07
John J. Mack	$ 160,481.71
The Robert K. Steel Blind Trust B	$ 160,481.71
Triremes 16 LLC	$ 160,481.71
Ron Haak	$ 10,698.68
WS Investment Company LLC (2010A)	$ 9,546.86
Clyde D. Wagner Living Trust dated June 6, 2001	$ 5,349.24
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 5,349.24
Steinar J. Engelsen	$ 1,611.69
Hadar Cars AB	$ 1,611.69
Mario Rosati	$ 164.08
	$1,892,274.49
Total:	**$5,201,170.41**

EXHIBIT B

Form of Convertible Promissory Note

EXHIBIT C

Form of Warrant to Purchase Shares

Exhibit 10.13

CAPNIA, INC.

AMENDMENT NO. 2 TO CONVERTIBLE PROMISSORY NOTES AND WARRANTS TO PURCHASE SHARES

This Amendment No. 2 to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares (this "Amendment") is made and entered into as of January 17, 2012 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303 and the persons and entities who are signatories hereto (the "Investors").

RECITALS

A. WHEREAS, the Company and the Investors are parties to that certain Convertible Promissory Note and Warrant Purchase Agreement, dated as of February 10, 2010, as amended by the Amendment No. 1 to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of November 10, 2010 (as amended, the "2010 Purchase Agreement"), pursuant to which the Company sold and issued to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A thereto (together with all such convertible promissory notes sold and issued pursuant to the 2010 Purchase Agreement, the "2010 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares issued pursuant to the Agreement, the "2010 Warrants");

B. WHEREAS, Section 6.1 of the 2010 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2010 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2010 Purchase Agreement, the 2010 Notes and the 2010 Warrants on behalf of all Investors (as defined in the 2010 Purchase Agreement).

C. WHEREAS, pursuant to the Note and Warrant Purchase Agreement, dated as of even date herewith, by and among the Company and the persons and entities listed on the Schedule of Investors attached thereto as Exhibit A (the "2012 Purchase Agreement"), the Company is undertaking the offering and sale of up to $2,000,000 in principal amount of new convertible promissory notes (the "2012 Notes"), together with related warrants to purchase shares of the Company's capital stock that will be issued pursuant to the 2012 Purchase Agreement.

D. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2010 Notes, now desire to amend the 2010 Notes and the 2010 Warrants to: (i) clarify and confirm that the 2010 Notes, issued pursuant to the 2010 Purchase Agreement, shall rank pari passu with the 2012 Notes, issued pursuant to the 2012 Purchase Agreement, in all respects; (ii) extend the Maturity Date of the 2010 Notes to January 17, 2013, such that the 2010 Notes and the 2012 Notes shall have the same maturity date; (iii) amend the definition of Shares under the 2010 Warrants to reflect the extended Maturity Date of the 2010 Notes; and (iv) make certain other changes.

E. WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2010 Purchase Agreement, 2010 Notes and 2010 Warrants, as applicable.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Amendments.

1.1 Amendments to 2010 Notes.

(a) The first paragraph of each 2010 Note is hereby amended and restated in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after January 17, 2013 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Purchase Agreement."

(b) The following is inserted as the new Section 5(j) of each 2010 Note:

"(j) *Pari Passu Notes*. The Holder acknowledges and agrees that the payment of all or any portion of the outstanding principal amount of this Note, and all accrued and unpaid interest under this Note, shall be pari passu in right of payment and in all other respects to: (i) the other Notes; and (ii) the convertible promissory notes (the "2012 Notes") issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the persons and entities listed on the Schedule of Investors attached thereto as Exhibit A. In the event that the Holder receives payments in excess of such Holder's pro rata share of the Company's payments to the holders of all the Notes and the 2012 Notes, then the

Holder shall hold in trust all such excess payments for the benefit of the holders of all other Notes and the 2012 Notes, and shall pay such amounts held in trust to such other holders upon demand by such holders."

1.2 Amendment to Warrant to Purchase Shares. Section 1(a) of each Warrant is hereby amended and restated in its entirety to read as follows:

"(a) *Definition of Shares*. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to January 17, 2013 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities' Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

2. Miscellaneous.

2.1 Waivers and Amendments. This Amendment nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of at least two-thirds in interest of the Notes issued pursuant to the Agreement may, with the Company's prior written consent, waive, modify or amend any provisions hereof on behalf of all Investors.

2.2 Governing Law. This Amendment shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. This Amendment (including the exhibits attached hereto and the other documents delivered pursuant hereto) and, to the extent not amended hereby, the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants and the exhibits attached thereto and the other documents delivered pursuant thereto, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Legal Effect. This Amendment shall constitute an integral part of the the 2010 Notes and the 2010 Warrants. Except as set forth in this Amendment, the 2010 Notes and the 2010 Warrants shall continue in full force and effect in accordance with their respective terms.

2.6 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument.

2.7 Facsimile; Execution and Delivery. A facsimile or other reproduction of this Amendment may be executed by one or more parties hereto and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes. At the request of any party hereto, all parties hereto agree to execute and deliver an original of this Amendment as well as any facsimile, telecopy or other reproduction hereof.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Biotechnology Development Fund IV, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

Biotechnology Development Fund IV Affiliates, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

BDF IV Annex Fund, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Vivo Ventures Fund V, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ernest Mario
Ernest Mario

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Mario 2002 Grandchildren's Trust

By: /s/ Ernest Mario
Name: Ernest Mario
Title: Trustee

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ John J. Mack

John J. Mack

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

The Robert K. Steel Blind Trust B

By: /s/ James I. Black
Name: James I. Black, III
Title: Trustee

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Triremes 16 LLC

By: Spinnaker Capital 2007 GP LLC
Its: Managing Member

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Shalavi Irrevocable Trust UAD 12/16/99 FBO Alexander Shalavi

By: /s/ John Shalavi
Name: John Shalavi
Title: Trustee

Shalavi Irrevocable Trust UAD 12/16/99 FBO Gina Shalavi

By: /s/ John Shalavi
Name: John Shalavi
Title: Trustee

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Ron Haak

Ron Haak

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: /s/ Clyde D. Wagner
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: /s/ Shifteh Karimi Wagner
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Steinar J. Engelsen
Steinar J. Engelsen

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

Hadar Cars AB

By: /s/ Hadar Cars
Name: Hadar Cars
Title: Chairman

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the date and year first written above.

INVESTOR:

/s/ Mario Rosati
Mario Rosati

[Signature Page to Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares]

Exhibit 10.14

Execution Version

CAPNIA, INC.

CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT

This Convertible Note and Warrant Purchase Agreement (this "Agreement") is made and entered into as of January 16, 2012 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303, and the persons and entities listed on the schedule of investors attached hereto as Exhibit A (each, an "Investor" and collectively, the "Investors").

RECITALS

WHEREAS, on the terms and subject to the conditions set forth herein, each Investor is willing to purchase from the Company, and the Company is willing to sell to such Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on the schedule of investors attached hereto as Exhibit A (the "Schedule of Investors"), together with a corresponding warrant to acquire shares of the Company's capital stock; and

WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings set forth in the form of Note (as defined below).

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Issuance of Convertible Promissory Notes and Warrants to Purchase Stock.

1.1 Convertible Promissory Notes. Each Investor, severally and not jointly, agrees, upon the terms and conditions specified in this Agreement, to lend to the Company the sum set forth on Exhibit A opposite such Investor's name (individually, a "Loan," and collectively, the "Loans") at the applicable Closing (as defined below). Each Investor's Loan shall be evidenced by a convertible promissory note, dated as of the date of the applicable Closing, in the form of Exhibit B attached hereto (each, a "Note" and collectively, the "Notes").

1.2 Warrant to Purchase Shares. Concurrently with the sale and issuance of the Notes to the Investors, the Company will issue to each Investor a warrant, in the form attached hereto as Exhibit C (each, a "Warrant" and collectively, the "Warrants") to purchase up to that number of shares of Preferred Stock ("Preferred Stock") as set forth in the Warrant, for a purchase price equal to $0.0001 times the principal amount of the corresponding Note.

1.3 Place and Date of Closing. Subject to the terms and conditions hereof, the purchase, sale and issuance of the Notes and the Warrants (collectively, the "Securities") shall take

place at one (1) or more closings (each of which is referred to in this Agreement as a "Closing"). The initial Closing (the "Initial Closing") will be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Rd., Palo Alto, California 94304, at 3:00 p.m. local time on the Effective Date, or at such other time and place as the parties shall mutually agree (the "Initial Closing Date"). In the event the Investors do not purchase Notes representing the aggregate amount of $2,000,000 at the Initial Closing, then, subject to the terms and conditions hereof, the Company may sell and issue at one or more subsequent Closings (each, a "Subsequent Closing"), at such time and place as determined by the Company, in its sole discretion (the "Subsequent Closing Date"), up to the balance of the unissued Notes either to: (a) Investors that are purchasing their respective pro rata portions of the Notes (such pro rata portions determined based on the Investors' percentage ownership of the outstanding Preferred Stock of the Company, measured as of the Initial Closing); (b) Investors that have previously purchased in full their pro rata portions of the Notes, in such proportions as determined by the Company in its sole discretion; or (c) such persons or entities as may be mutually agreed upon by the Company and Investors holding more than fifty percent (50%) of the aggregate outstanding principal amount of the Notes. The Company may conduct such Subsequent Closings until the earlier to occur of: (i) the date that is sixty (60) days following the Initial Closing; or (ii) such time as Notes representing the aggregate principal amount of $2,000,000 become subscribed for, and purchased by, the Investors (the end of such period, the "Final Closing Date"). Each of the Initial Closing and any Subsequent Closing conducted on or before the Final Closing Date (if applicable), shall be referred to herein as a "Closing," and each of the Initial Closing Date and any Subsequent Closing Date up to the Final Closing Date (if applicable), shall be referred to herein as a "Closing Date." Should any such sales of Notes be made by the Company at a Subsequent Closing, then the Company shall prepare and distribute to the Investors, either before or after any such Subsequent Closing Date, a revised Schedule of Investors. Unless already a party to this Agreement, each subsequent Investor that purchases Notes at a Subsequent Closing shall become a party to this Agreement.

1.4 Delivery. At each Closing, the Company will deliver to each applicable Investor a Note and Warrant to be purchased by such Investor, against receipt by the Company of the corresponding purchase price set forth on the Schedule of Investors (the "Purchase Price"). At each Closing, each applicable Investor shall deliver to the Company the Purchase Price in respect of the Note and Warrant being purchased by such Investor, as set forth on the Schedule of Investors.

2. Authorization. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $2,000,000.

3. Representations and Warranties of the Company. The Company represents and warrants to the Investors as follows:

3.1 Organization; Good Standing; Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. The Company is duly qualified and is authorized to transact business and is in good standing as a foreign corporation in the State of California and each jurisdiction in which the failure to so qualify would have a material adverse effect on the Company's business, properties or financial condition.

3.2 Corporate Power. The Company has all requisite legal and corporate power and authority: (i) to own and operate its properties and assets and to carry on its business as presently conducted and as contemplated to be conducted in the future; (ii) to execute and deliver this Agreement; (iii) to sell and issue the Securities, and (iv) to carry out and perform the terms and conditions of this Agreement.

3.3 Authorization. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution, delivery of this Agreement, the performance of all obligations of the Company hereunder, and the authorization, issuance, sale and delivery of the Securities has been taken or will be taken prior to the Initial Closing. This Agreement, when executed and delivered by the Company, will constitute a valid and binding obligation of the Company, enforceable in accordance with its terms, except as: (i) limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally; and (ii) limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies. The Securities, when issued in compliance with the provisions of this Agreement, will be validly issued, fully paid and nonassessable and will be free of any liens or encumbrances, other than any liens or encumbrances created by: (i) the Investors; and (ii) the holders of outstanding convertible promissory notes (the "2010 Notes") previously issued by the Company pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010, by and among the Company and the persons and entities listed on the schedule of investors attached thereto as Exhibit A, as amended to date (the "2010 Purchase Agreement"); *provided*, *however*, that the Securities may be subject to restrictions on transfer under state and/or federal securities laws.

3.4 Capitalization. Immediately prior to the Initial Closing Date, the authorized capital of the Company consists of: (a) 21,702,428 shares of Preferred Stock, (i) of which 459,375 shares have been designated Series A Preferred Stock, of which 375,000 shares are issued and outstanding, (ii) of which 3,743,053 shares have been designated Series B Preferred Stock, of which 1,429,779 shares are issued and outstanding, and (iii) of which 17,500,000 shares have been designated Series C Preferred Stock ("Series C Preferred Stock"), of which 8,580,616 shares are issued and outstanding; and (ii) 29,500,000 shares of Common Stock ("Common Stock"), of which 6,329,425 shares are issued and outstanding. Except for: (A) the conversion privileges of the Preferred Stock; (B) the conversion privileges of the 2010 Notes; (C) warrants exercisable for the purchase of shares of the Company's capital stock, which warrants were issued pursuant to the 2010 Purchase Agreement; (C) options exercisable for the purchase of up to 51,875 shares of Common Stock; (D) the Company's 1999 Incentive Stock Plan, as amended (the "1999 Plan") (as described below); (E) the Company's 2010 Equity Incentive Plan (the "2010 Plan") (as described below); and (F) the rights as set forth in the Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (the "Rights Agreement"), there are no outstanding options, warrants, or rights (including conversion or preemptive rights) for the purchase or acquisition from the Company of any of its securities. The Company: (x) has reserved 3,171,482 shares of Common Stock for issuance pursuant to the 1999 Plan, of which 2,830,331 shares are subject to outstanding stock options or stock purchase rights, no shares remain available for future grant, and 341,151 shares have been issued upon exercise of stock options or stock purchase rights; and (y) has reserved 1,538,842 shares of Common Stock for issuance pursuant to the 2010 Plan, of which 957,030 shares have are subject to outstanding stock options or stock purchase rights, 626,812 shares remain available for future grant, and no shares have been issued upon exercise of stock options or stock purchase rights.

3.5 Compliance with Other Instruments. The Company is not in violation or default of any provision of its Amended and Restated Certificate of Incorporation (the "Restated Certificate") or Bylaws (the "Bylaws") (each as amended to date) or in any material respect of any provision of any mortgage, indenture, agreement, instrument or contract to which it is a party or by which it is bound or, to the best of the Company's knowledge, of any federal or state judgment, order, writ, decree, statute, rule or regulation applicable to the Company. The execution, delivery and performance by the Company of this Agreement, and the consummation of the transactions contemplated hereby, will not result in any such violation or be in material conflict with or constitute, with or without the passage of time or giving of notice, either a material default under any such provision or an event that results in the creation of any material lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, impairment, forfeiture or nonrenewal of any material permit, license, authorization or approval applicable to the Company, its business or operations or any of its assets or properties.

3.6 Governmental Consent, etc. No consent, approval, qualification, order or authorization of, or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the Company's execution, delivery or performance of this Agreement, the offer, sale or issuance of the Securities, except for: (a) such filings as have been made prior to the Closing, except any notices of sale required to be filed with the Securities and Exchange Commission under Regulation D of the Securities Act of 1933, as amended (the "Securities Act"); or (b) such post-Closing filings as may be required under applicable state securities laws, which will be timely filed within the applicable periods therefor.

3.7 Offering. Subject in part to the truth and accuracy of the Investors' representations set forth in Section 4, the offer, sale and issuance of the Securities as contemplated by this Agreement are exempt from the registration requirements of Section 5 of the Securities Act, and all applicable state securities laws, and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

3.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company that might result, either individually or in the aggregate, in any material adverse change in the Company's business, properties or financial condition, or in any change in the current equity ownership of the Company, nor, to the Company's knowledge, is there any reasonable basis therefor. The foregoing includes, without limitation, any action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened involving the prior employment of any of the Company's employees, their use in connection with the Company's business of any information or techniques allegedly proprietary to any of their former employers or their obligations under any agreement with their former employers. The Company is not a party to or, to the Company's knowledge, named in or subject to any order, writ, injunction, judgment or decree of any court, government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or that the Company currently intends to initiate.

3.9 Brokers or Finders; Other Offers. The Company has not incurred, and will not incur, directly or indirectly, as a result of any action taken by the Company, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

3.10 Disclosure. Neither this Agreement nor any other written statements or certificates made or delivered in connection herewith, when taken as a whole, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading in light of the circumstances under which they were made.

4. Representations and Warranties of the Investors. Each Investor hereby represents and warrants, severally and not jointly, and only with respect to such Investor, to the Company with respect to such Investor's purchase of the Securities, as follows:

4.1 Power; Authorization. Such Investor has all requisite power and authority to execute and deliver this Agreement. This Agreement, when executed and delivered by such Investor, will constitute a valid and legally binding obligation of such Investor, enforceable in accordance with its respective terms, except as: (a) limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally; and (b) limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.2 Purchase Entirely for Own Account. This Agreement is made with such Investor in reliance upon such Investor's representation to the Company, which by such Investor's execution of this Agreement such Investor hereby confirms, that the Securities will be acquired for investment for such Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof.

4.3 Reliance upon Investor's Representations. Such Investor understands that the Securities are not registered under the Securities Act on the ground that the sale provided for in this Agreement and the issuance of the Securities hereunder is exempt from registration under the Securities Act pursuant to Section 4(2) thereof, and that the Company's reliance on such exemption is predicated on the Investors' representations set forth herein.

4.4 Disclosure of Information. Such Investor believes it has received all the information such Investor considers necessary or appropriate for deciding whether to purchase the Securities. Such Investor has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Securities and the Company's business, properties, prospects and financial condition and to obtain additional information necessary to verify the accuracy of any information furnished to such Investor or to which such Investor had access. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 3 or the right of such Investor to rely thereon.

4.5 Investment Experience; Economic Risk. Such Investor understands that the Company has a limited financial and operating history and that an investment in the Company

involves substantial risks. Such Investor represents to the Company that except as otherwise disclosed to the Company, in writing, prior to such Investor's execution of this Agreement, such Investor is an "accredited investor" (within the meaning of Regulation D, Rule 501(a), promulgated by the Securities and Exchange Commission under the Securities Act) or such Investor is experienced in evaluating and investing in private placement transactions of securities of companies in a similar stage of development to that of the Company and acknowledges that such Investor is able to fend for himself, herself or itself. Such Investor has such knowledge and experience in financial and business matters that such Investor is capable of evaluating the merits and risks of the investment in the Securities. Such Investor can bear the economic risk of such Investor's investment and is able, without impairing such Investor's financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of such Investor's investment. If other than an individual, such Investor also represents that such Investor has not been organized for the purpose of acquiring the Securities.

4.6 Residency. In the case of an Investor who is an individual, the state of such Investor's residency, or, in the case of an Investor that is a corporation, partnership or other entity, the state of such Investor's principal place of business, is correctly set forth on the Schedule of Investors.

4.7 Restricted Securities. Such Investor understands that the Securities are characterized as "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such Securities may be resold without registration under the Securities Act only in certain limited circumstances. In connection therewith, such Investor represents that it is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions, including, among other things, the existence of a public market for the shares, the availability of certain current public information about the Company, the resale occurring not less than one (1) year after a party has purchased and paid for the security to be sold, the sale being effected through a "broker's transaction" or in transactions directly with a "market maker" and the number of shares being sold during any three (3)-month period not exceeding specified limitations, each as applicable.

4.8 Brokers or Finders. The Company has not, and will not, incur, directly or indirectly, as a result of any action taken by such Investor, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

4.9 Investment Representations, Warranties and Covenants by Non-United States Persons. If such Investor is not a U.S. person (as defined in Regulation S promulgated under the Securities Act ("Regulation S")) or is deemed not to be a U.S. person under Rule 902(k)(2) of the Securities Act, such Investor has been advised and acknowledges that: (a) in issuing and selling the Securities to such Investor pursuant to this Agreement, the Company is relying upon the "safe harbor" provided by Regulation S and/or on Section 4(2) under the Securities Act; (b) it is a condition to the availability of the Regulation S "safe harbor" that the Securities not be offered or sold in the United States or to a U.S. person until the expiration of a one (1)-year "distribution compliance period" (or a six (6)-month "distribution compliance period," if the issuer is a "reporting

issuer," as defined in Regulation S) following the Closing Date; (c) notwithstanding the foregoing, prior to the expiration of the one (1)-year "distribution compliance period" (or six (6)-month "distribution compliance period," if the issuer is a "reporting issuer," as defined in Regulation S) after the Closing (the "Restricted Period"), the Securities may be offered and sold by the holder thereof only if such offer and sale is made in compliance with the terms of this Agreement and either: (i) if the offer or sale is within the United States or to or for the account of a U.S. person (as such terms are defined in Regulation S), the securities are offered and sold pursuant to an effective registration statement or pursuant to Rule 144 under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act, or (ii) the offer and sale is outside the United States and to other than a U.S. person, and (d) until the expiration of the Restricted Period, such Investor, its agents or its representatives have not and will not solicit offers to buy, offer for sale or sell any of the Securities, or any beneficial interest therein in the United States or to or for the account of a U.S. person, unless pursuant to an effective registration statement or pursuant to Rule 144 under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act.

4.10 Representations by Non-United States Persons. If such Investor is not a U.S. person, such Investor is satisfied as to the full observance of the laws of the Investor's jurisdiction in connection with any offer to acquire the Securities or any use of the Agreement, including: (a) the legal requirements within such Investor's jurisdiction for the purchase of the Securities; (b) any foreign exchange restrictions applicable to such purchase; (c) any governmental or other consents that may need to be obtained; and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such Securities. Such Investor's subscription and payment for, and the Investor's continued beneficial ownership of, the Securities will not violate any applicable securities or other laws of the Investor's jurisdiction.

4.11 Market Standoff. Such Investor agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering or first secondary public offering, as applicable, and ending on the date specified by the Company and the managing underwriter (such period not to initially exceed one hundred eighty (l80) calendar days and as may be extended for up to two (2) additional 17-day periods) (the "Lock-Up Period"): (a) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any securities of the Company, including, without limitation, shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired); or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any securities of the Company, including, without limitation, shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired), whether any such transaction described in clause (a) or (b) above is to be settled by delivery of securities, in cash or otherwise; *provided* that all officers and directors of the Company and holders of at least one percent (1%) of the Company's voting securities are bound by and have entered into similar agreements. The foregoing covenants shall apply to the Company's initial public offering of equity securities and to the Company's first secondary public offering of equity securities, but it shall not apply to the sale of any shares by an Investor to an underwriter pursuant to an underwriting agreement. Such Investor

agrees to execute an agreement(s) reflecting any transaction described in clauses (a) and (b) above as may be requested by the managing underwriters at the time of the initial public offering, and further agrees that the Company may impose stop transfer instructions with its transfer agent in order to enforce the covenants set forth in clauses (a) and (b) above. The underwriters in connection with the Company's initial public offering are intended third party beneficiaries of the covenants in this Section 4.11 and shall have the right, power and authority to enforce such covenants as though they were a party hereto. Any release from the Lock-Up Period shall be on a pro rata basis based upon the number of Registrable Securities (as defined in the Rights Agreement) held; *provided*, *however*, that one (1) or more selective releases from the Lock-Up Period not on a pro rata basis may be made with the written consent of the holders of a majority of the Registrable Securities not so released.

5. Conditions to Closing.

5.1 Conditions to Obligations of the Investors. The obligations of each Investor to purchase Securities hereunder are subject to the fulfillment on or before the Initial Closing Date of each of the following conditions, the waiver of which shall not be effective against the Investor unless consented to in writing thereto:

(a) Representations and Warranties Correct. The representations and warranties made by the Company in Section 3 shall be true and correct in all material respects as of the Initial Closing, with the same effect as if made on and as of the Initial Closing.

(b) Covenants. All covenants, agreements and conditions contained in this Agreement to be performed by the Company on or prior to the Initial Closing shall have been performed or complied with in all material respects.

(c) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(d) Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated hereby and all documents and instruments incident to such transactions shall be reasonably satisfactory in substance and form to the Investor.

(e) Transaction Documents. The Company shall have duly executed and delivered to the Investors the following documents:

(i) This Agreement;

(ii) Each Note and Warrant issued hereunder;

(iii) The Security Agreement, in the form of Exhibit D attached hereto (the "Security Agreement"); and

(iv) The Amended and Restated Voting Agreement in the form of Exhibit E attached hereto (the "Voting Agreement") (such documents specified in clauses (i) – (iv) collectively, the "Transaction Documents")

(f) Minimum Investment. At the Initial Closing, the Investors shall purchase Notes with an aggregate principal amount of at least $1,500,000.

5.2 Conditions to Obligations of the Company. The obligations of the Company to each Investor under this Agreement are subject to fulfillment on or before the Closing of each of the following conditions by that Investor:

(a) Representations. The representations made by the Investors in Section 4 shall be true and correct when made, and shall be true and correct on the Closing.

(b) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(c) Transaction Documents. Each Investor shall have duly executed and delivered to the Company this Agreement and the other Transaction Documents (excluding each Note and Warrant issued hereunder, which shall only be executed by the Company).

6. Miscellaneous.

6.1 Waivers and Amendments. Except as expressly provided herein, neither this Agreement, the Notes, the Warrants, the Security Agreement nor any term hereof or thereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; *provided*, *however*, that the holders of at least two-thirds (2/3) in interest of the Notes may, with the Company's prior written consent, waive, modify or amend any provisions hereof and thereof on behalf of all Investors. SUBJECT TO THE FOREGOING LIMITATIONS, EACH INVESTOR ACKNOWLEDGES THAT BY THE OPERATION OF THIS SECTION 6.1 THE HOLDERS OF AT LEAST TWO-THIRDS (2/3) IN INTEREST OF THE NOTES WILL HAVE THE RIGHT AND POWER TO DIMINISH OR ELIMINATE ALL RIGHTS OF ALL INVESTORS UNDER THIS AGREEMENT, THE NOTES, THE WARRANTS, AND THE SECURITY AGREEMENT.

6.2 Governing Law. This Agreement and all actions arising out of or in connection with this Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California or of any other state.

6.3 Survival. The representations, warranties, covenants and agreements made herein shall survive any investigation made by any Investor and the Closing of the transactions contemplated hereby.

6.4 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

6.5 Entire Agreement. This Agreement (including the exhibits attached hereto) and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

6.6 Notices, etc. All notices and other communications required or permitted under this Agreement shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed: (a) if to an Investor, at such Investor's address, facsimile number or electronic mail address set forth on the Schedule of Investors, or at such other address, facsimile number or electronic mail address as such Investor may designate by advance written notice to the Company; or (b) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the President (with a copy (which shall not constitute notice) addressed to Wilson Sonsini Goodrich & Rosati, Attention: Elton Satusky, 650 Page Mill Road, Palo Alto, CA 94304, or delivered via fax at (650) 496-6811) or at such other address or facsimile number as the Company may designate by advance written notice to each Investor. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address set forth on the Schedule of Investors. With respect to any notice given by the Company under any provision of the Delaware General Corporation Law or the Company's Amended and Restated Certificate of Incorporation or Bylaws, each Investor agrees that such notice may given by facsimile or by electronic mail.

6.7 Fees and Expenses. Each of the Company and each Investor shall each bear its own expenses incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

6.8 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument. A facsimile, telecopy or other reproduction of this Agreement may be executed by one or more parties hereto, and an executed copy of this Agreement may be delivered by one or more parties hereto by facsimile or similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen, and such execution and delivery shall be considered valid, binding and effective for all purposes.

6.9 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Agreement, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

6.10 Exculpation Among Investors. Each Investor acknowledges that it is not relying upon any person, firm or corporation, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Investor agrees that no Investor nor the respective controlling persons, officers, directors, partners, agents, or employees of any Investor shall be liable for any action heretofore or hereafter taken or omitted to be taken by any of them in connection with the Securities.

6.11 Separability of Agreements; Severability of this Agreement. The Company's agreement with each of the Investors is a separate agreement and the sale of the Securities to each of the Investors is a separate sale. Unless otherwise expressly provided herein, the rights of each Investor hereunder are several rights, not rights jointly held with any of the other Investors. Any invalidity, illegality or limitation on the enforceability of this Agreement or any part thereof, by any Investor whether arising by reason of the law of the respective Investor's domicile or otherwise, shall in no way affect or impair the validity, legality or enforceability of this Agreement with respect to other Investors. If any provision of this Agreement shall be judicially determined to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

6.12 Waiver of Anti-Dilution Adjustment. The undersigned Investors who are the holders of the requisite outstanding shares of Preferred Stock, on behalf of themselves and all other holders of Preferred Stock, hereby waive any price-based anti-dilution adjustment under Article V, Section 3(D) of the Restated Certificate with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.13 Waiver of Right of First Refusal. Pursuant to Section 4.2 of the Rights Agreement, the undersigned Investors, who are the holders of at least two-thirds (2/3) of the Registrable Securities (as defined in the Rights Agreement), on behalf of themselves and all other holders of Registrable Securities granted the right of first offer pursuant to Section 2.3 of the Rights Agreement, hereby agree to waive such right of first offer and any notice requirement contained therein with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.14 Treatment of Notes. The Company and each Investor agree to: (a) treat the Notes as equity for U.S. federal, state and local tax purposes within the meaning of Internal Revenue Code Section 385(c); and (b) not take any position inconsistent with such treatment for purposes of tax or information returns filed with the Internal Revenue Service or any other relevant taxing authority. Notwithstanding the foregoing, the Company makes no assurances that it will complete a Next Financing or a Non-Qualified Financing.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Biotechnology Development Fund IV, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

Biotechnology Development Fund IV Affiliates, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

BDF IV Annex Fund, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Vivo Ventures Fund V, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Mario Family Partners LP

By: /s/ Christopher B. Mario
Name: Christopher B. Mario
Title: General Partner of Mario Family Partners LP

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ John J. Mack

John J. Mack

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

The Robert K. Steel Blind Trust B

By: /s/ James I. Black
Name: James I. Black, III
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Triremes 16 LLC

By: Spinnaker Capital 2007 GP LLC
Its: Managing Member

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ron Haak

Ron Haak

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

WS Investment Company, LLC (2011A)

By: /s/ Michael Danaher
Name: Michael Danaher
Title: Member

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: /s/ Clyde D. Wagner
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: /s/ Shifteh Karimi Wagner
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Steinar J. Engelsen
Steinar J. Engelsen

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Hadar Cars AB

By: /s/ Hadar Cars
Name: Hadar Cars
Title: Chairman

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04

By: /s/ Michael Danaher
Name: Michael J. Danaher
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Mario Rosati

Mario Rosati

[Signature Page to Convertible Note and Warrant Purchase Agreement]

EXHIBIT A

Schedule of Investors

Investor	Note Principal Amount	Warrant Purchase Price	Total Purchase Price
Initial Closing: January 17, 2012			
BDF IV Annex Fund, L.P.	$ 6,000.40	$ 0.60	$ 6,001.00
Biotechnology Development Fund IV, L.P.	$ 1,432.86	$ 0.14	$ 1,433.00
Vivo Ventures Fund V, L.P.	$1,193,910.86	$ 119.39	$1,194,030.25
Biotechnology Development Fund IV Affiliates, L.P.	$ 26.00	$ 0.00	$ 26.00
Vivo Ventures Fund Affiliates V, LP	$ 14,011.68	$ 1.40	$ 14,013.08
Mario Family Partners LP	$ 161,116.07	$ 16.11	$ 161,132.18
John J. Mack	$ 160,481.71	$ 16.05	$ 160,497.76
The Robert K. Steel Blind Trust B	$ 160,481.71	$ 16.05	$ 160,497.76
Triremes 16 LLC	$ 160,481.71	$ 16.05	$ 160,497.76
Ron Haak	$ 10,698.68	$ 1.07	$ 10,699.75
Clyde D. Wagner Living Trust dated June 6, 2001	$ 5,349.24	$ 0.53	$ 5,349.77
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 5,349.24	$ 0.53	$ 5,349.77
Steinar J. Engelsen	$ 1,611.69	$ 0.16	$ 1,611.85
Hadar Cars AB	$ 1,611.53	$ 0.16	$ 1,611.69
TOTAL	**$1,882,563.38**	**$ 188.24**	**$1,882,751.62**

Investor	Note Principal Amount	Warrant Purchase Price	Total Purchase Price
First Subsequent Closing: January 20, 2012			
WS Investment Company, LLC (2011A)	$ 9,546.86	$ 0.95	$ 9,547.81
Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04	$ 738.15	$ 0.07	$ 738.22
Mario Rosati	$ 164.08	$ 0.02	$ 164.10
TOTAL	**$ 10,449.09**	**$ 1.04**	**$ 10,450.13**

EXHIBIT B

Form of Convertible Promissory Note

EXHIBIT C

Form of Warrant to Purchase Shares

EXHIBIT D

Form of Security Agreement

EXHIBIT E

Form of Amended and Restated Voting Agreement

Exhibit 10.15

Execution Version

CAPNIA, INC.

OMNIBUS AMENDMENT TO CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT, CONVERTIBLE PROMISSORY NOTES AND WARRANTS TO PURCHASE SHARES

This Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares (this "Amendment") is made and entered into as of July 31, 2012 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303, and the persons and entities who are signatories hereto (the "Investors").

RECITALS

A. WHEREAS, the Company and the Investors are parties to that certain Convertible Promissory Note and Warrant Purchase Agreement, dated as of February 10, 2010, as amended by that certain Amendment No. 1 to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of November 10, 2010, and as further amended by that certain Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares, dated as of January 17, 2012 (as amended, the "2010 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2010 Purchase Agreement (together with all such convertible promissory notes sold and issued pursuant to the 2010 Purchase Agreement, the "2010 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares issued pursuant to the 2010 Purchase Agreement, the "2010 Warrants");

B. WHEREAS, Section 6.1 of the 2010 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2010 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2010 Purchase Agreement, the 2010 Notes and the 2010 Warrants on behalf of all Investors (as defined in the 2010 Purchase Agreement).

C. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2010 Notes, now desire to amend the 2010 Notes and the 2010 Warrants to: (i) extend the Maturity Date of the 2010 Notes to July 31, 2013, such that the 2010 Notes, and the 2012 Notes (as defined below) shall have the same maturity date; (ii) amend the 2010 Notes so that in the event that no Next Financing takes place on or prior to the Maturity Date of the 2010 Notes, the price per share of the Company's Series C Preferred Stock, into which the outstanding principal amount and unpaid interest due under each 2010 Note may be voluntarily converted at the option of each Investor, will be reduced from $1.80 per share to $1.35 per share; (iii) amend the definition of Shares under the 2010 Warrants to reflect the extended Maturity Date of the 2010 Notes; (iv) amend the 2010 Warrants so that in the event the Shares subject to each 2010 Warrant are deemed to be shares of the Series C Preferred Stock, the exercise price for such Shares subject to each 2010 Warrant will be reduced from $1.80 per Share to $1.35 per Share; and (v) make certain other changes.

E. WHEREAS, the Company and the Investors are also parties to that certain Convertible Note and Warrant Purchase Agreement, dated as of January 16, 2012 (the "2012 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2012 Purchase Agreement

(together with all such convertible promissory notes previously sold and issued pursuant to the 2012 Purchase Agreement, the "January 2012 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares previously issued pursuant to the 2012 Purchase Agreement, the "January 2012 Warrants").

F. WHEREAS, Section 6.1 of the 2012 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the January 2012 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2012 Purchase Agreement, the January 2012 Notes and the January 2012 Warrants on behalf of all Investors (as defined in the 2012 Purchase Agreement).

G. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the January 2012 Notes, now desire to amend the 2012 Purchase Agreement, the January 2012 Notes and the January 2012 Warrants to: (i) authorize the Company to sell and issue additional Notes (the "July 2012 Notes," and sometimes together with the January 2012 Notes, the "2012 Notes") under the 2012 Purchase Agreement with an aggregate principal amount of up to $3,300,000, together with related Warrants (the "July 2012 Warrants," and sometimes together with the January 2012 Warrants, the "2012 Warrants"); (ii) extend the Maturity Date of the January 2012 Notes to July 31, 2013, such that the 2010 Notes and the 2012 Notes shall have the same maturity date; (iii) amend the January 2012 Notes so that in the event that no Next Financing takes place on or prior to the Maturity Date of the January 2012 Notes, the price per share of the Series C Preferred Stock, into which the outstanding principal amount and unpaid interest due under each January 2012 Note may be voluntarily converted at the option of each Investor, will be reduced from $1.80 per share to $1.35 per share; (iv) amend the definition of Shares under the January 2012 Warrants to reflect the extended Maturity Date of the January 2012 Notes; (v) amend the January 2012 Warrants so that in the event the Shares subject to each January 2012 Warrant are deemed to be shares of the Series C Preferred Stock, the exercise price for the Shares subject to each 2010 Warrant will be reduced from $1.80 per Share to $1.35 per Share; and (vi) make certain other changes.

H. WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants, as applicable.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Amendments.

1.1 Amendments to 2010 Notes.

(a) The first paragraph of each 2010 Note is hereby amended, restated and replaced in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal, together with any then accrued but

unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after July 31, 2013 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Purchase Agreement."

(b) The first sentence of Section 3(b) of each 2010 Note is hereby amended, restated and replaced in its entirety to read as follows:

"(b) *Voluntary Conversion*. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into: (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.35 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations); or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing."

1.2 Amendments to 2010 Warrants.

(a) Section 1(a) of each 2010 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(a) *Definition of Shares*. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to July 31, 2013 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities' Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

(b) Section 1(c) of each 2010 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(c) *Exercise Price*. The exercise price per Share shall be equal to 75% of the price per share of the Next Securities issued in the Next Financing; provided, however, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.35 per Share, subject to adjustment pursuant hereto (the "Exercise Price")."

1.3 Amendments to 2012 Purchase Agreement.

(a) The following section is inserted as new Section 1.5 of the 2012 Purchase Agreement:

"1.5 Extension Closing. Notwithstanding anything to the contrary set forth in Section 1.3 of this Agreement, one (1) or more additional Subsequent Closings may take place following the Final

Closing Date and on or before the date that is thirty (30) days following July 31, 2012 (each, an "Extension Closing" and also, a "Closing"), at which the Company may sell and issue additional Notes with an aggregate principal amount of up to $3,300,000: (a) *first*, to Investors that are purchasing their respective pro rata portions of the Notes to be issued and sold in such Extension Closings (such pro rata portions determined based on the Investors' percentage ownership of the outstanding Preferred Stock of the Company, measured as of the Initial Closing); (b) *second*, to Investors that have previously purchased in full their respective pro rata portions of such Notes to be issued and sold in such Extension Closings, in such proportions as determined by the Company in its sole discretion; and (c) *third*, to such persons or entities as may be mutually agreed upon by the Company and Investors holding greater than fifty percent (50%) of the aggregate outstanding principal amount of all Notes then issued and sold pursuant to this Agreement. The purchase, sale and issuance of the Notes and Warrants at an Extension Closing shall be subject to all terms and conditions of this Agreement."

(b) Section 2 of the 2012 Purchase Agreement is hereby amended, restated and replaced in its entirety to read as follows:

"2. Authorization. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $2,000,000 with respect to the Initial Closing and any Subsequent Closings occurring on or prior to the Final Closing Date. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $3,300,000 with respect to all Extension Closings."

1.4 Schedule of Investors. Exhibit A to the 2012 Purchase Agreement is hereby deleted and replaced in its entirety with Exhibit A to this Amendment.

1.5 Form of Convertible Promissory Note. Exhibit B to the 2012 Purchase Agreement is hereby deleted and replaced in its entirety with Exhibit B to this Amendment.

1.6 Amendments to January 2012 Notes.

(a) The first paragraph of each January 2012 Note is hereby amended, restated and replaced in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with simple interest from the date of this Note on the unpaid principal balance at a rate equal to twelve percent (12%) per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal amount, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after July 31, 2013 (the "Maturity Date") by Holders representing at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (as the same may from time to time be amended, modified or supplemented, the "2012 Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the 2012 Purchase Agreement."

(b) The first sentence of Section 3(b) of each January 2012 Note is hereby amended, restated and replaced in its entirety to read as follows:

"(b) Voluntary Conversion. If no Next Financing takes place on or prior to the Maturity Date, then all or a portion of the outstanding principal amount of this Note and all accrued and unpaid interest under this Note shall be convertible at the option of the Holder at any time after the Maturity Date into: (i) that number of shares of the Company's Series C Preferred Stock at a price of $1.35 per share (as adjusted to reflect subsequent stock dividends, stock splits, combinations or recapitalizations); or (ii) that number of shares of the equity securities issued by the Company in a Non-Qualified Financing at a price per share equal to 75% of the price per share paid by the other purchasers of the equity securities sold in the Non-Qualified Financing."

1.7 Amendments to January 2012 Warrants.

(a) Section 1(a) of each January 2012 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(a) Definition of Shares. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to July 31, 2013 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

(b) Section 1(c) of each January 2012 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(c) Exercise Price. The exercise price per Share shall be equal to seventy-five percent (75%) of the price per share of the Next Financing Securities issued in the Next Financing; provided, however, that if the Shares subject to this Warrant are deemed to be the Company's Series C Preferred Stock in accordance with Section 1(a), the exercise price for the Shares subject to this Warrant shall be $1.35 per Share, subject to adjustment pursuant hereto (the "Exercise Price").

1.8 Form of Warrant to Purchase Shares. Exhibit C to the 2012 Purchase Agreement is hereby deleted and replaced in its entirety with Exhibit C to this Amendment.

2. Miscellaneous.

2.1 Waivers and Amendments. This Amendment nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of at least two-thirds in interest of the Notes issued pursuant to the Agreement may, with the Company's prior written consent, waive, modify or amend any provisions hereof on behalf of all Investors.

2.2 Governing Law. This Amendment shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. This Amendment (including the exhibits attached hereto and the other documents delivered pursuant hereto) and, to the extent not amended hereby, the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants and the exhibits attached thereto and the other documents delivered pursuant thereto, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Legal Effect. This Amendment shall constitute an integral part of the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants. Except as set forth in this Amendment, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants shall continue in full force and effect in accordance with their respective terms.

2.6 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one (1) and the same instrument.

2.7 Facsimile; Execution and Delivery. A facsimile or other reproduction of this Amendment may be executed by one (1) or more parties hereto and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes. At the request of any party hereto, all parties hereto agree to execute and deliver an original of this Amendment as well as any facsimile, telecopy or other reproduction hereof.

2.8 Waiver of Anti-Dilution Adjustment. The undersigned Investors who are the holders of the requisite outstanding shares of Preferred Stock, on behalf of themselves and all other holders of Preferred Stock, hereby waive any price-based anti-dilution adjustment under Article V, Section 3(D) of the Restated Certificate with respect to the Company's sale and issuance of the Securities pursuant to the 2012 Purchase Agreement, as amended by this Amendment.

2.9 Waiver of Right of First Refusal. Pursuant to Section 4.2 of the Rights Agreement, the undersigned Investors, who are the holders of at least two-thirds (2/3) of the Registrable Securities (as defined in the Rights Agreement), on behalf of themselves and all other holders of Registrable Securities granted the right of first offer pursuant to Section 2.3 of the Rights Agreement, hereby agree to waive such right of first offer and any notice requirement contained therein with respect to the Company's sale and issuance of the Securities pursuant to the 2012 Purchase Agreement, as amended by this Amendment.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President

Address:
2445 Faber Place,
Suite 250
Palo Alto, CA 94303

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Biotechnology Development Fund IV, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

Biotechnology Development Fund IV Affiliates, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

BDF IV Annex Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Vivo Ventures Fund V, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ernest Mario
Ernest Mario

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Mario 2002 Grandchildren's Trust

By: /s/ Ernest Mario
Name: Ernest Mario
Title: Trustee

Mario Family Partners LP

By: /s/ Ernest Mario
Name: Ernest Mario
Title:

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ John J. Mack

John J. Mack

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

The Robert K. Steel Blind Trust B

By: /s/ James I. Black
Name: James I. Black, III
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Triremes 16 LLC

By: Spinnaker Capital 2007 GP LLC
Its: Managing Member

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Shalavi Irrevocable Trust UAD 12/16/99 FBO Alexander Shalavi

By: /s/ John Shalavi
Name: John Shalavi
Title: Trustee

Shalavi Irrevocable Trust UAD 12/16/99 FBO Gina Shalavi

By: /s/ John Shalavi
Name: John Shalavi
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ron Haak

Ron Haak

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: /s/ Clyde D. Wagner
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: /s/ Shifteh Karimi Wagner
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Steinar J. Engelsen

Steinar J. Engelsen

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Hadar Cars AB

By: /s/ Hadar Cars
Name: Hadar Cars
Title: Chairman

[Signature Page to Omnibus Amendment to Convertible Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares]

EXHIBIT A

SCHEDULE OF INVESTORS

Investor	Note Principal Amount	Warrant Purchase Price	Total Purchase Price
Initial Closing: January 17, 2012			
BDF IV Annex Fund, L.P.	$ 6,000.40	$ 0.60	$ 6,001.00
Biotechnology Development Fund IV, L.P.	$ 1,432.86	$ 0.14	$ 1,433.00
Vivo Ventures Fund V, L.P.	$1,193,910.86	$ 119.39	$1,194,030.25
Biotechnology Development Fund IV Affiliates, L.P.	$ 26.00	$ 0.00	$ 26.00
Vivo Ventures Fund Affiliates V, LP	$ 14,011.68	$ 1.40	$ 14,013.08
Mario Family Partners LP	$ 161,116.07	$ 16.11	$ 161,132.18
John J. Mack	$ 160,481.71	$ 16.05	$ 160,497.76
The Robert K. Steel Blind Trust B	$ 160,481.71	$ 16.05	$ 160,497.76
Triremes 16 LLC	$ 160,481.71	$ 16.05	$ 160,497.76
Ron Haak	$ 10,698.68	$ 1.07	$ 10,699.75
Clyde D. Wagner Living Trust dated June 6, 2001	$ 5,349.24	$ 0.53	$ 5,349.77
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 5,349.24	$ 0.53	$ 5,349.77
Steinar J. Engelsen	$ 1,611.69	$ 0.16	$ 1,611.85
Hadar Cars AB	$ 1,611.53	$ 0.16	$ 1,611.69
INITIAL CLOSING TOTALS:	**$1,882,563.38**	**$ 188.24**	**$1,882,751.62**

Investor	Note Principal Amount	Warrant Purchase Price	Total Purchase Price
First Subsequent Closing: January 20, 2012			
WS Investment Company, LLC (2011A)	$ 9,546.86	$ 0.95	$ 9,547.81
Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04	$ 738.15	$ 0.07	$ 738.22
Mario Rosati	$ 164.08	$ 0.02	$ 164.10
FIRST SUBSEQUENT CLOSING TOTALS:	**$ 10,449.09**	**$ 1.04**	**$ 10,450.13**
First Extension Closing: July 31, 2012			
BDF IV Annex Fund, L.P.	$ 9,901.01	$ 0.99	$ 9,902.00
Biotechnology Development Fund IV, L.P.	$ 2,362.76	$ 0.24	$ 2,363.00
Vivo Ventures Fund V, L.P.	$1,969,952.53	$ 197.00	$1,970,149.53
Biotechnology Development Fund IV Affiliates, L.P.	$ 44.00	$ 0.00	$ 44.00
Vivo Ventures V Affiliates Fund, L.P.	$ 23,119.65	$ 2.30	$ 23,121.95
Mario Family Partners LP	$ 265,841.51	$ 26.58	$ 265,868.09
John J. Mack	$ 264,794.83	$ 26.48	$ 264,821.31
The Robert K. Steel Blind Trust B	$ 264,794.83	$ 26.48	$ 264,821.31
Triremes 16 LLC	$ 264,794.83	$ 26.48	$ 264,821.31
Ron Haak	$ 17,652.82	$ 1.77	$ 17,654.59
Steinar J. Engelsen	$ 2,659.28	$ 0.27	$ 2,659.55

Investor	Note Principal Amount	Warrant Purchase Price	Total Purchase Price
Hadar Cars AB	$ 2,659.28	$ 0.27	$ 2,659.55
EXTENSION CLOSING TOTALS:	**$3,088,577.33**	**$ 308.86**	**$3,088,886.19**
Second Extension Closing: August 6, 2012			
Clyde D. Wagner Living Trust dated June 6, 2001	$ 8,826.25	$ 0.88	$ 8,827.13
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 8,826.25	$ 0.88	$ 8,827.13
EXTENSION CLOSING TOTALS:	**$ 17,652.50**	**$ 1.76**	**$ 17,654.26**

EXHIBIT B

FORM OF CONVERTIBLE PROMISSORY NOTE

EXHIBIT C

FORM OF WARRANT TO PURCHASE SHARES

Exhibit 10.16

CAPNIA, INC.

OMNIBUS AMENDMENT TO CONVERTIBLE PROMISSORY NOTES AND WARRANTS TO PURCHASE SHARES

This OMNIBUS AMENDMENT TO CONVERTIBLE PROMISSORY NOTES AND WARRANTS TO PURCHASE SHARES (this "Amendment") is made and entered into as of April 28, 2014 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303, and the persons and entities who are signatories hereto (the "Investors").

RECITALS

A. WHEREAS, the Company and the Investors are parties to that certain Convertible Promissory Note and Warrant Purchase Agreement, dated as of February 10, 2010, as amended by that certain Amendment No. 1 to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of November 10, 2010, as further amended by that certain Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares, dated as of January 17, 2012 and as further amended by that certain Omnibus Amendment to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of July 31, 2012 (as amended, the "2010 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2010 Purchase Agreement (together with all such convertible promissory notes sold and issued pursuant to the 2010 Purchase Agreement, the "2010 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares issued pursuant to the 2010 Purchase Agreement, the "2010 Warrants");

B. WHEREAS, Section 6.1 of the 2010 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2010 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2010 Purchase Agreement, the 2010 Notes and the 2010 Warrants on behalf of all Investors (as defined in the 2010 Purchase Agreement).

C. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2010 Notes, now desire to amend the 2010 Notes and the 2010 Warrants to: (i) extend the Maturity Date of the 2010 Notes to September 30, 2015, such that the 2010 Notes, the 2012 Notes (as defined below) and the 2014 Notes (as defined below) shall have the same maturity date; (ii) amend the definition of Shares under the 2010 Warrants to reflect the extended Maturity Date of the 2010 Notes; and (iii) make certain other changes.

E. WHEREAS, the Company and the Investors are also parties to that certain Convertible Note and Warrant Purchase Agreement, dated as of January 16, 2012, as amended by that certain Omnibus Amendment to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of July 31, 2012 (as amended, the "2012 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2012 Purchase Agreement (together with all such convertible promissory notes previously sold and issued pursuant to the 2012 Purchase Agreement, the "2012 Notes"), together with a corresponding warrant to

purchase shares of the Company's capital stock (together with all such warrants to purchase shares previously issued pursuant to the 2012 Purchase Agreement, the "2012 Warrants").

F. WHEREAS, Section 6.1 of the 2012 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2012 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants on behalf of all Investors (as defined in the 2012 Purchase Agreement).

G. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2012 Notes, now desire to amend the 2012 Notes and the 2012 Warrants to: (i) extend the Maturity Date of the 2012 Notes to September 30, 2015, such that the 2010 Notes, the 2012 Notes and the 2014 Notes shall have the same maturity date; (ii) amend the definition of Shares under the 2012 Warrants to reflect the extended Maturity Date of the 2012 Notes; and (iii) make certain other changes.

H. WHEREAS, pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of even date herewith, by and among the Company and the persons and entities listed on the Schedule of Investors attached thereto as Exhibit A (the "2014 Purchase Agreement"), the Company is undertaking the offering and sale of up to $4,000,000 in principal amount of new convertible promissory notes (the "2014 Notes"), together with corresponding warrants to purchase shares of the Company's capital stock, that will be issued pursuant to the 2014 Purchase Agreement.

H. WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants, as applicable.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Amendments.

1.1 Amendments to 2010 Notes. The first paragraph of each 2010 Note is hereby amended, restated and replaced in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with compound interest from the date of this Note on the unpaid principal balance at a rate equal to 12% per annum, compounded on the first day of each month and computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after September 30, 2015 (the "Maturity Date") by Holders representing at least a majority of the principal amount of all then outstanding Notes issued pursuant to that certain Convertible Note and Warrant Purchase Agreement by and among the Company and the Investors described therein, dated as of February 10, 2010, (as the same may from time to time be amended, modified or supplemented, the "Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes"

issued pursuant to the Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings set forth in the Purchase Agreement."

1.2 Amendments to 2010 Warrants. Section 1(a) of each 2010 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(a) *Definition of Shares*. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to September 30, 2015 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities' Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

1.3 Amendments to 2012 Notes. The first paragraph of each 2012 Note is hereby amended, restated and replaced in its entirety to read as follows:

"FOR VALUE RECEIVED CAPNIA, INC., a Delaware corporation (the "Company"), promises to pay to (the "Holder"), or its registered assigns, the principal amount of $, or such lesser amount as shall equal the outstanding principal amount hereof, together with simple interest from the date of this Note on the unpaid principal balance at a rate equal to twelve percent (12%) per annum, computed on the basis of the actual number of days elapsed and a year of 365 days. Two (2) times the unpaid principal amount, together with any then accrued but unpaid interest and any other amounts payable hereunder, shall be due and payable on the earlier of: (i) upon demand made after September 30, 2015 (the "Maturity Date") by Holders representing at least two-thirds (2/3) of the principal amount of all then outstanding Notes issued pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 17, 2012, by and among the Company and the Investors described therein (as the same may from time to time be amended, modified or supplemented, the "2012 Purchase Agreement"); or (ii) when, upon or after the occurrence of an Event of Default (as defined below), such amounts are declared due and payable by the Holder or made automatically due and payable in accordance with the terms of this Note. This Note is one of the "Notes" issued pursuant to the 2012 Purchase Agreement. Capitalized terms not otherwise defined herein shall have the meanings ascribed to such terms in the 2012 Purchase Agreement."

1.4 Amendments to 2012 Warrants. Section 1(a) of each 2012 Warrant is hereby amended, restated and replaced in its entirety to read as follows:

"(a) Definition of Shares. "Shares" shall mean Next Financing Securities in the event that a Next Financing occurs prior to September 30, 2015 (the "Note Maturity Date") and the Holder converts the Note issued to the Holder into Next Financing Securities. In the event that a Next Financing has not occurred before the Note Maturity Date, "Shares" shall mean either the Company's Series C Preferred Stock or Next Financing Securities, whichever such securities Original Issue Price (as such term is defined in the Company's Amended and Restated Certificate of Incorporation) is lower."

2. Miscellaneous.

2.1 Waivers and Amendments. This Amendment nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of: (i) at least two-thirds (2/3) in interest of the 2010 Notes issued pursuant to the 2010 Purchase Agreement; and (ii) at least two-thirds (2/3) in interest of the 2012 Notes issued

pursuant to the 2012 Purchase Agreement, may, with the Company's prior written consent, waive, modify or amend any provisions hereof on behalf of all Investors.

2.2 Governing Law. This Amendment shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California, but without regard to the principles of conflicts of laws of California, or any other state.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. This Amendment (including the exhibits attached hereto and the other documents delivered pursuant hereto) and, to the extent not amended hereby, the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants and the exhibits attached thereto and the other documents delivered pursuant thereto, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Legal Effect. This Amendment shall constitute an integral part of the 2010 Notes, the 2010 Warrants, the 2012 Notes and the 2012 Warrants. Except as set forth in this Amendment, the 2010 Notes, the 2010 Warrants, the 2012 Notes and the 2012 Warrants shall continue in full force and effect in accordance with their respective terms.

2.6 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one (1) and the same instrument.

2.7 Facsimile; Execution and Delivery. A facsimile or other reproduction of this Amendment may be executed by one (1) or more parties hereto and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all purposes. At the request of any party hereto, all parties hereto agree to execute and deliver an original of this Amendment as well as any facsimile, telecopy or other reproduction hereof.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Biotechnology Development Fund IV, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

Biotechnology Development Fund IV Affiliates, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

BDF IV Annex Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Vivo Ventures Fund V, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ernest Mario
Ernest Mario

Mario 2002 Grandchildren's Trust

By: /s/ Christopher B. Mario
Name: Christopher B. Mario
Title: Trustee

Mario Family Partners LP

By: /s/ Christopher B. Mario
Name: Christopher B. Mario
Title: General Partner of Mario Family Partners LP

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ John J. Mack

John J. Mack

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Robert K. Steel

Robert K. Steel

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Triremes 16 LLC

By: Spinnaker Capital 2007 GP LLC
Its: Managing Member

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ A. Morris Williams, Jr.
A. Morris Williams, Jr.

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ron Haak

Ron Haak

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: /s/ Clyde D. Wagner
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: /s/ Shifteh Karimi Wagner
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Steinar J. Engelsen
Steinar J. Engelsen

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Hadar Cars AB

By: /s/ Hadar Cars
Name: Hadar Cars
Title: Chairman

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04

By: /s/ Michael J. Danaher
Name: Michael J. Danaher
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Mario Rosati
Mario Rosati

[Signature Page to Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares]

Exhibit 10.17

CAPNIA, INC.

CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT

This CONVERTIBLE NOTE AND WARRANT PURCHASE AGREEMENT (this "Agreement") is made and entered into as of April 28, 2014 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303, and the persons and entities listed on the schedule of investors attached hereto as Exhibit A (each, an "Investor" and collectively, the "Investors").

RECITALS

WHEREAS, on the terms and subject to the conditions set forth herein, each Investor is willing to purchase from the Company, and the Company is willing to sell to such Investor, convertible promissory notes in the principal amount set forth opposite such Investor's name on the schedule of investors attached hereto as Exhibit A (the "Schedule of Investors"), together with corresponding warrants to acquire shares of the Company's capital stock. Such amounts shall be funded by the Investors in two (2) tranches as follows: (i) up to $2,800,000 in principal amount of Notes (as defined below) shall be sold and issued in a first tranche (the "First Tranche"); and (ii) up to $1,200,000 in principal amount of Notes shall be sold and issued in a second tranche (the "Second Tranche"); and

WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings set forth in the form of Note (as defined below).

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Issuance of Convertible Promissory Notes and Warrants to Purchase Stock.

1.1 Convertible Promissory Notes. Subject to all of the terms and conditions of this Agreement, each Investor, severally and not jointly, agrees, to lend to the Company the sum set forth on Exhibit A opposite such Investor's name (individually, a "Loan," and collectively, the "Loans") as follows: (i) at the First Tranche Initial Closing or any First Tranche Subsequent Closing (each as defined below), a Loan in the principal amount equal to the amount set forth opposite such Investor's name on the Schedule of Investors under the column labeled "First Tranche Note Principal Amount;" and (ii) at the Second Tranche Initial Closing or any Second Tranche Subsequent Closing (each as defined below), a Loan in the principal amount equal to the amount set forth opposite such Investor's name on the Schedule of Investors under the column labeled "Second Tranche Note Principal Amount." Each Investor's Loan shall be evidenced by a convertible promissory note, dated as of the date of the applicable Closing (as defined below), in the form of Exhibit B attached hereto (each, a "Note" and collectively, the "Notes").

1.2 Warrant to Purchase Shares. Concurrently with the sale and issuance of the Notes to the Investors in the First Tranche and the Second Tranche, the Company will issue to each Investor a warrant, in the form attached hereto as Exhibit C (each, a "Warrant" and collectively, the "Warrants") to purchase up to

that number of shares of Preferred Stock ("Preferred Stock") as set forth in the Warrant, for a purchase price equal to $0.001 times the principal amount of the corresponding Note.

1.3 Place and Date of Closing. Subject to the terms and conditions hereof, the purchase, sale and issuance of the Notes and the Warrants (collectively, the "Securities") shall take place shall take place at two (2) or more closings (each of which is referred to in this Agreement as a "Closing") as follows:

(a) First Tranche.

(i) First Tranche Initial Closing. The sale and issuance of the Notes and Warrants in the First Tranche shall take place at an initial Closing (the "First Tranche Initial Closing") that will be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Rd., Palo Alto, California 94304, at 3:00 p.m. local time on the Effective Date, or at such other time and place as the parties shall mutually agree (the "First Tranche Initial Closing Date"). At the First Tranche Initial Closing, the Company may sell and issue up to $2,800,000 in principal amount of Notes (the "First Tranche Note Principal Amount"), together with corresponding Warrants, to the Investors.

(ii) First Tranche Subsequent Closings. In the event the Investors do not purchase Notes representing the full First Tranche Note Principal Amount at the First Tranche Initial Closing, then, subject to the terms and conditions hereof, the Company may sell and issue at one (1) or more subsequent Closings (each, a "First Tranche Subsequent Closing"), at such time(s) and place(s) as determined by the Company, in its sole discretion (a "First Tranche Subsequent Closing Date"), up to the balance of the unissued Notes in the First Tranche either to: (A) Investors that are purchasing their respective pro rata portions of the Notes (such pro rata portions determined based on the Investors' (and their respective affiliates') percentage ownership of the outstanding shares of capital stock of the Company, measured on as-converted basis as of the First Tranche Initial Closing) (a "Pro Rata Portion") in the First Tranche; (B) Investors that have previously purchased in full their respective Pro Rata Portions of the Notes in the First Tranche, in such proportions as determined by the Company in its sole discretion; or (C) such persons or entities as may be mutually agreed upon by the Company and Investors holding more than fifty percent (50%) of the aggregate outstanding principal amount of the Notes sold and issued in the First Tranche. The Company may conduct such First Tranche Subsequent Closings until the earlier to occur of: (1) the date that is thirty (30) days following the First Tranche Initial Closing; or (2) such time as Notes representing the full First Tranche Note Principal Amount have become subscribed for, and purchased by, the Investors.

(b) Second Tranche.

(i) Second Tranche Initial Closing. The sale and issuance of the Notes and Warrants in the Second Tranche shall take place at an initial Closing (the "Second Tranche Initial Closing") that will be held at the offices of Wilson Sonsini Goodrich & Rosati, 650 Page Mill Rd., Palo Alto, California 94304, at 3:00 p.m. local time on the on the date that is five (5) business days following: (A) the affirmative election by the Company to draw down on the Second Tranche; and (B) the delivery by the Company to the Investors of written notice thereof (the "Second Tranche Closing Notice"), or at such other time and place as the parties shall mutually agree, following delivery by the Company to the Investors of the Second Tranche Closing Notice (the "Second Tranche Initial Closing Date"). At the Second Tranche Initial Closing, the Company may sell and issue up to $1,200,000 in principal amount of Notes (the "Second Tranche Note Principal Amount"), together with corresponding Warrants, to the Investors.

(ii) Second Tranche Subsequent Closings. In the event the Investors do not purchase Notes representing the full Second Tranche Note Principal Amount at the Second Tranche Initial Closing, then, subject to the terms and conditions hereof, the Company may sell and issue at one (1) or more

subsequent Closings (each, a "Second Tranche Subsequent Closing"), at such time(s) and place(s) as determined by the Company, in its sole discretion (a "Second Tranche Subsequent Closing Date"), up to the balance of the unissued Notes in the Second Tranche either to: (A) Investors that are purchasing their respective Pro Rata Portions of the Notes in the Second Tranche; (B) Investors that have previously purchased in full their respective Pro Rata Portions of the Notes in the Second Tranche, in such proportions as determined by the Company in its sole discretion; or (C) such persons or entities as may be mutually agreed upon by the Company and Investors holding more than fifty percent (50%) of the aggregate outstanding principal amount of the Notes sold and issued in the Second Tranche. The Company may conduct such Second Tranche Subsequent Closings until the earlier to occur of: (1) the date that is thirty (30) days following the Second Tranche Initial Closing; (2) such time as Notes representing the full Second Tranche Note Principal Amount have become subscribed for, and purchased by, the Investors; and (3) fifteen (15) calendar days prior to the consummation of the Company's Contemplated IPO.

1.4 General. Each of the First Tranche Initial Closing, each First Tranche Subsequent Closing, the Second Tranche Initial Closing and each Second Tranche Subsequent Closing conducted shall be referred to herein as a "Closing," and each of the First Tranche Initial Closing Date, each First Tranche Subsequent Closing Date, the Second Tranche Initial Closing Date and each Second Tranche Subsequent Closing Date, shall be referred to herein as a "Closing Date." Should any such sales of Notes be made by the Company at a First Tranche Subsequent Closing or a Second Tranche Subsequent Closing, as the case may be, then the Company shall prepare and distribute to the Investors, either before or after any such First Tranche Subsequent Closing Date or Second Tranche Subsequent Closing Date, as the case may be, a revised Schedule of Investors. Unless already a party to this Agreement, each subsequent Investor that purchases Notes at a First Tranche Subsequent Closing Date or Second Tranche Subsequent Closing Date, as the case may be shall become a party to this Agreement.

1.5 Delivery. At each Closing, the Company will deliver to each applicable Investor a Note and Warrant to be purchased by such Investor, against receipt by the Company of the corresponding purchase price set forth on the Schedule of Investors (the "Purchase Price"). At each Closing, each applicable Investor shall deliver to the Company the Purchase Price in respect of the Note and Warrant being purchased by such Investor, as set forth on the Schedule of Investors.

2. Authorization. The Company has authorized the sale and issuance of Notes with an aggregate principal amount of up to $4,000,000.

3. Representations and Warranties of the Company. The Company represents and warrants to the Investors as follows:

3.1 Organization; Good Standing; Qualification. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware. The Company is duly qualified and is authorized to transact business and is in good standing as a foreign corporation in the State of California and each jurisdiction in which the failure to so qualify would have a material adverse effect on the Company's business, properties or financial condition.

3.2 Corporate Power. The Company has all requisite legal and corporate power and authority: (a) to own and operate its properties and assets and to carry on its business as presently conducted and as contemplated to be conducted in the future; (b) to execute and deliver this Agreement; (c) to sell and issue the Securities, and (d) to carry out and perform the terms and conditions of this Agreement.

3.3 Authorization. All corporate action on the part of the Company, its officers, directors and stockholders necessary for the authorization, execution, delivery of this Agreement, the performance of

all obligations of the Company hereunder, and the authorization, issuance, sale and delivery of the Securities has been taken or will be taken prior to the First Tranche Initial Closing. This Agreement, when executed and delivered by the Company, will constitute a valid and binding obligation of the Company, enforceable in accordance with its terms, except as: (i) limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally; and (ii) limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies. The Securities, when issued in compliance with the provisions of this Agreement, will be validly issued, fully paid and nonassessable and will be free of any liens or encumbrances, other than any liens or encumbrances created by: (a) the holders of outstanding convertible promissory notes (the "2010 Notes") previously issued by the Company pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of February 10, 2010, by and among the Company and the persons and entities listed on the schedule of investors attached thereto as Exhibit A, as amended to date (the "2010 Purchase Agreement"); and (b) the holders of outstanding convertible promissory notes (the "2012 Notes") previously issued by the Company pursuant to the Convertible Note and Warrant Purchase Agreement, dated as of January 26, 2012, by and among the Company and the persons and entities listed on the schedule of investors attached thereto as Exhibit A, as amended to date (the "2012 Purchase Agreement"); *provided*, *however*, that the Securities may be subject to restrictions on transfer under state and/or federal securities laws.

3.4 Capitalization. Immediately prior to the First Tranche Initial Closing Date, the authorized capital of the Company consists of: (a) 21,702,428 shares of Preferred Stock, (i) of which 459,375 shares have been designated Series A Preferred Stock, of which 375,000 shares are issued and outstanding, (ii) of which 3,743,053 shares have been designated Series B Preferred Stock, of which 1,429,779 shares are issued and outstanding, and (iii) of which 17,500,000 shares have been designated Series C Preferred Stock ("Series C Preferred Stock"), of which 8,580,616 shares are issued and outstanding; and (ii) 29,500,000 shares of Common Stock ("Common Stock"), of which 6,428,716 shares are issued and outstanding. Except for: (A) the conversion privileges of the Preferred Stock; (B) the conversion privileges of the 2010 Notes; (C) the conversion privileges of the 2012 Notes; (D) warrants exercisable for the purchase of shares of the Company's capital stock, which warrants were issued pursuant to the 2010 Purchase Agreement; (E) warrants exercisable for the purchase of shares of the Company's capital stock, which warrants were issued pursuant to the 2012 Purchase Agreement; (F) options exercisable for the purchase of up to 51,875 shares of Common Stock; (G) the Company's 1999 Incentive Stock Plan, as amended (the "1999 Plan") (as described below); (H) the Company's 2010 Equity Incentive Plan (the "2010 Plan") (as described below); and (I) the rights as set forth in the Amended and Restated Investor Rights Agreement, dated as of March 20, 2008, by and among the Company and certain of the Company's stockholders (the "Rights Agreement"), there are no outstanding options, warrants, or rights (including conversion or preemptive rights) for the purchase or acquisition from the Company of any of its securities. The Company: (x) has reserved 2,231,962 shares of Common Stock for issuance pursuant to the 1999 Plan, of which 1,850,020 shares are subject to outstanding stock options or stock purchase rights, no shares remain available for future grant, and 381,942 shares have been issued upon exercise of stock options or stock purchase rights; and (y) has reserved 2,523,362 shares of Common Stock for issuance pursuant to the 2010 Plan, of which 989,230 shares have are subject to outstanding stock options or stock purchase rights, 1,534,132 shares remain available for future grant, and no shares have been issued upon exercise of stock options or stock purchase rights.

3.5 Compliance with Other Instruments. The Company is not in violation or default of any provision of its Amended and Restated Certificate of Incorporation (the "Restated Certificate") or Bylaws (the "Bylaws") (each as amended to date) or in any material respect of any provision of any mortgage, indenture, agreement, instrument or contract to which it is a party or by which it is bound or, to the best of the Company's knowledge, of any federal or state judgment, order, writ, decree, statute, rule or regulation applicable to the Company. The execution, delivery and performance by the Company of this Agreement, and the consummation of the transactions contemplated hereby, will not result in any such violation or be in

material conflict with or constitute, with or without the passage of time or giving of notice, either a material default under any such provision or an event that results in the creation of any material lien, charge or encumbrance upon any assets of the Company or the suspension, revocation, impairment, forfeiture or nonrenewal of any material permit, license, authorization or approval applicable to the Company, its business or operations or any of its assets or properties.

3.6 Governmental Consent, etc. No consent, approval, qualification, order or authorization of, or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the Company's execution, delivery or performance of this Agreement, the offer, sale or issuance of the Securities, except for: (a) such filings as have been made prior to the Closing, except any notices of sale required to be filed with the Securities and Exchange Commission under Regulation D of the Securities Act of 1933, as amended (the "Securities Act"); or (b) such post-Closing filings as may be required under applicable state securities laws, which will be timely filed within the applicable periods therefor.

3.7 Offering. Subject in part to the truth and accuracy of the Investors' representations set forth in Section 4, the offer, sale and issuance of the Securities as contemplated by this Agreement are exempt from the registration requirements of Section 5 of the Securities Act, and all applicable state securities laws, and neither the Company nor any authorized agent acting on its behalf will take any action hereafter that would cause the loss of such exemption.

3.8 Litigation. There is no action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened against the Company that might result, either individually or in the aggregate, in any material adverse change in the Company's business, properties or financial condition, or in any change in the current equity ownership of the Company, nor, to the Company's knowledge, is there any reasonable basis therefor. The foregoing includes, without limitation, any action, suit, proceeding or investigation pending or, to the Company's knowledge, currently threatened involving the prior employment of any of the Company's employees, their use in connection with the Company's business of any information or techniques allegedly proprietary to any of their former employers or their obligations under any agreement with their former employers. The Company is not a party to or, to the Company's knowledge, named in or subject to any order, writ, injunction, judgment or decree of any court, government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or that the Company currently intends to initiate.

3.9 Brokers or Finders; Other Offers. The Company has not incurred, and will not incur, directly or indirectly, as a result of any action taken by the Company, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

3.10 No "Bad Actor" Disqualification. The Company has exercised reasonable care, in accordance with Securities and Exchange Commission rules and guidance, to determine whether any Covered Person (as defined below) is subject to any of the "bad actor" disqualifications described in Rule 506(d)(1)(i) through (viii) under the Securities Act ("Disqualification Events"). To the Company's knowledge, no Covered Person is subject to a Disqualification Event, except for a Disqualification Event covered by Rule 506(d)(2) or 506(d)(3) under the Securities Act. The Company has complied, to the extent applicable, with any disclosure obligations under Rule 506(e) under the Securities Act. "Covered Persons" are those persons specified in Rule 506(d)(1) under the Securities Act, including the Company; any predecessor or affiliate of the Company; any director, executive officer, other officer participating in the offering, general partner or managing member of the Company; any beneficial owner of twenty percent (20%) or more of the Company's outstanding voting equity securities, calculated on the basis of voting power; any promoter (as defined in Rule

405 under the Securities Act) connected with the Company in any capacity at the time of the sale of the Notes and the Warrants; and any person that has been or will be paid (directly or indirectly) remuneration for solicitation of purchasers in connection with the sale of the Notes and the Warrants (a "Solicitor"), any general partner or managing member of any Solicitor, and any director, executive officer or other officer participating in the offering of any Solicitor or general partner or managing member of any Solicitor.

3.11 Disclosure. Neither this Agreement nor any other written statements or certificates made or delivered in connection herewith, when taken as a whole, contains any untrue statement of a material fact or omits to state a material fact necessary to make the statements contained herein or therein not misleading in light of the circumstances under which they were made.

4. Representations and Warranties of the Investors. Each Investor hereby represents and warrants, severally and not jointly, and only with respect to such Investor, to the Company with respect to such Investor's purchase of the Securities, as follows:

4.1 Power; Authorization. Such Investor has all requisite power and authority to execute and deliver this Agreement. This Agreement, when executed and delivered by such Investor, will constitute a valid and legally binding obligation of such Investor, enforceable in accordance with its respective terms, except as: (a) limited by applicable bankruptcy, insolvency, reorganization, moratorium and other laws of general application affecting enforcement of creditors' rights generally; and (b) limited by laws relating to the availability of specific performance, injunctive relief or other equitable remedies.

4.2 Purchase Entirely for Own Account. This Agreement is made with such Investor in reliance upon such Investor's representation to the Company, which by such Investor's execution of this Agreement such Investor hereby confirms, that the Securities will be acquired for investment for such Investor's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof.

4.3 Reliance upon Investor's Representations. Such Investor understands that the Securities are not registered under the Securities Act on the ground that the sale provided for in this Agreement and the issuance of the Securities hereunder is exempt from registration under the Securities Act pursuant to Section 4(2) thereof, and that the Company's reliance on such exemption is predicated on the Investors' representations set forth herein.

4.4 Disclosure of Information. Such Investor believes it has received all the information such Investor considers necessary or appropriate for deciding whether to purchase the Securities. Such Investor has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Securities and the Company's business, properties, prospects and financial condition and to obtain additional information necessary to verify the accuracy of any information furnished to such Investor or to which such Investor had access. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 3 or the right of such Investor to rely thereon.

4.5 Investment Experience; Economic Risk. Such Investor understands that the Company has a limited financial and operating history and that an investment in the Company involves substantial risks. Such Investor represents to the Company that except as otherwise disclosed to the Company, in writing, prior to such Investor's execution of this Agreement, such Investor is an "accredited investor" (within the meaning of Regulation D, Rule 501(a), promulgated by the Securities and Exchange Commission under the Securities Act) or such Investor is experienced in evaluating and investing in private placement transactions of securities of companies in a similar stage of development to that of the Company

and acknowledges that such Investor is able to fend for himself, herself or itself. Such Investor has such knowledge and experience in financial and business matters that such Investor is capable of evaluating the merits and risks of the investment in the Securities. Such Investor can bear the economic risk of such Investor's investment and is able, without impairing such Investor's financial condition, to hold the Securities for an indefinite period of time and to suffer a complete loss of such Investor's investment. If other than an individual, such Investor also represents that such Investor has not been organized for the purpose of acquiring the Securities.

4.6 Residency. In the case of an Investor who is an individual, the state of such Investor's residency, or, in the case of an Investor that is a corporation, partnership or other entity, the state of such Investor's principal place of business, is correctly set forth on the Schedule of Investors.

4.7 Restricted Securities. Such Investor understands that the Securities are characterized as "restricted securities" under the federal securities laws inasmuch as they are being acquired from the Company in a transaction not involving a public offering and that under such federal securities laws and applicable regulations such Securities may be resold without registration under the Securities Act only in certain limited circumstances. In connection therewith, such Investor represents that it is aware of the provisions of Rule 144 promulgated under the Securities Act which permit limited resale of shares purchased in a private placement subject to the satisfaction of certain conditions, including, among other things, the existence of a public market for the shares, the availability of certain current public information about the Company, the resale occurring not less than one (1) year after a party has purchased and paid for the security to be sold, the sale being effected through a "broker's transaction" or in transactions directly with a "market maker" and the number of shares being sold during any three (3)-month period not exceeding specified limitations, each as applicable.

4.8 Brokers or Finders. The Company has not, and will not, incur, directly or indirectly, as a result of any action taken by such Investor, any liability for brokerage or finders' fees or agents' commissions or any similar charges in connection with this Agreement.

4.9 No "Bad Actor" Disqualification Events. Neither: (a) such Investor; (b) any of its directors, executive officers, other officers that may serve as a director or officer of any company in which it invests, general partners or managing members; nor (c) any beneficial owner of any of the Company's voting equity securities (in accordance with Rule 506(d) of the Securities Act) held by such Investor is subject to any Disqualification Event, except for Disqualification Events covered by Rule 506(d)(2) or 506(d)(3) under the Securities Act and disclosed reasonably in advance of the Closing in writing in reasonable detail to the Company.

4.10 Investment Representations, Warranties and Covenants by Non-United States Persons. If such Investor is not a U.S. person (as defined in Regulation S promulgated under the Securities Act ("Regulation S")) or is deemed not to be a U.S. person under Rule 902(k)(2) of the Securities Act, such Investor has been advised and acknowledges that: (a) in issuing and selling the Securities to such Investor pursuant to this Agreement, the Company is relying upon the "safe harbor" provided by Regulation S and/or on Section 4(2) under the Securities Act; (b) it is a condition to the availability of the Regulation S "safe harbor" that the Securities not be offered or sold in the United States or to a U.S. person until the expiration of a one (1)-year "distribution compliance period" (or a six (6)-month "distribution compliance period," if the issuer is a "reporting issuer," as defined in Regulation S) following the Closing Date; (c) notwithstanding the foregoing, prior to the expiration of the one (1)-year "distribution compliance period" (or six (6)-month "distribution compliance period," if the issuer is a "reporting issuer," as defined in Regulation S) after the Closing (the "Restricted Period"), the Securities may be offered and sold by the holder thereof only if such

offer and sale is made in compliance with the terms of this Agreement and either: (i) if the offer or sale is within the United States or to or for the account of a U.S. person (as such terms are defined in Regulation S), the securities are offered and sold pursuant to an effective registration statement or pursuant to Rule 144 under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act, or (ii) the offer and sale is outside the United States and to other than a U.S. person, and (d) until the expiration of the Restricted Period, such Investor, its agents or its representatives have not and will not solicit offers to buy, offer for sale or sell any of the Securities, or any beneficial interest therein in the United States or to or for the account of a U.S. person, unless pursuant to an effective registration statement or pursuant to Rule 144 under the Securities Act or pursuant to an exemption from the registration requirements of the Securities Act.

4.11 Representations by Non-United States Persons. If such Investor is not a U.S. person, such Investor is satisfied as to the full observance of the laws of the Investor's jurisdiction in connection with any offer to acquire the Securities or any use of the Agreement, including: (a) the legal requirements within such Investor's jurisdiction for the purchase of the Securities; (b) any foreign exchange restrictions applicable to such purchase; (c) any governmental or other consents that may need to be obtained; and (d) the income tax and other tax consequences, if any, that may be relevant to the purchase, holding, redemption, sale or transfer of such Securities. Such Investor's subscription and payment for, and the Investor's continued beneficial ownership of, the Securities will not violate any applicable securities or other laws of the Investor's jurisdiction.

4.12 Market Standoff. Such Investor agrees that it will not, without the prior written consent of the managing underwriter, during the period commencing on the date of the final prospectus relating to the Company's initial public offering or first secondary public offering, as applicable, and ending on the date specified by the Company and the managing underwriter (such period not to initially exceed one hundred eighty (l80) calendar days and as may be extended for up to two (2) additional 17-day periods) (the "Lock-Up Period"): (a) lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, or otherwise transfer or dispose of, directly or indirectly, any securities of the Company, including, without limitation, shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired); or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of any securities of the Company, including, without limitation, shares of Common Stock or any securities convertible into or exercisable or exchangeable for Common Stock (whether now owned or hereafter acquired), whether any such transaction described in clause (a) or (b) above is to be settled by delivery of securities, in cash or otherwise; *provided* that all officers and directors of the Company and holders of at least one percent (1%) of the Company's voting securities are bound by and have entered into similar agreements. The foregoing covenants shall apply to the Company's initial public offering of equity securities and to the Company's first secondary public offering of equity securities, but it shall not apply to the sale of any shares by an Investor to an underwriter pursuant to an underwriting agreement. Such Investor agrees to execute an agreement(s) reflecting any transaction described in clauses (a) and (b) above as may be requested by the managing underwriters at the time of the initial public offering, and further agrees that the Company may impose stop transfer instructions with its transfer agent in order to enforce the covenants set forth in clauses (a) and (b) above. The underwriters in connection with the Company's initial public offering are intended third party beneficiaries of the covenants in this Section 4.12 and shall have the right, power and authority to enforce such covenants as though they were a party hereto. Any release from the Lock-Up Period shall be on a pro rata basis based upon the number of Registrable Securities (as defined in the Rights Agreement) held; *provided*, *however*, that one (1) or more selective releases from the Lock-Up Period not on a pro rata basis may be made with the written consent of the holders of a majority of the Registrable Securities not so released.

5. Conditions to Closing.

5.1 Conditions to Obligations of the Investors. The obligations of each Investor to purchase Securities hereunder are subject to the fulfillment on or before the Initial Closing Date of each of the following conditions, the waiver of which shall not be effective against the Investor unless consented to in writing thereto:

(a) Representations and Warranties Correct. The representations and warranties made by the Company in Section 3 shall be true and correct in all material respects as of the Initial Closing, with the same effect as if made on and as of the Initial Closing.

(b) Covenants. All covenants, agreements and conditions contained in this Agreement to be performed by the Company on or prior to the First Tranche Initial Closing shall have been performed or complied with in all material respects.

(c) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(d) Proceedings and Documents. All corporate and other proceedings in connection with the transactions contemplated hereby and all documents and instruments incident to such transactions shall be reasonably satisfactory in substance and form to the Investor.

(e) Transaction Documents. The Company shall have duly executed and delivered to the Investors the following documents this Agreement.

5.2 Conditions to Obligations of the Company. The obligations of the Company to each Investor under this Agreement are subject to fulfillment on or before the Closing of each of the following conditions by that Investor:

(a) Representations. The representations made by the Investors in Section 4 shall be true and correct when made, and shall be true and correct on the Closing.

(b) Blue Sky. The Company shall have obtained all necessary blue sky law permits and qualifications, or have the availability of exemptions therefrom, required by any state for the offer and sale of the Securities.

(c) Transaction Documents. Each Investor shall have duly executed and delivered to the Company this Agreement.

6. Miscellaneous.

6.1 Waivers and Amendments. Except as expressly provided herein, neither this Agreement, the Notes, the Warrants, the Security Agreement nor any term hereof or thereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; *provided*, *however*, that the holders of at least two-thirds (2/3) in interest of the Notes may, with the Company's prior written consent, waive, modify or amend any provisions hereof and thereof on behalf of all Investors. SUBJECT TO THE FOREGOING LIMITATIONS, EACH INVESTOR ACKNOWLEDGES THAT BY THE OPERATION OF THIS SECTION 6.1 THE HOLDERS OF AT LEAST TWO-THIRDS (2/3) IN INTEREST OF THE NOTES

WILL HAVE THE RIGHT AND POWER TO DIMINISH OR ELIMINATE ALL RIGHTS OF ALL INVESTORS UNDER THIS AGREEMENT, THE NOTES, THE WARRANTS, AND THE SECURITY AGREEMENT.

6.2 Governing Law. This Agreement and all actions arising out of or in connection with this Agreement shall be governed by and construed in accordance with the laws of the State of California, without regard to the conflicts of law provisions of the State of California or of any other state.

6.3 Survival. The representations, warranties, covenants and agreements made herein shall survive any investigation made by any Investor and the Closing of the transactions contemplated hereby.

6.4 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

6.5 Entire Agreement. This Agreement (including the exhibits attached hereto) and the other documents delivered pursuant hereto constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

6.6 Notices, etc. All notices and other communications required or permitted under this Agreement shall be in writing and shall be delivered personally by hand or by courier, mailed by United States first-class mail, postage prepaid, sent by facsimile or sent by electronic mail directed: (a) if to an Investor, at such Investor's address, facsimile number or electronic mail address set forth on the Schedule of Investors, or at such other address, facsimile number or electronic mail address as such Investor may designate by advance written notice to the Company; or (b) if to the Company, to its address or facsimile number set forth on its signature page to this Agreement and directed to the attention of the President (with a copy (which shall not constitute notice) addressed to Wilson Sonsini Goodrich & Rosati, Attention: Elton Satusky, 650 Page Mill Road, Palo Alto, CA 94304, or delivered via fax at (650) 496-6811) or at such other address or facsimile number as the Company may designate by advance written notice to each Investor. All such notices and other communications shall be deemed given upon personal delivery, on the date of mailing, upon confirmation of facsimile transfer or when directed to the electronic mail address set forth on the Schedule of Investors. With respect to any notice given by the Company under any provision of the Delaware General Corporation Law or the Company's Amended and Restated Certificate of Incorporation or Bylaws, each Investor agrees that such notice may be given by facsimile or by electronic mail.

6.7 Fees and Expenses. Each of the Company and each Investor shall each bear its own expenses incurred on its behalf with respect to this Agreement and the transactions contemplated hereby.

6.8 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one instrument. A facsimile, telecopy or other reproduction of this Agreement may be executed by one or more parties hereto, and an executed copy of this Agreement may be delivered by one or more parties hereto by facsimile or similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen, and such execution and delivery shall be considered valid, binding and effective for all purposes.

6.9 Attorneys' Fees. In the event of any dispute between the parties concerning the terms and provisions of this Agreement, the party prevailing in such dispute shall be entitled to collect from the other party all costs incurred in such dispute, including reasonable attorneys' fees.

6.10 Exculpation Among Investors. Each Investor acknowledges that it is not relying upon any person, firm or corporation, other than the Company and its officers and directors, in making its investment or decision to invest in the Company. Each Investor agrees that no Investor nor the respective controlling persons, officers, directors, partners, agents, or employees of any Investor shall be liable for any action heretofore or hereafter taken or omitted to be taken by any of them in connection with the Securities.

6.11 Separability of Agreements; Severability of this Agreement. The Company's agreement with each of the Investors is a separate agreement and the sale of the Securities to each of the Investors is a separate sale. Unless otherwise expressly provided herein, the rights of each Investor hereunder are several rights, not rights jointly held with any of the other Investors. Any invalidity, illegality or limitation on the enforceability of this Agreement or any part thereof, by any Investor whether arising by reason of the law of the respective Investor's domicile or otherwise, shall in no way affect or impair the validity, legality or enforceability of this Agreement with respect to other Investors. If any provision of this Agreement shall be judicially determined to be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions of this Agreement shall not in any way be affected or impaired thereby.

6.12 Waiver of Anti-Dilution Adjustment. The undersigned Investors who are the holders of the requisite outstanding shares of Preferred Stock, on behalf of themselves and all other holders of Preferred Stock, hereby waive any price-based anti-dilution adjustment under Article V, Section 3(D) of the Restated Certificate with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.13 Waiver of Right of First Refusal. Pursuant to Section 4.2 of the Rights Agreement, the undersigned Investors, who are the holders of at least two-thirds (2/3) of the Registrable Securities (as defined in the Rights Agreement), on behalf of themselves and all other holders of Registrable Securities granted the right of first offer pursuant to Section 2.3 of the Rights Agreement, hereby agree to waive such right of first offer and any notice requirement contained therein with respect to the Company's sale and issuance of the Securities pursuant to this Agreement.

6.14 Treatment of Notes. The Company and each Investor agree to: (a) treat the Notes as equity for U.S. federal, state and local tax purposes within the meaning of Internal Revenue Code Section 385(c); and (b) not take any position inconsistent with such treatment for purposes of tax or information returns filed with the Internal Revenue Service or any other relevant taxing authority. Notwithstanding the foregoing, the Company makes no assurances that it will complete a Next Financing or a Non-Qualified Financing.

6.15 Waiver of Potential Conflicts of Interest. Each of the Investors and the Company acknowledges that Wilson Sonsini Goodrich & Rosati, Professional Corporation ("WSGR"), may have represented and may currently represent certain of the Investors. In the course of such representation, WSGR may have come into possession of confidential information relating to such Investors. Each of the Investors and the Company acknowledges that WSGR is representing only the Company in this transaction. Each of the Investors and the Company understands that an affiliate of WSGR may also be an Investor under this Agreement. Pursuant to Rule 3-310 of the Rules of Professional Conduct promulgated by the State Bar of California, an attorney must avoid representations in which the attorney has or had a relationship with another party interested in the representation without the informed written consent of all parties affected. By executing this Agreement, each of the Investors and the Company hereby waives any actual or potential conflict of interest which may arise as a result of WSGR's representation of such persons and entities, WSGR's possession of such confidential information and the participation by WSGR's affiliate in the

financing. Each of the Investors and the Company represents that it has had the opportunity to consult with independent counsel concerning the giving of this waiver.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Vivo Ventures Fund V, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, LP

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Mario Family Partners LP

By: /s/ Christopher B. Mario
Name: Christopher B. Mario
Title: Manager of Melmotte LLC
General Manager of Mario Family Partners LP

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ John J. Mack

John J. Mack

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Robert K. Steel

Robert K. Steel

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Ithaca Partners LLC

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title:

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ A. Morris Williams, Jr.

A. Morris Williams, Jr.

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Gore Creek LLC

By: /s/ Anastasios Parafestas
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ron Haak

Ron Haak

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

WS Investment Company, LLC (2014A)

/s/ James A. Terranova
James A. Terranova
Director of Fund Operations

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: /s/ Clyde D. Wagner
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: /s/ Shifteh Karimi Wagner
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Steinar J. Engelsen
Steinar J. Engelsen

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Hadar Cars AB

By: /s/ Hadar Cars
Name: Hadar Cars
Title: Chairman

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04

By: /s/ Michael J. Danaher
Name: Michael J. Danaher
Title: Trustee

[Signature Page to Convertible Note and Warrant Purchase Agreement]

IN WITNESS WHEREOF, the parties have caused this Convertible Note and Warrant Purchase Agreement to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Mario Rosati

Mario Rosati

[Signature Page to Convertible Note and Warrant Purchase Agreement]

EXHIBIT A

SCHEDULE OF INVESTORS

Name	First Tranche Note Principal Amount	First Tranche Warrant Purchase Price	Total First Tranche Purchase Price	Second Tranche Note Principal Amount	Second Tranche Warrant Purchase Price	Total Second Tranche Purchase Price
Vivo Ventures Fund V, L.P.	$1,101,509.30	$ 1,101.52	$1,102,610.82	$ 472,075.42	$472.07	$ 472,547.49
Vivo Ventures Fund Affiliates V, LP	$ 12,927.47	$ 12.93	$ 12,940.40	$ 5,540.34	$ 5.54	$ 5,545.88
Mario Family Partners LP	$ 139,320.81	$ 139.32	$ 139,460.13	$ 59,708.92	$ 59.71	$ 59,768.63
John J. Mack	$ 138,633.50	$ 138.77	$ 138,772.27	$ 59,473.83	$ 59.47	$ 59,533.30
Robert K. Steel	$ 138,772.27	$ 138.77	$ 138,911.04	$ 59,473.83	$ 59.47	$ 59,533.30
Ithaca Partners LLC	$ 104,079.20	$ 104.08	$ 104,183.28	$ 44,605.37	$ 44.60	$ 44,649.98
Gore Creek LLC	$ 34,693.07	$ 34.69	$ 34,727.76	$ 14,868.46	$ 14.87	$ 14,883.33
A. Morris Williams, Jr.	$ 46,257.31	$ 46.26	$ 46,303.57	$ 19,824.56	$ 19.82	$ 19,844.38
Ron Haak	$ 9,251.40	$ 9.25	$ 9,260.65	$ 3,964.88	$ 3.96	$ 3,968.84
Clyde D. Wagner Living Trust dated June 6, 2001	$ 4,625.61	$ 4.63	$ 4,630.24	$ 1,982.41	$ 1.98	$ 1,984.39
Shifteh Karimi Wagner Living Trust dated June 6, 2001	$ 4,625.61	$ 4.63	$ 4,630.24	$ 1,982.41	$ 1.98	$ 1,984.39
Steinar J. Engelsen	$ 1,481.09	$ 1.48	$ 1,482.57	$ 634.75	$ 0.63	$ 635.38
Hadar Cars AB	$ 1,481.09	$ 1.48	$ 1,482.57	$ 634.75	$ 0.63	$ 635.38

Name	First Tranche Note Principal Amount	First Tranche Warrant Purchase Price	Total First Tranche Purchase Price	Second Tranche Note Principal Amount	Second Tranche Warrant Purchase Price	Total Second Tranche Purchase Price
WS Investment Company, LLC (2014A)	$ 9,121.34	$ 9.12	$ 9,130.46	$ 3,909.14	$ 3.91	$ 3,913.05
Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04	$ 717.56	$ 0.72	$ 718.28	$ 307.53	$ 0.31	$ 307.84
Mario Rosati	$ 184.68	$ 0.18	$ 184.86	$ 79.15	$ 0.08	$ 79.23
TOTAL	**$1,747,681.31**	**$ 1,747.83**	**$1,749,429.14**	**$ 749,065.75**	**$749.03**	**$ 749,814.79**

EXHIBIT B

FORM OF CONVERTIBLE PROMISSORY NOTE

EXHIBIT C

FORM OF WARRANT TO PURCHASE SHARES

Exhibit 10.18

CAPNIA, INC.

OMNIBUS AMENDMENT TO CONVERTIBLE PROMISSORY NOTES

This OMNIBUS AMENDMENT TO CONVERTIBLE PROMISSORY NOTES (this "Amendment") is made and entered into as of May 5, 2014 (the "Effective Date"), by and among Capnia, Inc., a Delaware corporation (the "Company"), with offices at 2445 Faber Place, Suite 250, Palo Alto, CA 94303, and the persons and entities who are signatories hereto (the "Investors").

RECITALS

A. WHEREAS, the Company is: (i) contemplated completing a firm commitment underwritten initial public offering of units pursuant to the Company's registration statement on Form S-1 filed under the Securities Act on or before September 30, 2015 (the "Contemplated IPO"); and (ii) in connection with the Contemplated IPO, the Company will offer units for sale to the public which shall consist of: (a) one (1) share of the Company's Common Stock; and (b) a warrant to purchase one (1) share of Common Stock.

B. WHEREAS, the Company and the Investors are parties to that certain Convertible Promissory Note and Warrant Purchase Agreement, dated as of February 10, 2010, as amended by that certain Amendment No. 1 to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of November 10, 2010, as further amended by that certain Amendment No. 2 to Convertible Promissory Notes and Warrants to Purchase Shares, dated as of January 17, 2012 and as further amended by that certain Omnibus Amendment to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of July 31, 2012 (as amended, the "2010 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2010 Purchase Agreement (together with all such convertible promissory notes sold and issued pursuant to the 2010 Purchase Agreement, the "2010 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares issued pursuant to the 2010 Purchase Agreement, the "2010 Warrants");

C. WHEREAS, Section 6.1 of the 2010 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2010 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2010 Purchase Agreement, the 2010 Notes and the 2010 Warrants on behalf of all Investors (as defined in the 2010 Purchase Agreement).

D. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2010 Notes, now desire to amend the 2010 Notes to amend the definition of "Next Financing Securities" under the 2010 Notes to clarify and conirm that, to the extent the Contemplated IPO qualifies as a Next Financing upon which the Notes will become convertible into equity securities of the Company, the 2010 Notes will become convertible into shares of Common Stock, with such rights, preferences, privileges and restrictions, contractual or otherwise, as the shares of Common Stock issued by the Company in the Contemplated IPO.

E. WHEREAS, the Company and the Investors are also parties to that certain Convertible Note and Warrant Purchase Agreement, dated as of January 16, 2012, as amended by that certain

Omnibus Amendment to Convertible Promissory Note and Warrant Purchase Agreement, Convertible Promissory Notes and Warrants to Purchase Shares, dated as of July 31, 2012 (as amended, the "2012 Purchase Agreement"), pursuant to which the Company issued and sold to each Investor, a convertible promissory note in the principal amount set forth opposite such Investor's name on Exhibit A to the 2012 Purchase Agreement (together with all such convertible promissory notes previously sold and issued pursuant to the 2012 Purchase Agreement, the "2012 Notes"), together with a corresponding warrant to purchase shares of the Company's capital stock (together with all such warrants to purchase shares previously issued pursuant to the 2012 Purchase Agreement, the "2012 Warrants").

F. WHEREAS, Section 6.1 of the 2012 Purchase Agreement provides that the holders of at least two-thirds (2/3) in interest of the 2012 Notes may, with the Company's prior written consent, waive, modify or amend any provisions of the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants on behalf of all Investors (as defined in the 2012 Purchase Agreement).

G. WHEREAS, the Company and the undersigned Investors, representing the holders of at least two-thirds (2/3) in interest of the 2012 Notes, now desire to amend the 2012 Notes to amend the definition of "Next Financing Securities" under the 2012 Notes to clarify and conirm that, to the extent the Contemplated IPO qualifies as a Next Financing upon which the Notes will become convertible into equity securities of the Company, the 2012 Notes will become convertible into shares of Common Stock, with such rights, preferences, privileges and restrictions, contractual or otherwise, as the shares of Common Stock issued by the Company in the Contemplated IPO.

H. WHEREAS, unless otherwise stated, capitalized terms not otherwise defined herein shall have the respective meanings ascribed to such terms in the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants, as applicable.

AGREEMENT

NOW THEREFORE, in consideration of the foregoing, and the representations, warranties, and conditions set forth below, the parties hereto, intending to be legally bound, hereby agree as follows:

1. Amendments.

1.1 Amendments to 2010 Notes. The definition of "Next Financing Securities" set forth in Section 1(d) each 2010 Note is hereby amended, restated and replaced in its entirety to read as follows:

"(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing; provided, however, that in the event that the Company's completes its contemplated firm commitment underwritten initial public offering of units pursuant to the Company's registration statement on Form S-1 filed under the Securities Act on or before September 30, 2015 (the "Contemplated IPO"), then "Next Financing Securities" will instead be shares of Common Stock issued by the Company with such rights, preferences, privileges and restrictions, contractual or otherwise, as the shares of Common Stock issued by the Company in the Contemplated IPO."

1.2 Amendments to 2012 Notes. The definition of "Next Financing Securities" set forth in Section 1(d) each 2012 Note is hereby amended, restated and replaced in its entirety to read as follows:

"(d) "Next Financing Securities" are the equity securities issued by the Company in the Next Financing with such rights, preferences, privileges and restrictions, contractual or otherwise, as the securities issued by the Company in the Next Financing; provided, however, that in the event that the Company's completes its contemplated firm commitment underwritten initial public offering of units pursuant to the Company's registration statement on Form S-1 filed under the Securities Act on or before September 30, 2015 (the "Contemplated IPO"), then "Next Financing Securities" will instead be shares of Common Stock issued by the Company with such rights, preferences, privileges and restrictions, contractual or otherwise, as the shares of Common Stock issued by the Company in the Contemplated IPO."

2. Miscellaneous.

2.1 Waivers and Amendments. This Amendment nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; provided, however, that the holders of: (i) at least two-thirds (2/3) in interest of the 2010 Notes issued pursuant to the 2010 Purchase Agreement; and (ii) at least two-thirds (2/3) in interest of the 2012 Notes issued pursuant to the 2012 Purchase Agreement, may, with the Company's prior written consent, waive, modify or amend any provisions hereof on behalf of all Investors.

2.2 Governing Law. This Amendment shall be governed in all respects by the laws of the State of California as such laws are applied to agreements between California residents entered into and to be performed entirely within California, but without regard to the principles of conflicts of laws of California, or any other state.

2.3 Successors and Assigns. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors and administrators of the parties hereto.

2.4 Entire Agreement. This Amendment (including the exhibits attached hereto and the other documents delivered pursuant hereto) and, to the extent not amended hereby, the 2010 Purchase Agreement, the 2010 Notes, the 2010 Warrants, the 2012 Purchase Agreement, the 2012 Notes and the 2012 Warrants and the exhibits attached thereto and the other documents delivered pursuant thereto, constitute the full and entire understanding and agreement between the parties with regard to the subjects hereof and thereof.

2.5 Legal Effect. This Amendment shall constitute an integral part of the 2010 Notes, the 2010 Warrants, the 2012 Notes and the 2012 Warrants. Except as set forth in this Amendment, the 2010 Notes, the 2010 Warrants, the 2012 Notes and the 2012 Warrants shall continue in full force and effect in accordance with their respective terms.

2.6 Counterparts. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall be deemed to constitute one (1) and the same instrument.

2.7 Facsimile; Execution and Delivery. A facsimile or other reproduction of this Amendment may be executed by one (1) or more parties hereto and delivered by such party by facsimile or any similar electronic transmission device pursuant to which the signature of or on behalf of such party can be seen. Such execution and delivery shall be considered valid, binding and effective for all

purposes. At the request of any party hereto, all parties hereto agree to execute and deliver an original of this Amendment as well as any facsimile, telecopy or other reproduction hereof.

(Signature Pages Follow)

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

COMPANY:

CAPNIA, INC.

By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

Address:
2445 Faber Place
Suite 250
Palo Alto, CA 94303

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Biotechnology Development Fund IV, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

Biotechnology Development Fund IV Affiliates, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

BDF IV Annex Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments IV, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Vivo Ventures Fund V, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of Vivo Ventures V, LLC,
its General Partner

Vivo Ventures V Affiliates Fund, L.P.

By: /s/ Edgar G. Engleman
Edgar G. Engleman
Managing Member of BioAsia Investments V, LLC,
its General Partner

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

/s/ Ernest Mario
Ernest Mario

Mario 2002 Grandchildren's Trust

By: /s/ Ernest Mario
Name: Ernest Mario
Title: Trustee

Mario Family Partners LP

By: /s/ Ernest Mario
Name: Ernest Mario
Title: Partner

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

John J. Mack

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Robert K. Steel

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Triremes 16 LLC

By: Spinnaker Capital 2007 GP LLC
Its: Managing Member

By: _____
Name: Anastasios Parafestas
Title: Manager

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

A. Morris Williams, Jr.

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

Shalavi Irrevocable Trust UAD 12/16/99 FBO Alexander Shalavi

By: _____
Name: John Shalavi
Title: Trustee

Shalavi Irrevocable Trust UAD 12/16/99 FBO Gina Shalavi

By: _____
Name: John Shalavi
Title: Trustee

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Ron Haak

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTORS:

WS Investment Company, LLC (2010A)

_____

James A. Terranova
Director of Fund Operations

WS Investment Company, LLC (2011A)

_____

James A. Terranova
Director of Fund Operations

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Clyde D. Wagner Living Trust dated June 6, 2001

By: _____
Name: Clyde D. Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Shifteh Karimi Wagner Living Trust dated June 6, 2001

By: _____
Name: Shifteh Karimi Wagner
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Steinar J. Engelsen

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Hadar Cars AB

By: _____
Name: Hadar Cars
Title: Chairman

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Michael Danaher and Carol Danaher, Trustees of the Danaher Family Trust dtd. 6/29/04

By: _____
Name: Michael J. Danaher
Title: Trustee

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

IN WITNESS WHEREOF, the parties have caused this Omnibus Amendment to Convertible Promissory Notes and Warrants to Purchase Shares to be duly executed and delivered by their proper and duly authorized officers as of the Effective Date.

INVESTOR:

Mario Rosati

[Signature Page to Omnibus Amendment to Convertible Promissory Notes]

Exhibit 23.2

Independent Registered Public Accounting Firm's Consent

We consent to the inclusion in this Form S-1 Registration Statement of Capnia, Inc. of our report dated May 7, 2014, which includes an explanatory paragraph as to the Company's ability to continue as a going concern with respect to our audits of the financial statements of Capnia, Inc. as of December 31, 2013 and 2012 and for the years ended December 31, 2013 and 2012 and for the period from August 25, 1999 (inception) to December 31, 2013, which report appears in the Prospectus, which is part of this Registration Statement. We also consent to the reference to our Firm under the heading "Experts" in such Prospectus.

/s/ Marcum LLP

Marcum LLP
New York, NY
June 10, 2014

Exhibit 99.1

June 10, 2014

Anish Bhatnagar
Chief Executive Officer , Capnia, Inc.
3 Twin Dolphin Drive, Suite 160
Redwood City, CA 94065

RE: Consent of Charles River Associates

Dear Dr. Bhatnagar,

Capnia, Inc. ("**Capnia**" or the "**Company**") has requested that Charles River Associates execute this consent in connection with a proposed initial public offering by the Company (the "**Offering**"). In connection with the Offering, the Company plans to file a registration statement on Form S-1 with the Securities and Exchange Commission Exchange Commission, as amended from time to time until it becomes effective (the "**Registration Statement**") *and/or* make presentations to qualified institutional buyers or institutional accredited investors who are potential investors (the "**Presentations**").

This consent serves as confirmation by Charles River Associates to Capnia that Charles River Associates hereby:

1. consents to the use of, and references to, Charles River Associates' name, in connection with Charles River Associates' research data on Serenz entitled "Serenz Opportunity Assessment" dated November 15, 2012 (collectively, the "**Research**"), in the Registration Statement and/or its Presentations; and

2. grants the Company permission to include references to the Research, substantially in the form furnished hereto as **Exhibit A**, as part of the Registration Statement and/or its Presentations.

This consent further confirms that the references from the Registration Statement and/or its Presentations quoted in **Exhibit A** are an accurate depiction of the Research and that Charles River Associates provides its consent to the inclusion of this letter as an exhibit to the Registration Statement. The Company agrees to indemnify Charles River Associates against any and all claims arising from the use of the Research, substantially in the form furnished hereto as **Exhibit A**. Attached hereto on **Exhibit B** is a disclaimer of liability for the benefit of Charles River Associates. In addition, we understand the need for confidentially with respect to Capnia's planned initial public offering, and we agree to not discuss the planned offering with any third parties.

Sincerely,

Charles River Associates
By: /s/ Gregory K. Bell
Name: Gregory K. Bell
Title: Group Vice President, Global Practice Leader – Life Sciences

Agreed and Accepted:
Capnia, Inc.
By: /s/ Anish Bhatnagar
Name: Anish Bhatnagar
Title: President and Chief Executive Officer

EXHIBIT A

Statement in Registration Statement and/or the Presentations

A 2012 survey of 140 AR sufferers in the U.S. and the E.U., conducted on our behalf by Charles River Associates, indicated that approximately 27% would be “highly likely” to try Serenz as a treatment for their AR at our intended price point. Those who categorized themselves as “highly likely” to try Serenz at our proposed price points indicated that, on average, they expected to use it between four and seven months out of the year, and to use one to two doses per day during these months. The U.S. patients surveyed reported that they currently spend an average of $64 to $112 each month, out of pocket (excluding insurance or government payor support), for AR medication.

EXHIBIT B

Disclaimer

Charles River Associates' ("CRA") study was prepared for Capnia on terms specifically limiting the liability of CRA. CRA's conclusions are the result of the exercise of CRA's reasonable professional judgment, based in part upon materials and information and information provided to CRA by Capnia and others. Use of this information by you or any third party for whatever purpose should not, and does not, absolve you or such third party from using due diligence in verifying the information. CRA has not been requested to opine as to, and does not guarantee, warrant or opine upon: (i) the underlying business decision to participate (or not to participate) in any transaction or investment relating to Serenz (the "Transaction"); or (ii) the failure of the Transaction to perform in any particular manner. Any opinion expressed herein shall not amount to any form of guarantee that CRA has determined or predicted future events or circumstances, and no such reliance may be inferred or implied. The information is effective as of the date the study was created. CRA has no obligation to update the information set forth in the study and expressly disclaims any such responsibility. Any use which you or a third party makes of this information, or any reliance on it, or decisions to be made based on it, are the responsibility of you or such third party. CRA accepts no duty of care or liability of any kind whatsoever to you or any such third party, and by your receipt and review of this information, you release and hold CRA (including all of its affiliates, officers, employees and directors) harmless for all claims, liabilities and damages, if any, suffered as a result of decisions made, or not made, or actions taken, or not taken, based on or related to this information.