



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

May 16, 2017

Via E-mail

Anish Bhatnagar, M.D.
Chief Executive Officer
Capnia, Inc.
1235 Radio Road, Suite 110
Redwood City, CA 94065

**Re: Capnia, Inc.
Registration Statement on Form S-1
Filed April 21, 2017
File No. 333-217420
Form 8-K Filed April 10, 2017
File No. 001-36593**

Dear Dr. Bhatnagar:

We have limited our review of the above-referenced filings to those issues we have addressed in our comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter by amending your registration statement and providing the requested information. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

Form S-1 Filed April 21, 2017

Plan of Distribution, page 114

1. Please reconcile your references to Aspire Capital in the third paragraph with the identities of the selling stockholders as disclosed in the table on page 116.

Selling Stockholders, page 115

2. From your disclosure regarding ownership before the offering, it appears that the selling stockholders do not own many of the offered shares. Please revise to clarify the circumstances under which the selling stockholders will acquire the offered shares. In

this regard, your disclosure in the last paragraph on page 7 appears to indicate that you have issued in excess of 27 million shares to the selling shareholders; it is unclear how those shares are reflected in the pre-offering ownership disclosed on page 116.

Note 14. Subsequent Events, page F-27

3. We reference the discussion of the significant acquisition of Essentialis on March 7, 2017. Please revise to include the financial statements and pro forma financial information required by Item 11(e) of Part I of the Form S-1 rules and Rule 8-04 and 8-05 of Regulation S-X.

Item 17. Undertakings, page II-6

4. Please provide the undertakings required by Regulation S-K Item 512(a)(6).

Form 8-K Filed April 10, 2017

Exhibit 99.2 Unaudited Pro Forma Condensed Combined Financial Statements

5. We note that the recorded value of the assets acquired and the amounts allocated to those assets in the Unaudited Pro Forma Combined Balance Sheet are based on an independent valuation of the fair value of those assets. Please describe to us the nature and extent of the valuation expert's involvement and management's reliance on the work of the valuation expert. For guidance, please refer to Question 141.02 of the Compliance and Disclosure Interpretations on Securities Act Sections.
6. Please provide us your analysis of how you concluded under ASU 2017-01 and ASC 805-10-55 that the Essentialis transaction should be accounted for as an asset acquisition, rather than a business combination. Your analysis should include details of any assets, liabilities, contracts, agreements, employees or other items transferred under this transaction. Please also explain to us how you considered the research and development programs discussed in Note 2 to the Essentialis financial statements included in Exhibit 99.1.
7. You disclose in Notes 2 and 3(a) that you capitalized the entire consideration as patents and intellectual property to be amortized over the legal remaining patent life. However, it appears that the Essentialis product acquired was a clinical stage drug candidate. Please address the following:
 - Tell us how you considered whether any of the purchase price should have been allocated to other assets or in-process research and development.
 - Tell us how your accounting treatment complies with ASC 805-50 and ASC 730-10-25-1.

Anish Bhatnagar
Capnia, Inc.
May 16, 2017
Page 3

- Support your conclusion that the intangible asset you have recorded has alternative future use.
8. Please explain to us your basis for recording contingent consideration at the acquisition date and how this complies with the guidance in ASC 805-10-15-4 and ASC 450-20-25-1.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

Refer to Rules 460 and 461 regarding requests for acceleration. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Li Xiao at (202) 551-4391 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Caleb French at (202) 551-6947 or me at (202) 551-6947 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief
Office of Electronics and Machinery

cc: Elton Satusky, Esq.
Wilson Sonsini Goodrich & Rosati