

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

Mail Stop 3030

August 5, 2016

Via E-mail
Mr. David D. O'Toole
Chief Financial Officer
Capnia, Inc.
1235 Radio Road, Suite 110
Redwood City, California 94065

Re: Capnia Inc.

Form 10-K for the Fiscal Year Ended December 31, 2015

Filed March 25. 2016

Form 10-Q for the Quarterly Period Ended March 31, 2016

Filed May 12, 2016 File No. 001-36593

Dear Mr. O'Toole:

We have limited our review of your filing to the financial statements and related disclosures and have the following 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2015

Exhibit 31.1 and 31.2 Certifications

1. We note that the officer certifications do not include the language referring to internal control over financial reporting that should appear in the introductory sentence of paragraph 4 and paragraph 4(b). Please refer to Exchange Act Rule 13a-14(a) and Item 601(b)(31) of Regulation S-K and amend the filing to include the correct certifications. You may file an abbreviated amendment that includes a cover page, explanatory note, signature page and paragraphs 1, 2, 4 and 5 of the certification. This comment also

Mr. David D. O'Toole Capnia, Inc. August 5, 2016 Page 2

applies to your Forms 10-Q for the quarters ended March 31, June 30 and September 30, 2015.

Form 10-Q for the Quarterly Period Ended March 31, 2016

Item 4. Management's Report on Internal Control Over Financial Reporting, page 20

2. We note your disclosure on page 20 that you have conducted an evaluation of the effectiveness of internal control over financial reporting as of March 31, 2016. We note that Item 308 of Regulation S-K requires management to provide its report on internal control over financial reporting as of the most recent fiscal year end. Please confirm to us that you have performed an assessment of your internal control over financial reporting in the interim period, or remove the disclosures from the requested amendment to your Form 10-Q.

Exhibit 31.1 and 31.2 Certifications

3. We note that the officer certifications do not include the language referring to internal control over financial reporting that should appear in the introductory sentence of paragraph 4 and paragraph 4(b). Please amend the filing to include the correct certifications. Refer to Exchange Act Rule 13a-14(a) and Item 601(b)(31) of Regulation S-K.

Exhibit 32.2 Certifications

4. The Section 906 certification included in Exhibit 32.2 refers to the fiscal quarter ended September 30, 2015. Please file a full amendment with currently dated corrected certifications.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

Mr. David D. O'Toole Capnia, Inc. August 5, 2016 Page 3

• the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Jeanne Bennett at (202) 551-3606 or me at (202) 551-3676 with any questions. You may also reach Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

/s/ Brian Cascio

Brian Cascio Accounting Branch Chief Office of Electronics and Machinery