



DIVISION OF
CORPORATION FINANCE

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

January 31, 2014

Via E-mail

Alison Bauerlein
Chief Financial Officer
Inogen, Inc.
326 Bollay Drive
Goleta, California 93117

**Re: Inogen, Inc.
Amendment No. 3 to Registration Statement on Form S-1
Filed January 28, 2014
File No. 333-192605**

Dear Ms. Bauerlein:

We have reviewed your filing 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 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.

Attractive economic model, page 4

1. Your response to prior comment 1 appears to focus on the population in each area; however, it remains unclear whether the oxygen therapy market is equally represented in each area or whether there is disproportionate representation in the areas in which you were not successful during the bidding. Please clarify your response accordingly; include in your response the portion of your historic business that you derived from the areas in which you were not successful during the competitive bidding.

Cost of revenue and gross profit, page 70

2. Please expand your response to prior comment 3 to tell us how you believe investors can determine from your discussion of gross margin the extent of the effect of the relative amount of Inogen One G2 sales versus Inogen One G3 sales during the periods presented.

Investing activities, page 76

3. Please ensure that your disclosure here and throughout your filing is current. We note for example your reference here to your plans “for the remainder of 2013.”

Clinical validation, page 103

4. Please expand your response to prior comment 4 to tell us who ultimately determines, in connection with the peer review process, the content of the published articles and the conclusions of the studies and, to the extent applicable, who was paid to conduct the studies. Please also address the last clause of prior comment 4; currently, the exhibit you filed appears to consent merely to the use of the studies and copies of the abstract and article, but does not consent to the discussion of the studies that you have included in the prospectus.

Principal and selling stockholders, page 154

5. Please provide us your analysis of whether the selling stockholders who acquired their shares recently are underwriters as defined by the Securities Act. We may have further comment after you identify which shares mentioned in the footnotes are being sold in this transaction.

Financial Statements

6. We continue to evaluate your response to prior comment 8 from your January 28, 2014 response letter and also your response letters submitted on January 30, 2013 and January 31, 2013 regarding your lease accounting revenue recognition and may have additional comments.

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specific in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Kevin Kuhar, Staff Accountant, at (202) 551-3662 or Kaitlin Tillian, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Ted Moskovitz at (202) 551-3689 or me at (202) 551-3617 with any other questions.

Sincerely,

/s/ Russell Mancuso

Russell Mancuso
Branch Chief

cc (via e-mail): Martin J. Waters