



DIVISION OF  
CORPORATION FINANCE

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

January 26, 2015

Via E-mail

Jeffrey M. Soinski  
Chief Executive Officer  
Avinger, Inc.  
400 Chesapeake Drive  
Redwood City, CA 94063

**Re: Avinger, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed January 20, 2015  
File No. 333-201322**

Dear Mr. Soinski:

We have reviewed your registration statement 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.

Management's Discussion and Analysis, page 54

1. With a view toward disclosure regarding known material trends, events and uncertainties under Regulation S-K Item 303, please tell us the extent of and reasons why you "lowered [your] long-term commercial forecast during the fourth quarter of 2014," as noted in your letter dated January 21, 2015. Include in your response the extent to which the forecast was lowered and the reasons underlying the change.
2. We refer to your letter dated January 21, 2015. While we acknowledge your response, we have concerns regarding the assertion in the filing that management believes the fair value of a share of the company's common stock was \$4.5 as of September 30, 2014 and December 31, 2014. To help us better understand your analysis, please respond to the following:

- Tell us when you first began contemplating the initial public offering leading to the filing on November 6, 2014. Also, tell us when you first met with underwriters and provide us a history of your discussions with underwriters.
- Describe to us the extent to which your management and Board of Directors relied on third party valuations in establishing the fair value of your common stock.
- Tell us whether you expect the third party valuation will be complete prior to closing the initial public offering.
- Explain to us how the company's progress toward an initial public offering was considered in the disclosure that your board of directors determined that there were no internal or external developments that would indicate that the fair value of your common stock had increased from September 30, 2014. In that regard, we note that your initial draft registration statement was filed on November 6 and that you made your first public filing on December 30, 2014.
- Tell us why the likelihood of an initial public offering had not significantly increased between September 30, 2014 and December 31, 2014. Also, explain why any marketability discount would not have decreased during that period.
- In light of the progress toward an initial public offering, tell us why the value of the preferred stock preferences had not decreased as of December, 31 2014.
- Tell us how the indication of a potential offering price range of \$12 to \$14 from your investment bankers on January 9, 2015 does not provide objective and contemporaneous evidence that the fair value of a share of your common stock had increased from \$4.5 as of September 30, 2014.
- We see that you sold preferred shares in fourth quarter of 2014 and the January of 2015 at \$12.60 per share and that the preferred shares convert to common stock on a one-for-one basis upon consummation of the offering. In light of the conversion terms and the progress toward your initial public offering, tell us why the per share price realized on sales of the preferred shares is not evidence that the fair value of a share of your common stock had increased from \$4.5 as of September 30, 2014.

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.

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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 specified 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 Li Xiao at (202) 551-4391 or Gary Todd, Senior Accountant, at (202) 551-3605 if you have questions regarding comments on the financial statements and related matters. Please contact Tim Buchmiller at (202) 551-3635 or Geoff Kruczek, Senior Attorney, at (202) 551-3641 with any other questions.

Sincerely,

/s/ Geoff Kruczek for

Amanda Ravitz  
Assistant Director

cc (via e-mail): Philip H. Oettinger, Esq.  
Wilson Sonsini Goodrich & Rosati  
Professional Corporation