



DIVISION OF
CORPORATION FINANCE
Mail Stop 3030

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

July 20, 2009

Hojabr Alimi
Chief Executive Officer
Oculus Innovative Sciences, Inc.
1129 N. McDowell Blvd.
Petaluma, CA 94954

Re: Oculus Innovative Sciences, Inc.
Post-effective amendment to Form S-1
Filed July 15, 2009
File No. 333-157776

Dear Mr. Alimi:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. Please revise your document to comply with all applicable comments in our letter dated July 16, 2009 and any follow-up letters regarding your registration statement on Form S-1, File No. 333-158539. In your response to this letter, please clearly indicate how and where you have applied each of those comments in this registration statement.

Common stock to be registered, page 1

2. Please clarify the number of shares registered for sale on this registration statement that underlie each class of your warrants.

Selling Security Holders, page 17

3. According to your explanatory note, you are deregistering 473,410 shares of common stock underlying Series C warrants. However, your response to prior comment 3 in your letter dated July 9, 2009 regarding registration statement file number 333-158539 indicated that you would “deregister 584,772 shares of common stock” issuable upon exercise of the Series C warrants. Please tell us the reason for the difference. Also tell us how you arrived at the 584,772 number mentioned in your response.
4. Please tell us whether any shares underlying the Series C warrants were sold by the selling security holders.
5. Please disclose the identity of the natural person who exercises the sole or shared voting and/or dispositive powers with respect to the shares to be offered by Cranshire Capital. It appears from note 5 to your table that you have only identified the natural person who has voting control over Downsview. Also disclose the identity of the natural persons who exercise sole or shared voting power with respect to the shares offered by Rockmore. It appears from note 7 to your table that you have only identified natural persons who share dispositive power over the shares held by Rockmore. Alternatively, tell us how Rockmore and its affiliates operate their business such that no natural person directly or indirectly exercises sole or shared voting power.
6. Please tell us whether any of the selling stockholders is a broker-dealer or affiliate of a broker-dealer.
7. Please revise the information in the fourth column of your table regarding the number of shares Seamus Burlingame will own after this offering. Given the number of shares disclosed in columns two and three, it is unclear how you determined that he will hold only 16,667 shares after this offering.

Executive Compensation, page 41

8. Please revise to include the disclosures required by Item 402(r) of Regulation S-K, including all required tables.

Security Ownership . . . , page 45

9. It appears from your disclosure here and notes 5 and 6 to the table that the number of shares beneficially owned by Robert and Seamus Burlingame do not include the shares underlying the Series A and B warrants they acquired in February 2009. Given your disclosure on page 2 regarding when those warrants become exercisable, it appears that the Burlingames may now acquire the shares underlying those warrants within 60 days. Also, given the exercise period for the Series A and B warrants issued by you to the investors in the February 6, 2009 offering, it appears that those investors may now acquire the shares underlying those warrants within 60 days. Please update your beneficial ownership and selling stockholders tables to include the shares underlying the warrants as appropriate; see Rule 13d-3(d)(1)(i).

Undertakings, page II-8

10. Please include the undertakings required by Regulation S-K Item 512(a)(5)(ii) and (a)(6).

Exhibits

11. Please tell us why exhibit 23.1 is not signed by the same auditor that signed the report appearing on page F-1.

* * * * *

As appropriate, please amend your filing in response to these comments. You may wish to provide us with marked copies of the amendments to expedite our review. Please furnish a cover letter with your amendments that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendments and responses to our 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 all information required under the Securities Act of 1933 and that they have provided all information investors require for an informed investment decision. 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.

Before the amended registration statement is declared effective pursuant to Section 8 of the Securities Act, the company should provide us with a letter, acknowledging that:

Hojabr Alimi
Oculus Innovative Sciences, Inc.
July 20, 2009
Page 4

- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to our comments on your filing.

Please contact Geoffrey Kruczek at (202) 551-3641 or me at (202) 551-3617 with any other questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Amy M. Trombly, Esq.