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August 18, 2009

United States Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E., Mail Stop 3030
Washington, DC 20549

Attn: Geoffrey Kruczek

Re: Oculus Innovative Sciences, Inc.
Post-effective amendment on Form S-1
Filed August 7, 2009
File No. 333-157776

Dear Mr. Kruczek:

I am securities counsel for Oculus Innovative Sciences, Inc. (the "Company"). I am writing in response to comments received from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") in their letter dated August 13, 2009 regarding the post-effective amendment to the Form S-1, File No. 333-157776, together with certain exhibits thereto (the "Registration Statement").

Set forth below are the Company's responses to the Staff's comments. The numbering of the response corresponds to the numbering of the comment in the letter from the Staff.

Comment 1. We note your response to prior comment 1; however, your "Explanatory Note" before your prospectus cover continues to disclose that you are attempting to "decrease the number of shares of common stock included in the Registration Statement" by a number that appears to include shares that have been sold or transferred by the selling stockholders. Therefore, we reissue the comment.

Response 1. We propose to revise the language so that it reads as follows:

This Post-Effective Amendment No. 2 to Form S-1 (this "Post-Effective Amendment") is being filed by Oculus Innovative Sciences, Inc. (the "Company") pursuant to the undertakings in Item 17 of the registration statement on Form S-1 (Registration No. 333-157776) (the "Registration Statement"), which was previously declared effective by the Securities and Exchange Commission on March 26, 2009, to (i) include the consolidated financial statements and the notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended March 31, 2009, (ii) update certain other information in the Registration Statement and (iii) decrease the number of shares of common stock included in the Registration Statement from 4,886,724 to 2,930,290. The decrease in registered shares reflects (i) the deregistration of 473,410 shares underlying Series C warrants described in the Registration Statement, which shares have not been issued, and (ii) an update to the disclosure to reflect 1,483,024 shares that were previously registered by the Registration

Statement and were subsequently sold or otherwise transferred by the selling stockholders. No additional securities are being registered under this Post-Effective Amendment. Based on information received by the Company, no shares were sold by the selling stockholders pursuant to the Registration Statement since June 11, 2009, the date on which the Company filed its Annual Report on Form 10-K. All applicable registration fees were paid at the time of the original filing of the Registration Statement.

Comment 2. Please include in your response the acknowledgements from the registrant mentioned at the end of this letter.

Response 2. The Company will comply with the Staff's comment upon filing the Registration Statement.

If you have further questions or comments, please feel free to contact us. We are happy to cooperate in any way we can.

Regards,

/s/ Amy M. Trombly

Amy M. Trombly, counsel to the Company

cc: James Schutz, Oculus Innovative Sciences, Inc.