

Mail Stop 6010

October 12, 2006

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

**Re: Oculus Innovative Sciences, Inc.  
Amendment No. 1 to Registration Statement on Form S-1  
Filed September 18, 2006  
File No. 333-135584**

Dear Mr. Alimi:

We have reviewed your registration statement and have the following 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

General

1. Please revise your disclosure to clarify technical terms used throughout your filing. For example, we note the third sentence on page 9 concerning three pathogens.

Because all of our products are based on our Microcyn platform technology, page 8

2. The fourth sentence of this section is not consistent with the fifth sentence of this section. Please advise or revise.

We may agree to change the brand name of our product in Mexico, page 13

3. Please disclose the percentage of your revenues from Microcyn60.

Overview, page 50

4. We note your response to prior comment 20 and reissue that comment, which sought revised disclosure in the first paragraph here and in the summary.

Our Products – Microcyn Platform, page 55

5. We note your response to prior comment 21. Please revise your tabular disclosure here and in the summary (in a footnote or otherwise) to clarify (i) the reasons why the indications for your products differ from one another and (ii) whether similarly named products have different or identical formulations.

Principal Stockholders, page 94

6. Please disclose the natural person who has voting or investment power for the shares held by Brookstreet Securities Corporation.

Financial Statements, page F-1

Consolidated Statements of Stockholders' Equity (Deficit), page F-5

7. We note that during the three months ended June 30, 2006 you issued warrants in exchange for services with a fair value of \$26,000. Please revise to include a description of the warrants, including the number of shares the warrants are exercisable for, the exercise price, the term, and the significant assumptions used to value the warrants.

Note 3 – Summary of Significant Accounting Policies, page F-9

Stock-Based Compensation, page F-14

8. We see that you adopted SFAS 123(R) during the three months ended June 30, 2006. When you adopt a new accounting standard in an interim period the notes to interim financial statements should present all of the relevant disclosures required by that standard in the period of adoption. Please expand your disclosures as required by paragraph 84 of SFAS 123(R).

Note 8 – Accrued Expenses and Other Current Liabilities, page F-22

9. We note your response to prior comment 47. Please revise your disclosures to clearly describe the accrued stock option rescission and the basis for your accounting. Include in your discussion when the options were granted and when the statute of limitations lapsed.

Note 12 – Stockholders' Equity, page F-28

Valuation of Common Stock, page F-31

10. We note your response to prior comment 49. Please address the following:
- Tell us why there was no increase in the fair value of your common stock from July 2005 when you obtained an independent valuation to when you issued options in October 2005 and January 2006.
  - Considering that your initial organizational meeting with investment bankers took place on July 27, 2005, tell us how you determined that it was appropriate to discount the fair value of your common stock 58% and 50% from the mid-point of the expected IPO filing range, particularly for the more recent issuances such as the options granted on July 27, 2006.
  - Tell us how you determined a 44% and 33% discount from the preferred stock purchase price was appropriate.
  - Tell us why you issued warrants to your advisory board, law firm, placement agent, and consultants at \$4.50 per share in September, October and November 2005 and January 2006 but issued options to employees and board members at \$2.54 and \$3.00 during this same period and subsequent period, respectively. Include in your response a detailed analysis of any differences between the options and warrants and why you concluded that no compensation expense was necessary for the option grants.
  - Tell us why the \$2.82 per share July 2006 valuation was significantly lower than the expected IPO filing range and \$4.50 warrant exercise price issued in conjunction with your June 2006 financing.
  - Tell us when the underwriter's provided you with the estimated IPO offering price range.
  - Clearly discuss significant changes or events that occurred over the last 12 months that would support the substantial discounts and the variations in the prices assigned to your options and warrants.
11. We note your response to prior comment 50, the inclusion of the consent for the July 2005 valuation report, and the disclosures on page F-32 to a June 2006 valuation report. While you are not required to make reference to an independent valuation, when you do so, in this case the June 2006 report, you must name the

expert and file their written consent as an exhibit to the registration statement.  
See Item 601(b) of Regulation S-K.

Note 13 – Stock Compensation Plans, page F-32

12. We note that you removed the tables disclosing the option activity under all your plans and the options outstanding and currently exercisable for the years ended March 31, 2004 through 2006. Please revise to include these disclosures.

Note 18 – Subsequent Events

13. We note that you have issued Series C convertible preferred stock and warrants on September 14, 2006.
14. Please tell us and revise the filing to clearly disclose all the material terms of the convertible preferred stock and warrants, including but not limited to, the conditions under which the company or the holder may convert into common shares, the conversion rate and all conditions that may result in adjustments to that rate, any conditions under which the company or the holder may redeem the stock, and the dividend rates and any adjustments thereto. Likewise, please clearly describe the material terms of all related agreements, such as registration rights agreements and guarantee agreements.
15. Describe clearly how you have or will account for the Series C convertible preferred stock, including any related discounts, any beneficial conversion features pursuant to EITF 98-5 or any embedded derivatives requiring bifurcation pursuant to SFAS 133 and EITF 00-19.
16. Provide a similar discussion of your accounting for the warrants.
- Revise the Critical Accounting Estimates section of MD&A to disclose the methodology and significant estimates used to value any of instruments you carry at fair value.
- In this regard, as applicable, please refer to the guidance provided in SFAS 150, EITF 05-04, EITF 00-19 and the Division of Corporation Finance's Current Accounting and Disclosure Issues Outline at <http://www.sec.gov/divisions/corpfin/acctdis120105.pdf>.
17. Please clearly disclose your assessment of the impact that the recall is expected to have on your business and operations.

Item 17. Undertakings, page II-5

18. We note your response to prior comment 55. We note that in the event that you rely on Rule 424(b)(3), you would be subject to Rule 430C(d) of the Securities Act, which requires you to furnish the undertakings required by Item 512(a) of Regulation S-K. We therefore ask that you provide the undertakings contained in Item 512(a)(5)(ii).

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As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact at Lynn Dicker at (202) 551-3616 or Brian Cascio, Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Donald C. Hunt at (202) 551-3647 or me at (202) 551-3602 with any other questions.

Sincerely,

Thomas A. Jones  
Senior Attorney

cc (via fax): Sylvia K. Burks, Esq., Pillsbury Winthrop Shaw Pittman LLP  
Gabriella A. Lombardi, Esq., Pillsbury Winthrop Shaw Pittman LLP