Mail Stop 6010

July 28, 2006

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

Re: Oculus Innovative Sciences, Inc.
Registration Statement on Form S-1
Filed July 3, 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 confirm that any preliminary prospectus you circulate will include all non-Rule 430A information. This includes the price range and related information based on a *bona fide* estimate of the public offering within that range. Also, in the next amendment, please fill in the blanks throughout the filing, and note that we may have additional comments after you do so.

2. Please provide us with copies of any graphics or artwork that you intend to use in your prospectus. We may have further comment after reviewing those materials.

3. We note that on your website you reference distribution of your products in Iran, Sudan, and Syria, countries identified by the U.S. State Department as state sponsors of terrorism, and subject to U.S. economic sanctions. Please describe for us the extent and nature of your past, current, and anticipated contacts with those countries, whether through subsidiaries, distributors, affiliates or other direct or indirect arrangements. Discuss sales or other contacts with the governments of these countries, including government-owned or controlled entities, and private parties. Please also describe any potential or actual military uses of your products, other than wound care.

4. Discuss for us the materiality to you of your contacts with Iran, Sudan, and Syria, individually and in the aggregate, and whether those contacts, individually or in the aggregate, constitute a material investment risk for your security holders. Please address materiality in quantitative terms, including the dollar amounts of any associated assets and liabilities, and revenues. Please also address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon a company's reputation and share value.

   We note, for example, that Arizona and Louisiana have adopted legislation that requires their state retirement systems to prepare reports regarding state pension fund assets invested in, and/or permits divestment of state pension fund assets from, companies that do business with U.S.-designated state sponsors of terrorism. The Pennsylvania legislature has adopted a resolution directing its Legislative Budget and Finance Committee to report annually to the General Assembly regarding state funds invested in companies that have ties to terrorist-sponsoring countries. The Missouri Investment Trust has established an equity fund for the investment of certain state-held monies that screens out stocks of companies that do business with U.S.-designated state sponsors of terrorism. Illinois, Maine, New Jersey and Oregon have adopted legislation requiring reporting of interests in, or divestment from, companies that do business with Sudan, and similar legislation has been proposed by several other states. Finally, Harvard University, Yale University, Stanford University, and other educational institutions have adopted policies prohibiting investment in, and/or requiring divestment from, companies that do business with Sudan. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that operate in Iran, Sudan, and Syria.

Prospectus Summary, page 1

Oculus Innovative Sciences, Inc., page 1

5. Please clarify your disclosure in the final two paragraphs of this section so that potential investors can more readily identify the products you are currently marketing, those for which you are seeking or plan to seek regulatory approval, and the geographic markets for each. Consider presenting this information in bullet point or tabular format.

6. Please tell us whether all of the sources of the data cited in the prospectus have consented to your use of their data and whether any reports were prepared specifically for your use.

7. Please revise the "Principal Risks" subsection of your summary to present the information disclosed using bullet points, subcaptions or another more readable format.

The Offering, page 4

8. Please expand your disclosure to address the treatment of shares reserved for future grants under your 2006 stock incentive plan.

Summary Consolidated Financial Data, page 5

9. Please revise the table in footnote (1) on page 5 and footnote (1) on page 30 to remove the caption which currently shows the totals of the stock-based compensation expense amounts presented in the individual income statement line items. We refer you to Section I.C.2 of the 12/1/05 Current Accounting and Disclosures Issues in the Division of Corporation Finance, which can be accessed at http://www.sec.gov/divisions/corpfin/acctdis120105.pdf.

Risk Factors, page 7

10. If true, please add a risk factor that addresses the fact that your Articles of Incorporation will authorize the issuance of 100,000,000 shares of common stock and 5,000,000 shares of preferred stock, that authorized but unissued shares may be issued without further shareholder approval and that these shares may be granted rights and preferences that are greater than those of common shares being offered pursuant to this prospectus.

We may incur significant liabilities . . ., page 9

11. Please disclose whether you are aware of the Mexican Ministry of Health's intent to pursue claims against you. Also disclose the statute of limitations, if any, that would limit the MOH's ability to bring claims in the future.

12. Please revise the MD&A to discuss your relationship with MOH. We note the first and last sentences of this risk factor.

We are in a dispute with the licensor …, page 12

13. Please disclose the material amount of your revenues from the patent license. Also, clarify whether the loss of the patent licenses may affect sales of your products outside of Japan. In addition, file the agreement as an exhibit.

Capitalization, page 25

14. Please revise to remove the caption relating to cash and cash equivalents from your presentation of capitalization.

Management's Discussion and Analysis . . ., page 31

15. We note your discussion of the need to perform clinical trials on your Microcyn platform technology and your disclosure on page 3 that clinical trials will be "lengthy and expensive." We further note your reference on page 18 to development of a compound with potential applications in oncology. Provide more details of the specific plans to pursue commercialization of the your products and product candidates, quantify the estimated costs and discuss the expected funding/ financing sources. You should also discuss the expected timing of these events.

Discontinued Operations, page 33

16. Please file as exhibits the agreements with Quimica Pasteur.

Comparison of Years Ended March 31, 2006 and March 31, 2005, page 36

Cost of Revenues, pages 36 and 38

17. Please revise to discuss the specific reasons for the significant gross loss each period and your plans and efforts to generate gross profit from your products and services. In addition, discuss the expected impact to Oculus Innovative Sciences if you are not able to do this.

Liquidity and Capital Resources, page 39

18. Please tell us how you will account for the warrants issued in connection with the Loan and Security Agreement entered into in June 2006.

Business, page 44

19. Please file the consents required by Rule 436 for the physician clinical studies summarized in your prospectus.

Overview, page 44

20. Please revise the first paragraph here and in the summary to clarify that you do not have the necessary regulatory approvals to market Microcyn in the United States as a drug.

Our Products – Microcyn Platform, page 49

21. Please clarify how each of the products listed in the table differ. We note, for example, the varying indications for "Dermacyn Wound Care" in the United States, European Union and Canada. Are these different products? Also, please reconcile your product indication descriptions here with your disclosure on page 3, which implies that the United States and European Union versions of Dermacyn are identical to one another and to Microyn60 in Mexico.

22. Please explain technical terms, such as "stasis ulcers."

Clinical Trials and Physician Studies, page 51

Completed Trials and Studies, page 51

23. Please specify which of the studies you sponsored and disclose the details of your sponsorship, quantifying the extent of your sponsorship if possible.

24. Revise your disclosure to identify Dr. Luca Dalla Paola as a member of your business and medical advisory board.

25. Tell us how you selected the physician clinical studies to highlight in your prospectus and provide us with details regarding the seven additional studies not summarized in the prospectus.

Sales and Marketing, page 54

26. Please file all material agreements required by Item 601(b) of Regulation S-K, including any material distribution agreement.

27. Please revise the last paragraph of this section to specify the regulatory approvals needed and disclose the steps you have taken to receive those approvals.

Other Market Opportunities, page 55

28. Please disclose the amount of material revenues from each of the other market opportunities, such as the percentage of revenues from veterinary medicine.

29. Please expand the second paragraph on page 55 to identify the leading manufacturer. Also, file the agreement as an exhibit.

30. Please expand the third full paragraph on page 56 to specify the regulatory approvals needed.

Research and Development, page 56

31. Please expand your disclosure to explain what your "L3 anti-viral compound" is and to provide details of the referenced preclinical studies. Please reconcile your development of this compound with your statement in the first sentence of this section regarding the goals of your research and development program.

Intellectual Property, page 57

32. Please clarify the significance of having (i) filed provisional, as opposed to non-provisional, patent applications and (ii) received a notice of allowance from the U.S. Patent and Trademark Office.

Foreign Regulation, page 65

33. Please disclose in greater detail the government regulatory approval processes for those jurisdictions in which you manufacture, market or sell your products, including, for example, Mexico.

Executive Officers, Key Employees and Directors, page 67

34. Please discuss the business experience during the past five years of Mr. Alimi.

Employment, Severance and Change of Control Arrangements, page 74

35. Please tell us how you will account for the additional options that will be granted upon completion of the offering discussed on page 74.

Equity Compensation Plans, page 75

36. Please summarize the material terms of your 2006 Stock Incentive Plan.

Physician Advisors, page 79

37. Please clarify how you compensate your clinical investigational board.

38. Please clarify the role of the business and medical advisory board and the clinical investigational board by including specific information regarding their activities for your company.

39. Please tell us whether the physicians disclosed in this section have consented to the description of their role with you.

Related Party Transactions, page 81

40. Please disclose the payments to date to White Moon Medical.

41. Please clarify why all options held by your directors will vest upon completion of this offering. For example, was this a term of their original option agreements or plan?

Change in Independent Registered Public Accounting Firm, page 93

42. Please revise to provide all disclosures required by Item 304 of Regulation S-K and the Exhibit 16 letter from PricewaterhouseCoopers.

Financial Statements, page F-1

43. Please update the financial statements as required by Rule 3-12 of Regulation S-X.

44. Include updated accountants' consents with all amendments to the filing.

Consolidated Statements of Cash Flows, page F-7

45. We note that the effect of exchange rates on cash of $144, $(127), and $(14) for fiscal 2006, 2005 and 2004, respectively, are the same as the foreign currency translations on your consolidated statements of stockholders' equity (deficit). Please tell us whether you prepared the statement of cash flows for your foreign operations using the exchange rates in effect at the time of the cash flows in accordance with paragraph 25 of SFAS 95. Revise as necessary.

Note 3 – Summary of Significant Accounting Policies, page F-8

Accounts Receivable, page F-10

46. Please clarify the nature of the government charge-backs and how these are recorded in your financial statements.

Note 8 – Accrued Expenses and Other Current Liabilities, page F-19

47. Please tell us the nature of the accrual for stock option rescission.

Note 9 – Long-Term Debt, page F-19

48. We note that you allocated a portion of the proceeds from your debt financings to warrants. Please revise to disclose the significant assumptions used to value the warrants.

Note 12 – Stockholders' Equity, page F-24

Valuation of Common Stock, page F-27

49. Provide us with an itemized chronological schedule detailing each issuance of your preferred shares, ordinary shares, stock options and warrants during the last 12 months. Include the following information for each issuance or grant date:

    a. Number of shares issued or issuable in the grant
    b. Purchase price or exercise price per share
    c. Any restriction or vesting terms
    d. Management's fair value per share estimate
    e. How management determined the fair value estimate
    f. Identity of the recipient and relationship to the company
    g. Nature and terms of any concurrent transactions with the recipient
    h. Amount of any recorded compensation element and accounting literature relied upon

In the analysis requested above, highlight any transactions with unrelated parties believed by management to be particularly evident of an objective fair value per share determination. Progressively bridge management's fair value per share determinations to the current estimated IPO price per share, identifying all material positive and negative events occurring during the period which could reasonably contribute to variances in fair value. Also, indicate when discussions were initiated with your underwriter(s).

50. We note that you refer to an independent valuation on page F-27. While you are not required to make reference to this independent valuation, when you do so, you must name the expert and file their written consent. See Item 601(b) of Regulation S-K. In addition, revise to disclose the method the expert used to determine the fair value of the common stock.

Note 17 – Discontinued Operations, page F-32

51. Please disclose why you believe you will not have any loss exposure for the unpaid taxes related to your involvement with QP.

Part II

Recent Sales of Unregistered Securities – Page II-1

52. Please revise your disclosures generally to include all of the information required by Item 701 of Regulation S-K, including, among other things, the following:

- Please identify by name or by class the persons to whom the securities were sold.
- Where an offering was conducted in reliance on Regulation D, please disclose the specific Regulation D exemption relied upon and the facts that supported the availability of that exemption.
- Where an offering was conducted in reliance on Rule 701, please disclose the facts that supported the availability of that exemption.
- Please provide the disclosures required by Item 701(b) with respect to any underwriters, placement agents, finders or other persons who participated in any offering.

Note that this disclosure item is not limited to equity transactions. We note for example the debt transactions referenced on page 39.

53. Rather than describing unrelated transactions on a group basis, please revise the second paragraph to separately provide all of the information required by Item 701 of Regulation S-K for each issuance to consultants.

54. Provide the disclosure required by Item 701 of Regulation S-K for the warrants issued pursuant to section 6 of the loan and security agreement filed as Exhibit 10.13 and all of the warrants described on pages 25 and page F-26.

Item 17. Undertakings, page II-3

55. Please provide the undertakings contained in Items 512(a)(5)(ii) and 512(a)(6) of Regulation S-K.

Exhibits

56. Please file all other required exhibits to allow sufficient time for staff review.

57. Please tell us how your filing of forms of promissory notes as exhibits 4.7 through 4.10 satisfies the requirements of Regulation S-K Item 601.

* * * * *

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.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, 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.

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.

We will consider a written request for acceleration of the effective date of the registration statement as a 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. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

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