

Mail Stop 6010

December 8, 2006

VIA U.S. MAIL AND FACSIMILE (718.228.2522)

Mr. Leo Ehrlich  
Chief Financial Officer  
StatSure Diagnostic Systems, Inc.  
1 Clarks Hill Road  
Framingham, Massachusetts 01702

**Re: StatSure Diagnostics Systems, Inc.  
Form 10-KSB for the year ended December 31, 2005  
Filed April 17, 2006  
Forms 10-QSB for the Periods Ended March 31, June 30,  
and September 30, 2006  
File No. 000-21284**

Dear Mr. Ehrlich:

We have reviewed your response to our letter dated November 16, 2006 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. [In addition, we await the amendments to the documents referenced above which you have indicated you will revise to address our prior comments.](#) 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 filings. 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.

From 10-KSB for the Year Ended December 31, 2005

Financial Statements, page F-1

Note 10. Equity Transactions, page F-13

1. Please refer to prior comment 9 and the disclosure which refers to a 30% discount for restrictions. Please tell us the nature of the post vesting restrictions. Tell us why these restrictions would not be captured already as part of the Black-Scholes pricing model, for example, as part of the weighted average expected life.
2. We note your response to prior comment 9. Paragraph 9 of SFAS123 indicates that quoted market prices are the best evidence of fair value. As we note that you have had no other transactions with independent third parties or a contemporaneous valuation performed by an independent party that would support your use of the \$1.40 value assigned to your common stock in the Black-Scholes model, it would appear that the quoted market price represents the best evidence of the fair value of your common stock. On page 21 you disclosed that your common stock traded between \$2.00 and \$3.40 during the 2005 first quarter. Please revise the financial statements to use the quoted market price when valuing the options granted or advise us.

Form 10-QSB for the Period Ended June 30, 2006

Financial Statements, page 3

Note 8. Shareholders' Equity Transactions, page 10

3. We note your response to prior comment 25 and the policy you disclose indicating that you will reassess the liquidated damages at each balance sheet date. Please tell us how this would be consistent with the guidance in paragraph 16 of EITF 00-19 or revise your policy to comply with that guidance.
4. Please refer to prior comments 26 and 29. We note that you believe it is not probable that the security will become redeemable as of June 30, 2006. [Discuss](#) your conclusions as of September 30, 2006 given that use of the registration statement is suspended. [We note the disclosure on page 19 of your Form 10-Q for the period ended September 30, 2006.](#)

Form 10-QSB for the Period Ended September 30, 2006

Financial Statements, page 3

Note 5. Diluted Earnings (Loss) per Common Share, page 11

5. Please tell us how you considered paragraphs 13 and 14 of SFAS 128 in your calculation of diluted earnings per share for the three months ended September 30, 2006. Please note that paragraph 11 of SFAS 128 would require you to adjust the numerator for any changes in income or loss that would result from the assumed conversion of the potential common shares. We note that you did not consider the excess of the fair value of the preferred stock and warrants over their proceeds that you included in loss for the period as an adjustment. Please tell us why or revise to correctly apply the guidance.
6. You refer to a “derivative liability related to the convertible notes and warrants.” Tell us and revise the filing to describe the transactions that resulted in these derivative liabilities or revise the filing to clarify.

Note 8. Equipment Under Construction, page 12

7. Please refer to prior comment 2. On page 6 of this filing you state that under your September 29, 2006 agreement with Chembio, [you granted Chembio](#) exclusive manufacturing rights to the HIV product. On page 12 you state that the HIV Barrel product will be manufactured by Chembio and that you are exploring alternative uses for the equipment. Clearly describe to us how you accounted for this equipment as of September 30, 2006. Tell us whether you assessed the equipment for impairment under SFAS 144.
8. Tell us why you have not depreciated the assets to date and explain why it is appropriate under U.S. GAAP to begin depreciation in the fourth quarter of 2006. [Cite the authoritative literature on which you based your accounting.](#)

Mr. Leo Ehrlich  
StatSure Diagnostic Systems, Inc.  
December 8, 2006  
Page 4

Please amend your filings and respond to these comments within 10 business days or tell us when you will provide us with a response. 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 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.

You may contact Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 or me at (202) 551-3671 if you have any questions regarding these comments.

Sincerely,

Martin James  
Senior Assistant Chief Accountant