

Mail Stop 3561

February 20, 2009

Terren S. Peizer  
President and Chief Executive Officer  
Hythiam, Inc.  
11150 Santa Monica Blvd, Suite 1500  
Los Angeles, CA 90025

**Re: Supplemental Response  
Form 10-K for Fiscal Year Ended December 31, 2007  
Filed May 1, 2008  
Form 10-Q for Quarter Ended September 30, 2008  
Filed November 10, 2008  
File No. 001-31932**

Dear Mr. Peizer:

We have reviewed your filings 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 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 supplemental 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.

Supplemental Response

Form 10-K for Fiscal Year Ended December 31, 2007

Management's Discussion and Analysis of Financial Condition and Results of Operations

Liquidity and Capital Resources, page 49

1. We have reviewed your response to our prior comment one, noting that you do not believe cash operating expenditures is a non-GAAP measure. We understand that this disclosure is useful to investors however cash operating expenditures is not a defined GAAP term. Please include the definition of how you calculate this measure. If you continue to believe that this measure provides useful information to investors regarding your financial condition and results of operations, according to Item 10(e)(2) of Regulation S-K, please provide:
  - A presentation, with equal or greater prominence, of the most directly comparable financial measure calculated and presented in accordance with GAAP, and
  - A reconciliation (by schedule or other clearly understandable method), which shall be quantitative for historical non-GAAP measures presented, and quantitative for forward-looking information, of the differences between the non-GAAP financial measure disclosed with the most directly comparable financial measure calculated and presented in accordance with GAAP.

Form 10-Q for the Period Ended September 30, 2008

Notes to Condensed Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies

Goodwill and Other Intangible Assets, page 16

2. We have reviewed your response to our prior comment seven noting your response did not fully address our comment, thus we are partially reissuing our comment. Per your disclosure on page 35 of your Form 10-Q for the quarter ended June 30, 2008, we note that there was substantial doubt about CompCare's ability to continue as a going concern and CompCare's board of directors were evaluating strategic alternatives including the sale of CompCare. As the value of your healthcare services segment's value is dependant on the synergies created by using CompCare's infrastructure to facilitate the use of PROMETA, please tell us

how this decision did not trigger an impairment test. Refer to paragraph 28 of SFAS 142 for further guidance.

3. In connection with the comment above, we note that you used the market and income approach to estimate the fair value of the healthcare services reporting unit. We note that the value of your healthcare services segment amounted to \$67 million at September 30, 2008 while the post-acquisition fair value was \$65.5 million. Considering the healthcare services reporting unit generated net losses before income taxes of approximately \$41 million in the year ended December 31, 2007 and \$9 million, \$10.2 million, and \$6.4 million for the three months ended March 31, 2008, June 30, 2008, and September 30, 2008. Please provide us with a reasonably detailed summary of the analysis and identify and explain the basis for all significant assumptions. Please discuss the inputs used in the valuation models (observable, unobservable), the priority of those inputs in the fair value hierarchy of SFAS 157 (e.g. level 1, level 2, or level 3), and provide additional detail regarding how you weighted each of the valuation models and why the weight given was deemed to be appropriate (versus another percentage).

Marketable Securities, page 14

4. We have reviewed your response to our prior comment eight noting that because the ARS are owned by Hythiam (not CompCare) that you believe you have the intent and ability to hold these securities until June 30, 2010. Please tell us how you have the ability to hold these securities until June 30, 2010, considering (i) your cash on hand as of September 30, 2008 was \$13.7M, (ii) your healthcare services segments losses before income taxes, (iii) your negative cash flows from operations, and (iv) the loss of major customers for which you planned to use the behavioral health management care segment infrastructure to facilitate the use of PROMETA in their treatment programs.

Note 5. Debt Outstanding, page 21

5. We have reviewed your responses to our prior comments nine. Your responses did not fully address our comments; as a result we will partially reissue our comments. Based on the amended terms of your senior secured note, please tell us how you determined the present value of cash flows related to the amended debt compared to the original debt resulted in a \$1.8 million gain. In your response, please identify and explain your basis for all significant assumptions used.
6. We have reviewed your response to our prior comment ten, noting that you concluded the reclassification of warrants from additional-paid-in-capital to liability was not material to your previous financial statements. Tell us your

consideration of the effects of prior year misstatements when quantifying misstatements in current year financial statements, see SAB Topic 1N. Considering your stock price decreased approximately 73% from the date of issuance of the original warrants to December 31, 2007, please tell us what qualitative and quantitative factors you examined in determining the prior year financial statements were not materially misstated. As part of your response, please provide us with the assumption used each reporting period in determining the FMV of the warrants.

Other Exchange Act Reports

7. Please revise your other Exchange Act reports, as necessary, to comply with our comments above.

As appropriate, please amend your filing 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 amendment and responses to our comments.

You may contact William J. Kearns, Staff Accountant, at (202) 551-3727 or Nasreen Mohammad, Assistant Chief Accountant, at (202) 551-3773 if you have any questions.

Sincerely,

John Reynolds  
Assistant Director