



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

Mail Stop 6010

October 16, 2008

VIA U.S. MAIL AND FAX (651) 634-3212

Mr. Greg S. Lea
Senior Vice President and Chief Financial Officer
Enteromedics Inc.
2800 Patton Road
St. Paul, Minnesota 55113

**Re: Enteromedics, Inc.
Form 10-K for the year ended December 31, 2007
Filed March 13, 2008
File No. 001-33818**

Dear Mr. Lea:

We have reviewed your response filed September 19, 2008 and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. Where indicated, we think you should revise future filings 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 comment or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

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

Financial Statements, page 55

Report of Independent Registered Public Accounting Firm, page 55

1. Please refer to our prior comment 1. We note from your response that you will amend your Form 10-K for the year ended December 31, 2007 to include a revised auditors' report that references the audit of the period from inception to date. We will review your amended 10-K when it is filed.

Form 10-Q for the three and six months ended June 30, 2008

Financial Statement, page 3

Consolidated Statements of Cash Flows, page 5

2. Please refer to prior comment 3. We see from your response that this stock compensation relates to options issued to non-employees which you account for based on the guidance in EITF 96-18. Please further explain to us the nature and terms of your agreements with non-employees to which you issue options in exchange for services. It is unclear to us how you determine your measurement date and why, based on the guidance in EITF 96-18, you "remeasure" the fair value of options granted at each reporting date until the performance is complete. Please advise and cite the GAAP literature that supports your accounting.

Note (1) Summary of Significant Accounting Policies, page 6

Recently Issued Accounting Standards, page 7

3. Please refer to prior comment 4. We see from your response that you determined the fair value of your investments with the assistance of your investment advisors and custodians who use industry accepted pricing services and financial models. Please respond to the following:
 - It does not appear that you have addressed our prior comment, please tell us more about the inputs used, what they represent and how you were able to corroborate these prices.
 - It appears, in part, that you have based your inputs on quoted market prices from inactive markets. Please tell us how the fact that these markets are inactive impacted your valuation.
 - It appears that you have merely provided the definition of level 2 inputs in your response. Please tell us about your specific investments, how you determined the fair value and the specific inputs utilized in determining fair value.

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- Consider the Staff's guidance and Clarifications on Fair Value Accounting at <http://sec.gov/news/press/2008/2008-234.htm>.
- Confirm that you will revise future filings to address our concerns.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses to our comments and provides any requested supplemental information. Detailed cover letters greatly facilitate our review. Please file your cover letter on EDGAR as correspondence. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Julie Sherman, Staff Accountant, at (202) 551-3640 or me at (202) 551-3554 if you have any questions regarding these comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Angela Crane
Accounting Branch Chief