

Via Facsimile and U.S. Mail
Mail Stop 6010

August 22, 2006

Mr. Les M. Taeger
Senior Vice President and Chief Financial Officer
Orthologic Corp.
1275 W. Washington Street
Tempe, AZ 85281

**Re: Orthologic Corp.
Form 10-K for the year ended December 31, 2005
Filed on March 13, 2006
Form 10-Q for the interim period ended June 30, 2006
File No. 000-21214**

Dear Mr. Taeger:

We have limited our review of your filing to those issues we have addressed in our comments. In some of our comments we ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments. Where indicated, we think you should revise your documents 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.

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.

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Form 10-K for the year ended December 31, 2005

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

Liquidity and Capital Resources, page 32

1. Please revise your disclosure to expand discussions of your financial obligations for 2006 and 2007 as they relate to the contractual obligations table. You disclose accrued clinical expenses of \$544,000, additional commitment due to clinical sites of \$988,000, and contracts to consultants and other contractual obligation, however the sum of these amounts are a fraction of the "total liabilities" caption disclosed for 2006 and 2007 in your table. Additionally, revise your contractual obligations table to comply with the format prescribed in Item 303(a)(5) of Regulation S-K.

Financial Statements

Notes to Financial Statements

Summary of Significant Accounting Policies

D. Excess Space Reserve, page F-7

2. Please tell us why you have accrued a liability for excess space reserve and the accounting literature management relied upon to record this accrual.

Note 14. Subsequent Events, page F-19

Sale of Shares of Company Stock, Issuance of Warrants and Entry into Master Services Agreement, page F-20

3. Please tell us and disclose the significant terms of your agreement with Quintiles specifically the milestones that must be achieved in order for the stock warrants to vest.

Form 10-Q for the interim period ended June 30, 2006

Item 1. Financial Statements

Notes to Unaudited Condensed Financial Statements

C. Sale of Shares of Company Stock, Issuance of Warrants and Entry into Master Services Agreement, page 13

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4. Please provide to us your analysis under EITF 00-19 of how you accounted for the warrants issued to PharmaBio Development (dba NovaQuest). It appears that you are required to issue registered shares to settle the contract and the number of shares that must potentially be issued to settle the contract is infinite because at the time the warrants were issued the stock price was unknown. Based on this information, it would appear that the warrants should have been initially recorded as a liability with changes in the fair market value recorded through earnings in accordance with EITF 00-19.

Please amend your Form 10-K for the year ended December 31, 2005 and respond to these comments within 10 business days of the date of this letter 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 file the letter on EDGAR under the form type label CORRESP. 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 filing to be certain that the filing include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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.

In connection with responding to our comments, please provide, in your letter, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;
- staff comments or changes to disclosure in response to staff comments in the filings reviewed by the staff do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments 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 our review of your filing or in response to our comments on your filing.

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You may contact Christine Allen, Staff Accountant, at (202) 551-3652 or Kevin Woody, Branch Chief at (202) 551-3629 if you have questions regarding the comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief Accountant