

Mail Stop 6010

September 25, 2008

Trevor Phillips, Ph.D.
President and Chief Executive Officer
Critical Therapeutics, Inc.
60 Westview Street
Lexington, MA 02421

Re: Critical Therapeutics, Inc.
Registration Statement on Form S-4/A
Filed September 18, 2008
File No. 333-152442

Dear Dr. Phillips:

We have reviewed your filing 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 any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM S-4/A

Summary, page 1

Interests of Cornerstone's Directors and Executive Officers, page 9

1. We note that you have included information regarding Scott Townsend in the table that discloses the ownership interests of Cornerstone's Directors and Executive Officers. Please revise your disclosure to disclose the information regarding Scott Townsend in the section entitled "Interests of Critical

Therapeutics' Directors and Executive Officers" to clarify that Scott Townsend is currently an executive officer of Critical Therapeutics rather than Cornerstone.

Critical Therapeutics, Management's Discussion and Analysis of Financial Condition and Results of Operations, page 235

Financial Operations Overview, page 236

Critical Accounting Policies, page 240

Revenue Recognition, page 241

2. Please tell us how you have recognized all of the MedImmune collaboration revenue under your proportional performance model. Such recognition infers that you have completed all research and development efforts. In addition, please disclose the process for estimating the progress of your research and development efforts, including the major drivers and assumptions used. Please quantify and disclose the reasonably likely effect that a change in your assumptions related to your proportional performance calculation could have on financial position and operations.

Unaudited Pro Forma Condensed Combined Financial Information, page 327

Notes to Unaudited Pro Forma Condensed Combined Financial Statements, page 331

2) Purchase Price, page 331

3. Please refer to your response to comment ten, we disagree that market prices after the announcement are not helpful. Please revise your proforma to reflect a purchase price that is determined by using the equity securities pricing over a period of time before and after the acquisition was agreed to and announced as outlined in EITF 99-12.
4. Please refer to your response to comment twelve. Please revise the parenthetical disclosure of cost of product sales to reflect the amount of amortization of product rights for each period presented. An example is as follows: (exclusive of amortization of product rights of \$____, \$____ and \$____ in 2007, 2006 and 2005).

* * *

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 information. Detailed cover

Trevor Phillips, Ph.D.
Critical Therapeutics, Inc.
September 25, 2008
Page 3

letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 Ibolya Ignat at (202) 551-3656 or Joel Parker at (202) 551-3651 if you have questions regarding comments on the financial statements and related matters. Please contact Jennifer Riegel at (202) 551-3575 or me at (202) 551-3715 with any other questions.

Sincerely,

Jeffrey Riedler
Assistant Director

cc: Steven D. Singer, Esq.
Michael J. LaCascia, Esq.
Brian A. Johnson, Esq.
Wilmer Cutler Pickering Hale and Dorr LLP
399 Park Avenue
New York, NY 10022