



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

Mail Stop 3030

July 16, 2009

Caesar J. Belbel
Executive Vice President, Chief Legal Officer and Secretary
Clinical Data, Inc.
One Gateway Center, Suite 702
Newton, Massachusetts 02458

**Re: Clinical Data, Inc.
Amendment No. 1 to Registration Statement on Form S-3
Filed July 1, 2009
File No. 333-159039**

Dear Mr. Belbel:

We have limited our review of your filing to the issues we have addressed in our comment. Where indicated, we think you should revise your document in response to this comment. 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 or may not 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.

Registration Rights Agreement, page 6

1. We note your response to prior comment 3. To the extent that the liquidated damages provision of your registration rights agreement has been triggered or will be triggered prior to effectiveness of the registration statement, please revise to provide tabular disclosure of the amount payable to the selling stockholders.

Related Party Transactions, page 16

2. Tell us the authority on which you rely to incorporate by reference from your Forms 8-K the information required to be included in Form S-3 pursuant to Item 7 of the form.

Information Incorporated by Reference, page 19

3. We note that you have incorporated by reference the Form 10-K for the fiscal year ended March 31, 2009, which in turn forward incorporates by reference portions of a definitive proxy statement that has not yet been filed. Please note that you should file the Part III information, either in a definitive proxy statement or in an amendment to the Form 10-K, prior to requesting acceleration of this registration statement. Refer to Item 123.01 of the Securities Act Forms' Compliance and Disclosure Interpretations, available on our website at www.sec.gov.

Undertakings, page 20

4. We note your response to prior comment 10; however, the undertaking required by Regulation S-K Item 512(a)(6) should be included in your filing. See Rule 430C(d).

As appropriate, please amend your registration statement in response to this comment. 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 response to our comment 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 response to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Act of 1933 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.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

Caesar J. Belbel
Clinical Data, Inc.
July 16, 2009
Page 3

- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your submission or in response to our comments on your submission.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

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.

Please contact Mary Beth Breslin at (202) 551-3625 or me at (202) 551-3617 with any questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via facsimile): Marc A. Recht, Esq.
Cooley Godward Kronish LLP