

Via Facsimile and U.S. Mail
Mail Stop 4720

March 29, 2010

Andrew J. Fromkin
President and Chief Executive Officer
Clinical Data, Inc.
One Gateway Center, Suite 702
Newton, MA 02458

**Re: Clinical Data, Inc.
Form 10-K for Fiscal Year Ended March 31, 2009
Schedule 14A Filed July 29, 2009
File No. 000-12716**

Dear Mr. Fromkin:

We have reviewed your filings and have the following comments. In our comments, we ask you to provide us with information to better understand your disclosure. Where a comment requests you to revise disclosure, the information you provide should show us what the revised disclosure will look like and identify the annual or quarterly filings, as applicable, in which you intend to first include it. If you do not believe that revised disclosure is necessary, explain the reason in your response. After reviewing the information provided, we may raise additional comments and/or request that you amend your filings.

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 filings. 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.

Form 10-K for the Fiscal Year Ended March 31, 2009

Item 1. Business

About Vilazodone, page 7

1. We note you disclose the terms of your agreement with Merck in your Form 10-Q's. We believe your Form 10-K should also discuss the material terms of the

Merck license agreement. Please revise the description of the agreement in the Form 10-K to disclose the following information:

- a. Describe all material rights and obligations of each party;
- b. Quantify all amounts paid to date;
- c. Quantify the aggregate potential milestone payments;
- d. Provide a royalty range or a statement that the royalty percentage is in the single digits, teens, etc.; and
- e. Discuss the material term and termination provisions.

Patents and Proprietary Technology, page 14

2. Please discuss your material owned patents or groups of related patents. The discussion should identify the jurisdiction(s) where you have obtained patent protection, identify the product(s), product candidate(s), or technology that are dependent on the patent(s), and disclose when the patent(s) expires.
3. We also note your discussion on page 15 pertaining to exclusive in-licensed rights. The discussion should be expanded to indicate the term of the patents that have been granted.

Item 7. Management's Discussion And Analysis Of Financial Condition And Results Of Operations

Financial Operations Overview

Research and Development Expense, page 38

4. We believe that your disclosures about historical research and development expenses and estimated future expenses related to your major research and development projects could be enhanced for investors. Please refer to the Division of Corporation Finance "Current Issues and Rulemaking Projects Quarterly Update" under section VIII – Industry Specific Issues – Accounting and Disclosure by Companies Engaged in Research and Development Activities. You can find it at the following website address:
<http://www.sec.gov/divisions/corpfin/cfcrq032001.htm>.

Please expand your MD&A to disclose the following information for each of your major research and development projects.

- a. The current status of the project;
- b. The costs incurred during each period presented and to date on each project;
- c. The nature, timing and estimated costs of the efforts necessary to complete each project;
- d. The anticipated completion dates of each project;

- e. The risks and uncertainties associated with completing development on schedule, and the consequences to operations, financial position and liquidity if each project is not completed timely; and finally
- f. The period in which material net cash inflows from significant projects are expected to commence for each project.

Regarding b., if you do not maintain any research and development costs by project, disclose that fact and explain why management does not maintain and evaluate research and development costs by project. Provide other quantitative or qualitative disclosure that indicates the amount of the company's resources being used on the project.

Regarding c. and d., disclose the amount or range of estimated costs and timing to complete the phase in process and each future phase. To the extent that information is not estimable, disclose those facts and circumstances indicating the uncertainties that preclude you from making a reasonable estimate.

Critical Accounting Policies and Significant Judgments and Estimates

Valuation of Intangibles and Goodwill, page 38

- 5. A reporting unit is at risk of failing step one of the impairment test if it has a fair value that is not substantially in excess of carrying value. If this is the case, please provide the following disclosures for each reporting unit that is at risk of failing step one:
 - a. Percentage by which fair value exceeded carrying value as of the date of the most recent test;
 - b. Amount of goodwill allocated to the reporting unit;
 - c. Description of the methods and key assumptions used and how the key assumptions were determined;
 - d. Discussion of the degree of uncertainty associated with the key assumptions. The discussion regarding uncertainty should provide specifics to the extent possible (e.g., the valuation model assumes recovery from a business downturn within a defined period of time); and
 - e. Description of potential events and/or changes in circumstances that could reasonably be expected to negatively affect the key assumptions.

Accrued Expenses, page 39

- 6. Please disclose information about the historical accuracy of these accounting estimates, a quantification of their sensitivity to changes in key assumptions and the expected likelihood of material changes in the future.

Part IV Item 15. Exhibits, Financial Statement Schedules

Consolidated Financial Statements

Notes To Consolidated Financial Statements

(2) Significant Accounting Policies

Revenue Recognition, page F-11

7. Please disclose your accounting policy for recognizing fees for licenses of intellectual property. Also, revise to clarify how service fee revenue from genetic tests is recognized. Disclose in Critical Accounting Policies on page 38 the nature of any uncertainties in estimates relating to recognizing each type of revenue.

Segment and Geographical Information, page F-14

8. Please expand your disclosure to provide the information requested in paragraphs 38 and 39 of SFAS 131 (ASC 280-10-50 paragraphs 41 and 42).

(4) Business Combinations

Adenosine Therapeutics, LLC, page F-17

9. Please provide us your analysis, under the guidance of EITF 98-3, supporting your conclusion that the assets acquired from Adenosine Therapeutics constituted a business for purposes of application of the guidance in SFAS 141 which resulted in the recording of Contingent acquisition costs of \$16 million in 2009. Reconcile your conclusions to the fact that \$52.1 million of the \$52.3 million purchase price was allocated to IPR&D.

(9) Commitments and Contingencies

Contractual Commitments and Commercial Obligations, page F-23

10. Please add disclosure about your material collaboration and licensing agreements. Include a discussion of the facts and circumstances surrounding your common issuances to Merck for a license, as presented on your Consolidated Statements of Stockholders' Equity. Disclose how the cost was accounted for in each period.

Schedule 14A

Equity Compensation, page 13

11. We note that stock awards are based upon the Compensation Committee's consideration of guidelines that take growth in market capitalization, individual performance, salary and tenure into account. The Compensation Discussion and Analysis does not disclose the guidelines and goals the Compensation Committee considered to determine your executive officers' stock awards. Please provide us with draft disclosure for your 2010 proxy statement which provides the following:
- a. A more detailed specific description and quantification of each of the individual and corporate goals and performance objectives for each named executive officer;
 - b. Confirmation that you will discuss the achievement of the objectives; and
 - c. A discussion of how the level of achievement, market capitalization, salary and tenure or other goals or objectives will affect the actual awards to be granted.

To the extent that these criteria are quantifiable, the discussion in your proxy statement should also be quantified.

* * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provide the requested information. Detailed letters greatly facilitate our review. Please furnish the letter to us via EDGAR under the form type label CORRESP.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings 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 do not foreclose the Commission from taking any action with respect to the filings; and

Andrew J. Fromkin
Clinical Data, Inc.
March 29, 2010
Page 6

- 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 filings or in response to our comments on your filings.

Please contact James Peklenk, Staff Accountant, at (202) 551-3661 or Mary Mast, Senior Accountant, at (202) 551-3613 if you have any questions regarding the processing of your response as well as any questions regarding comments on the financial statements and related matters. You may contact John Krug, Senior Attorney, at (202) 551-3862 with questions on any of the other comments. In this regard, do not hesitate to contact me, at (202) 551-3679.

Sincerely,

Jim B. Rosenberg
Senior Assistant Chief
Accountant