



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 6010

May 19, 2008

VIA U.S. Mail and Facsimile 510.657.4476

John R. Cheney
Chief Executive Officer and
Chief Financial Officer
Cardima, Inc.
47266 Benicia Street
Fremont, CA 94538-7330

RE: **Cardima, Inc.**
Form 10-KSB for the fiscal year ended December 31, 2007
Filed April 15, 2008
File No. 000-22419

Dear Mr. Cheney:

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 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-KSB for the fiscal year ended December 31, 2007

Item 8A. Controls and Procedures, page 37

1. Please refer to prior comment 1 and your proposed disclosure in Exhibit A of your response. Please revise the disclosure you include in the amended 10-K to indicate whether each of the identified items is a material weakness or a significant deficiency.
2. Further, we note that the proposed disclosure while called “management’s report on internal control over financial reporting” does not state whether management concluded that the company’s internal control over financial reporting was effective or was not effective. Rather we note that you disclose only management’s conclusion on disclosure controls and procedures. Please revise the disclosure you include in the amended 10-K to also disclose management’s conclusion on your internal control over financial reporting required by Item 308 of Regulation S-B.

Financial Statements, page F-1

Note 10. Stock-based Compensation, page F-24

3. Please refer to prior comment 8. While we note the disclosure of the weighted average remaining contractual term of options outstanding, we did not locate similar disclosure for options exercisable. Please include this information in future filings, or tell us where you disclose the information.

Note 12: Restatement of Financial Statements, page F-29

4. We note your response to prior comment 12. Please revise this note in your amended Form 10-K to clearly explain to investors what the “Excess Share Liability” represents. Discuss how you applied the guidance in paragraph 11 of EITF 00-19 in concluding that the warrants should be classified as equity. Clearly identify the sequencing method you followed in determining whether you had sufficient authorized and unissued shares to settle the outstanding contracts that fell within the scope of EITF 00-19.

John R. Cheney
Cardima, Inc.
May 19, 2008
Page 3

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

You may contact Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 or me, at (202) 551-3671, if you have questions regarding these comments

Sincerely,

Martin F. James
Senior Assistant Chief Accountant