



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

Mail Stop 6010

January 30, 2008

VIA U.S. Mail and Facsimile 510.657.4476

Chris Mak  
Chief Financial Officer  
Cardima, Inc.  
47266 Benicia Street  
Fremont, CA 94538-7330

RE: **Cardima, Inc.**  
**Form 10-KSB and Amendment No. 1 thereto for the fiscal year ended**  
**December 31, 2006**  
**Form 10-QSB for the Quarterly Periods Ended June 30 and**  
**September 30, 2007**  
**File No. 000-22419**

Dear Mr. Mak:

We have reviewed your filings and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. 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/A for the fiscal year ended December 31, 2006

Financial Statements, page F-1

Note 11. Stock Based Compensation, page F-18

1. Your proposed revised disclosure in response to prior comment 9 does not provide all of the required information. For example, it does not include the aggregate intrinsic value of your fully vested options and exercisable options as of the latest balance sheet date as required by paragraph A240d. Please revise the note in future filings to disclose all of the information required by paragraphs A240(d)(1), (d)(2), (e)(2) and (h) of SFAS 123R.

Exhibit 31.1 - Certifications

2. Please refer to prior comment 10. We noted that the certifications required by Exchange Act Rule 13a-14(a) included in your Form 10-QSB for the quarterly period ended September 30, 2007 continued to include the title of the certifying individual at the beginning of the certification. As previously requested, please revise the certifications in future filings to remove the individual's title when identifying the certifying individual at the beginning of the certification.

Form 10-QSB for the Quarterly Period Ended June 30, 2007

Financial Statements, page 3

Statements of Operations, page 4

3. Please tell us why the shares used in computing both basic and fully diluted earnings per share for the three months ended June 30, 2007 are the same. Tell us why the fully diluted amount does not include any common stock equivalents or correct the amounts in the amended 10-QSB you intend to file.

Note 1. Interim Financial Information, page 6

Restatement of Previously Reported Financial Results, page 6

4. You disclose that you will restate your March 31, 2006 and December 31, 2006 financial statements. Please tell us when you intend to file the restated financial statements for each of the periods.

5. Please revise future filings to include the disclosures required by SFAS 154 for your restated statements of cash flows and properly label those statements as restated.
6. We note the restatement you made in response to prior comments 6 and 10 and the disclosures included in this note. However, while we understand that you have now concluded that the modifications to the Apex debt and warrants agreements were substantial and, therefore, resulted in an extinguishment, your accounting for the debt extinguishment and the resulting adjustments to your financial statements remains unclear.
  - Provide us with your calculations of the gain or loss on debt extinguishment resulting from both the February 14, 2006 and January 15, 2007 modifications of your debt agreements with Apex, showing us how you initially recorded the new debt instrument at fair value, and how you determined the amount of the debt extinguishment gain or loss to be recognized and the effective rate of the new instrument.
  - Clearly show how you treated any fees you paid related to both the old loan and the new loan when calculating the debt extinguishment gain or loss. Please note that for extinguishment gains and losses, the fees paid or received should generally be associated with the extinguishment of the old debt instrument under EITF 96-19.
  - Separately identify any component of the gain or loss related to the changes in the debt conversion ratio and exercise price of the warrants.
  - If you did not record a gain or loss on debt extinguishment in accordance with EITF 96-19, please explain why.
  - Explain to us what the additional liability of \$400,000 presented in the 'Conversion feature liabilities' caption of your restated balance sheet as of December 31, 2006 represents.
  - Discuss why your accounting resulted in the acceleration of \$1,000,000 in loan fees.
  - Revise your disclosures in future filings, including the amended 10-QSB, to include similar information, so that your accounting treatment is clear to investors.
7. In addition, to the extent that the \$400,000 conversion features liabilities relates to your bifurcation of the embedded conversion options of the Apex notes, please explain how that would be consistent with your response to prior comment 3 stating that the Apex debt was conventional convertible.

Note 7. Loans Payable, page 11

8. We note your response to prior comment 13 and to the disclosure included on page 12. Please tell us the specific rights that Apix gave up for net cash settlement that resulted in the company no longer accounting for the warrants as liabilities. We were unable to identify such a change in the documents filed as exhibits to the Forms 8-K.
9. Notwithstanding the above comment, consistent with the representations in your response to prior comment 2, we note that since the company did not have a sufficient number of authorized and unissued common shares at December 31, 2006 and March 31, 2007 to settle the warrants, the conversion of the debt, the exit fees and the facility fees, pursuant to paragraph 19 of EITF 00-19 you would continue to classify the warrants as liabilities at each of those dates. Likewise, we note that following the effectiveness of the 1-for-10 reverse stock-split reflected in your balance sheet of June 30, 2007, that situation no longer existed and as a result, it appears that liability accounting would no longer be required for the warrants and would result in the reversal of the warrant liability. If true, please confirm our understanding and correct the disclosure in the amended Form 10-QSB.

Form 10-QSB for the Quarterly Period Ended September 30, 2007

Statements of Operations, page 4

10. Please show us how you determined the shares used to compute both basic and fully diluted earnings per share for the three months ended September 30, 2006. We note that the original Form 10-QSB filed for the three months ended September 30, 2006 reflected basic shares of 101,915 and fully diluted shares of 185,781 while the current presentation reflects the same number of shares for both basic and fully diluted earnings per share.
11. Revise the statement in all future filings, including the amended filings, to disclose income (loss) applicable to common shareholders on the face of the income statement.

Note 1. Interim Financial Information, page 6

Restatement, page 6

12. You disclose that you made a conclusion on November 16, 2007 that the financial statements you previously issued as of and for the three-month period ended June 30, 2007 should no longer be relied upon. Please file the applicable Item 4.02 Form 8-K and the related amendment to your June 30, 2007 Form 10-QSB.
13. Please ensure that your amended June 30, 2007 Form 10-QSB includes all of the disclosures required by paragraph 26 of SFAS 154 including the effect of the correction on each financial statement line item and any per-share amounts affected for each prior period presented. Explain why you are accounting for the change in the exercise price of the warrants as a beneficial conversion charge.
14. Please show us how you calculated the loss on restructuring of \$800,000 and the two beneficial conversion amounts of \$3.1 million and \$2.3 million.

Recent Accounting Pronouncements, page 7

15. You disclose that you have not yet determined the impact of the adoption of FSP 00-19-2 on your financial statements. As we note that the guidance is effective for financial statements issued for fiscal years beginning after December 15, 2006, and interim periods within those fiscal years, please update all future filings to disclose your conclusion.
16. Further, consistent with paragraph 12 of the FSP, please revise future filings to disclose the information required about each of your registration payment arrangements or each group of similar arrangements.

Note 13. Concentration of Credit Risk, page 12

17. Please tell us and in future filings disclose how you accounted for the return of \$85,000 of products during the second quarter of 2007 from your former Japanese distributor.

Exhibit 31.1 - Certifications

18. We note that the language at the beginning of paragraphs 4 and 5 was modified and refers to only one individual and not the certifying officers. In future filings, please revise the certifications to reflect the exact form set forth in Item 601(b)(31) of Regulation S-B.

Mr. Chris Mak  
Cardima, Inc.  
January 30, 2008  
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As appropriate, please respond to these comments and file the amended Forms 10-KSB and 10-QSB 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 file your cover letter on EDGAR. 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