



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

Mail Stop 3030

December 22, 2008

Via Facsimile and U.S. Mail

Mr. Paul S. Weiner  
Chief Financial Officer  
Palomar Medical Technologies, Inc.  
82 Cambridge Street  
Burlington, MA 01803

**Re: Palomar Medical Technologies, Inc.  
Form 10-K for the Year Ended December 31, 2007  
Filed March 6, 2008  
Form 10-Q for the Quarter Ended September 30, 2008  
File No. 001-11177**

Dear Mr. Weiner:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your documents in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 10-K For the Year Ended December 31, 2007

Item 8. Financial Statement and Supplementary Data, page 41

Note 1. Summary of Significant Accounting Policies, page 47

-Stock-based Compensation, page 51

1. We note that you calculate your expected volatility within the Black-Scholes model based on historical volatilities and "other factors." Please tell us and revise your future filings to include a discussion of the "other factors" for which you base your volatility upon within your valuation. Refer to the guidance in paragraphs A240-242 of SFAS 123(R) and SAB Topic 14.

Note 8 – Stockholders' Equity, page 60

2. We note from your disclosure under "Common Stock" that you pay a 5% per annum fee to certain holders of your common stock so long as those investors continue to hold their common stock in their name. Please provide us with your legal analysis as to why those fees should not be considered as the payment of dividends on those shares of common stock. If those fees could be considered dividends, it would appear that you are distributing dividends to the shareholders of your common stock on a basis that is not pro rata. If so, please provide us with your legal analysis as to how your actions are consistent with the laws of your jurisdiction of incorporation and your certificate of incorporation. Please cite with specificity any legal authorities upon which you rely in conducting your analyses. In addition, in your future filings, please identify the investors who hold the shares of common stock who receive this fee/dividend and disclose the business purpose of entering into this arrangement.

Note 18. Alma Agreement, page 68

3. We note your disclosures here and throughout the filing related to your resolution of your patent infringement and trade dress lawsuit against Alma Lasers, Inc (Alma). It appears based upon your disclosures that there are multiple elements to these agreements such as the agreement not to challenge the infringement, validity, and enforceability of certain patents; a settlement fee for certain costs that you incurred; and the licensing of certain patents to Alma. Please tell us and revise future filings to clearly discuss each specific right you received and obligation you incurred and how you valued and accounted for each of the elements. Within your discussion, please provide the amounts that each party will pay or have paid as part of the settlement agreement. Cite the accounting literature on which you relied and how you applied the accounting literature to your situation.

Item 9A. Controls and Procedures, page 69

Management's Report on Internal Control over Financial Reporting, page 70

4. Please revise this report in future filings to include the disclosure required by Item 308(a)(4) of Regulation S-K.

Item 11 – Executive Compensation, page 72

5. We note from the disclosure under "Target Total Cash Compensation" incorporated by reference from your proxy statement that the Wilson Group, in collaboration with your compensation committee, identified peer group companies for use in determining the compensation to be awarded to your named executive officers. In your future filings, please identify the companies in your peer group. Refer to Item 402(b)(2)(xiv) of Regulation S-K. Please also briefly discuss in your applicable future filings how each element of compensation you provide to your named executive officers relates to the data you have analyzed from the peer companies and include an analysis of where actual payments under each element of compensation actually fell within the targeted range. If any of your named executive officers are compensated at levels that are materially different from the targeted levels of compensation, please also provide discussion and analysis as to why.
6. We note from the disclosure under "Base Salary, Non-Equity (Cash) Incentive and Bonus" incorporated by reference from your proxy statement that you have not quantified the principal objective financial performance goal or adequately disclosed the individual objectives that are necessary to be achieved in order for your named executive officers to earn their compensation under the non-equity incentive plan. Please provide such disclosure in your future filings and clarify how the achievement of those objectives translated into the incentive compensation awarded to each named executive officer. To the extent you believe that disclosure of the performance goals, on a historical basis, would result in competitive harm such that the information could be excluded under Instruction 4 to Item 402(b) of Regulation S-K, please provide us with a detailed explanation supporting your conclusion. Refer also to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available on our website at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>. If it is appropriate to omit specific targets or performance objectives based on a competitive harm analysis, please provide the appropriate disclosure pursuant to Instruction 4 to Item 402(b) of Regulation S-K. If discussing how difficult or likely it will be to achieve the targeted performance goals, you should provide as much detail as necessary without disclosing information that poses a reasonable risk of competitive harm and provide sufficient discussion and analysis as to the level of increased performance the established financial measures are intended to incentivize.

7. We note your disclosure under "Equity Incentive" incorporated by reference from your proxy statement. In your future filings, please provide additional discussion and analysis of the factors considered by the compensation committee in determining the amount of stock option awards to grant to each of your named executive officers.
8. We note from the disclosure in your "Summary Compensation Table" incorporated by reference from your proxy statement that the amounts awarded to your named executive officers under the heading "Non-Equity Incentive Plan Compensation" exceed the maximum estimated future payout amounts indicated under the column "Estimated Future Payouts under Non-Equity Incentive Plan Awards" in your "Grants of Plan-Based Awards" table. In your future filings, please ensure that the threshold, target and maximum amounts of payouts under your non-equity incentive plans are accurately disclosed in your "Grants of Plan-Based Awards" table and that if the actual grants somehow exceed the disclosed maximums the reasons are adequately disclosed, discussed and analyzed.

Form 10-Q for the Quarter Ended September 30, 2008

Notes to Condensed Consolidated Financial Statements, page 6

9. We note your disclosures on pages 13-15 related to your collaborative product development agreements and research and development contracts with the Gillette Company, Johnson & Johnson Consumer Companies, Inc., and the U.S. Department of Army. Please tell us and revise your future filings to disclose the impact that EITF 07-01 and EITF 07-03 will have or had on your results of operations consistent with the guidance in SAB Topic 11M.
10. We note on page 31 your disclosures related to entering into an international distribution agreement with Q-MED AB during fiscal 2008. Please tell us and revise your future filings to describe the significant terms of the arrangement with Q-MED AB, including payment, return, exchange, price protection, discounts, sales incentives and other significant matters. Discuss if the change has or will have any impact upon your revenue recognition policy. Refer to SAB 104 and SFAS 48 as necessary.

Note 6. Fair Value of Financial Instruments, page 10

11. We note your disclosures related to the fair values of your investments in auction-rate securities. Please address the following:
  - Please revise future filings to disclose why you classified your investment in auction rate securities held at December 31, 2007 within the Level 1 category.
  - It appears that based upon your disclosures that you have transferred your auction rate securities from Level 1 at December 31, 2007 to Level 3 at September 30, 2008.

However, the rollforward information that you provided related to your Level 3 financial instruments indicates that your investment in auction rate securities have been classified as Level 3 since December 31, 2007. Please tell us why the change from Level 1 to Level 3 is not presented as a transfer in during the period ended September 30, 2008, and revise future filings as necessary.

- Additionally, please disclose in future filings your policy for transfers in or out of Level 3 and separately quantify the gain or loss for instruments transferred into Level 3 during the period.
- Paragraph 32(e) of SFAS 157 requires disclosure, in annual periods, of the valuation method used and significant assumptions underlying the valuations for the auction rate securities. However, paragraph 39 of SFAS 157 requires this disclosure in the period of adoption. We do not see where you included this disclosure in your Forms 10-Q as of March 31, 2008, June 30, 2008, or September 30, 2008. Please tell us where you provided this disclosure or otherwise include the required disclosure in your annual report.
- We note that you recorded the reduction of the value of the auction rate securities as an unrealized loss. In light of the failed auctions and your statement that you will not be able to access your investments in auction rate securities until further auctions are successful, please revise future filings to specifically disclose, if true, that you believe that the securities will recover their full par value and that you have both the intent and ability to hold the securities until such recovery.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter that keys your responses 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 responses to our comments.

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 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 writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and

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

You may contact Tara Harkins, Staff Accountant, at (202) 551-3639 or Lynn Dicker, Reviewing Accountant, at (202)-551-3616 if you have questions regarding comments on the financial statements and related matters. Please contact Alan Morris, Staff Attorney, at (202) 551-3601, or me at (202) 551-3635 if you have questions on any other comments. In this regard, do not hesitate to contact me or Kevin Vaughn, Accounting Branch Chief, at (202) 551-3643 with any questions.

Sincerely,

Timothy Buchmiller  
Reviewing Attorney