



DIVISION OF  
CORPORATION FINANCE

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

September 27, 2011

Via E-Mail

Kenneth T. Coviello  
Chief Executive Officer  
Vycor Medical, Inc.  
3651 FAU Boulevard, Suite 300  
Boca Raton, FL 33434

**Re: Vycor Medical, Inc.  
Amendment No. 1 to Form 10-K for the year ended December 31, 2010  
Filed September 2, 2011  
Amendment No. 1 to Form 10-K for the Year Ended December 31, 2009  
Filed September 2, 2011  
File No. 001-34932**

Dear Mr. Coviello:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within 30 calendar days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Amendment No. 1 to Form 10-K for the year ended December 31, 2010

Consolidated Statement of Operations, page F-3

1. We note the line item "Stock Compensation" presented on the face of your statements of operations. Please revise the statements of operations in future filings, including any amendment to this filing, to present expense for stock compensation in the same line or lines as cash compensation in accordance with SAB Topic 14F.
2. Additionally, we note that you have presented expenses for "Goodwill on Acquisition of Subsidiary" and "Costs related to Acquisition of Subsidiary", as non-operating expenses. Please explain to us why these expenses are properly reflected as non-operating expenses.

on your statement of operations. Refer to FASB ASC paragraph 350-20-45-2. Revise future filings, including any amendment to this filing, to present these expenses within your operating loss or tell us why your current presentation is appropriate.

Note 3 – Business Acquisition, page F-6

3. We note that you based your fair value of the assets acquired in the NovaVision, Inc. acquisition on an independent appraisal. Please describe to us the nature and extent of the third party appraiser's involvement and management's reliance on the work of the independent appraiser. Please refer to Question 141.02 of the Compliance and Disclosure Interpretations on Securities Act Sections, which can be found at <http://www.sec.gov/divisions/corpfin/guidance/sasinterp.htm>, which explains the circumstances under which a valuation firm would be named and its consent included in registration statements.
4. As a related matter, please explain to us your valuation methodology and significant assumptions you used in allocating the transaction price to the assets you acquired. Revise future filings as necessary.

Note 5 – Restatement, page F-11

Note 6 – Notes Payable, page F-14

5. We note that you determined that a beneficial conversion feature (BCF) did not exist for any of your convertible notes. Please provide us with your BCF analysis, including a comparison of the conversion prices of your convertible notes at issuance to your stock price at issuance.

Note 9 –Intangible Assets, page F-18

6. We note that you determined that the trademarks acquired in conjunction with the NovaVision, Inc. acquisition have indefinite useful lives. Please explain to us the factors you considered in concluding that these assets have indefinite useful lives. Refer to FASB Accounting Standards Codification 350-30-35. Additionally please explain to us the methodology you used to determine fair value of the trademarks.

Non-Employee Stock Based Compensation, page F-21

7. We note the significance of the value of your prepaid expenses related to the warrants you have issued to consultants. Please provide a reconciliation of your prepaid expense for each material issuance to the aggregate prepaid expense you have recognized on your balance sheet at December 31, 2010.

Item 9A. Controls and Procedures (As Revised), page 45

8. We note that you have concluded that your disclosure controls and procedures were not effective as of June 30, 2011, but we do not see where you have concluded on the

effectiveness of your disclosure controls and procedures as of the end of period covered by this report. Please revise your filing to provide management's assessment and conclusion regarding the effectiveness of disclosure controls and procedures as of the end of period covered by this report, which in this instance is December 31, 2010. Refer to Item 307 of Regulation S-K.

9. It does not appear that your management has performed its assessment of internal control over financial reporting as of December 31, 2010. Since you were required to file or filed an annual report for the prior fiscal year, it appears you are required to report on your management's assessment of internal control over financial reporting.

If your management has not yet performed its assessment, we ask that you complete your evaluation and amend your filing within 30 calendar days to provide the required management's report on internal control over financial reporting. Refer to Item 308 of Regulation S-K and provide all the required disclosures.

In performing your evaluation, you may find the following documents helpful:

- the Commission's release *Amendments to Rules Regarding Management's Report on Internal Control Over Financial Reporting* (Securities Act Release 8809/Financial Reporting Release 76). You can find this release at: <http://www.sec.gov/rules/final/2007/33-8809.pdf>;
- the Commission's release *Commission Guidance Regarding Management's Report on Internal Control Over Financial Reporting Under Section 13(a) or 15(d) of the Securities Exchange Act of 1934* (Securities Act Release 8010/Financial Reporting Release 77). You can find this release at <http://sec.gov/rules/interp/2007/33-8810.pdf>; and
- the "Sarbanes-Oxley Section 404 – A Guide for Small Business" brochure at: (<http://www.sec.gov/info/smallbus/404guide.shtml>).

Amendment No. 1 to Form 10-K for the Year Ended December 31, 2009

10. We note that you did not provide Management's Report on Internal Control over Financial Reporting in the amendment to your Form 10-K for the year ended December 31, 2009 (the "2009 Form 10-K") filed on September 2, 2011. Further, we note that while you included Management's Report on Internal Control over Financial Reporting in the original 2009 Form 10-K filed on March 31, 2010, you disclose that the assessment on which management based its conclusion on the effectiveness of your internal control over financial reporting as of December 31, 2009 was performed as of December 31, 2008. Please further amend your 2009 Form 10-K to include the required Management's Report on Internal Control over Financial Reporting as required by Item 308 of Regulation S-K. To the extent management did not perform the required assessment as of December 31, 2009, please complete your evaluation and amend your filing within 30

calendar days to provide the required management's report on internal control over financial reporting.

11. We note in the original 2009 Form 10-K filed on March 31, 2010, you disclose that management's assessment of internal control over financial reporting is based on "criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") in Internal Control - Integrated Framework - Guidance for Smaller Public Companies (the COSO criteria)." Please note that this is not an acceptable framework as set forth in SEC Release 33-8810. Specifically, the guidance you reference is not an actual framework for evaluation, but instead provides guidance on how small companies can utilize the framework set forth in Committee of Sponsoring Organizations of the Treadway Commission's "Internal Control - Integrated Framework." Please clarify for us the actual framework that you utilized in your evaluation of internal control over financial reporting. Further, please revise future filings, including any amendment to this filing, to specifically indicate the actual framework management utilized. In this regard, you may indicate, if true, that you carried out your evaluation based on criteria of the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control - Integrated Framework while utilizing the additional guidance contained in the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control over Financial Reporting - Guidance for Smaller Public Companies.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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
- 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.

Kenneth T. Coviello  
Vycor Medical, Inc.  
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You may contact Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Martin F. James, Senior Assistant Chief Accountant at (202) 551-3671 with any other questions.

Sincerely,

/s/ Kevin L. Vaughn

Kevin L. Vaughn  
Accounting Branch Chief