

September 12, 2008

Mail Stop 6010

Kenneth T. Coviello
Chief Executive Officer
Vycor Medical Inc.
80 Orville Drive, Suite 100
Bohemia, New York 11716

**Re: Vycor Medical, Inc.
Amendment No. 2 to Registration Statement on Form S-1
Filed August 25, 2008
File No. 333-149782**

Dear Mr.Coviello:

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 supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not 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.

Prospectus Cover Page

1. Your plan of distribution on page 70 continues to discuss selling at market prices and does not disclose the fixed price of this offering. While we will not object if you disclose that selling shareholders will sell at the disclosed fixed price until your shares are quoted on the OTC Bulletin Board and thereafter at prevailing market prices or privately negotiated prices, your disclosure in the Plan of Distribution needs to accurately and precisely reflect that fact. As a consequence we reissue prior comment 2.

Prospectus Summary, page 1

2. We note your addition of an FDA website hyperlink. Please file the hyperlinked information or remove the reference. See footnote 41 of SEC Release 33-7856 (April 28, 2000).

Our Products, page 37

3. We note your response to prior comment 12.
 - We reissue the first bullet point in prior comment 12. We note your revisions. However, your disclosure continues to make comparative statements such as “less need” and “increase” without identifying the products you are comparing yourself to. Please identify in your disclosure with specificity the comparable products which do not have the benefits that you describe your research and design efforts are trying to achieve.
 - Please clarify your disclosure to explain what it means to have “used the following design parameters for our products.”
 - We note your revisions to the discussion of your product’s shortcomings. In order to provide equal prominence to your shortcomings, please provide this disclosure in the same bullet point format as the other statements in this section.

Manufacture, page 29

4. We reissue the second bullet point of prior comment 13. Please clearly disclose that you could “only complete the design, fabrication and testing of three products” due to “funding constraints” in this section of your prospectus. Also, please disclose the status of your contract with Lacey as disclosed in the related risk factor.

Selling Stockholders, page 67

5. We note your response to prior comment 26. However, your response appears to be limited to any amounts ***paid*** to the selling stockholders for interest. Please tell us whether there were any other amounts. For example, please clearly disclose the dollar value of any payment you ***may*** be required to make to any selling shareholder, which includes interest payments in the first year following the sale of convertible notes.
6. We note your response to prior comment 27 and your revised disclosure. If it is your view that such a description of the relationships and arrangements between and among those parties already is presented in the prospectus and that all agreements between and/or among those parties are included as exhibits to the registration statement, please provide us with confirmation of your view in this regard.

Experts, page 74

7. We note your disclosure excludes the audited period from inception (June 5, 2005) to December 31, 2007. Please revise so that the disclosure is consistent with the auditors' report.

Financial Statements, page 76

Report of Independent Registered Public Accounting Firm, page 77

8. Your auditors disclose that "the Company has restated previously issued financial statements as of December 31, 2007 and 2006 and for the years then ended." Please request your auditors to tell us why they do not also refer to the restatement required for the inception to date information. We similarly note that your disclosure in Note 7 does not refer to the restatement for the period from inception through December 31, 2007.

Statements of Operations, page 79

9. Please tell us why you classified 'compensatory element of stock' as a non-operating expense. In this regard, discuss the extent to which these charges relate to activities for which the revenues and expenses have historically been included in operating income. Please refer to Question 2 of SAB Topic 5:P.3.

Statement of Stockholder's Deficiency, page 80

10. Please refer to prior comment 31. Please revise the statement to reflect all changes in equity from date of inception (June 5, 2005) through the date of the latest balance sheet presented, as required by paragraph 11(d) of SFAS 7. We note that the current presentation excludes the period from inception through December 31, 2005.

Note 1. Significant Accounting Policies, page 82

Revenue Recognition, page 84

11. Please refer to prior comment 3. You disclose that your product is "already approved" by the FDA. Please similarly revise this disclosure.

Note 3. Long-Term Debt, page 85

12. Please refer to prior comment 33. Please revise the disclosure to clarify the repayment terms of your debt to Optimus Service LLC. Also, please tell us why you reflect all of this debt as long term given the current disclosure that "The

Company has agreed to monthly payments of \$20,500 beginning in March February 2008 (sic) with interest at the Prime interest rate as reported in the Wall Street Journal.”

13. Please refer to prior comment 34. Your response indicates that David Salomon received a \$15,000 promissory note for each of 20 units purchased. It appears that Mr. Salomon was sold convertible promissory notes in the amount of \$300K instead of the \$150K listed in the Debt Table. Please clarify and if necessary amend your filing to disclose the correct amount of debt held by Mr. Salomon. Also, please tell us why you reflect all of this debt as long term given the current disclosure that the balance is due August 28, 2008.
14. Please refer to prior comment 34. Please disclose all of the significant terms of your debt and include the information in one note. Include in your disclosure how you accounted for each debt instrument at issuance, including the allocation of proceeds between the debt, any warrants, beneficial conversion features, or embedded derivatives requiring bifurcation pursuant to SFAS 133. Also disclose the method and amortization period for the associated debt discount.
15. Further, it appears from your response that you bifurcated the embedded conversion feature of the debt and have recorded this as a liability at fair value under SFAS 133. If true, the value of the liability would be marked-to-market each reporting period with realized and unrealized gains and losses flowing through income. It appears from the financial statements that the fair value of the conversion feature was recorded in APIC as Equity in your Statement of Stockholders' Deficiency. Please tell us how you are accounting for these derivatives on your Balance Sheet, your basis for electing that accounting treatment and where you recorded the realized and unrealized gains and losses on your Statement of Operations.
16. In this regard, and considering your response that the convertible debt includes a feature whereby the number of shares issuable upon conversion is unlimited, please tell us how you considered paragraph 19 of EITF 00-19 in your accounting for your non-employee options and warrants. Given your response, please ensure that your disclosure properly describes the significant terms of all options and warrants, how you are accounting for them and why, and the method and significant assumptions used to value them

Note 5. Net Loss per Share, page 87

17. Please see prior comment 35. We note that you have presented information required by paragraphs 64-85 and A240-242 of SFAS 123(R) relating to your share-based compensation arrangements and awards in your response but not in your filing. Please disclose this information in your filing and ensure that it is

complete as per the above guidance. Similarly provide the required disclosures in Note 5 of your interim financial statements. Also tell us why your share based compensation disclosures are included in your Net Loss per Share footnote.

18. Further, please tell us how you considered SAB Topic 14:D in determining your volatility.
19. Please see prior comment 36. We note that you have presented information we requested to be disclosed in your response letter but not in your filing. Please disclose this information in your filing
20. Further with respect to your response to prior comment 36, please tell us and clarify in your disclosure whether you are accounting for the warrants and options issued to Fountainhead Capital Partners as equity or a liability and tell us why. Your response states that “[t]his warrant was determined to be an embedded derivative in connection with the related convertible debenture and was valued under the Black-Scholes Model.” Please tell us why you believe the warrant and the options are embedded derivatives and not a freestanding, detachable instruments issued in connection with the debt. Refer to APB 14. Please also discuss how you considered EITF 98-5 and 00-27. Please similarly address these questions for your other option and warrant issuances.
21. Please see prior comment 37. In the prior comment we asked where the amounts for the Black-Scholes value of derivatives granted to Fountainhead Capital and David Salomon are recorded on the balance sheet. We note that your response to our question was that the values referred to in the comment are no longer included and you refer us to your response to comment 34. We interpret this to mean that these amounts are no longer on the balance sheet. In your response to prior comment 34, you state that you have bifurcated the embedded derivatives and accounted for these as a liability. Please clarify your disclosures to consistently reflect the accounting treatment you have elected.

Note 7. Restatement of Financial Data as of December 31, 2007, page 89

22. Please refer to prior comment 38. Please amend your filing, as previously requested, to clearly describe the nature of each error as well as quantifying the related amount.

Interim Financial Statements, page 93

23. Please refer to prior comment 40. Please amend your filing, as previously requested, to provide interim Statements of Stockholders’ Equity (Deficiency).

Note 1. Organization and Description of Business, page 98

24. Please tell us why you refer to “the instructions to Form 10-QSB and Item 310 of Regulation S-B” and not Article 8 of Regulation S-X.

Note 3. Issuance of Common Shares, page 101

25. For each issuance, disclose the date and number of shares of stock, warrants, rights, or other equity securities issued for cash and for other consideration. Also disclose for each issuance, the dollar amounts (per share or other equity unit and in total) assigned to the consideration received for shares of stock, warrants, rights, or other equity securities. Further, disclose for each issuance involving noncash consideration, the nature of the noncash consideration and the basis for assigning amounts. See paragraph 11(d) of SFAS 7.

Note 4. Long-Term Debt, page 102

26. Please show us how you determined the current portion of your long-term debt.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. 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 amendment and responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require for an informed 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.

You may contact Jong Hwang at 202-551-3327 or in his absence, Kaitlin Tillan at 202-551-3604 if you have questions regarding comments on the financial statements and related matters. Please contact Jay Mumford at (202) 551-3637 or me at (202) 551-3444 with any other questions.

Sincerely,

Perry Hindin
Special Counsel

cc: (via fax) Benjamin Tan, Esq.