

November 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. 4 to Registration Statement on Form S-1  
Filed November 4, 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.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 18

Critical Accounting Policies and Estimates, page 20

1. Please refer to prior comment 1. The disclosure of you critical accounting policies should not be a repetition of the accounting policy disclosures in the notes to your financial statements. Critical accounting policies represent those accounting policies that management believes are most "critical" -- that is, they are both most important to the portrayal of the company's financial condition and results, and they require management's most difficult, subjective or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. You should provide the disclosure so that

you can provide greater awareness of the sensitivity of your financial statements to the methods, assumptions, and estimates underlying their preparation. To do this you should explain the judgments and uncertainties affecting the application of your critical accounting policies, and the likelihood that materially different amounts would be reported under different conditions or using different assumptions. The objective of this disclosure is consistent with the objective of MD&A. If you do not have any critical accounting policies, then you would not be required to provide this disclosure.

Financial Statements, page 69

2. Please update the financial statements and related disclosures to comply with Rule 8-08 of Regulation S-X and Item 303 of Regulation S-K.
3. Please refer to prior comment 3. Your additional paid-in capital of \$373,675 does not agree to your statement of stockholders' deficiency. Please reconcile and revise so that the amounts in your balance sheet and the amounts in your statement of stockholders' deficiency are consistent, or tell us why the current presentation is appropriate.
4. We note your presentation of unearned compensation as a contra equity account. Please tell us why you did not eliminate the presentation of deferred compensation from your equity accounts upon the adoption of SFAS 123R with reference to the authoritative accounting literature which supports your presentation of the contra equity account.

Statements of Operations, page 72

5. Please refer to prior comment 4. Your response notes that no changes were required for the years ended December 31, 2007 and 2006 and the period from inception through December 31, 2007 because there were no share-based payments made by the company in those periods. However, we continue to note that you include a line item titled, 'Compensatory element of stock' in your statements of operations. If this expense is related to a share-based payment arrangement as the title implies, you should revise your statements of operations to reflect the expense within the same line or lines as cash compensation paid to the same employees consistent with SAB Topic 14.F. Otherwise, please tell us and disclose the nature of these amounts and why you believe the current classification is appropriate.
6. Further, although your response notes that the required change was made to the interim financial statements, we continue to note that you similarly reflect a

separate line item for 'Compensatory element of stock' in your statements of operations on page 90. You should similarly revise these statements as noted in the above comment.

Statements of Cash Flows, page 75

7. Please reconcile the amount of non-cash compensation and proceeds from stockholders' capital contributions to your statement of stockholders' deficiency. Please also reconcile with note 5.

Note 3. Long-Term Debt, page 78

8. Please refer to prior comment 11. We note your response but you did not include the requested disclosures in the notes to your financial statements. Please disclose the conversion terms for the Fountainhead and Salomon debt.
9. We note that the Fountainhead debt was issued with common stock, options and warrants. As such, it appears that you are required to allocate a portion of the proceeds from the debt to each of the instruments, including the debt. Any associated discount on the debt would be recognized as interest expense using the effective interest rate method over the term of the debt. While you disclose that you allocated \$28,500 to the common stock issued, we did not see where you discussed the allocation for the options and warrants. If the common stock, warrants and options are properly classified as equity and not as liabilities, please tell us how you considered paragraph 16 of APB 14. Discuss whether you allocated the portion of the proceeds allocable to these instruments as paid-in capital. In addition, tell us whether you determined the values to be allocated based on the relative fair values of the securities at time of issuance.
10. Please refer to prior comment 12. We note your response. Our prior comment requested disclosure of the fair value of the bifurcated conversion feature of the Salomon and Fountainhead debt. If you are not bifurcating the conversion feature under SFAS 133 then this disclosure is not relevant and should not be provided.
11. Please refer to prior comment 14. In your response you note that you "reviewed the related conversion features and determined that the conversion features represent a derivative liability." It appears that you recorded an amount on the Salomon debt of \$28,500 and an amount on the Fountainhead debt of \$22,891, a total of \$51,391, as a derivative liability in your balance sheet as of December 31, 2007. This accounting is not consistent with your disclosure that the conversion

feature “did not require bifurcation.” In addition, your response to prior comment 13 indicates that you analyzed the conversion feature under EITF 00-19 and it did not require bifurcation. If the feature did not require bifurcation under SFAS 133, you would not separately value and bifurcate the conversion feature. Instead, you would be required to review the transaction to determine whether or not there was a beneficial conversion feature under EITF 98-5 and 00-27. Please reconcile your responses and tell us how you accounted for the debt issued with common stock, options and warrants and why. Ensure that your accounting and disclosure is consistent with your response and U.S. GAAP.

12. Please refer to prior comment 14. Your response states that you “reviewed the related conversion features and determined that the conversion features represent a derivative liability under SFAS 133.” This response does not appear to be consistent with your disclosure or your response to prior comment 13. In addition, if you should account for the conversion feature as a derivative liability you should value the derivative at fair value, not relative fair value, and then re-value the liability at fair value at each balance sheet date. Please tell us how you are accounting for these instruments and why and ensure that your accounting and disclosure is consistent with your response and U.S. GAAP.

Note 4. Options, Warrants and Convertible Securities, page 80

13. Please tell us and disclose how you accounted for and valued the warrants and options issued to advisors in 2006 and 2007. In addition to disclosing the method used for valuation, please also disclose any significant assumptions underlying the method used.

Note 5. Net Loss per Share, page 80

14. We reissue prior comment 17 as it does not appear that all of the 2008 disclosures were moved. Please move the disclosures related to 2008 to your interim financial statements, or tell us why you provide this disclosure in your audited financial statements and not within your unaudited interim financial statements.

15. We reissue prior comment 18 as it does not appear that the disclosures provided in your prior response letter were added. We note that the explanations given in your response should be included in your disclosure. Further, please tell us and amend your disclosure to discuss how the volatility figure you disclose was derived. Specifically discuss the other factors that you state on page 82. Please explain to us the nature of the other factors and how you determined your volatility with reference to SFAS 123R and SAB Topic 14. Discuss how you determine implied volatility.
16. Furthermore, please tell us why it is appropriate to use assumptions derived as of June 30, 2008 for valuations on grant dates in 2006 and 2007. Also tell us why the assumptions should be static throughout this 2.5 year period.
17. Please refer to prior comment 19. Please ensure that for each transaction listed in the table on page 81, that there is a relevant purpose to showing the information presented. For example, if you are not valuing the instrument at fair value, either remove the reference to how you determined the fair value or tell us why you present the information in the table.
18. We reissue certain parts of prior comment 20. With respect to your Black-Scholes valuation table, please tell us and disclose how you determined the amounts presented under the price column. It appears from your disclosures that for some instruments conversion can occur under a range of prices.
19. Please refer to prior comment 20. For each issuance reflected in the table on page 81, please tell us how you determined the fair value of your common stock at the date of grant as shown in the table as 'Value at Grant.' We note that some of the values are different even though they were issued on the same date. Please tell us why.
20. Please refer to prior comment 20. For the issuances reflected in the table on page 81, please disclose the significant assumptions used for the valuation under the Black Scholes model. Those assumptions should be those used for the relevant periods and not as of June 30, 2008. Refer to SFAS 123R.
21. Please refer to prior comments 22 - 24. While your response states that you determined that the options and warrants should be classified as equity, your disclosure on page 82 continues to state that the Fountainhead warrant "was determined to be a freestanding derivative in connection with the related

convertible debenture and was valued under the Black-Scholes Model.” We note similar disclosures on page 83 with respect tot the Fountainhead option. Please reconcile. Please also explain why you are amortizing the associated discount over the expected life of the warrant and not over the term of the debt using the effective interest rate method. Cite the accounting literature upon which you relied and explain how applied that literature to your facts and circumstances.

22. Please refer to prior comment 25. Please respond to the following:

- Please tell us and disclose the significant assumptions used to value the options. These assumptions should be for the relevant period of time and not as of June 30, 2008.
- We continue to note that your disclosure refers to the expected life of the options and warrants and not the vesting period. Tell us why you are amortizing the fair value of the options over the expected life of the options and not the vesting period. Cite the accounting literature upon which you relied. Discuss how you considered Issue 2 of EITF 96-18 and paragraph 39 of SFAS 123R. Discuss whether and how you are recognizing the compensation cost over the requisite service period based on an analysis of the terms of the share-based payment award.
- Please similarly address the accounting for the other options and warrants discussed on pages 83 and 844 where you disclose that the fair value of the option is being amortized over the expected life of the option. Tell us why the expected term represents the same period in which you would recognize the expense for the services if you had paid cash for those services instead of paying with the equity instruments.

Note 6. Commitments and Contingencies, page 84

23. Please reconcile the disclosure in this note with the disclosure on page 23 which states that you have a lease that expires December 31, 2008 and minimum future rental payments of \$20,000.

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

24. On page 72 it appears from your reference that the December 31, 2006 balance sheet is restated. Similarly, on page 73 it appears from your reference that the statement of operations for the period from inception to December 31, 2007 is restated. On pages 74 – 75 you show that your statement of stockholders’ deficiency and statement of cash flows for all periods presented were restated.

There is no discussion of these restatements in the notes to your financial statements. Please revise to provide any disclosure required by SFAS 154.

25. Please refer to prior comment 26. Please revise your explanations of the adjustments to fully describe the nature of the errors.

Reconciliation of Balance Sheets, page 85

26. We reference your response to prior comments 26, 27 and 28. Please update this reconciliation for changes in your balance sheet.

Statements of Operations, page 86

27. We note that the balances in the line item 'compensatory element of stock' imply that you had share based compensation expense. Please tell us what these balances represent if they are not share based compensation. If these balances do represent share based compensation, please revise to reflect the expense related to share-based payment arrangements in the same line or lines as cash compensation paid to the same employees consistent with SAB Topic 14.F. Please similarly revise your interim statements of operations on page 90.
28. Please remove the double underline shown under your operating losses to avoid implying that this is a total and not a subtotal.
29. We reference your response to prior comment 29. We note that your response states that the derivative obligation has been presented as a separate line item from SG&A. Please tell us which line item it is, whether the name is appropriate and whether it is being marked-to-market each period.

Interim Financial Statements, page 89

Statements of Cash Flows, page 92

30. Please reconcile your net loss for the six months ended June 30, 2007 of \$(67,317) with the amount of \$(78,167) shown in your statement of operations on page 90.

31. Please reconcile the amount of non-cash compensation expense for the six months ended June 30, 2008 with the amounts reflected in your statement of stockholders' deficiency and in note 3 on page 97. Please also reconcile the amounts shown for options & warrants issued for services and value of rights, options and warrants in your statement of stockholders' deficiency with the amounts shown in note 3 on page 97 and in note 5 on pages 99 – 100.

Note 2. Significant Accounting Policies, page 94

Going Concern, page 94

32. Please reconcile the net loss of \$(1,611,115) for the six months ended June 30, 2008 with the net loss of \$(962,506) shown in your statements of operations on page 90. Please also reconcile the stockholders' deficiency of \$(303,549) as of June 30, 2008 with the stockholders' deficiency of \$(937,548) shown in your balance sheet on page 89.

Revenue Recognition, page 96

33. Please refer to prior comment 8. Please tell us why you refer to your product being approved by the FDA and why this disclosure is not consistent with the disclosure in note 2 on page 78.

Note 3. Issuance of Common Shares, page 97

34. Please refer to prior comment 32. Your response notes that the terms of the original conversion agreement were not modified. However, we continue to note that you disclose the issuance of 1,211,111 shares of common stock upon the conversion of debt even though your disclosure states that the maximum number of shares issuable upon conversion was 1,111,111 (see page 98). Please tell us why you issued the additional 100,000 shares and how you accounted for that issuance and why. Further, please tell us why you attributed a value of \$169,000 to the conversion of \$150,000 of debt in your statement of stockholders' deficiency on page 93.

Note 4. Long-Term Debt, page 98

35. Please refer to prior comment 35. We note that you did not revise your disclosure as requested. Please disclose the total principal amount of the debt issued to Fountainhead Capital Partners Limited and Regent Private Capital, LLC. Please



show us how you calculated the amount of your beneficial conversion feature for each of the four debt instruments issued in 2008. Your response should include the fair value of your common stock used in the calculation and how you determined the fair value of your common stock. Please also disclose the method you are using to amortize the discount. That is, the effective yield method consistent with EITF 98-5.

36. Please refer to prior comment 35. Your response states that you determined that there was “a discount at issuance of the Fountainhead and Regent debt pursuant to EITF 98-5 and 00-27” and “[t]he Company does believe that a beneficial conversion feature exists and has recorded a Derivative liability relative to the Fountainhead and Regent debt.” Under paragraphs 5 and 9 of EITF 98-5 and paragraph 19 of EITF 00-27, you should record the beneficial conversion amount to APIC and the recorded discount on the debt should be recognized as interest expense over the term of the debt (to the debt’s redemption date) using the effective yield method. Your reference to a derivative liability implies that the instruments should be accounted for under SFAS 133 and not EITF 98-5 and 00-27. Please revise so that your accounting and disclosure are consistent with the U.S. GAAP that is applicable to these instruments, or tell us why your accounting is appropriate.
37. Further, you disclose that “[t]he amount of the BCF is based on the relative fair values of the debt and the conversion feature. The fair value of the conversion feature was determined by the use of a Black Scholes calculation and the total cash received was allocated between those 2 components.” Under paragraphs 5 and 6 of EITF 98-5, you should measure the amount of the beneficial conversion feature based on its intrinsic value and not based upon fair value or relative fair value. You should calculate that intrinsic value as the difference between the conversion price and the fair value of the common stock multiplied by the number of shares into which the security is convertible. However, you should also limit the amount you allocate to the beneficial conversion feature so that it does not exceed the proceeds received from the debt. Please revise or tell us why you believe your valuation is consistent with U.S. GAAP.

Note 5. Options, Warrants and Convertible Securities, page 99

38. You disclose that you issued options to purchase 50,000 shares to a consultant. You disclose that you are amortizing the value “over the expected life of the option.” Please revise to include all of the information required by paragraph 64 of SFAS 123R, including the fair value of the options, the significant assumptions used to determine the fair value and the expected life of the option you are using

to amortize the fair value. Please tell us why you are amortizing the value over the life of the option. Discuss how you considered Issue 2 of EITF 96-18 which states that you should record the expense in the same period and in the same manner as if you had paid cash for the services.

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.