



DIVISION OF  
CORPORATION FINANCE

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

September 14, 2012

Via E-mail

David Cantor

President

Vycor Medical, Inc.

6401 Congress Ave., Suite 140

Boca Raton, FL 33487

**Re: Vycor Medical, Inc.  
Post-Effective Amendment No. 1 to Form S-1  
Filed September 6, 2012  
File No. 333-176713**

Dear Mr. Cantor:

We have limited our review of your filing to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. 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 registration statement and the information you provide in response to these comments, we may have additional comments.

Exhibit 5.1

1. The penultimate paragraph of the legal opinion states that the common stock is duly authorized and outstanding "with the exception of 10,333,333 shares which are labeled as 'Treasury Stock.'" Accordingly, counsel has not offered an opinion as to whether the shares offered for resale, when issued, will be validly issued, fully paid and non-assessable. Please refer to section II.B.1.a of Staff Legal Bulletin No. 19 (Oct. 14, 2011) and have counsel revise the paragraph to state, if true, that the Common Stock, when issued, will be validly issued, fully paid and non-assessable.

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 Act of 1933 and all applicable Securities 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.

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Notwithstanding our comments, before we can declare your new post-effective amendment statement effective, if any, the company should provide us with a letter, acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please contact Joseph McCann at (202) 551-6262 or Tim Buchmiller at (202) 551-3635 with any questions.

Sincerely,

/s/ Tim Buchmiller for

Amanda Ravitz  
Assistant Director

cc (via e-mail): Robert L. B. Diener, Esq.