



DIVISION OF
CORPORATION FINANCE

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

November 24, 2010

Manny Villafana
Chairman and Chief Executive Officer
Kips Bay Medical, Inc.
3405 Annapolis Lane North, Suite 200
Minneapolis, Minnesota, 55447

**Re: Kips Bay Medical, Inc.
Amendment No. 5 to Registration Statement on Form S-1
Filed November 9, 2010
File No. 333-165940**

Dear Mr. Villafana:

We have reviewed your amended registration statement 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 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.

Intellectual Property, page 2

1. Given that only one of the patent applications that were initially rejected has been reversed, please tell us why you deleted the disclosure relating to the remaining rejected patent applications in this section. Refer to prior comment 14 in our letter dated June 4, 2010 and prior comment 6 in our letter dated June 24, 2010.

Clinical Development of Our eSVS MESH, page 2

2. The basis for your statement in the third sentence of the second paragraph of this section that the eSVS MESH and implant procedures do not result in an increase in patient complications during or after the surgery is unclear. Are you excluding the trials involving incompatible implant methods and saphenous veins grafts that were too small? If so, why

are they excluded given that it appears the implant methods and diameter of the graphs were not inconsistent with your product instructions at the time of the trials. Furthermore, please provide brief disclosure comparing your success rate with relevant industry average success rates.

3. Please tell us whether the early results which formed the basis for the CE Mark received in May 2010 differ from the final results. If so, please tell us the impact, if any, of these differing results upon the status of your CE Mark. Revise accordingly.

Recent Developments, page 4

4. We note your response to prior comment 27 of the staff's comment letter dated May 5, 2010. Please tell us whether you have entered into any agreements with your distributors. If so, please file all material agreements with your next amendment.

Risk Factors, page 7

5. Please revise your risk factor disclosure to disclose the risks relating to the inconclusiveness of the trials, failure of the proximal anastomotic site and downsizing of the saphenous vein grafts disclosed on page 51 of your prospectus.

Stabilization, page 93

6. Please revise your disclosure in this section to explain what short sales are, what covered short sales are and what naked short sales are.

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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company 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

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- 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 refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Julie Sherman at (202) 551-3640 or Jeffrey Jaramillo, Accounting Branch Chief, at (202) 551-3212 if you have questions regarding comments on the financial statements and related matters. Please contact Ruairi Regan at (202) 551-3269 or Daniel Morris, Special Counsel, at (202) 551-3314 with any other questions.

Sincerely,

Martin James
Acting Assistant Director

cc (by facsimile): Robert K. Ranum, Esq.