



DIVISION OF
CORPORATION FINANCE

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

February 21, 2013

Via E-mail

Edward Smith
President and Chief Executive Officer
PolyMedix, Inc.
170 N. Radnor-Chester Road, Suite 300
Radnor, Pennsylvania 19087

**Re: PolyMedix, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed February 12, 2013
File No. 000-51895**

Dear Mr. Smith:

We have limited our review of the above proxy statement to the issue we have addressed in our comment. Please respond to this letter by revising the proxy statement. Where you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to our comment, we may have additional comments.

1. We note that you are seeking approval to effect a reverse stock split by a ratio of not less than ten-for-one and not more than fifty-for-one, with the exact ratio to be set within this range by your board of directors. We also note that you are seeking approval to amend your certificate of incorporation to reduce the number of authorized shares by a ratio of ten-for-one. Please revise your disclosure to describe any specific plans, arrangements or understandings, whether written or oral, to issue any of the additional authorized shares that will be available if the reverse stock split is approved and your board sets the ratio greater than ten-for-one. If you have no such plans, arrangements or understandings, please revise your disclosure to so state.

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 comment, please provide a written statement from the company acknowledging that:

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- 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.

You may contact Johnny Gharib at (202) 551-3170, Jennifer Riegel at (202) 551-3575 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Jennifer Riegel for

Jeffrey P. Riedler
Assistant Director

cc: Via E-mail
Don Readlinger, Esq.
Pepper Hamilton
301 Carnegie Center, Suite 400
Princeton, New Jersey 08543