



DIVISION OF
CORPORATION FINANCE

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

March 20, 2012

Via E-mail

Nicholas Landekic
President & Chief Executive Officer
PolyMedix, Inc.
170 N. Radnor-Chester Road, Suite 300
Radnor, PA 19087

**Re: PolyMedix, Inc.
Preliminary Proxy Statement on Schedule 14A
Filed March 14, 2012
File No. 000-51895**

Dear Mr. Landekic:

We have limited our review of your filing to the issues addressed in the following comments.

Please respond to this letter by amending your filing 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 filing and the information you provide in response to these comments, we may have additional comments.

Proposal 2

1. Please revise the description of Proposal 2 included on the proxy card such that the description is consistent with Rule 14a-21, as illustrated by Exchange Act Rules Compliance & Disclosure Interpretation Question 169.07 (February 13, 2012).

Proposal 3

2. You disclose that the number of shares of common stock issued and outstanding will be reduced as a result of the Reverse Stock Split but the number of authorized shares would remain unchanged at 250 million. Please disclose whether you currently have, or do not have, any plans with respect to the increased number of authorized unissued shares of common stock that will result upon the realization of the proposed Reverse Stock Split. If such plans exist, please disclose all material information.

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

Nicholas Landekic
PolyMedix, Inc.
March 20, 2012
Page 2

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

- 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.

Please contact Karen Ubell at (202) 551-3873 or me at (202) 551-3715 with any questions.

Sincerely,

/s/ Jeffrey Riedler

Jeffrey Riedler
Assistant Director