

August 21, 2007

Mail Stop 6010

By U.S. Mail and facsimile to (651) 481-7690

Daniel J. Starks
Chairman, President and Chief Executive Officer
St. Jude Medical, Inc.
One Lillehei Plaza
St. Paul, Minnesota 55117

**Re: St. Jude Medical, Inc.
Definitive 14A
Filed April 2, 2007
File No. 001-12441**

Dear Mr. Starks:

We have limited our review of your definitive proxy statement to your executive compensation and other related disclosure and have the following comments. Our review of your filing is part of the Division's focused review of executive compensation disclosure.

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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call me at the telephone number listed at the end of this letter.

In some comments we have asked you to provide us with additional information so we may better understand your disclosure. Please do so within the time frame set forth below. You should comply with the remaining comments in all future filings, as applicable. Please confirm in writing that you will do so and also explain to us how you intend to comply. Please understand that after our review of all of your responses, we may raise additional comments.

If you disagree with any of these comments, 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.

Director Compensation Table, page 9

1. You indicate that in May of each year, directors may elect to receive the annual retainer fee payable over the following 12 months either as 100% cash, 50% cash plus 50% restricted stock, or 100% restricted stock. In light of this disclosure, as well as the information you have provided in footnote 1 to the director compensation table, it is unclear why you have not provided a Stock Awards column in accordance with Item 402(k) of Regulation S-K and the information required by 402(k)(2)(iii) and the Instruction to Item 402(k)(2)(iii) and (iv). Please revise to add such column and provide such information or tell us why you believe it is appropriate not to do so.

Compensation Discussion and Analysis, page 17

2. You state on page 17 that compensation should be related to individual performance and qualifications but also that a substantial part of an executive officer's compensation should be incentive-based, tied to corporate performance, and subject to risk. In connection with your discussion of the various elements, you provide some description and analysis of how company performance affects compensation levels, but little discussion of individual performance, even though your disclosure suggests it is a significant factor in determining compensation. For example, you state that an executive officer's individual performance and experience can cause the officer's total compensation to be higher or lower than the 60th percentile of your peer group and that actual payment amounts of annual incentive awards for an individual executive can fall above or below target opportunity based upon performance. As another example, you state that individual grant sizes of stock option awards are dependent upon the company's future business plans and the executive officer's ability to positively impact those plans, the executive officer's position and level of responsibility within the Company and an evaluation of the executive officer's past performance. Please expand your disclosure to provide an analysis of how individual performance and these other considerations resulted in the 2006 and 2007 compensation elements and levels for the named executive officers.

Executive Compensation Philosophy and Policies, page 18

3. We note your disclosure regarding the peer group of medical product companies. Identify all the companies with which you are engaged in benchmarking compensation of your named executive officers, including if applicable, those companies that were the source of industry-specific survey data and general industry survey data that supplemented the peer data for certain of your named executive officers. With respect to the latter set of companies, discuss in your disclosure the degree to which the compensation committee considered such companies comparable to you.

4. You state that your objective is to attract and retain talented individuals by targeting base salaries, annual cash incentives and long-term incentives for standard performers at the 60th percentile of the market as defined by an analysis of the peer companies and other survey data. Provide greater detail regarding what the compensation committee views as a “standard performer.” For example, describe the factors considered in making such evaluation and the measures a named executive officer must achieve to attain such status.
5. In addition, in light of actual compensation paid for the 2006 fiscal year, please supplement such disclosure to also indicate the actual, as opposed to targeted, percentiles of market represented by the actual compensation paid for your 2006 fiscal year. To the extent such compensation levels were above or below your target of the 60 percentile for standard performers, indicate whether this was due to named executive officers fulfilling their responsibilities at a level above or below what you consider would be achieved by a standard performer, and provide an analysis of the resulting compensation levels for each compensation element.
6. Disclose the performance objectives for 2006 and 2007 discussed on page 20 and the weighting ascribed to each of these objectives. To the extent you believe that disclosure of the objectives is not required because it would result in competitive harm such that you may exclude this information under Instruction 4 to Item 402(b) of Regulation S-K, please provide on a supplemental basis a detailed explanation for such conclusion. Please also disclose how difficult it would be for the named executive officers or how likely it will be for you to achieve the specific target levels applicable to each such officer. General statements regarding the level of difficulty or ease associated with achieving performance goals are not sufficient. In discussing how difficult it will be for an executive or how likely it will be for you to achieve the target levels or other factors, please provide as much detail as necessary without providing information that would result in competitive harm. Please provide analysis of the factors considered by the compensation committee prior to the awarding of incentive compensation and not merely rely on statements such as those on page 20 that indicate that that performance objectives are set at a level that you believe are “aggressive enough to inspire top performance but reasonable enough to be realistically achievable” or that “objectives established for 2007 reflect a difficulty and likelihood of achievement relative to the peer companies similar to the 2006 performance objectives.”
7. You state on page 20 that the compensation committee may, in its discretion, reduce or eliminate individual incentive targets or individual incentive awards for a performance period. Revise your disclosure to more fully discuss and analyze the exercise of such discretion.

Stock Option Awards, page 21

8. You state in the second paragraph of this section that stock option awards are based upon peer group and survey data and are also dependent upon the company's future business plans and the executive officer's ability to positively impact those plans, the executive officer's position and level of responsibility within the company and an evaluation of the executive officer's past performance. Please provide an analysis as to how these various factors contributed to the compensation committee's ultimate determination of individual grant sizes.

Perquisites and Other Benefits, page 22

9. You state that named executive officers receive certain perquisites that you believe are consistent with perquisites provided to senior executives in similar-sized companies. Clarify what an "annual cash perquisite allowance" is. For example, is it simply a cash payment to a named executive officer for \$24,000 to \$26,000? What is it designed to award, how is it different than the base salary element and how does it fit into your overall compensation objectives and affect decisions regarding other elements in light of your bullet point disclosure on page 17? See Item 402(b)(1) of Regulation S-K.

Employment, Termination, Change of Control and Indemnification Agreements, page 22

10. Expand your disclosure of the severance and indemnification agreements and the St. Jude Medical Management Savings Plan to include a more thorough discussion of Item 402(b)(1) of Regulation S-K with respect to each of these elements of compensation. Discuss how each of these compensation components and your decisions regarding these elements fit into your overall compensation objectives and affect decisions regarding other elements. Also, analyze why you structured these agreements in the manner summarized on pages 31 and 32.

Option Exercises, page 29

11. We note the amounts realized by Mr. Starks upon exercise of some of his option awards. To the extent applicable, supplement your Compensation Discussion and Analysis to explain how compensation or amounts realizable from prior compensation are considered in setting other elements of compensation. See Item 402(b)(2)(x) of Regulation S-K.

Please respond to our comments by September 21, 2007, or tell us by that time when you will provide us with a response.

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 all information required under

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the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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.

When you respond to our comments, please provide, in writing, a 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 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in connection with our review of your filing or in response to comments.

Please contact me at (202) 551-3444 with any questions.

Sincerely,

Perry J. Hindin
Special Counsel