January 12, 2007

#### Via Facsimile and U.S. Mail

Mr. John C. Heinmiller Chief Financial Officer St. Jude Medical, Inc. One Lillehei Plaza St. Paul, MN 55117

Re: St. Jude Medical, Inc.

Form 10-K for the year ended December 31, 2005

Filed March 16, 2006 File No. 1-12441

#### Dear Mr. Heinmiller:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and will make no further review of your documents. Where indicated, we think you should revise your document in response to these comments. If you disagree, 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. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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

Mr. John C. Heinmiller St. Jude Medical, Inc. January 12, 2007 Page 2

### Form 10-K for the fiscal year ended December 31, 2005

Note 1 - Summary of Significant Accounting Policies, page 27

## Fiscal Year, page 27

1. We note your response to prior comment 2. We continue to request that you revise future filings to date your financial statements as of the actual end of your fiscal periods.

# Revenue Recognition, page 29

2. We note your response to our prior comment 3. We note that you have provided the requested information as it relates to sales through independent distributors. Please tell us and revise future filings to describe how you account for any incentive programs related to sales through your direct sales force.

\* \* \* \*

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding these comments.

Sincerely,

Kevin L. Vaughn Branch Chief