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

Re: St. Jude Medical, Inc.

Form 10-K for the Fiscal Year Ended January 2, 2010

Filed March 2, 2010 File No. 1-12441

Response Letter Dated September 28, 2010

Dear Mr. Starks:

We refer you to our comment letter dated September 15, 2010 regarding business contacts with Cuba, Iran, Sudan, and Syria. We have completed our review of this subject matter and have no further comments at this time.

Sincerely,

Cecilia Blye, Chief Office of Global Security Risk

cc: Martin James
Senior Assistant Chief Accountant
Division of Corporation Finance