

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

December 15, 2010

Joseph P. Caruso President, Chief Executive Officer and Director Palomar Medical Technologies, Inc. 15 Network Drive Burlington, MA 01803

Re: Palomar Medical Technologies, Inc.

Definitive Proxy Statement on Schedule 14A

Filed April 12, 2010 File No. 001-11177

Dear Mr. Caruso:

We have completed our limited review of your filing and do not have any further comments at this time. Please contact Aslynn Hogue at (202) 551-3841 with any questions.

Sincerely,

Russell Mancuso Branch Chief

cc (fax): Patricia A. Davis, General Counsel — Palomar Medical Technologies, Inc.