

TITAN MEDICAL INC.

NOTICE OF ANNUAL AND SPECIAL MEETING OF SHAREHOLDERS

NOTICE IS HEREBY GIVEN that the Annual and Special Meeting (the “**Meeting**”) of shareholders of Titan Medical Inc. (the “**Corporation**”) will be held at the Corporation’s office located at 1343 Sandhill Drive, Suite 101, Ancaster, Ontario, on:

THURSDAY, MAY 5, 2011

at the hour of 11:00 in the morning, Toronto time, for the following purposes:

1. to receive and consider the financial statements of the Corporation for the fiscal year ended December 31, 2010, together with the report of the auditors thereon;
2. to elect directors of the Corporation;
3. to reappoint as auditors BDO Canada LLP, the incumbent auditors of the Corporation, and authorize the directors to fix the remuneration of the auditors;
4. to ratify, confirm and approve the Corporation’s stock option plan (as amended); and
5. to transact such other business as may properly come before the Meeting or any adjournments thereof.

A copy of the Information Circular and form of proxy accompany this Notice.

The directors have fixed the close of business on the second last business day before the Meeting (or any adjournment thereof) as the time before which proxies to be used at the Meeting (or any adjournment thereof) must be deposited with the Corporation or with Olympia Transfer Services Inc.; provided, however, that proxies may also be deposited with the scrutineer(s) at the Meeting (or any adjournment thereof) prior to the commencement of the Meeting.

DATED the 24th day of March, 2011.

By Order of the Board

(signed) Craig Leon
Chairman and Chief Executive Officer
Titan Medical Inc.