August 23, 2022

Via EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street, N.E. Washington, D.C. 20549

Re: Request for Acceleration – Titan Medical Inc. Registration Statement on Form F-3 (SEC File No. 333-266994)

Ladies and Gentlemen:

Titan Medical Inc. (the "Company"), respectfully requests that the Commission accelerate the effectiveness of the above-referenced Registration Statement on Form F-3 (File No. 333-266994), and permit said Registration Statement to become effective at 3:00 p.m. (Eastern Time) on August 25, 2022, or as soon thereafter as practicable.

The Company hereby authorizes James Guttman, an attorney with our outside legal counsel, Dorsey & Whitney LLP, to orally modify or withdraw this request for acceleration.

Please contact James Guttman of Dorsey & Whitney LLP at (416) 367-7376 with any questions with respect to this request.

Sincerely,

Titan Medical Inc.

/s/ Stephen Lemieux

Stephen Lemieux Chief Financial Officer

cc: James Guttman, Dorsey & Whitney LLP