

Form 51-102F3
Material Change Report

Item 1 Name and Address of Company

Titan Medical Inc. (the “Company”)
170 University Avenue
Suite 1000
Toronto, Ontario
M5H 3B3

Item 2 Date of Material Change

August 15, 2016.

Item 3 News Release

The press release was disseminated through Marketwired on August 15, 2016 with respect to the material change.

Item 4 Summary of Material Change

The previously announced private placement transaction with Shanghai Jugu Equity Investment Fund Co. Ltd., scheduled to close on August 15, 2016, failed to close on that date.

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

On or about May 29, 2016, the Company entered into an agreement (the “Subscription Agreement”) for an equity investment from Shanghai Jugu Equity Investment Fund Co. Ltd. (“Shanghai Jugu”). Under the terms of the Subscription Agreement, Shanghai Jugu agreed to subscribe for and purchase US \$16,000,000 worth of Common Shares under a private placement, at a subscription price of CDN \$0.746 per Common Share (the “Shanghai Jugu Private Placement”). The Subscription Agreement provided that the Shanghai Jugu Private Placement may be completed in two separate closings: (i) at the first closing, initially expected to take place by June 30, 2016, (“First Closing”) the parties were to complete the issuance and purchase of 16,377,568 Common Shares; and (ii) at a second closing (“Second Closing”) to occur following clearance by the TSX of a Personal Information Form (the “PIF”) to be submitted by Shanghai Jugu, the parties were expected to complete the issuance and purchase of 11,506,350 Common Shares. On July 6, 2016, the TSX informed the Company that the PIF had cleared. However, Shanghai Jugu did not complete the financing in the First Closing or the Second Closing pursuant to the terms of the Subscription Agreement and requested an extension for the closing of the entire transaction. On July 18, 2016 the Company announced that it had agreed to extend the closing of the Subscription Agreement to August 15, 2016. However, Shanghai Jugu did not complete the transaction on August 15, 2016. There can be no assurance as to whether Shanghai Jugu will complete the Subscription Agreement on the terms set forth therein, if at all.

5.2 *Disclosure for Restructuring Transactions*

Not applicable.

Item 6 Reliance on subsection 7.1(2) of National Instrument 51-102

Not applicable.

Item 7 Omitted Information

Not applicable.

Item 8 Executive Officer

The following executive officer is knowledgeable about the material changes and may be contacted about this report:

Stephen Randall
Chief Financial Officer
(416) 548-7522 (ext. 152)

Email: stephen@titanmedicalinc.com

Website: www.titanmedicalinc.com

Item 9 Date of Report

September 7, 2016.