

Form 51-102F3
Material Change Report

Item 1 Name and Address of Company

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

Item 2 Date of Material Change

August 7, 2018 and August 10, 2018.

Item 3 News Release

The press releases attached as Schedule “A” and Schedule “B” were disseminated through Marketwired on August 7, 2018 and August 10, 2018 with respect to the material changes.

Item 4 Summary of Material Change

On August 7, 2018, the Company filed a final short-form prospectus with securities regulators in Ontario, British Columbia and Alberta and a corresponding registration statement on Form F-10 with the United States Securities and Exchange Commission, with respect to its previously announced offering of units (the “**Offering**”).

On August 10, 2018, the Company announced that it had closed the Offering. The Company sold 7,679,574 units (each, a “**Unit**”) under the Offering at a price of US \$2.50 per Unit for gross proceeds of US \$19,198,935. Each Unit is comprised of one common share of the Company (a “**Common Share**”) and one warrant entitling the holder to purchase one Common Share at a price of US \$3.20 until expiry on August 10, 2023.

Item 5 Full Description of Material Change

5.1 Full Description of Material Change

Please see the press releases attached as Schedule “A” and Schedule “B”.

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

August 14, 2018.

Schedule "A"

[See Attached]

Titan Medical Announces Filing of Final Prospectus and Pricing of Marketed Offering of Units

TORONTO, Aug. 07, 2018 -- **Titan Medical Inc.** (“Titan” or the “Company”) (TSX:TMD) (NASDAQ:TMDI), a medical device company focused on the design, development and commercialization of a robotic surgical system for application in minimally invasive surgery (“MIS”), is pleased to announce today that it has filed and been receipted for a final short form prospectus (the “**Final Prospectus**”) in connection with the previously announced marketed offering (the “**Offering**”) of units of the Company (the “**Units**”). Pursuant to the Offering, Titan will issue Units at a price of US \$2.50 per Unit for gross proceeds of a minimum of US \$16,000,000 and a maximum of US \$20,000,000. Each Unit is comprised of one common share of the Company (a “**Common Share**”) and one Common Share purchase warrant of the Company (a “**Warrant**”). Each Warrant is exercisable for one Common Share at a price of US \$3.20, for a period of 5 years following the closing of the Offering.

The Offering will be undertaken on a best efforts basis pursuant to the terms and conditions of an agency agreement entered into between the Company and Bloom Burton Securities Inc. (the “**Agent**”). The Units will also be offered for sale in the United States, by or through one or more United States registered broker-dealers appointed by the Agent as sub-agents. In connection with the Offering, the Agent will be paid a cash commission equal to 7.0% of the gross proceeds of the Offering and it will be issued that number of non-transferable broker warrants exercisable for Common Shares equal to 7.0% of the number of Units sold in the Offering.

The Final Prospectus has been filed in each of the provinces of Ontario, British Columbia and Alberta, and a corresponding registration statement on Form F-10 (the “**Registration Statement**”) will be filed with the United States Securities and Exchange Commission under the U.S.-Canada Multijurisdictional Disclosure System.

The net proceeds of the Offering will be used to fund continued development work in connection with the Company’s SPORT Surgical System, as well as for working capital and other general corporate purposes. Further details are disclosed in the Final Prospectus, available at www.sedar.com and the Registration Statement, available at www.sec.gov.

The Offering is subject to a number of customary conditions, including, without limitation, receipt of all regulatory and stock exchange approvals. This news release is not an offer of the Units for sale in the United States. The Registration Statement has not yet become effective. The Units may not be sold nor may offers to buy be accepted in the United States prior to the time the Registration Statement becomes effective. This news release shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the Units, in any province, state or jurisdiction in which such offer, solicitation or sale would be unlawful prior to registration or qualification under the securities laws of such province, state or jurisdiction.

About Titan

Titan is focused on research and development through to the planned commercialization of computer-assisted robotic surgical technologies for application in MIS. The Company is developing the SPORT Surgical System, a single-port robotic surgical system. The SPORT Surgical System is comprised of a surgeon-controlled patient cart that includes a 3D high-definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides an advanced ergonomic interface to the patient cart and a 3D endoscopic view inside the patient’s body. Titan intends to initially pursue focused surgical indications for the SPORT Surgical System, which may include one or more of gynecologic, urologic, colorectal or general abdominal procedures.

For more information, please visit the Company’s website at www.titanmedicalinc.com.

Forward-Looking Statements

This news release contains “forward-looking statements” within the meaning of applicable Canadian and U.S. securities laws. Such statements reflect the current expectations of management of the Company’s future growth, results of operations, performance and business prospects and opportunities. Wherever possible, words such as “may”, “would”, “could”, “will”, “anticipate”, “believe”, “plan”, “expect”, “intend”, “estimate”, “potential for” and similar expressions have been used to identify these forward-looking statements. These statements, including with respect to the use of the net proceeds of the Offering and the timing for filing of the Registration Statement, reflect management’s current beliefs with respect to future events and are based on information currently available to management. Forward-looking statements involve significant risks, uncertainties and assumptions. Many factors could cause the Company’s actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, without limitation, those listed in the “Risk Factors” section of the Company’s Annual Information Form dated March 31, 2018 (which may be viewed at www.sedar.com). Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance, or achievements may vary materially from those expressed or implied by the forward-looking statements contained in this news release. These factors should be considered carefully, and prospective investors should not place undue reliance on the forward-looking statements. Although the forward-looking statements contained in the news release are based upon what management currently believes to be reasonable assumptions, the Company cannot assure prospective investors that actual results, performance or achievements will be consistent with these forward-looking statements. Except as required by law, the Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Contact Information

LHA Investor Relations

Kim Sutton Golodetz

(212) 838-3777

kgolodetz@lhai.com

or

Bruce Voss

(310) 691-7100

bvoss@lhai.com

Schedule “B”

[See Attached]

Titan Medical Announces Closing of Previously Announced Public Offering

TORONTO, Aug. 10, 2018 -- **Titan Medical Inc.** (“Titan” or the “Company”) (TSX:TMD) (NASDAQ:TMDI), a medical device company focused on the design, development and commercialization of a robotic surgical system for application in minimally invasive surgery (“MIS”), is pleased to announce the closing of its previously announced public offering (the “Offering”) pursuant to an agency agreement dated August 7, 2018 between the Company and Bloom Burton Securities Inc. (the “Agent”).

The Company completed the closing of the Offering on August 10, 2018 and issued 7,679,574 units (the “Units”) for gross proceeds of US \$19,198,935. Each Unit was issued at a price of US \$2.50 per Unit and is comprised of one common share of the Company (a “Common Share”) and one warrant entitling the holder to purchase one Common Share at a price of US \$3.20 until expiry on August 10, 2023.

The Common Shares sold and issued in connection with the closing were listed and posted for trading on the Toronto Stock Exchange under the symbol TMD and on the NASDAQ Capital Market under the symbol “TMDI” at the opening on August 10, 2018.

The Units were qualified for sale by way of a prospectus dated August 7, 2018 (the “Prospectus”) filed by the Company in each of the provinces of Ontario, British Columbia and Alberta, and a corresponding registration statement on Form F-10 (the “Registration Statement”) with the United States Securities and Exchange Commission under the U.S.-Canada Multijurisdictional Disclosure System. The Units were offered for sale in the United States through Northland Capital Markets, who was appointed by the Agent as a sub-agent. Northland Capital Markets is a division of Northland Securities, Inc., member FINRA/SIPC.

The net proceeds of the Offering will be used to fund continued development work in connection with the Company’s SPORT Surgical System, as well as for working capital and other general corporate purposes. Further details are disclosed in the Prospectus, available at www.sedar.com and the Registration Statement, available at www.sec.gov.

Related Party Transaction

An aggregate of 5,000 Units were issued to an insider of the Company under the Offering for gross proceeds of US \$12,500. The insider subscription constitutes a “related party transaction” pursuant to Multilateral Instrument 61-101 – *Protection of Minority Security Holders in Special Transactions* (“MI 61-101”). In completing the insider subscription, the Company relied on the exemptions from the formal valuation and minority shareholder approval requirements of MI 61-101 set forth in sections 5.5 (a) and 5.7(a) of MI 61-101, as the aggregate value of the insider subscription does not exceed 25% of the market capitalization of the Company. The Company did not file a material change report more than 21 days before the expected closing of the Offering due to the limited time between the commitment by the insider to purchase the subject Units and the closing.

About Titan

Titan is focused on research and development through to the planned commercialization of computer-assisted robotic surgical technologies for application in MIS. The Company is developing the SPORT Surgical System, a single-port robotic surgical system. The SPORT Surgical System is comprised of a surgeon-controlled patient cart that includes a 3D high-definition vision system and multi-articulating instruments for performing MIS procedures, and a surgeon workstation that provides an advanced ergonomic interface to the patient cart and a 3D endoscopic view inside the patient’s body. Titan intends to initially pursue focused surgical indications for the SPORT Surgical System, which may include one or more of gynecologic, urologic, colorectal or general abdominal procedures.

For more information, please visit the Company’s website at www.titanmedicalinc.com.

Forward-Looking Statements

This news release contains “forward-looking statements” within the meaning of applicable Canadian and U.S. securities laws. Such statements reflect the current expectations of management of the Company’s future growth, results of operations, performance and business prospects and opportunities. Wherever possible, words such as “may”, “would”, “could”, “will”, “anticipate”, “believe”, “plan”, “expect”, “intend”, “estimate”, “potential for” and similar expressions have been used to identify these forward-looking statements. These statements, including with respect to the use of the net proceeds of the Offering, reflect management’s current beliefs with respect to future events and are based on information currently available to management. Forward-looking statements involve significant risks, uncertainties and assumptions. Many factors could cause the Company’s actual results, performance or achievements to be materially different from any future results, performance or achievements that may be expressed or implied by such forward-looking statements, including, without limitation, those listed in the “Risk Factors” section of the Company’s Annual Information Form dated March 31, 2018 (which may be viewed at www.sedar.com). Should one or more of these risks or uncertainties materialize, or should assumptions underlying the forward-looking statements prove incorrect, actual results, performance, or achievements may vary materially from those expressed or implied by the forward-looking statements contained in this news release. These factors should be considered carefully, and prospective investors should not place undue reliance on the forward-looking statements. Although the forward-looking

statements contained in the news release are based upon what management currently believes to be reasonable assumptions, the Company cannot assure prospective investors that actual results, performance or achievements will be consistent with these forward-looking statements. Except as required by law, the Company expressly disclaims any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise.

Contact Information

LHA Investor Relations

Kim Sutton Golodetz

(212) 838-3777

kgolodetz@lhai.com

or

Bruce Voss

(310) 691-7100

bvoss@lhai.com