

August 18, 2009

TITAN MEDICAL

Titan Medical Inc. Announces Results for the Three and Six Months Ended June 30, 2009

TORONTO, ONTARIO -- (MARKET WIRE) -- 08/18/09 -- Titan Medical Inc. ("the Company") (TSX VENTURE: TMD) is pleased to announce today its results for the three and six months ended June 30, 2009. The financial statements and Management's Discussion and Analysis for the period may be viewed on SEDAR.

Operational Highlights

After having successfully completed Phase B prototype of Amadeus® in 2008, Titan further pursued key strategic relationships and carrying on efforts to secure its intellectual property through the patent process in Q2 2009.

Titan Medical Inc. is focused on the development and commercialization of robotic surgical technologies. The Company is currently developing Amadeus®, a next generation 4-armed robotic surgical system, with the objective of enabling surgeons to remotely manipulate surgical instruments. Robotic surgery has developed over the past 10 years into a proven and growing method of treatment. The global robotic surgical market size is currently estimated to be \$3.4 billion with potential for placement of 6,000 robotic surgical systems. The Company is researching and developing innovative technologies to empower surgeons to use robots in the operating room of the future.

Financial Highlights:

- Cash and cash equivalents at June 30, 2009 totaled \$1,340,358 (December 31, 2008 -- \$1,607,047).
- The net losses for the three months and six months ended June 30, 2009 were \$99,215 and \$291,062 respectively (\$1,154,267 and \$1,500,048 for the equivalent periods in 2008).
- The Company's R&D investments for the three and six months ended June 30, 2009 were - \$27,381 (recovery due to tax credits) and \$43,965 respectively (\$925,716 and \$1,138,803 for the equivalent periods in 2008).

Craig Leon, Chief Executive Officer of Titan Medical Inc., commented on the results by saying "I am very pleased with our progress in establishing strategic relationships and preserving cash resources while we await the opportunity to raise additional capital to pursue the Phase C development of the Company's clinical-grade robotic surgical platform."

Forward Looking Statements

This news release contains "forward-looking statements" which 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" and similar expressions have been used to identify these forward-looking statements. These statements 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 Filing Statement dated July 8, 2008 (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.

The TSX Venture Exchange does not accept responsibility for the adequacy or accuracy of this release.

Contacts:

Titan Medical Inc.

Craig Leon

Chief Executive Officer

(416) 548-7522 (ext. 151)

(416) 368-1608 (FAX)

cleon@titanmedicalinc.com