



Investor Presentation

TSX: TMD | OTCQX: TITXF

March 14, 2017

Forward Looking Statements

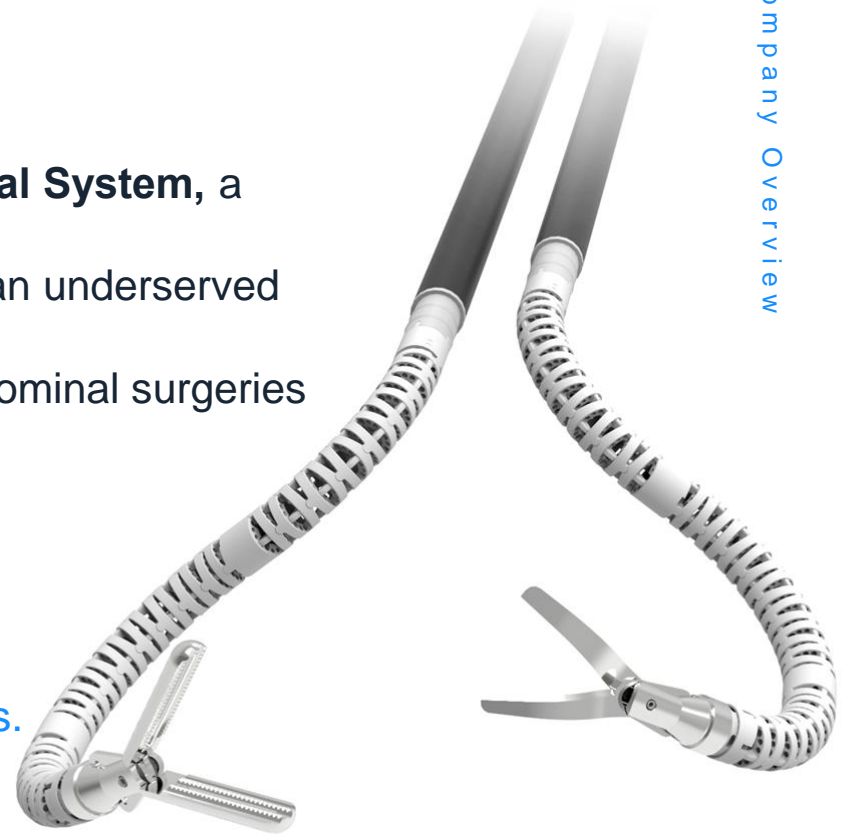
This presentation contains "forward-looking statements" which reflect the current expectations of management of the Company's future growth, results of operations, technological development and implementation, performance and business prospects, opportunities, and illustrations and prototypes of the SPORT™ Surgical Systems. 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, achievements or technological development and implementation to be materially different from any future results, performance, achievements or technological development and implementation 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 in respect of the fiscal year ended December 31, 2015 and other information contained in the Company's public filings (which may be viewed at www.sedar.com). Information contained in this presentation is qualified in its entirety by such public filings. 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 presentation. 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 presentation 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. This presentation does not constitute an offer to sell any class of securities of the Company in any jurisdiction.



Titan Medical Overview

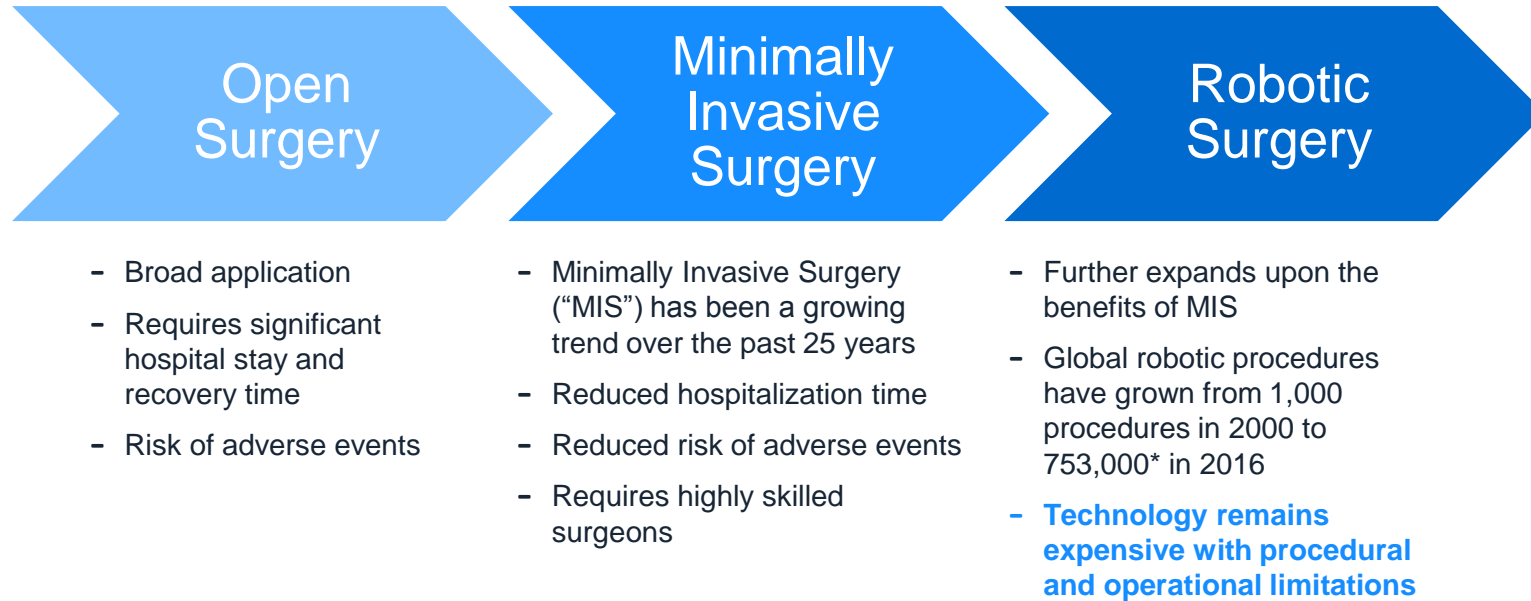
Designer and developer of the **SPORT™ Surgical System**, a versatile single incision platform that addresses an underserved segment of the multibillion-dollar* market for abdominal surgeries performed using robotic technology.

Designed for improved clinical capabilities,
operating room efficiency and hospital economics.



* Global robotic surgery market opportunity approaching \$20 billion by 2021 according to WinterGreen Research Report 2014

Evolution of Surgical Care



* Source: Intuitive Surgical press release to announce preliminary fourth quarter and full year 2016 results



Today's Robotic Surgery Environment

Robotic technology was introduced to mitigate the risks of minimally invasive surgery (MIS), reduce variations in procedural efficiency, and improve consistency of patient outcomes.

Benefits

- + Increased Dexterity
- + Improved Visualization (3D)
- + Improved Ergonomics

Challenges

- High Cost of Entry
- Large Physical Footprint
- High Level of Training
- Increased Cost For Each Procedure
- Reduced Operational Efficiency (long setup time)
- Low ROI for Hospitals
- Limited Procedural Capability

16%



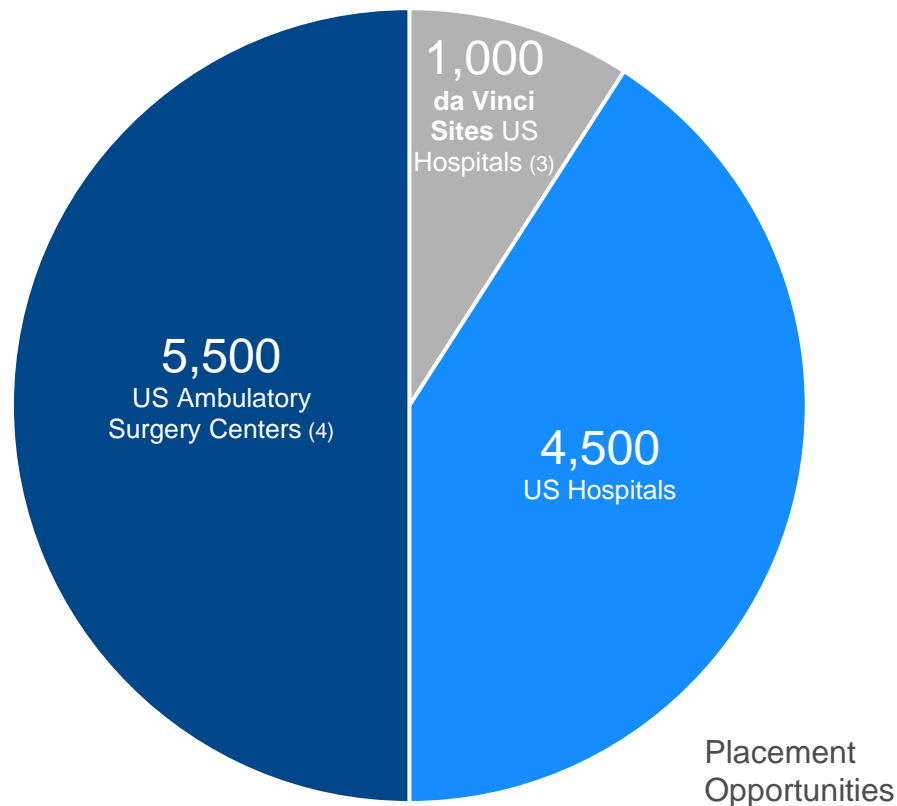
In 2015, only 650,000 (approximately 16%) of applicable surgeries, out of a possible 4,000,000*, were completed using robotic surgical technology.

*Source – Intuitive Surgical Q4 2016 Investor Presentation



\$12B+ Capital Revenue Opportunity

10,000 New US
Placement
Opportunities^(1,2)

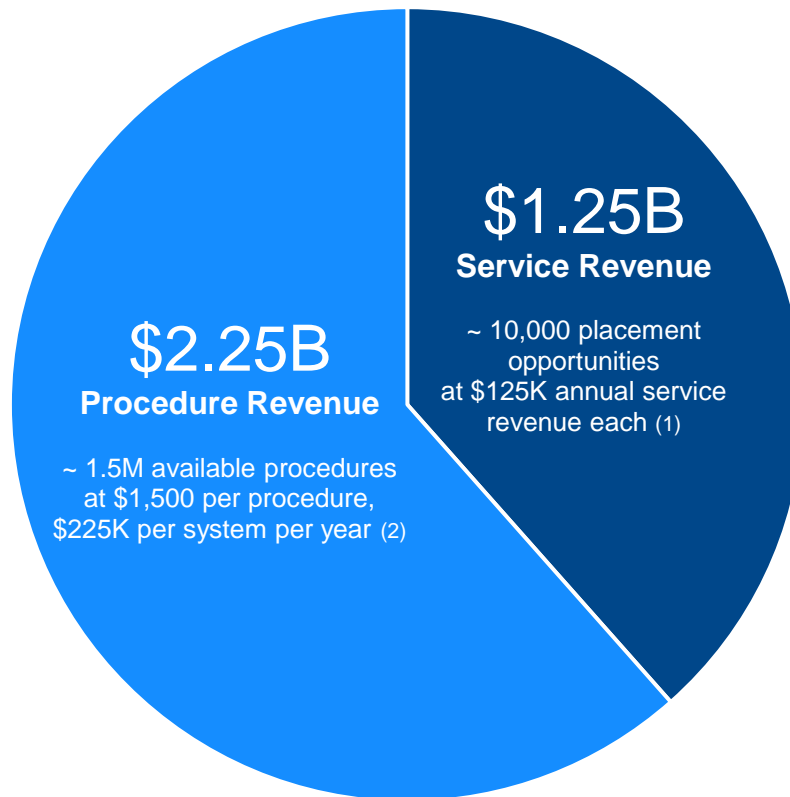


- (1) Based on estimate of 1 system per hospital at \$1.25M per system plus accessories
- (2) Registered US Hospitals Source: <http://www.aha.org/research/rc/stat-studies/fast-facts.shtml>
- (3) da Vinci US Hospitals Source: <http://davincisurgeonlocator.com/>
- (4) Ambulatory Surgery Centers Source: <http://www.ascassociation.org/advancingsurgicalcare/whatisanasc/numberofascspersstate>



\$3.5B Annual Recurring Revenue Opportunity

From US Hospitals for
Service and Consumables



- (1) \$125,000 of annual service revenue per system after year 1
- (2) \$1,500 per procedure revenue, assuming 150 procedures per placement per year



TSPORT™ SURGICAL SYSTEM

- Versatile single port robotic surgery solution
- Overcomes multi-port robotic surgery limitations
- Engineered for performance, efficiency and cost-effectiveness
- Provides access to underserved market segments, such as ambulatory surgery centers



Technology Differentiation

Engineered for Simplicity and Efficiency



Single Incision

With a single incision made around the umbilicus, the result can be near scarless surgery



Small Footprint

A small footprint in the OR with enhanced mobility and ease-of-use leads to quicker deployment in multiple ORs and higher utilization



Multi-Articulating

Single-use end-effectors on reusable multi-articulating instrument arms result in optimal and economical device performance in every procedure



Open Display

3D high definition 32" display offers the perfect balance of surgical immersion and situational awareness in the OR



Ergonomic Workstation

Highly ergonomic workstation with natural handle interface enables comfortable surgical posture, even during long procedures



Purposeful Design

Designed from the ground up to improve:

Clinical Capabilities

OR Efficiency

Hospital Economics



SPORT Workstation



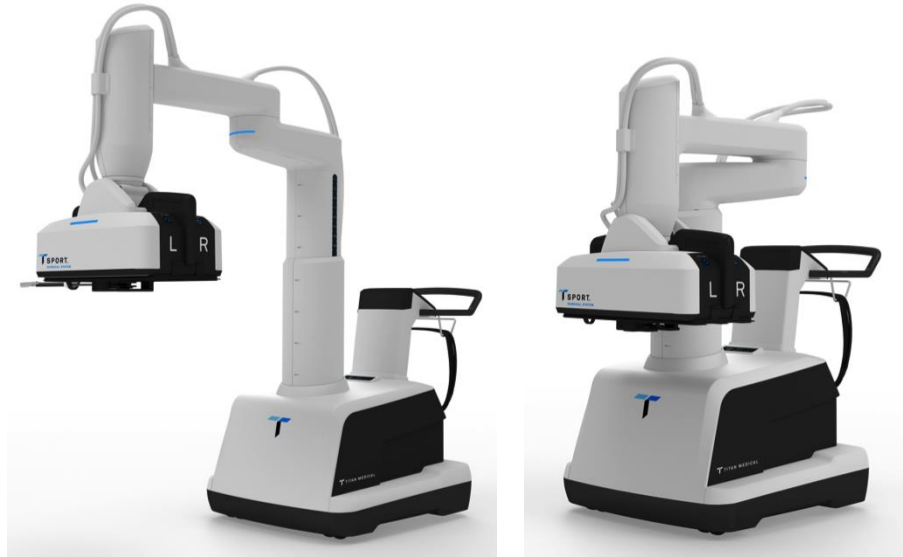
- Ergonomically focused design
- Natural multi-articulated handle interface
- Open, unobtrusive 3D high-definition display platform
- Multi-configurable elbow rest and foot pedal positioning
- Easily maneuverable with swiveling easy-gliding coasters
- Small footprint



SPORT Patient Cart



- Single-arm configuration with no external moving parts facilitates simple setup and assistant-friendly surgery
- Single incision enables swift multi-quadrant positioning
- Easy to load and unload instruments through Camera Insertion Tube (CIT)
- Compact, rollers enable mobility
- Convenient to maneuver and position
- Minimal cable management in OR



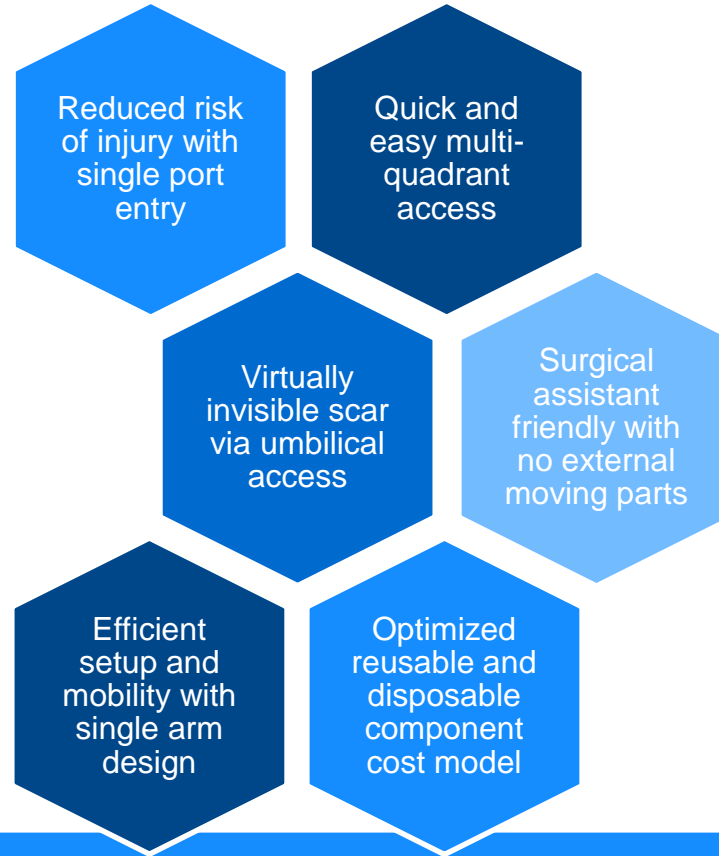
SPORT CIT and Instruments

- Camera Insertion Tube (CIT) includes 3D camera, laser light source, and accommodates two multi-articulating instruments
- Variety of multi-use instruments with single patient use end effectors for suturing, grasping, cutting and coagulation
- Efficient multi-quadrant access with repositioning of CIT
- Open architecture for adaptation of future end effectors and functions



Single Incision
Surgery + Enhanced
Robotic Technology =

Optimal Patient Care



SPORT provides surgeons with multi-articulated instruments in a triangulated configuration, achieved through a single incision.



Intellectual Property

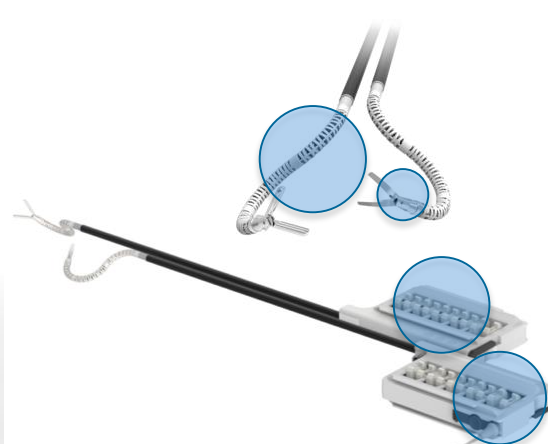
The SPORT Surgical System is a unique single incision robotic surgical system that has been developed based on clinical user requirements

14 Patents

32 Applications

Licensed Technology: Columbia University

Areas of the SPORT Surgical System covered by patents or pending applications:



Plan for Commercialization

2017 ➤ Human factors, design, development and pre-clinical studies

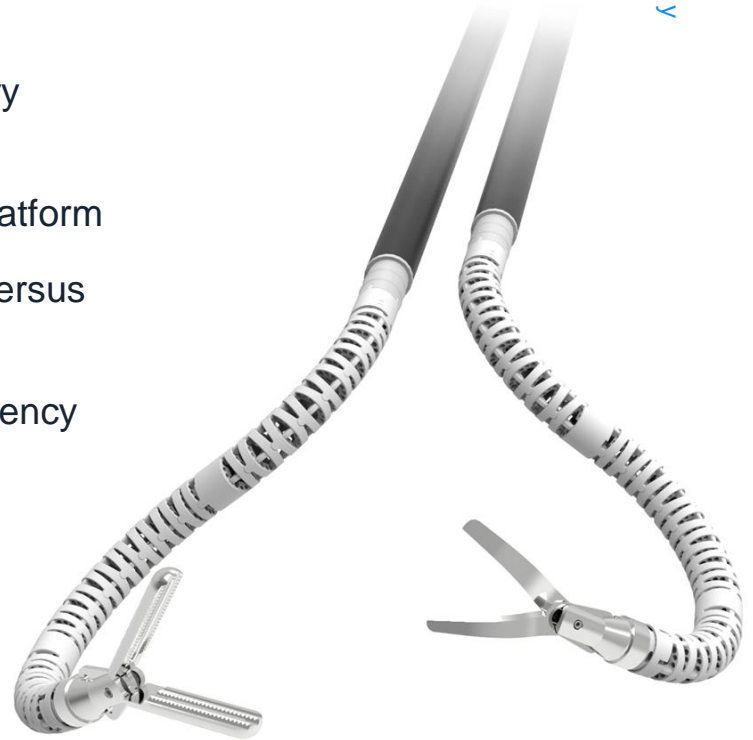
2018 ➤ Development, tooling, pre-clinical studies, regulatory submission preparation and application

2019 ➤ Projected regulatory clearance and approvals, commercialization in US and Europe with limited release



Summary

- Addressing underserved segment of global robotic surgery market approaching \$20 billion by 2021
- Highly versatile, differentiated advanced single incision platform
- Substantial benefits to patients, surgeons and hospitals versus competitive offerings
- Engineered for clinical performance, operating room efficiency and hospital economics
- Attractive capital and recurring revenue model
- Experienced management team with record of success





Thank You

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