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, 2016 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 medical robotic systems market to reach $17.9 billion in 2022, Market Analysis and Segment Forecasts to 2022, Grand View Research.
Leadership Team

David J. McNally
President, CEO & Director
Founder, President, CEO & Chairman Domain Surgical Inc.; developer, manufacturer, marketer of advanced energy surgical platform, merged with OmniGuide in 2016. Co-founder, President & CEO ZEVEX International Inc. (NASDAQ: ZVXI); developer, manufacturer, marketer of award-winning medical devices, acquired by MOOG Inc. in 2007. Bachelor of Science in mechanical engineering from Lafayette College, MBA from the University of Utah, co-inventor on 30+ U.S. and international patents.

Stephen Randall, CPA
Chief Financial Officer
30+ years of executive experience in established and start-up companies including accounting, finance, capital markets, tax planning, compliance, IT management, mergers & acquisitions and operations.
Bachelor of Arts in political science from the University of Western Ontario, Commerce Degree from the University of Windsor.

Perry Genova
VP of R&D
Expert in medical device product development including surgical robotics, author of 32 peer-reviewed papers, inventor of 30 U.S. Patents + 24 patents pending. PhD in biomedical engineering from the University of North Carolina at Chapel Hill, Bachelor of Science in electrical engineering from the University of North Carolina at Charlotte.

Curtis Jensen
VP of Quality & Reg. Affairs
20+ years of experience leading quality and regulatory affairs teams at established and start-up U.S. companies to achieve quality systems compliance, 510(k) clearances, and CE Mark approvals.
Master of Science in applied mathematics from Johns Hopkins University, Bachelor of Science in electrical engineering from Utah State University.

Sachin Sankholkar
VP of Marketing
20+ years of advanced medical device marketing experience, including 15 years at Intuitive Surgical Inc. developing robotic surgeon network and procedural expertise in multiple subspecialties.
Master of Science in biomedical engineering from Drexel University, MBA from the University of Southern California.

Chris Seibert
VP of Business Development
12+ years of advanced medical device sales and management experience, including 10 years at Intuitive Surgical Inc. and Stereotaxis Inc. with IDN/GPO sales channel expertise and C-level access and network.
Bachelor of Arts from the University of Alabama, Master of Arts in human relations from the University of Oklahoma, MBA from the University of South Alabama.
Evolution of Surgical Care

- **Open Surgery**
  - Broad application
  - Requires significant hospital stay and recovery time
  - Risk of adverse events

- **Minimally Invasive Surgery**
  - Minimally Invasive Surgery ("MIS") has been a growing trend over the past 25 years
  - Reduced hospitalization time
  - Reduced risk of adverse events
  - Requires highly skilled surgeons

- **Robotic Surgery**
  - Further expands upon the benefits of MIS
  - Global robotic procedures have grown from 1,000 procedures in 2000 to 753,000* in 2016
  - Technology remains expensive with procedural and operational limitations

* Source: Intuitive Surgical Inc. 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.

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Challenges</th>
</tr>
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<tbody>
<tr>
<td>+ Increased Dexterity</td>
<td>- High Cost of Entry</td>
</tr>
<tr>
<td>+ Improved Visualization (3D)</td>
<td>- Large Physical Footprint</td>
</tr>
<tr>
<td>+ Improved Ergonomics</td>
<td>- High Level of Training</td>
</tr>
<tr>
<td></td>
<td>- Increased Cost For Each Procedure</td>
</tr>
<tr>
<td></td>
<td>- Reduced Operational Efficiency (long setup time)</td>
</tr>
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<td></td>
<td>- Low ROI for Hospitals</td>
</tr>
<tr>
<td></td>
<td>- Limited Procedural Capability</td>
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</table>
$12B+
U.S. Capital Revenue Opportunity
10,000 New Placement Opportunities(1,2)

(1) Based on estimate of 1 system per hospital at $1.25M per system plus accessories
(4) Ambulatory Surgery Centers Source: [http://www.ascassociation.org/advancingsurgicalcare/whatisanasc/numberofascsperspstate](http://www.ascassociation.org/advancingsurgicalcare/whatisanasc/numberofascsperspstate)
$3.5B
U.S. Annual Recurring Revenue Opportunity
For Service and Consumables

$1.25B
Service Revenue
~ 10,000 placement opportunities at $125K annual service revenue each (1)

$2.25B
Procedure Revenue
~ 1.5M available procedures at $1,500 per procedure, $225K per system per year (2)

(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
1.6M
U.S. Annual Available Procedure Market(1)

U.S. Available Market (%) for Select Procedures (Data as of 2015)

- Benign Hysterectomy: 35% (2015 dV Adoption) / 65% (2015 Available Market)
- Cancer Hysterectomy: 17% (2015 dV Adoption) / 83% (2015 Available Market)
- Endometriosis Resection: 5% (2015 dV Adoption) / 95% (2015 Available Market)
- Cholecystectomy: 2% (2015 dV Adoption) / 98% (2015 Available Market)
- Colorectal Procedures: 8% (2015 dV Adoption) / 92% (2015 Available Market)
- Partial Nephrectomy: 50% (2015 Available Market)
- Prostatectomy: 15% (2015 Available Market)

(1) da Vinci U.S. procedure adoption data as of 2015 per Intuitive Surgical Inc. Investor Presentation
SPORT 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

<table>
<thead>
<tr>
<th>Single Incision</th>
<th>Small Footprint</th>
<th>Multi-Articulating</th>
<th>Open Display</th>
<th>Ergonomic Workstation</th>
<th>Purposeful Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>With a single incision made around the umbilicus, the result can be near scarless surgery</td>
<td>A small footprint in the OR with enhanced mobility and ease-of-use leads to quicker deployment in multiple ORs and higher utilization</td>
<td>Single-use end-effectors on reusable multi-articulating instrument arms result in optimal and economical device performance in every procedure</td>
<td>3D high definition 32” display offers the perfect balance of surgical immersion and situational awareness in the OR</td>
<td>Highly ergonomic workstation with natural handle interface enables comfortable surgical posture, even during long procedures</td>
<td>Designed from the ground up to improve: Clinical Capabilities, OR Efficiency, Hospital Economics</td>
</tr>
</tbody>
</table>
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

- Reduced risk of injury with single port entry
- Quick and easy multi-quadrant access
- Virtually invisible scar via umbilical access
- Surgical assistant friendly with no external moving parts
- Efficient setup and mobility with single arm design
- Optimized reusable and disposable component cost model

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.

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

18 Patents
42 Applications
# Plan for Commercialization*

<table>
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<tr>
<th>Year</th>
<th>Activities</th>
</tr>
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<tbody>
<tr>
<td>2017</td>
<td>Human factors, design, development and pre-clinical studies</td>
</tr>
<tr>
<td>2018</td>
<td>Development, tooling, pre-clinical studies, regulatory submission preparation and application</td>
</tr>
<tr>
<td>2019</td>
<td>Projected regulatory clearance and approvals, commercialization in U.S. and Europe with limited release</td>
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</table>

*Based on management’s current estimates.*
2017 Year-to-date Progress

- Recruited qualified VP of Research & Development, VP of Quality & Regulatory Affairs
- Assessed product development program, established 2017-2018 milestones
- Conducted surgeon interviews and demos on SPORT prototype
- Completed USD $5 M March Canadian capital raise led by Bloom Burton Securities Inc.
- Resumed product development and human factors studies
- Finalized user requirements for 1st generation SPORT
- Issued Patents
  - U.S. Patent No. 9,629,688 titled “Actuator and Drive for Manipulating a Tool”
- Completed USD $8 M June-July Canadian & U.S. capital raise
- Converted USD $2 M deposit to equity held by Longtai Medical
- Established Centers of Excellence in U.S. and Europe for preclinical SPORT studies
- Successfully performed first preclinical studies with advanced SPORT prototype
- Completed USD $2.7 M October surgeon-led private placement
- Received USD $7.1 M from exercise of warrants and broker warrants (as of October 31st)
Summary

• Addressing underserved segment of multibillion dollar global robotic surgery market
• 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

TSX: TMD | OTCQB: TITXF