

LivaNova

Health innovation that matters

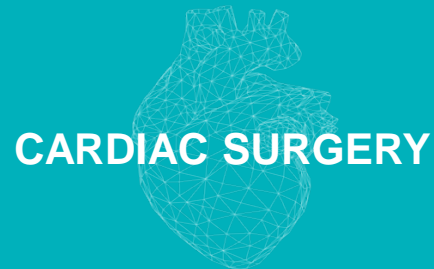
Cowen and Company
Annual Healthcare
Conference 2018

March 13, 2018

NEUROMODULATION



CARDIAC SURGERY



Safe Harbor

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Intellectual Property

This report may contain references to our proprietary intellectual property, including among others:

Trademarks for our Neuromodulation systems, the VNS Therapy® System, the VITARIA® System and our proprietary pulse generator products: Model 102 (Pulse®), Model 102R (Pulse Duo®), Model 103 (Demipulse®), Model 104 (Demipulse Duo®), Model 105 (AspireHC®), Model 106 (AspireSR®) and Model 1000 (SenTiva®).

Trademarks for our Cardiopulmonary product systems: S5® heart-lung machine, S3® heart-lung machine, Inspire™, Heartlink™, XTRA® Autotransfusion System, 3T Heater-Cooler® and Connect™.

Trademarks for our line of surgical tissue and mechanical heart valve replacements and repair products: Mitroflow™, Crown PRT™, Solo Smart™, Perceval®, Top Hat™, Reduced Series Aortic Valves™, Carbomedics Carbo-Seal™, Carbo-Seal Valsalva™, Carbomedics Standard™, Orbis™ and Optiform™, and Mitral valve repair products: Memo 3D™, Memo 3D ReChord™, AnnuloFlo™ and AnnuloFlex™.

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We are a \$1.0B¹ focused medical innovator

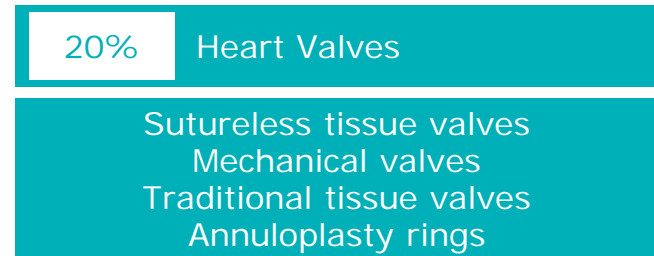
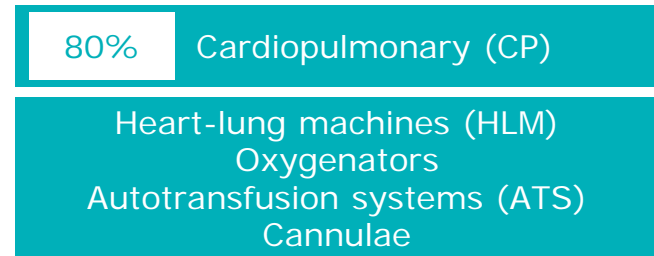
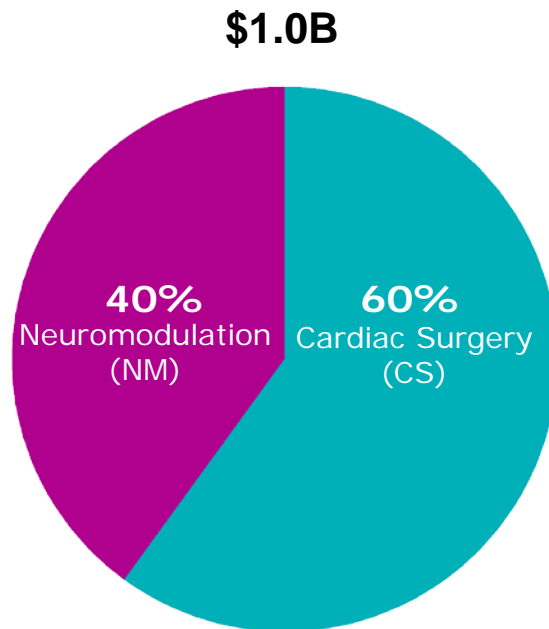
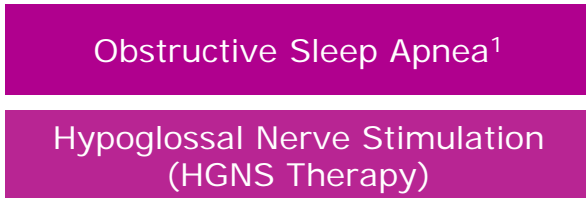
Improving quality
of patients' lives

Strong leadership
position in
Neuromodulation
and Cardiac
Surgery

Targeting
underserved and
high-growth
market segments



With leading positions in neuromodulation and cardiac surgery



Our portfolio is focused on “Head & Heart”

| | NEUROMODULATION | CARDIAC SURGERY | |
|----------------------|--------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------|-------------------------------------|
| | | CARDIOPULMONARY | HEART VALVES |
| | Creator, leader of VNS Therapy | Market-leading positions | Only sutureless valve on the market |
| Global Market (2017) | \$4.1B | \$3.0B | \$1.7B |
| Market Growth | Low-double-digit | Low-single-digit | Low-single-digit |
| Sales (2017) | \$375M | \$500M | \$140M |
| Disease State | Drug-resistant epilepsy Treatment-resistant depression Obstructive sleep apnea | Heart valve disease Coronary disease Congenital heart defect Heart failure | |
| Customers | Neurologists Epileptologists Psychiatrists Neurosurgeons ENT Specialists | Perfusionists Intensivists Cardiac Surgeons Cardiologists Interventional Cardiologists | |

Multiple near-term growth drivers

NEUROMODULATION

SenTiva advances the science of VNS Therapy



100,000 patients treated with VNS Therapy

CARDIAC SURGERY

S5 HLM reduces transfusions and improves recovery



40 years as market leader in heart-lung machines

Inspire oxygenator provides personalized perfusion



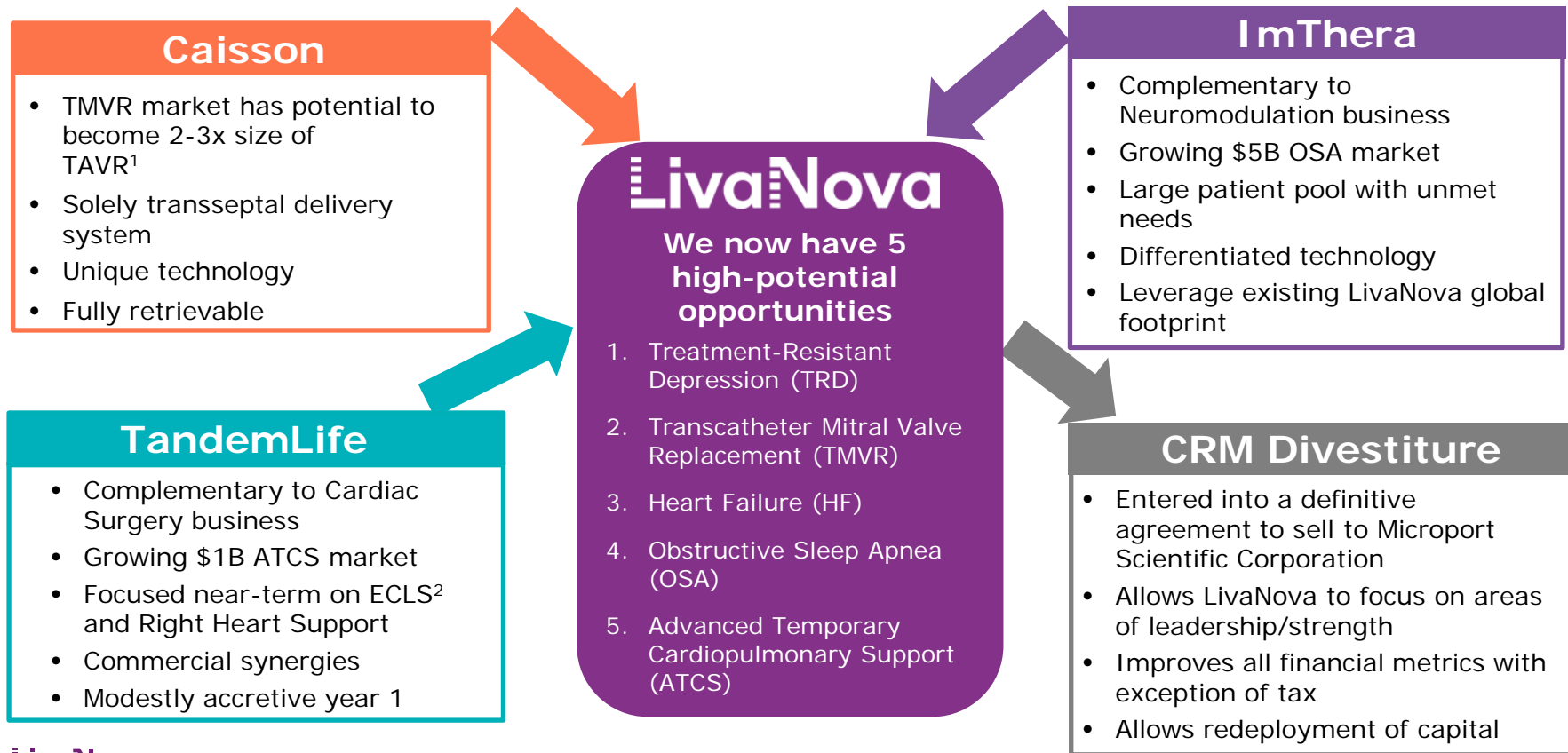
1 million+ patients treated with Inspire

Perceval optimizes the surgical approach to sutureless aortic valve replacement



10 years of clinical use

Significant portfolio repositioning over last 12 months



Differentiated pipeline targeting 5 medical conditions with high unmet needs

TREATMENT-RESISTANT DEPRESSION (TRD)

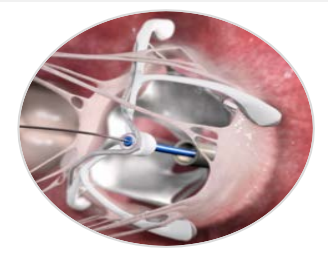
VNS Therapy may provide better outcomes and symptom improvement



Depression is the leading cause of disability worldwide

TRANSCATHETER MITRAL VALVE REPLACEMENT (TMVR)

Unique transseptal investigational device



2-3 times the size of aortic market opportunity

HEART FAILURE (HF)

Novel delivery of Autonomic Regulation Therapy (ART) may improve regulation of cardiovascular function



Leading cause of morbidity and mortality

OBSTRUCTIVE SLEEP APNEA (OSA)

Implantable pulse generator (IPG) opens the airway during sleep



Rapidly growing multi-billion dollar market

ADVANCED TEMPORARY CARDIOPULMONARY SUPPORT (ATCS)

Platform technology for temporary cardiopulmonary support



Accessing a \$1B opportunity while advancing the standard of care

ImThera Rationale

Complementary to Neuromodulation business

Overview

- OSA is a disorder in which breathing repeatedly stops and starts due to the throat muscles relaxing and blocking the airway during sleep
- Our sleep therapy device is an implantable product that stimulates the hypoglossal nerve, which opens the airway while a patient is sleeping

Market Potential

- \$5B OSA market – large and growing market
- Opportunity to disrupt current treatment paradigm (mainly CPAP¹) and fill significant unmet clinical need for new therapy

Leverage of Existing Infrastructure

- Proven market development capabilities in Neuromodulation
- Global commercial network, R&D, regulatory and supply chain capabilities
- ENT² clinician is existing call point

Technology

- Differentiated technology with small IPG, single lead and easier implant procedure
- ImThera device has CE Mark approval
- Limited competition on the horizon

Financial

- \$78M up front payment; \$147M based on regulatory and sales milestones
- Modestly dilutive in 2018

Implantable therapy for OSA

Stimulation
opens
the airway



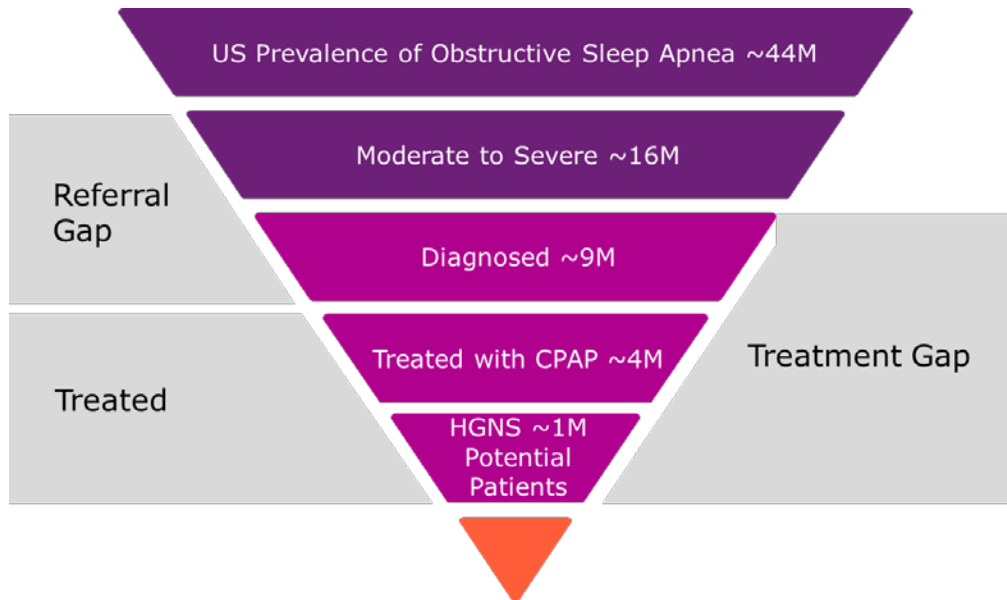
Implantable Pulse
Generator

Positive outcomes:

- Restoration of normal sleep patterns
- Less invasive than conventional sleep apnea surgeries
- Fully implantable with no masks, hoses or mouthpieces

Current state:

- Current standard of care is CPAP
- 40-50% of OSA patients stop or refuse CPAP
- Large patient pool that could benefit from HGNS¹



TandemLife Rationale

Complementary to Cardiac Surgery business

| | |
|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Overview | <ul style="list-style-type: none">• 4 advanced temporary cardiac and respiratory support solutions• Products can be used for numerous potential applications• Focused on ECLS¹ and Right Heart Support near-term |
| Market Potential | <ul style="list-style-type: none">• \$1B largely under-penetrated segment• Only company with complete set of system solutions• Significant upside potential of increased share, geographic expansion and penetration into emerging applications |
| Leverage of Existing Infrastructure | <ul style="list-style-type: none">• Immediate commercial synergies: perfusionists & cardiac surgeons• Significant potential to leverage OUS channel and expand geographically• Building interventional cardiologist call point, which can also be used for TMVR |
| Technology | <ul style="list-style-type: none">• Most versatile platform built around a common pump & controller• Strong acceptance of new products launched in the past 3 years• Next-gen pump and controller in development |
| Financial | <ul style="list-style-type: none">• \$200M up front payment; \$50M based on regulatory milestones• Modestly accretive in 2018; generating cash• Meets IRR & ROIC hurdles with shared risk on sales milestones |

Focused on Advanced Temporary Cardiopulmonary Support solutions

ExtraCorporeal Life Support (ECLS)

CARDIOPULMONARY SUPPORT

TANDEM LIFE

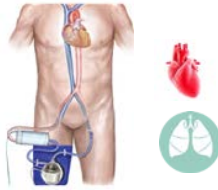
- Veno – Arterial bypass

Components:

- Pump
- Oxygenator
- Femoral arterial cannula
- Femoral venous cannula

- Available since 2017

Veno-Arterial ECLS



RESPIRATORY SUPPORT

TANDEM LUNG

- Veno – Venous bypass

Components:

- Pump
- Oxygenator
- Dual lumen venous cannula

- Available since 2016

Veno-Venous ECLS



Percutaneous Mechanical Circulatory Support (pMCS)

LEFT HEART SUPPORT

TANDEM HEART

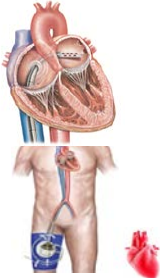
- Left Atrium – Femoral Artery bypass

Components:

- Pump
- Femoral arterial cannula
- Femoral venous transseptal cannula

- Available since 2002

Left Heart Support



RIGHT HEART SUPPORT

PROTEK DUO

- Right Atrium – Pulmonary Artery bypass

Components:

- Pump
- Dual lumen venous cannula

- Available since 2014

Right Heart Support



Accessing a \$1B opportunity while advancing the standard of care

| | Mechanical Circulatory Support (MCS) | | | Respiratory Support | | |
|--------------------------------|--------------------------------------|------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------------------------|
| | Standard-of-Care | Advanced | | Long-Term Support | Standard-of-Care | Advanced |
| | | | | | | |
| Devices and Techniques | Intra-Aortic Balloon Pump (IABP) | Right and Left Heart Support | Veno-Arterial ECLS | Surgical LVADs ¹ | Mechanical Ventilation (MV) | Veno-Venous ECLS |
| Estimated Segment Value | \$250M | \$600M | \$160M | \$1B | \$300M | \$240M |
| Key Players | Maquet Teleflex | Abiomed TandemLife | Maquet TandemLife | Abbott Medtronic | Multiple Players | Maquet TandemLife |

POTENTIAL APPLICATIONS:

Note: Pivotal data does not yet confirm definitive claims

Cardiac

- Cardiogenic shock
- High-risk percutaneous coronary interventions
- Right ventricle failure

Cardiopulmonary

- Post-cardiopulmonary bypass
- Cardiac arrest

Pulmonary

- Acute respiratory distress syndrome
- Acute exacerbation of chronic obstructive pulmonary disease

Summary: advancing our strategic objectives

Who are we?

- **\$1B** focused medical innovator
- Strong leadership position in neuromodulation and cardiac surgery
- Targeting almost **\$9B** global market opportunities
- Making targeted M&A decisions

Divestiture

- Entered into a binding LOI to sell CRM business to MicroPort for **\$190M**
- Allows LivaNova to focus on areas of leadership/strength
- Improves all financial metrics with exception of tax
- Allows redeployment of capital
- Deal is progressing well; on track to close in 2Q18

Acquisitions

- 3 acquisitions in the past 12 months – Caisson, ImThera and TandemLife
- Large growing markets with high unmet needs
- Aligned with our focus on “head and heart”
- Mix of accretive and dilutive
- Leveraging global footprint and capabilities

LivaNova

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