Neovasc Inc.
Equity Offering

Alexei Marko, CEO
Chris Clark, CFO

January 2015
Forward-looking statements

Statements contained herein that are not based on historical or current fact, including without limitation statements containing the words “anticipates,” “believes,” “may,” “continues,” “estimates,” “expects,” and “will” and words of similar import, constitute “forward-looking statements” within the meaning of the U.S. Private Securities Litigation Reform Act of 1995 and Canadian securities laws. In particular the following statements in this news release constitute forward-looking statements; statements regarding the Company’s expectations regarding TiaraTM, the anticipated accelerating investment in the Company’s lead implant devices, the Company’s expectations regarding future sales of surgical patches to LeMaitre, the Company’s expectation that it will be able to convert more consulting services customers into contract manufacturing customers, and its expectations regarding gross margin and expenses. Such forward looking statements involve known and unknown risks, uncertainties and other factors that may cause the actual results, events or developments to be materially different from any future results, events or developments expressed or implied by such forward-looking statements. Such factors include, among others, the following: risks relating to regulatory requirements, including the inherent uncertainties of research and development, risks related to medical devices and clinical procedures, the Company’s ability to comply with the conditions of the FDA’s approval, the Company’s ability to successfully receive any required local or institutional approvals, risks related to necessary enrollment of patients, the possibility of unfavorable or delayed clinical trial results, whether the FDA and other regulators will be satisfied with the results from the TIARA-I Early Feasibility Trial and further trials and studies that will be required; general economic and business conditions, both nationally and in the regions in which the Company operates; the merits and the Company’s defense of the lawsuit filed by CardiAQ; our anticipated use of proceeds from any financings; a history of losses and lack of and uncertainty of revenues; ability to obtain required financing; the demand and growth of our tissue and consulting business and expenses related to the same; ability to properly integrate newly acquired businesses; technology changes; competition; changes in business strategy or development plans; the ability to attract and retain qualified personnel; existing governmental regulations and changes in, or the failure to comply with, governmental regulations; liability and other claims asserted against the Company; and other factors referenced in the Company’s filings with Canadian securities regulators and the Securities and Exchange Commission. Although the Company believes that expectations conveyed by the forward-looking statements are reasonable based on the information available to it on the date such statements were made, no assurances can be given as to the future results, approvals or achievements. Given these uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. The Company does not assume the obligation to update any forward-looking statements except as otherwise required by applicable law.
Cardiovascular products for refractory angina and mitral valve disease

Commercial products and established revenues
# Management and Board

## Management

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>ALEXEI MARKO</td>
<td>CHIEF EXECUTIVE OFFICER, DIRECTOR</td>
<td>Almost 20 years experience in medical device field; Neovasc CEO since 2008</td>
</tr>
<tr>
<td>CHRIS CLARK</td>
<td>CHIEF FINANCIAL OFFICER</td>
<td>Almost 20 years finance and accounting experience</td>
</tr>
<tr>
<td>BRIAN MCPHERSON</td>
<td>CHIEF OPERATING OFFICER</td>
<td>More than 20 years experience in medical device manufacturing and operations</td>
</tr>
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## Board of Directors

<table>
<thead>
<tr>
<th>Name</th>
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<th>Experience</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAUL GEYER</td>
<td>CHAIRMAN</td>
<td>CEO, LightIntegra Technology</td>
</tr>
<tr>
<td>JANE HSIAO, PhD</td>
<td>Former Vice-Chairman – Technical affairs,</td>
<td>IVAX Corporation</td>
</tr>
<tr>
<td>DOUGLAS JANZEN</td>
<td></td>
<td>Former President &amp; CEO, Cardiome Pharma Corp.</td>
</tr>
<tr>
<td>WILLIAM O’NEILL, MD</td>
<td>Medical Director, Center for</td>
<td></td>
</tr>
<tr>
<td>STEVE RUBIN</td>
<td>EVP, Administration, OPKO Health</td>
<td></td>
</tr>
<tr>
<td>ALEXEI MARKO</td>
<td>CEO, Neovasc</td>
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### 3 product lines
**Targeting 3 significant markets**

<table>
<thead>
<tr>
<th>Tiara™</th>
<th>Reducer™</th>
<th>Biological Tissue</th>
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<tbody>
<tr>
<td>Transcatheter mitral valve replacement (investigational)</td>
<td>Transcatheter device for refractory angina (CE marked)</td>
<td>Proprietary biological tissue products for implantable medical devices (commercial)</td>
</tr>
</tbody>
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![Tiara™ Image](image1.png)

![Reducer™ Image](image2.png)

![Biological Tissue Image](image3.png)
Tiara™
Transcatheter Mitral Valve
Minimally invasive device under development for millions of patients who experience mitral regurgitation as a result of mitral heart valve disease
Mitral Valve Regurgitation (MR)

A serious and poorly served condition that requires development of highly specialized devices to address the complex mitral anatomy

Results in:
- heart failure
- death
Tiara
Addressable market opportunity

- Estimated that in 2015, ~5.9 million people will suffer from MR in the US and EU
- ~40% of these MR patients in US suffer from significant MR
- A significant percentage of patients with severe MR are not good candidates for conventional surgical treatment
Tiara
A novel investigational transcatheter Mitral Valve replacement

REPLACES THE DISEASED VALVE

- Design is specific to mitral anatomy
- Does not obstruct left ventricular outflow tract (LVOT)
- Quick and repeatable implantation procedure
- No need for cardiac bypass
Tiara
January 2014 - first human implant of Tiara

Conducted by physicians at St. Paul’s Hospital, Vancouver, Canada

EXCELLENT RESULTS FROM FIRST CASES

• No procedural complications
• Complete resolution of MR
• Being recognized at leading cardiovascular medical conferences and published in JACC in 2014

Five patients treated to date (four pursuant to compassionate use exemptions, one clinical study subject)
TIARA- I
Multinational, multicenter early feasibility study in the US, Canada, EU

- Observational study of high-risk (operable) patients

- Co-Chairs of Study Committee:
  - Dr. Martin Leon
  - Dr. Anson Cheung

- Enroll up to 30 patients

- Participating centers include:
  Columbia University Medical Center/New York-Presbyterian Hospital (New York)
  Lenox Hill Hospital (New York)
  Cedars-Sinai Medical Center (Los Angeles)
  St. Paul’s Hospital (Vancouver)
  Antwerp Cardiovascular Center / ZNA Middelheim (Belgium)
Refractory Angina
Debilitating condition with limited treatment options

\[ \sim 645,000 \text{ (estimated)} \]
refractory angina patients in the US who are potential candidates

substantially larger population of “recurrent” angina patients

CAUSED BY INADEQUATE BLOOD FLOW TO AREAS OF THE HEART MUSCLE THAT CANNOT BE MANAGED THROUGH CONVENTIONAL THERAPY
Reducer

20 minute catheter-based procedure

- Implanted in the coronary sinus (large vein in heart)
- Hourglass shape modulates flow of blood in the heart to elevate CS pressure
- Re-distributing blood and increasing flow to ischemic areas in the endocardium
- CE marked
Reducer

COSIRA study primary endpoint achieved

Double-blind, randomized, sham-controlled, multicenter prospective trial

• n = 104 patients at 11 clinical investigation sites

• Improvement of ≥2 angina CCS classes (primary endpoint) occurred approximately 2.3x more frequently in Reducer group (P =0.024)

• CCS is a grading scale that is widely used to describe and classify the severity of effort-related angina
Reducer

Expected next steps

- Expand enrollment in European Registries
- File IDE application and initiate US IDE Study required for FDA approval
- Introduce product into pilot centers in Europe
- Explore full commercial launch in EU
Our Biological Tissue Business

Working with industry customers to improve patient care
Biological Tissue
Proprietary process with 25+ year implant history

• Implantable tissue from animal pericardium
• Retains mechanical characteristics of natural tissue
• Used in implantable medical devices including transcatheter heart valves
• Represents 100% of Neovasc’s current revenues
Corporate Overview

- Current cash and cash equivalents / investments position, as of September 30, 2014 of ~$21.7m (low long-term debt)
- Listed on TSX and NASDAQ
Objectives

• Tiara Program
  – Complete TIARA-I enrollment in 2015
  – Activities to support CE mark application
  – Activities to support US IDE application

• Reducer Program
  – Initiate US FDA trial in 2015
  – Preparing for EU product launch

• Tissue Business
  – Continue to support infrastructure and development programs
Thank you

Alexei Marko, CEO
Chris Clark, CFO

January 2015