Naturally Restoring the Heart Valve

**Xeltis** is a clinical-stage medical device company pioneering a restorative approach in heart valve therapy.

- **With ETR, the patient’s natural healing system develops tissue that pervades Xeltis’ heart valve,** forming a new, natural and fully functional valve within it. This new therapeutic approach is called Endogenous Tissue Restoration (ETR) and it is based on Nobel Prize awarded science. As ETR occurs, Xeltis implants are gradually absorbed by the body.

- **ETR is enabled by the porous structure of Xeltis’ valves.** RestoreX is the world’s first polymer-based technology designed to enable natural restoration through ETR.

- **In industrialized countries heart valve disease affects around two percent** of the population, with hundreds of thousands of patients undergoing heart valve intervention every year.

- **Today, patients with artificial heart valves** generally endure the risk of repeated replacement procedures or take long-term medication with potentially severe side effects.

- **Xeltis’ valves have the potential to disrupt the entire cardiovascular sector,** by overcoming the limitations of existing artificial options: limited durability in a lifetime or need of impairing anticoagulants. Xeltis’ restorative approach may help hundreds of thousands of patients to live better lives, by enabling their body to restore a new heart valve by itself.

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**Clinical Trials on Restorative Heart Valve Therapy Underway**

**XPLORE-2**  
Xeltis initiated Xplore-2, a U.S. multi-center feasibility clinical trial for its pulmonary valve. Prominent U.S. centers are now participating in the Xplore-2 trial: more information is available on www.xplore2trial.com.

**XPLORE-1**  
Xeltis completed enrollment in the Xplore-1 feasibility clinical trial for its pulmonary valve. Devices have successfully been implanted in 12 patients at multiple sites in Europe and Asia. The primary objective of the study is patient survival rate six months after surgery.

- **All patients from the Xplore-1 trial are doing well** (NYHA-I class), with no reinterventions/reoperations or device-related SAEs 12 months after surgery.

- **Preliminary one-year data from the Xplore-1 clinical trial presented at ECHSA 2018** have shown that Xeltis’ restorative pulmonary heart valve has potential for use in RVOT reconstruction.

**Data Confirm Technology Promise**

- **Positive performance and safety preclinical data on the same valve have been published** in leading peer-reviewed journals *Eurointervention* and *JTCVS*.

- **Promising preclinical data on Xeltis’ restorative aortic valves** have been shared at a number of leading international medical meetings. Preclinical data on Xeltis’ Aortic Valve have also been published in leading peer-reviewed journals including *EuroIntervention*.

- **31-month follow-up data from a pediatric feasibility study** of a vascular graft developed with RestoreX technology showed positive functionality results with no device-related adverse events.

**How Endogenous Tissue Restoration Works**

- **Step 1:** Xeltis devices work as normal heart valves once implanted.

- **Step 2:** New tissue naturally forms around and within the device to restore a new, healthy, functioning heart valve.

- **Step 3:** Xeltis devices gradually absorb, leaving patients with a new, healthy, functioning heart valve.

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**CONTACTS & KEY INFORMATION**

**Headquarter**  
Seefeldstrasse 35  
CH-8008 Zurich, Switzerland

**Website**  
www.xeltis.com

**Investors**  
Strategic Investor, Life Sciences Partners, Kurma Partners, VI Partners, Ysios Capital and private investors

**Sector**  
Medical Devices

**Platform**  
Implantable devices made of supramolecular polymers enabling the body’s natural restoration of heart valves and blood vessels via Endogenous Tissue Restoration (ETR).

**Initial Indication**  
Pulmonary heart valve replacement: Each year, about 100,000 children worldwide are born with life- threatening congenital heart defects requiring pulmonary valve replacement.

**Media Contact**  
laura.monti@xeltis.com
Xeltis Closed a €45 Million Series C Financing

- It is supporting continuation of clinical activities and acceleration of product and market development for the company’s novel pulmonary and aortic valve programs.
- Led by a global strategic investor; the funding included participation from venture capital fund Ysios Capital, institutional investors (LSP, Kurma Partners and VI Partners) and private investors.

Xeltis is Supported by Nobel Laureate Professor Jean-Marie Lehn

- Professor Lehn received the 1987 Nobel Prize in Chemistry for his work in supramolecular chemistry, the science that Xeltis used as the basis for its RestoreX technology.
- He is recognized as a pioneer in supramolecular chemistry, a term that he first coined.

What Experts are Saying

Jean Marie-Lehn Nobel Laureate, PhD
Pioneer in Supramolecular Chemistry, co-winner of 1987 Nobel Prize in Chemistry
“Supramolecular chemistry enables Xeltis technology by providing unique biochemical and biomechanical properties, delivering solutions to issues faced by traditional materials over the course of decades.”

Frederick J. Schoen, MD, PhD
Executive Vice Chairman, Pathology, Brigham and Women’s Hospital
Prof. of Pathology and Health Sciences and Technology, Harvard Medical School
“I am impressed by the Xeltis preclinical results to date that have advanced our understanding of host-biomaterial interactions and show potential for an innovative approach that could improve the care of patients with cardiovascular disease.”

Martin B. Leon, MD
Director, Center for Interventional Vascular Therapy
Columbia University Medical Center / New York-Presbyterian Hospital
“I am excited by the potential of the Xeltis technology for the replacement of heart valves, bringing significant benefits not only to the procedure and valve designs but also to clinical outcomes for patients.”

Professor Gerardus Bennink
Head and Chief of Pediatric Cardio-thoracic Surgery at the Heart Center, University of Cologne
“A number of clinicians including myself are confident in the potential of the technology in heart valve replacement. I like to think that we are getting closer to a positive solution.”

Professor Christian Spaulding
Professor of Cardiology at Paris-Descartes University and Director of the Interventional Cardiology Department at European Hospital Georges Pompidou
“There is a real clinical need for alternative treatment options that overcome the durability issue of existing biological valves; considering the growing trend of TAVI procedures in younger and lower risk patients. A restorative approach could prove a highly beneficial treatment option.”

CAUTION: The Xeltis technology is investigational and NOT available for sale at this time.