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## **Contact Details and Pictures illustrating the Work**

**Project No:** 242008

**Project Acronym:** LifeValve

**Project Full Name:** Living autologous heart valves for minimally invasive implantable procedures

### **List of LifeValve Beneficiaries**

#### **Universität Zürich (Coordinator) (CH)**

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#### **Technische Universiteit Eindhoven (NL)**

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#### **Medizinische Universität Wien (AT)**

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#### **Xeltis AG (CH)**

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Department of Nuclear Medicine

Dr. Laszlo Balkay

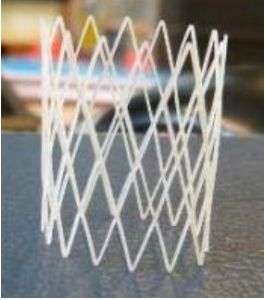
Egyetem Ter 1, 4032 Debrecen, Hungary

[www.nmc.dote.hu](http://www.nmc.dote.hu)



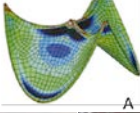
## Pictures Illustrating the Work

**Biodegradable stent**



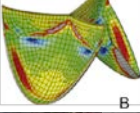
**Computational design and production of decellularized tissue engineered heart valves**

Previous Design

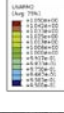


A


Improved Design




B

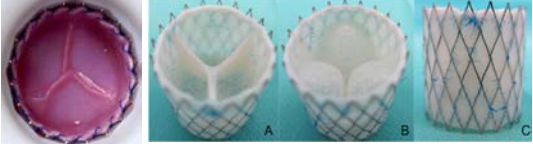


**Delivery system**







RESEARCH & DEVELOPMENT

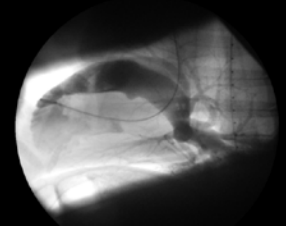

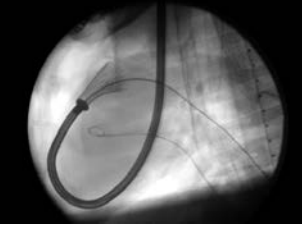




**Implantation of the valve**

*The dTEHV sewn in a nitinol stent is carefully crimped down to the desired diameter and then loaded into the delivery device.*

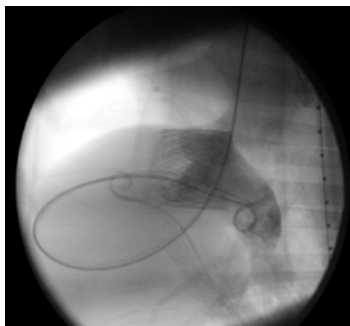
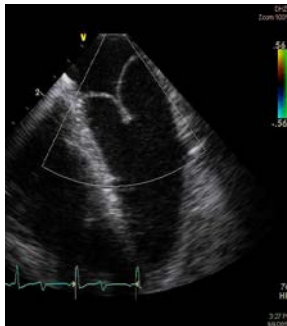

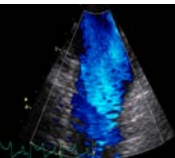




*The implantation site is located by angiography.*

*Introduction of the delivery system.*

*Release of stent at implantation site.*

**Evaluation of the implanted valve**

*After implantation the opening diameter and location of the stent as well as the function of the valve are evaluated by intra cardiac ultrasound and angiography.*

PRE-CLINICAL TRIALS