# SVAN
# Safety Vascular Access Needle
## ein neuer intraossärer Zugang für unsere Kleinsten

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# SVAN Safety Vascular Access Needle

## TEAM

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**Project Leader**

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**Inventor**

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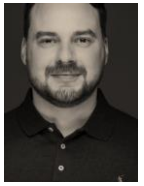
**Technical Design**

**David Russ**
**Electronics**

**Erik Kornfellner**
**Technical Design**

**Rene Stiegler**
**Industrial design**



**Markus Ortner**
**MDR**

**Wolfgang Drexler**
**Host**

**S. Rentz-Chorherr**
**MDR**

**Michael Hoschitz**
**TTO**

**Martin Meyerspeer**
**Imaging**

**Winter Eduard**
**Foetal study**

**Matthias E-Schweda**
**Animal study**

**Christian Laurer**
**Business Mentor**

**Ghazaleh Gouya**
**Clinical mentor**

FFG Forschung wirkt.

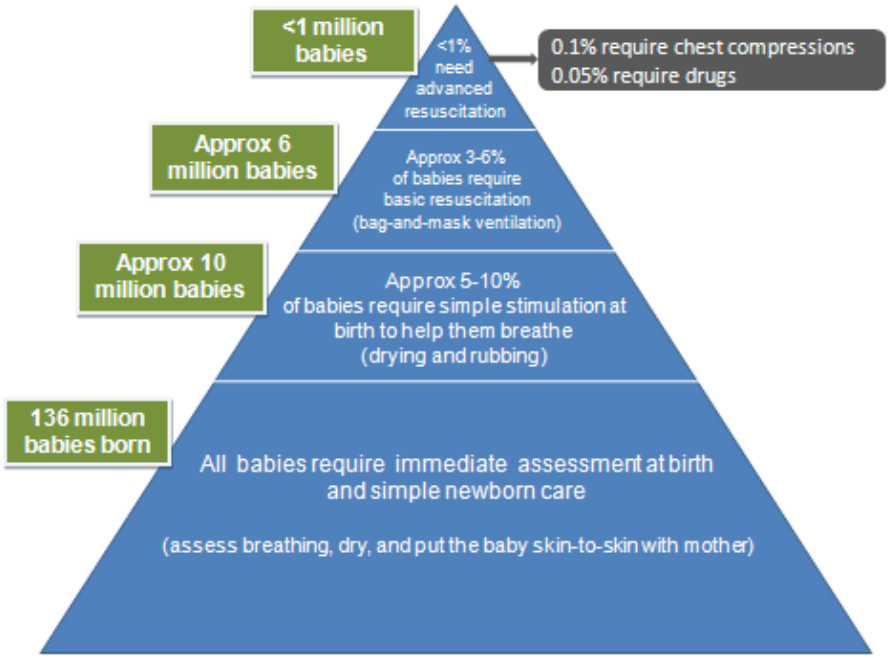
Förderungen Themen Initiativen Services Success Stories

FFG > Initiativen > Spin-off Fellowship

# Spin-off Fellowship

# Warum SVAN ?

~140 Mio. Geburten/Jahr
5-15% benötigen medizinische Unterstützung in den ersten Minuten
**~ 1 Mio. Neu- & Frühgeborene und sterben**
Aufgrund Atemnot und Komplikationen




Lee et al. BMC Public Health 2011, 11(Suppl 3):S12
http://www.biomedcentral.com/1471-2458/11/S3/S12

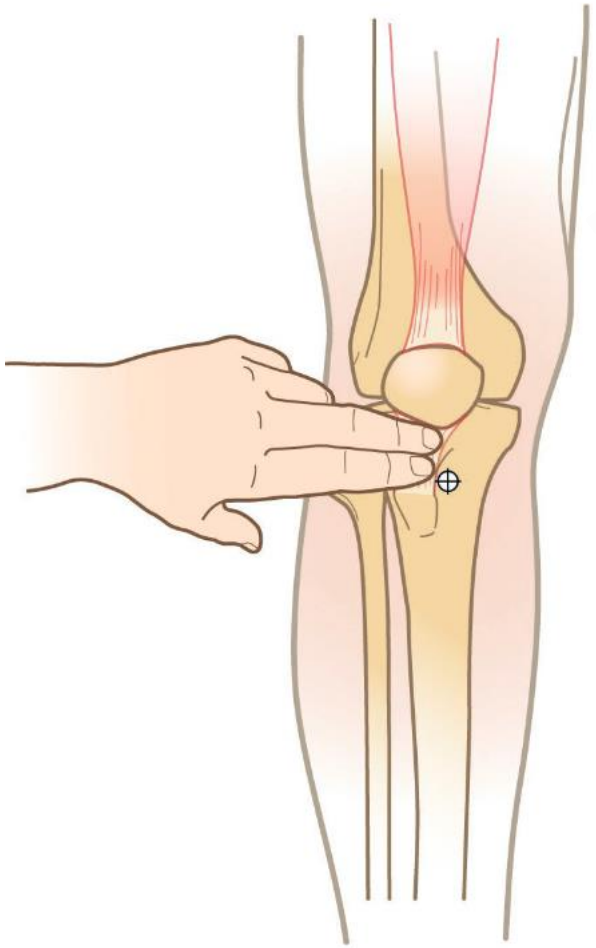
# Warum SVAN ?

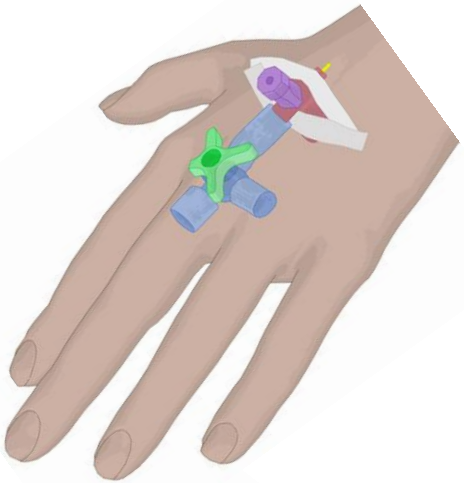


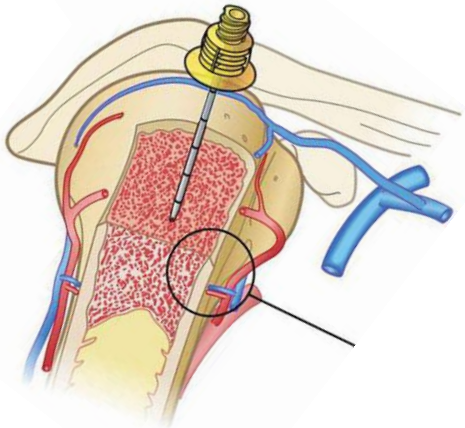
TRAINING
mit Simulatoren

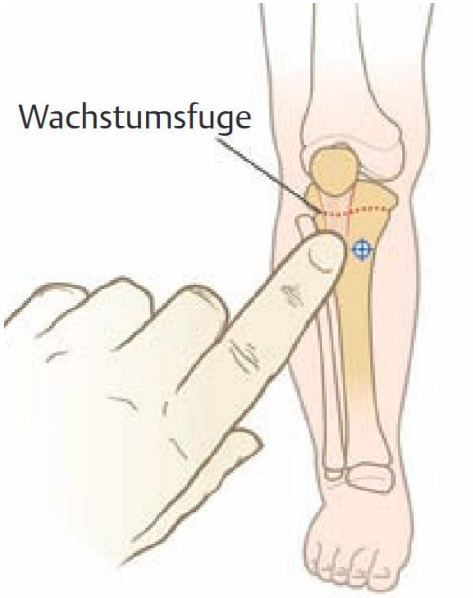
EUQIPMENT
zur Therapie

# Intraossäre Punktion→schneller venöser Zugang



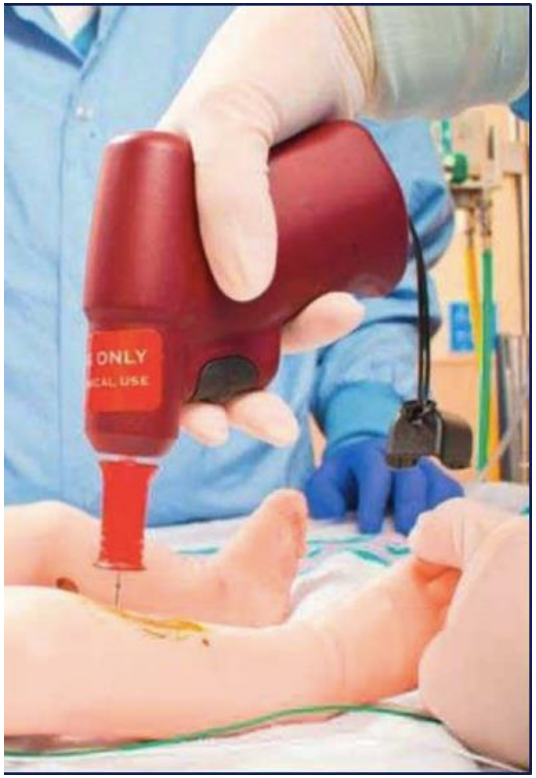






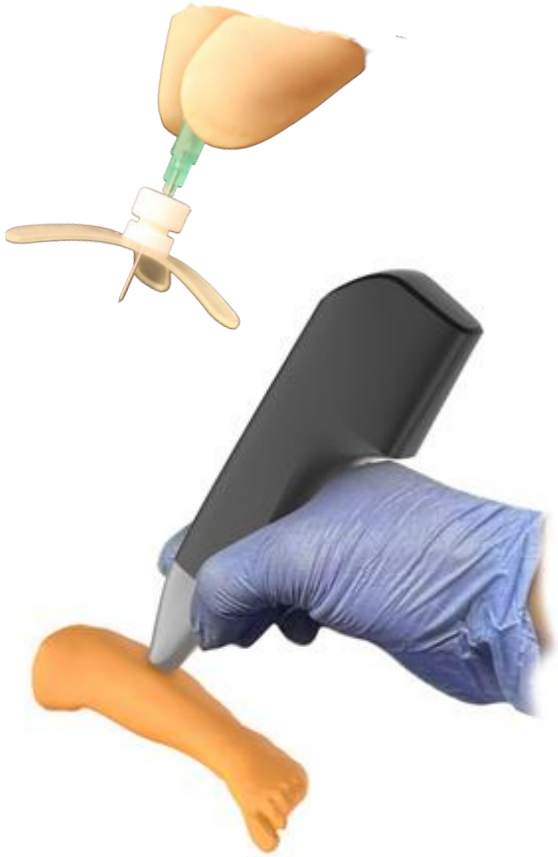
# Verfügbare Systeme im Vergleich

## State of the Art



50-70% Failure rate

## SVAN System



# Verfügbare Systeme im Vergleich

## State of the Art


**Tiefenkontrolle**

**Bohrautomatik**

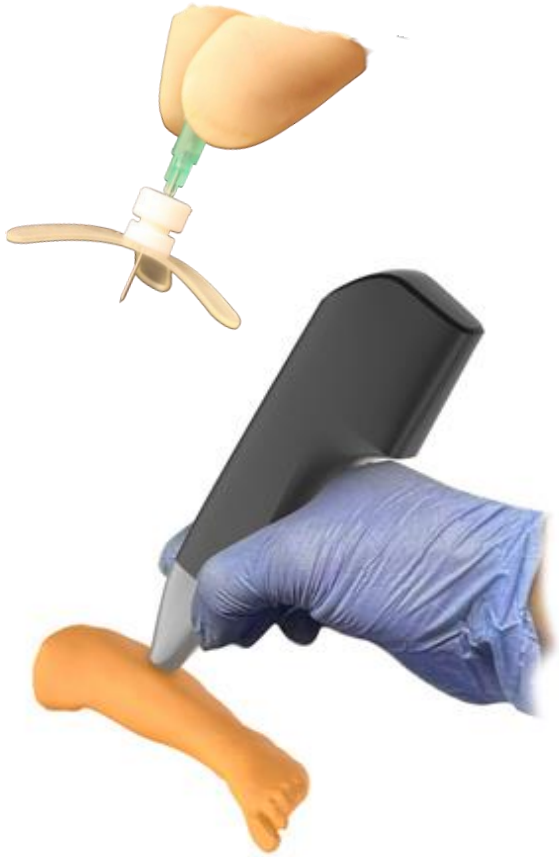
**Sicherheitsstop**

**Pinzettengriff**

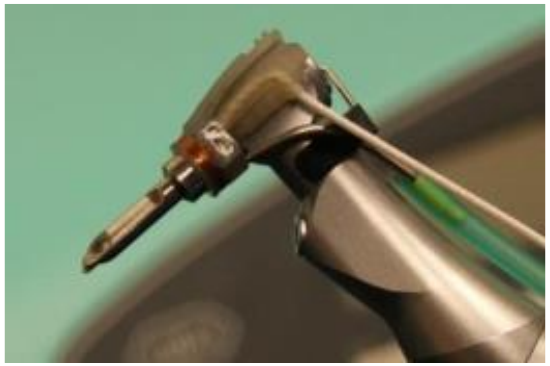
**Nadelfixierung**

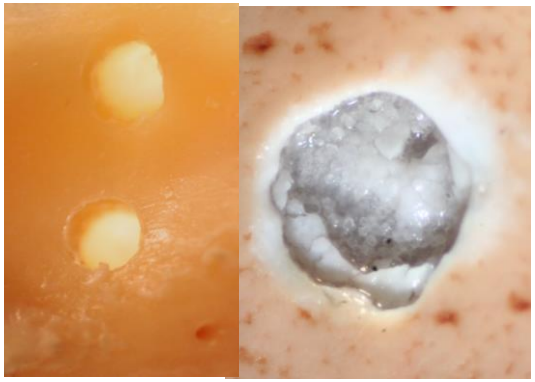
**Dünnere Nadel**
**Ø 0.8 mm needle**

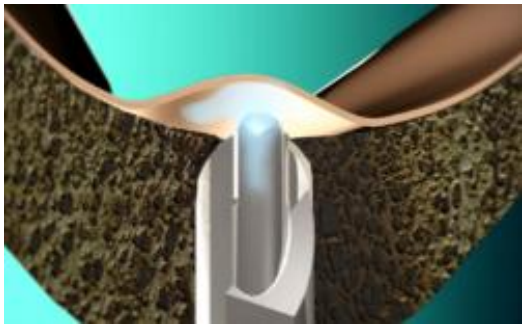
## SVAN System



# Built on the success of Sinusafe- Dental Drill

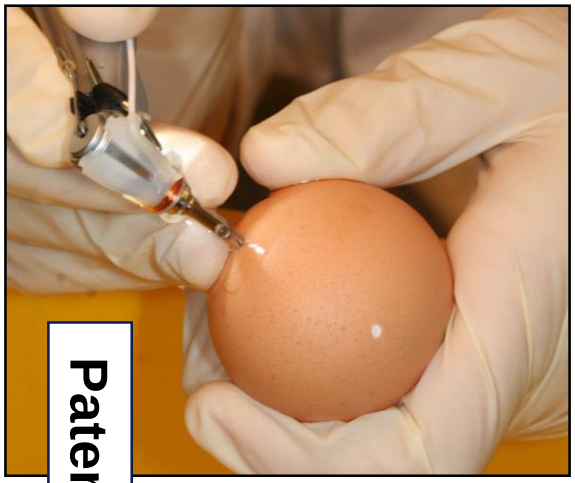






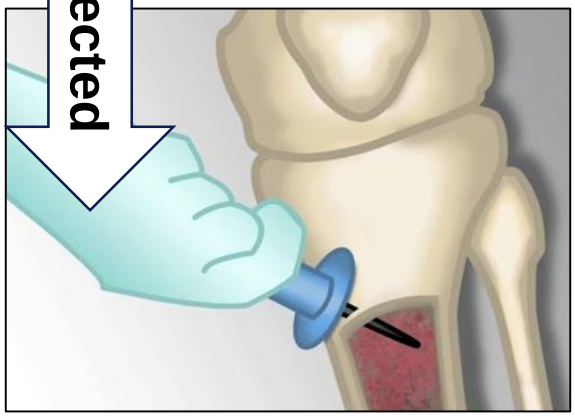
3D-Printing used to develop and produce drill guides to test the function of the designed sensor and the autostop function

CAD – Designmodel – Product Prototyp



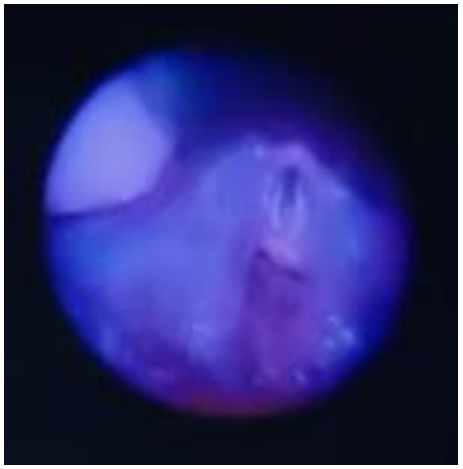
Patent Protected

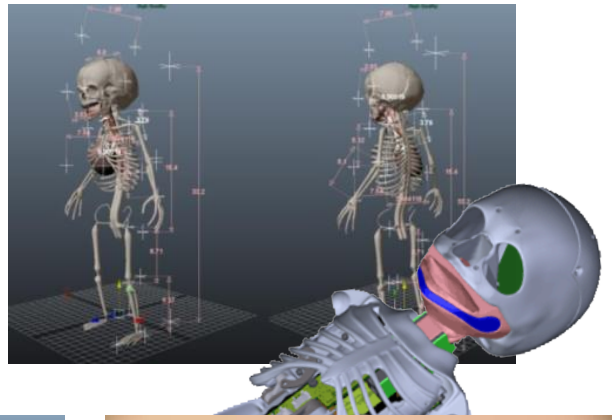
SVAN

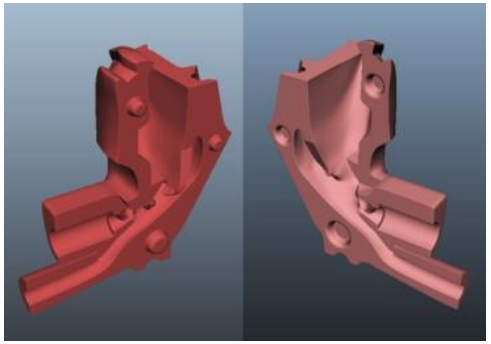


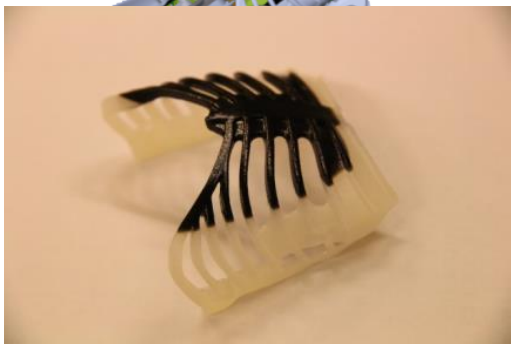
# Built on the success of „Paul“

- 3D-Printing used for reconstruction and development of a neonatologic mannequin
- Highly realistic upper airway in combination with a breathing simulator
- Training of Complex scenarian and pathologies

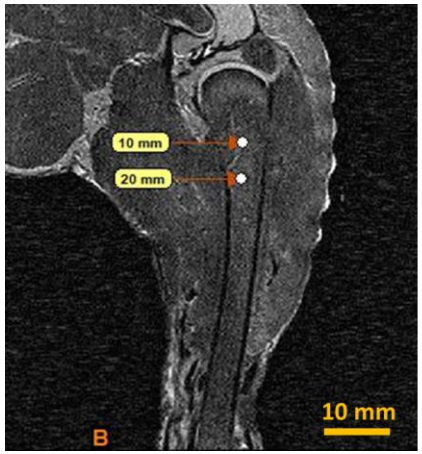


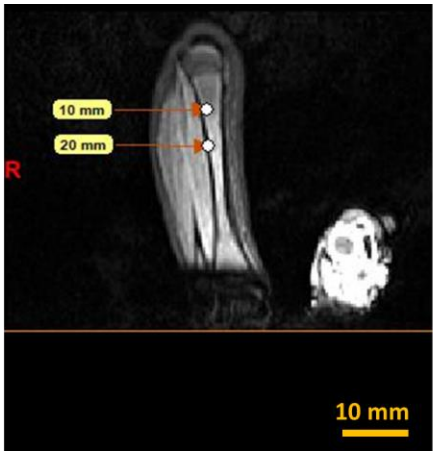


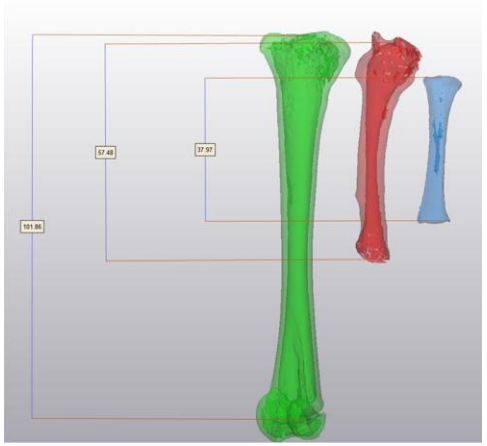





# JIO Trainer- Realistic Simulation Training Model

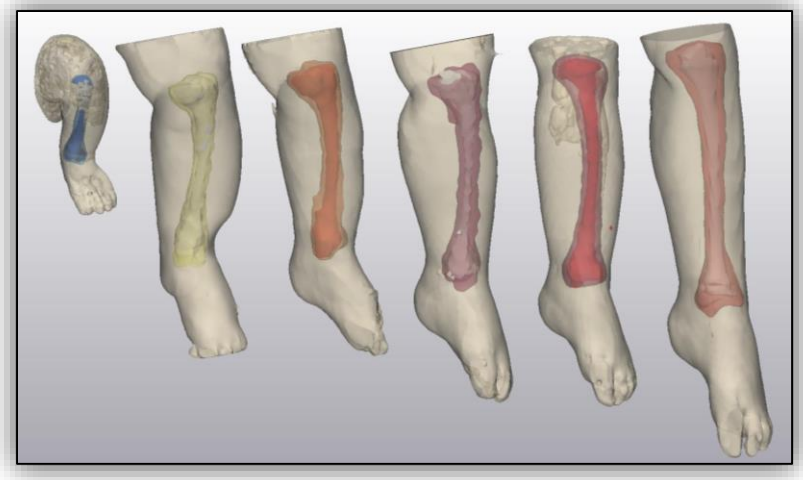


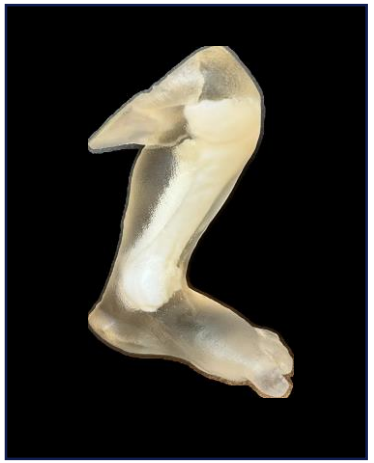
**Derzetig wird für Trainings oft ein Hühnerbein verwendet “Golden Standard”**

1d



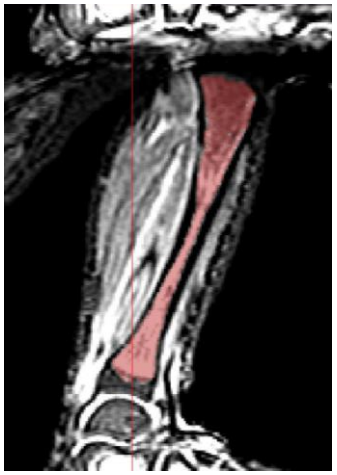
**Anatomisch korrekte SVAN Modelle**

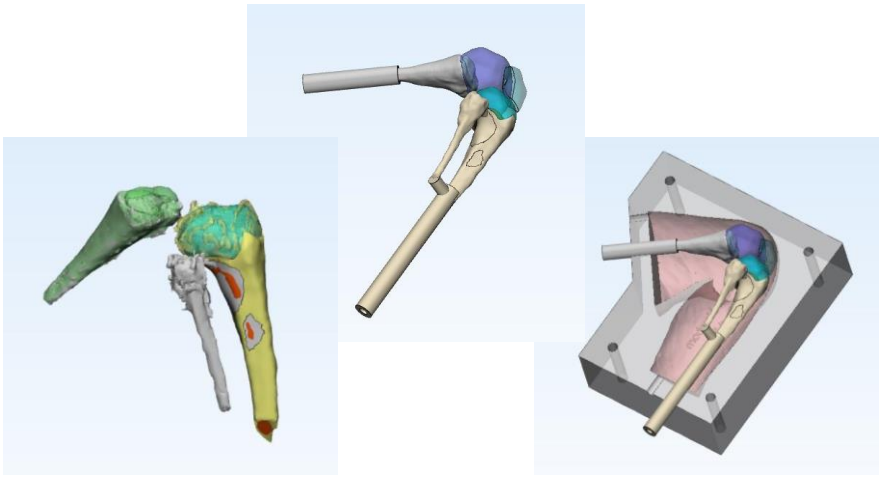
3J

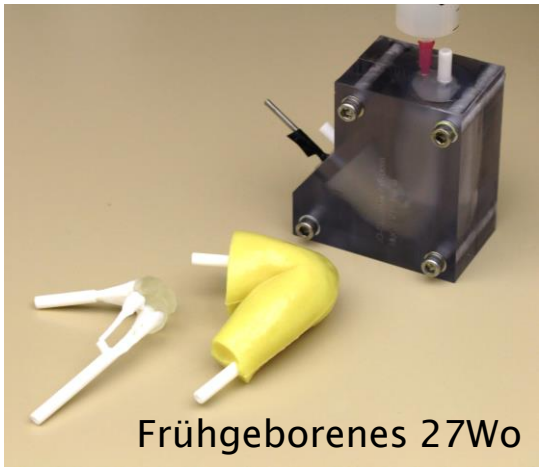


**Neugeborenes**

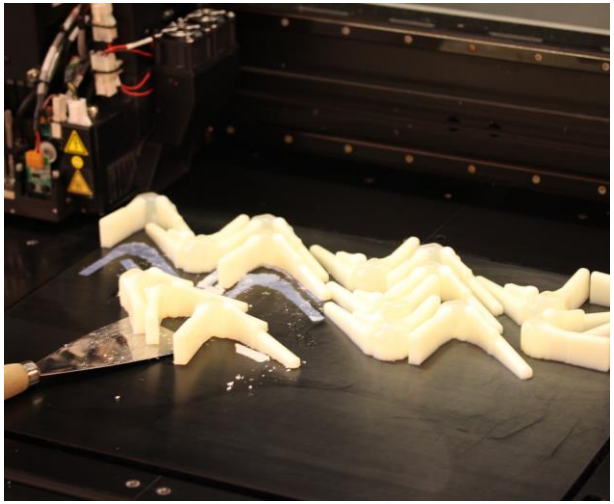
# Polyjet – Technologie für Design + Test Modelle

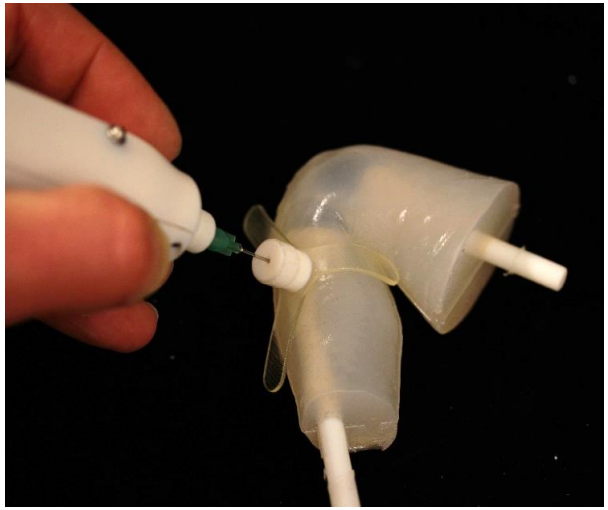


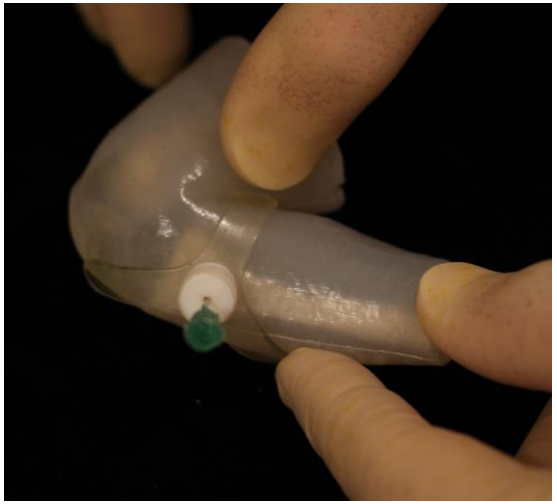




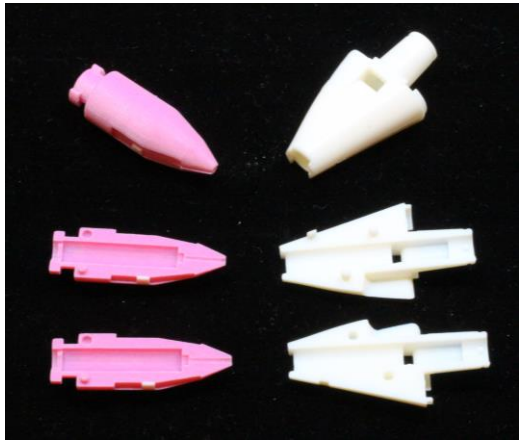

Das Material ist meist unser Limit







# Polyjet – Technologie für Design + Test Modelle

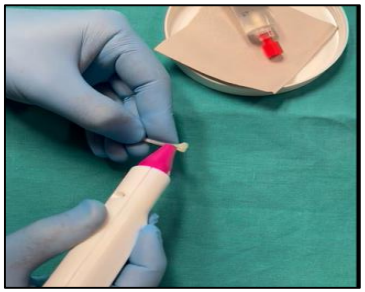


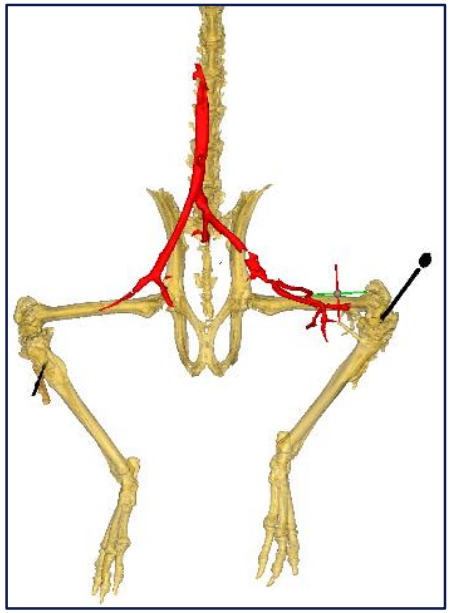
Usabilitytest / schnelle Designentwürfe

Infusionstest (Maus Modell)


# Current status- Late Preclinical Evaluation

- 90% Erfolgrate in einer Pilotstudie mit animal cadaver, VetKlinikum, Wien
- Next steps- Clinical Investigation in Humans for CE MARK
- MDR approval





# Business Model

**USP/Value Proposition:**

- First fully automated IO drill
- Patent-protected
- In-house clinical investigation MDR

**Revenue model:**

- Sales to hospitals, emergency services, vet clinics
- Clincial training simualtion course
- Partnerships with Maufacturers, Distributers

**Go to Market strategy:**

Dual market approach
2026- CE Animals
(early revenue and market feedback)
2028- CE Humans

**Value chain structure:**

- Core R&D in-house
- Outsourced production (Lercher Medical, Ottronics) and MDR Consultation

I.E.C.T
HERMANN HAUSER

**€100.000 Investment Prize**
**1St Place for Best Idea**


LISAvienna life science austria

xbio
**1St Place for Best Pitch**

Bdp Basel

AUSTRIA INNOVATIV


# HELP US SAVE LIVES

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