



**CARDIAWAVE**

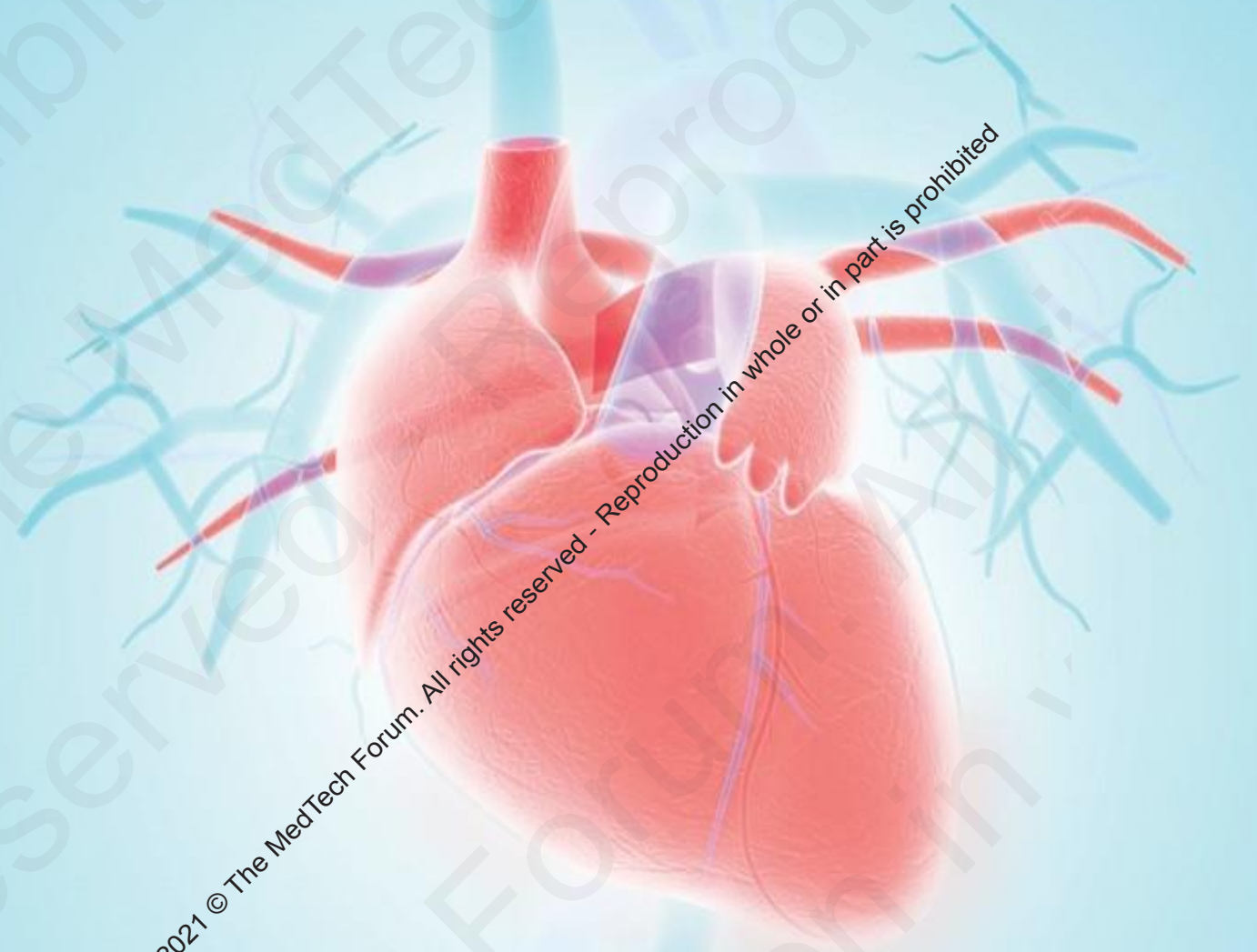


**HealthTech  
AWARD** 2020

# CARDIAWAVE

**Maurice Delplanque, COO**

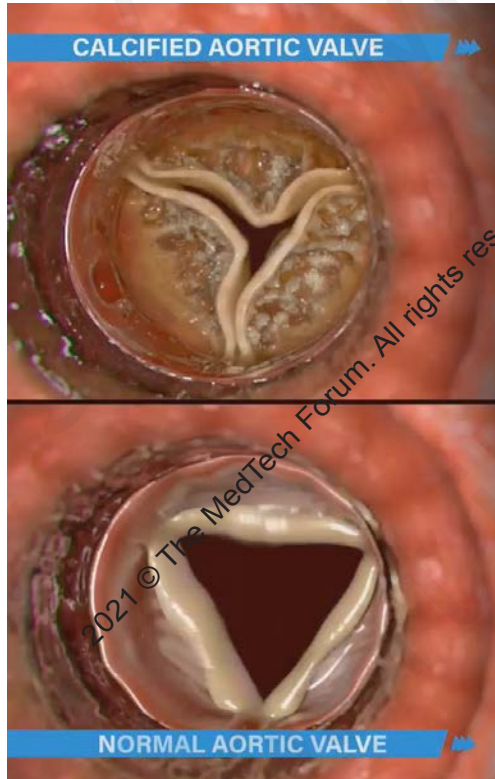
Apr, 2021



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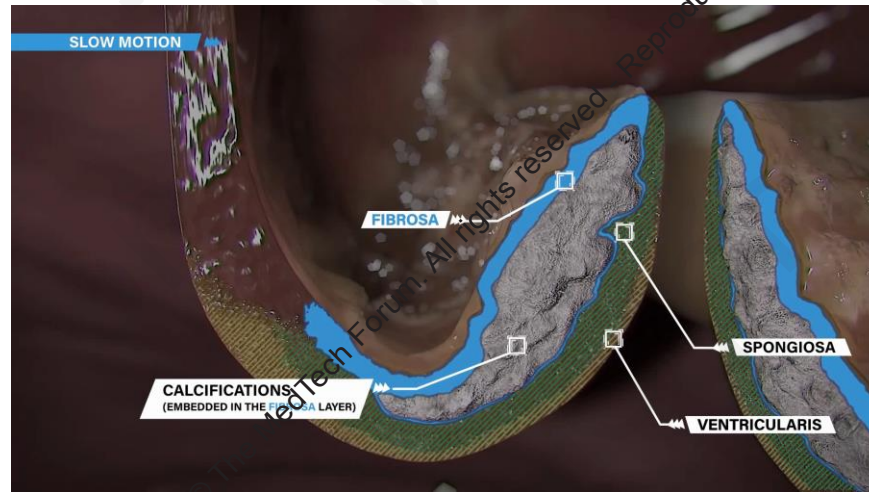
# Calcified Aortic Stenosis (CAS)



- **Third-most frequent** cardiovascular disease
- Progression with **age**
- Severe CAS is a **life-threatening** condition... **2-3** years life expectancy
- **10M patients** affected in western countries
- 16% severe symptomatic are not eligible to surgery
- **400,000** patients left **with no medical solution**

**Cardiawave has been created  
to treat these patients**

# Unique Non-invasive ultrasound therapy solution



- Focused ultrasound  $\neq$  HIFU
- Very intense and very short pulses ( $10 \mu\text{s}$ )
- Clouds of microscopic cavitation bubbles
- When cavitation bubbles implode, they produce shock waves

**micro-fragmentation of calcium embedded in valve leaflets soften the tissues**

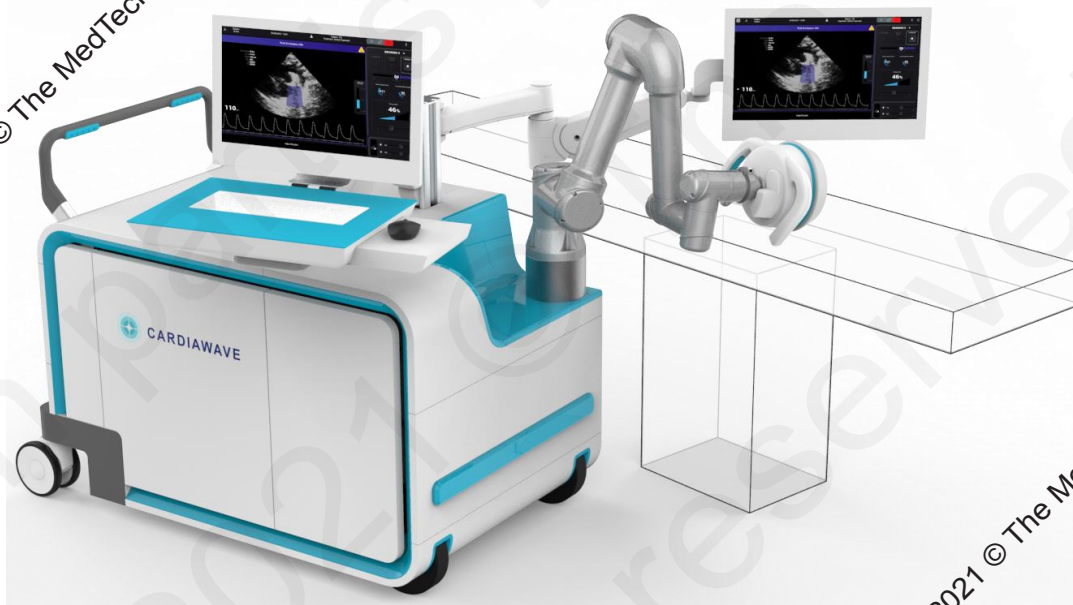
# Valvosoft : a unique combination of three innovative technologies



Pulsed Cavitation Ultrasound... energy

Ultrasound Image guidance & monitoring... precision and safety

Cobotics... ergonomics



- Non-invasive
- Light or no sedation
- 1 hour of therapy
- Outpatient (ambulatory)



# Cardiawave Team



**Benjamin BERTRAND**  
CEO, Cofunder  
& Chairman of the board



**Dr René SPAARGAREN**  
Chief Medical Officer



**Luc MORISSET**  
Quality and Regulatory  
Affairs Director



**Maurice DELPLANQUE**  
Chief Operative Officer  
Chief Technical Officer



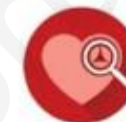
**INNOVATION 2030**  
CONCOURS MONDIAL D'INNOVATION



**Institut Langevin**  
ONDES ET IMAGES



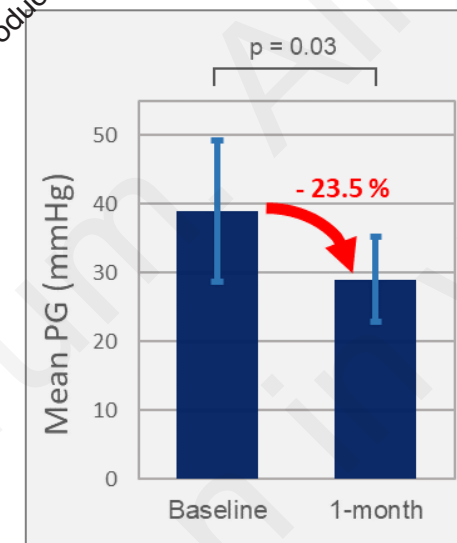
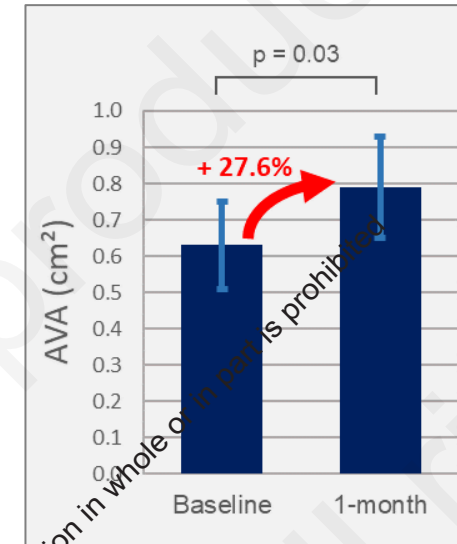
Hôpital européen Georges-Pompidou



# Clinical study results



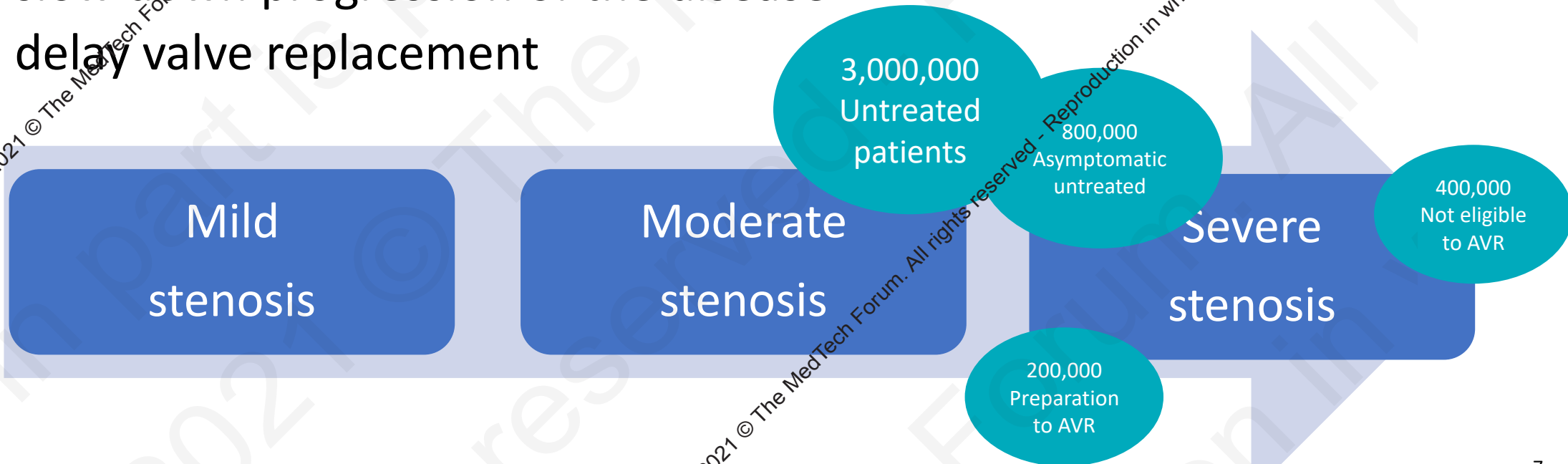
- Multicentric « First in Man » (FR, NL, RS)
- Indication: patients not eligible to valve replacement
- 28 patients treated
- No procedure or device related major adverse events at 12 months
- Improvement of anatomical and hemodynamics and QoL for a majority of patients
- Results published in *Circulation*



## Next steps



- Launch CE marking study in Eur. and an Early Feasibility Study in the US
- Capital increase in Q4 2021, Q1 2022
- In the future, expand current indication by treating preventively moderate patients **+3M patients**
  - slow down progression of the disease
  - delay valve replacement



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