PROCOPE MEDICALS

# PITCH DECK

WWW.PROCOPE-MEDICALS.COM

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# The sustainable alternative to the heart transplant shortage

*With more than 64 million people affected by severe heart failure worldwide, we are committed to making a significant impact in the fight against heart failure.*

*Our mission is to provide heart failure patients with a **state-of-the-art artificial heart**, giving them the hope of a longer and serene life.*

**S.Chabane, Co founder & CEO**

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**64 Million**

Heart failure patients worldwide

**+ 70%**

more deaths from cardiovascular disease in 30 years (1990 to 2021)

**200 000**

patients worldwide waiting for a transplant

**3%** of needs are covered

**Shortage of heart transplants**

# Leading cause of death in the world

The impact of heart failure on individuals and society is tremendous

*Sources : https://world-heart-federation.org/news/deaths-from-cardiovascular-disease-surged-60-globally-over-the-last-30-years-report/*

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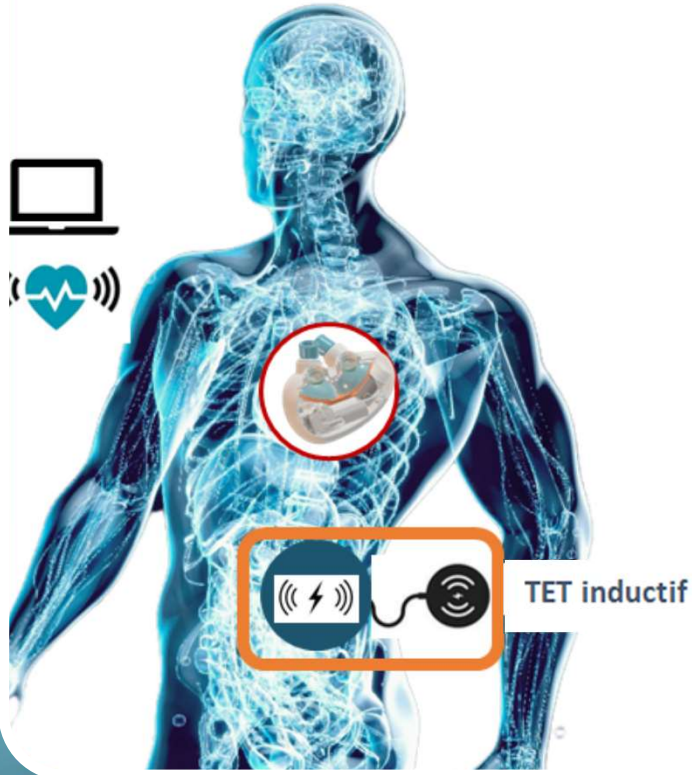



# Our Artificial Heart

01 COMPATIBLE WITH ALL PATIENT MORPHOLOGIES

02 WIRELESS AND FULLY IMPLANTABLE

03 MIMICS THE HEART'S NATURAL PULSATILITY

04 REMOTE MONITORING BY MEDICAL TEAMS

# MARKET COMPETITORS

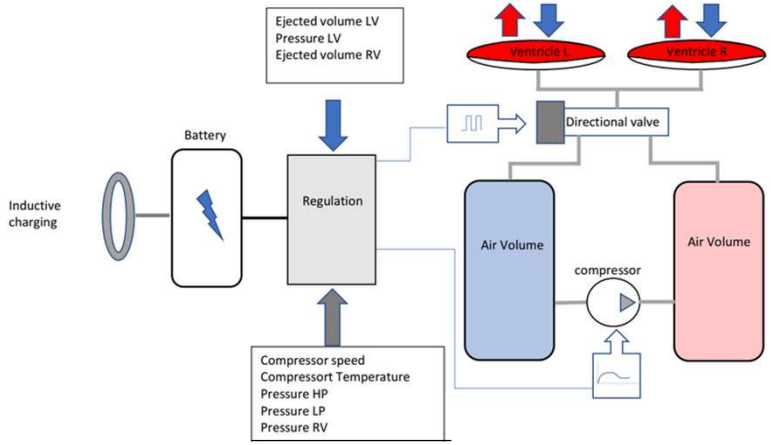
| | SynCardia | CARMAT | REALHEART | BiVACOR | PROCOPE MEDICALS |
|---|---|---|---|---|---|
| Stage | On market | On market / Clinical trial | Preclinical trial | Clinical trial | Preclinical feasibility |
| Technology | Pneumatic | Hydraulic | Mecanic | Centrifugal pump | Pneumatic |
| Anatomical compatibility ++ | ✓ | ✗ | ✓ | ✓ | ✓ |
| Transcutaneous wire connections (infections) | ✗ | ✗ | ✗ | ✗ | ✓ |
| Pulsatility | ✓ | ✓ | ✓ | ✗* | ✓ |
| Self-regulating system | ✗ | ✓ | ✓ | ✓ | ✓ |
| Noiseless | ✗ | ✓ | ✓ | ✓ | ✓ |

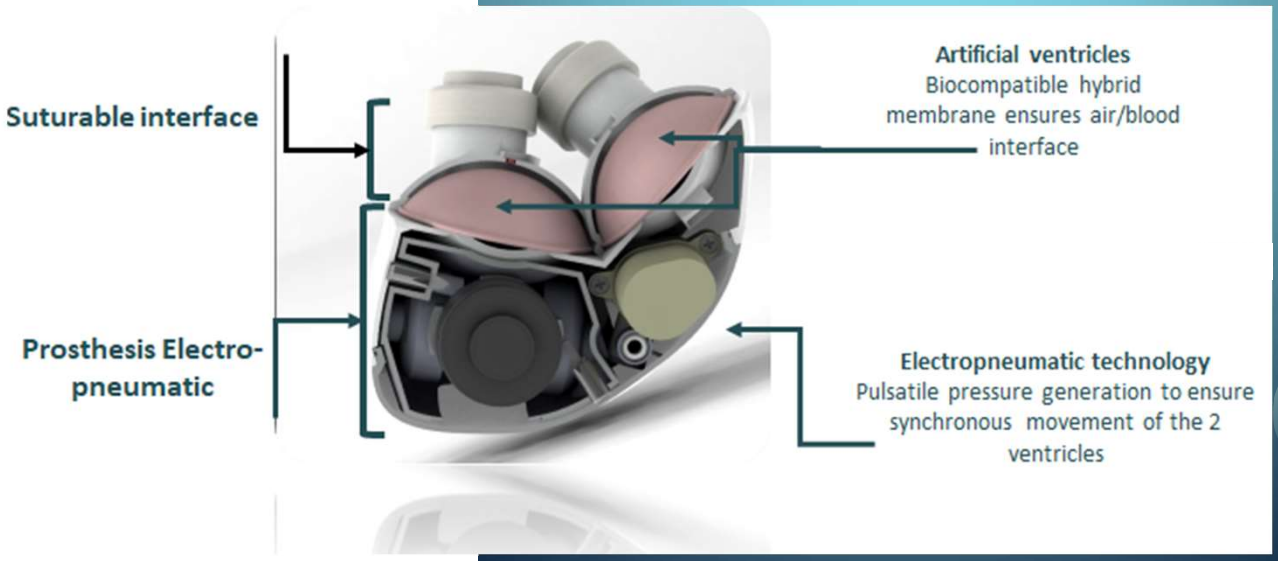
* *Rapid, cyclical changes in pump speed induce pulsating flow.*

# A PATENTED TECHNOLOGY

PROCOPE Medicals 100% owner of the pneumatic innovation of its device. The pneumatic innovation is protected by an international patent (in Europe, USA, Canada, Japan, China, South Korea)

**The major difference with Syncardia and Carmat is our pneumatic innovation. The technology lead to a very different operation of the device. The innovation give many advantages for the device : low energy consumption, compacity, pulsatile and synchronous ventricles.**



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# OUR TEAM

**Saïd Chabane**
CEO- Scientific Director

**Samuel Plumejault**
Chief Technical Director

**Stephanie Gouraud**
Chief Operations Director

**Pr Jean-Ch Roussel**
Chief Medical Officer
Phd Cardiac Surgery

**Pr Thomas Senage**
Phd Cardiac Surgery

## Scientific Board

**Sylvie Sesmat**
PhD- Research Engineering - Systems Dynamics

**Dr Gilles Marcillaud**
Surgeon

**Daniel Pierrat**
Expert CFD Fluid Engineering

**Samuel Durand**
Mechanical Engineering & Materials Design

**Muriel Vayssade**
PhD- University Professor - Specialist in biomaterials

**Eric Bideaux**
PhD- University Professor - Systems Dynamics

## Partners

**Pierre Fleurance**
R&D Design Engineer

**Alba Thio i Pera**
Biomedical Engineer
CIFRE thesis

**Jeanne Bonnin**
R&D Design Engineer

**Joris Thobie**
R&D Design Engineer

**Céline Garnier**
Office Manager

**Marie Dallibert**
Community Manager

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# R&D: MILESTONES ACHIEVED

01

## ANATOMICAL VALIDATION

Morphological compatibility testing :
Virtual implants (scans) & body implants

02

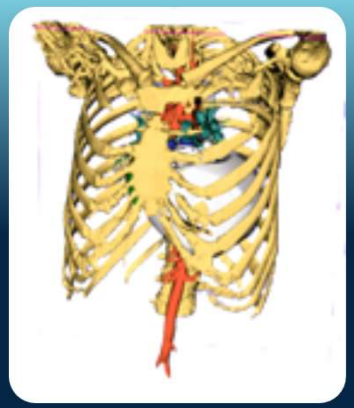
## NUMERIC SIMULATION & HEMODYNAMIC OPTIMIZATION

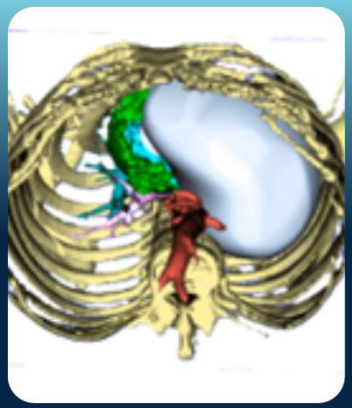
CFD blood flow simulation
Validation of hemodynamic requirements/development of specific calculation code

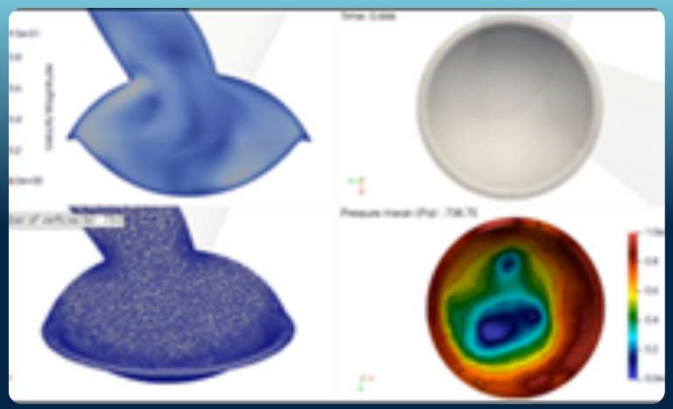
03

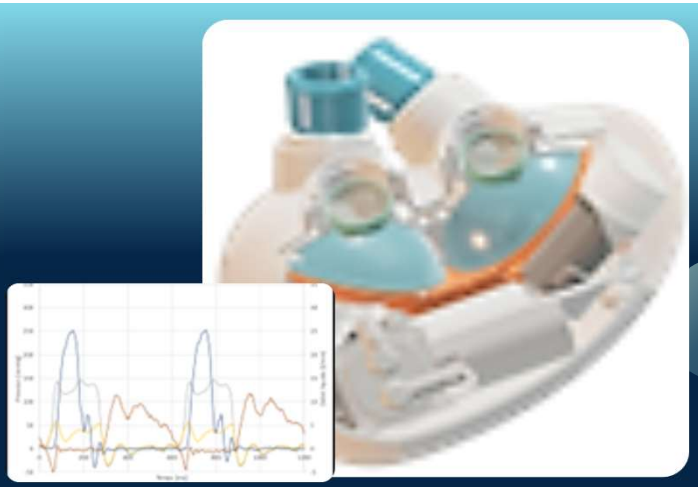
## PROOF OF CONCEPT & EXPERIMENTAL VALIDATION

Test bench and characterization of prototype performance
Validation of prosthesis behavior using an arterial circulation simulator









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# OUR ROADMAP

## 2024-2027

### Preclinical trials blood/animal

Biocompatible, self-regulating preclinical version of the prosthesis

## 2027-2030

### Clinical trials - first in man

Clinical version of the prosthesis with implantable battery and remote monitoring system

## 2030

### MARKET

AMM
Production distribution marketing

**HR : 9 to 60 recruitments**

**IP Strategy : New patents (2 others patents under investigation in 2024)**

**COMPLIANCE  MDR* regulatory plan and ISO 13485 quality system**

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**To date:**

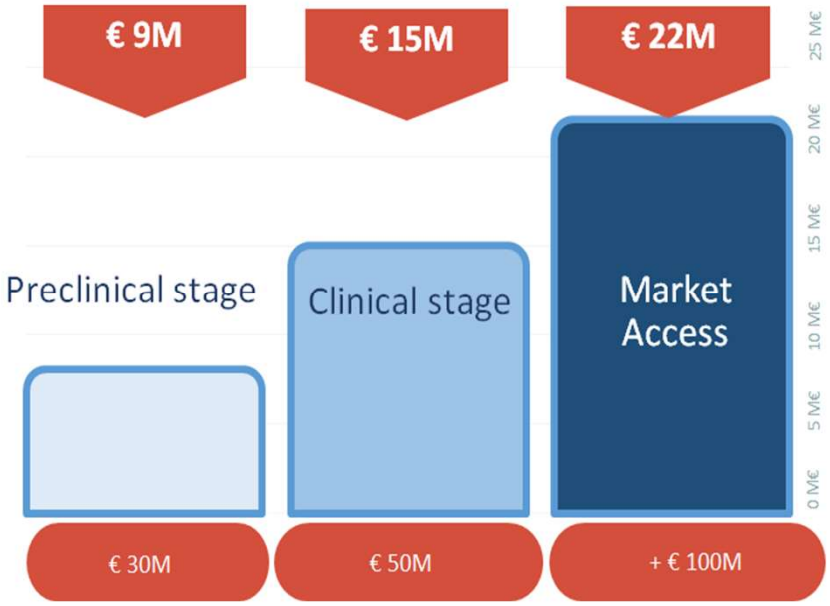
**€2,63 M**

**Private (Business Angels)**
1.260.000€
**Public grants**
1.370.000€

# Funds raised

# Funds needs

Sources of financing :
Venture capital
Private equity
Banks
Grants
Stock market / IPO




PROCOPE Medicals valuations

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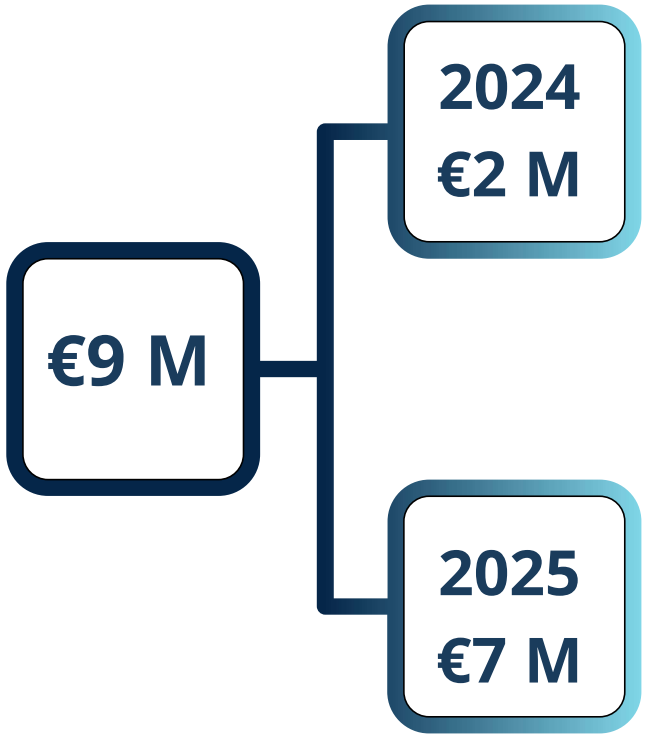
# Details for the 2024-2025 fundraising round




## use of funds

**R&D:** Finalization of developments on complete prosthesis

**IP:** 2 new patents

**HR:** Recruiting new talents

**R&D:** Pre-industrialization and manufacture of prostheses

**Regulatory:** Pre-clinical validation study carried out

**IP: 1** new patent

**HR:** Recruiting new talents

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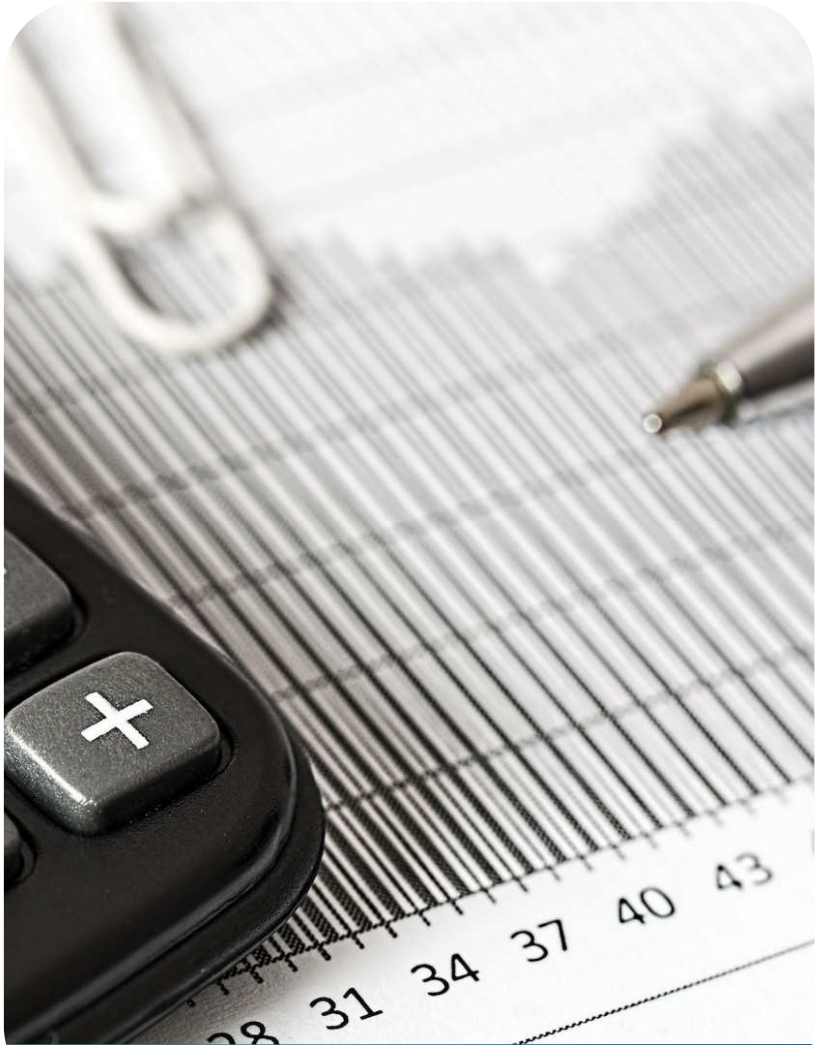

# BUSINESS & INVESTORS APPENDIX

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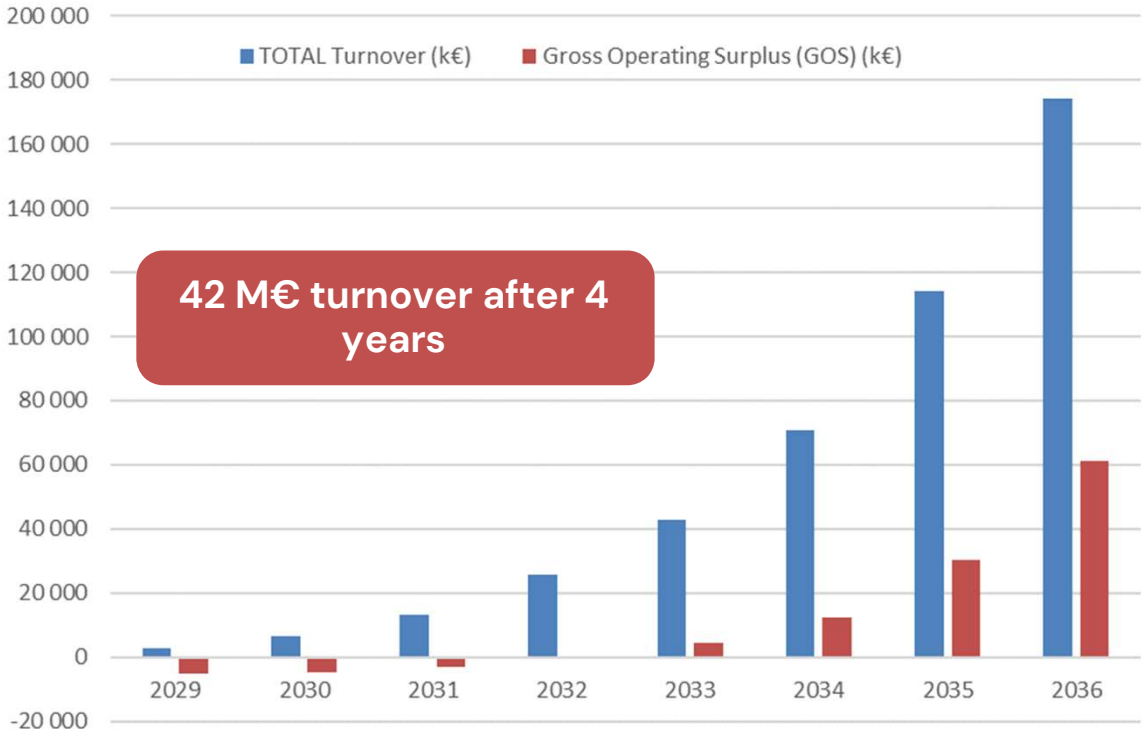
# Business

Distribution by medical partners in Europe, US and Asia

Business growth support by promotion of the TAH and medical teams training. Prospecting by PROCOPE Medicals sales team.

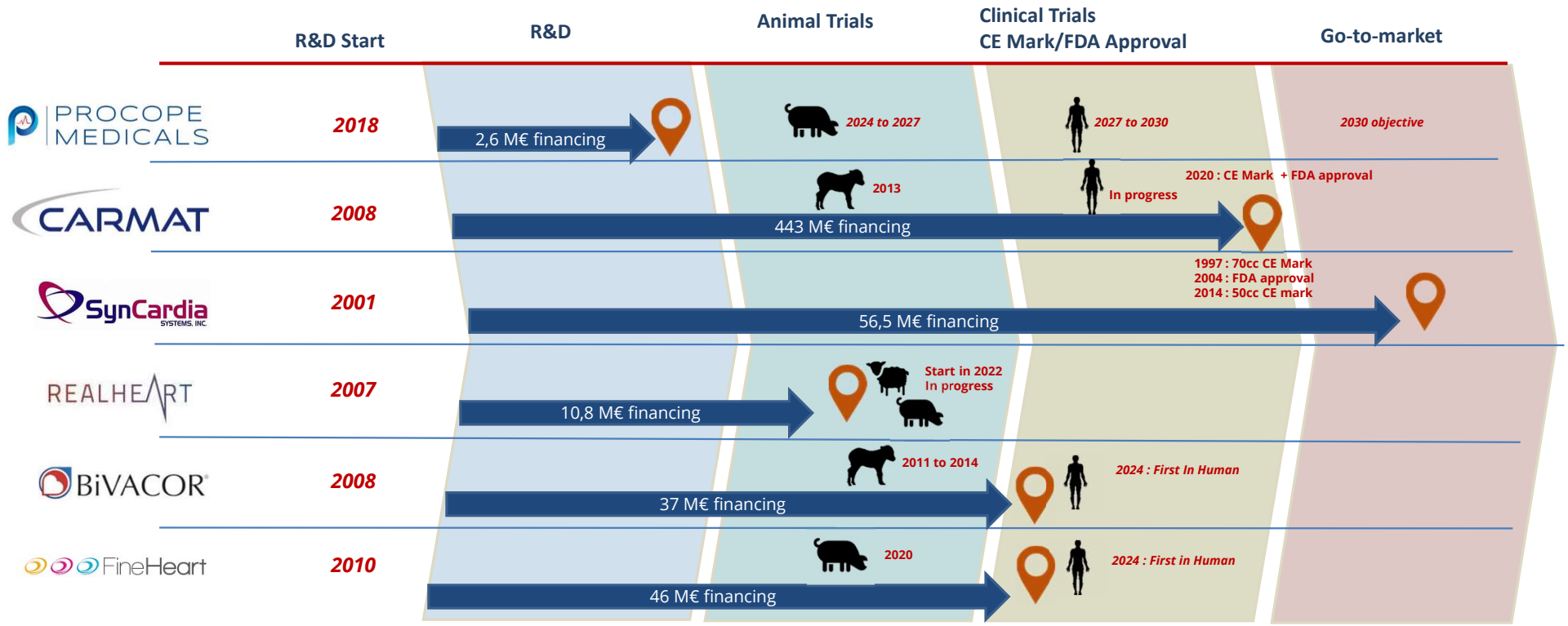
## Forecasted turnover



# COMPETITORS R&D ANALYSIS

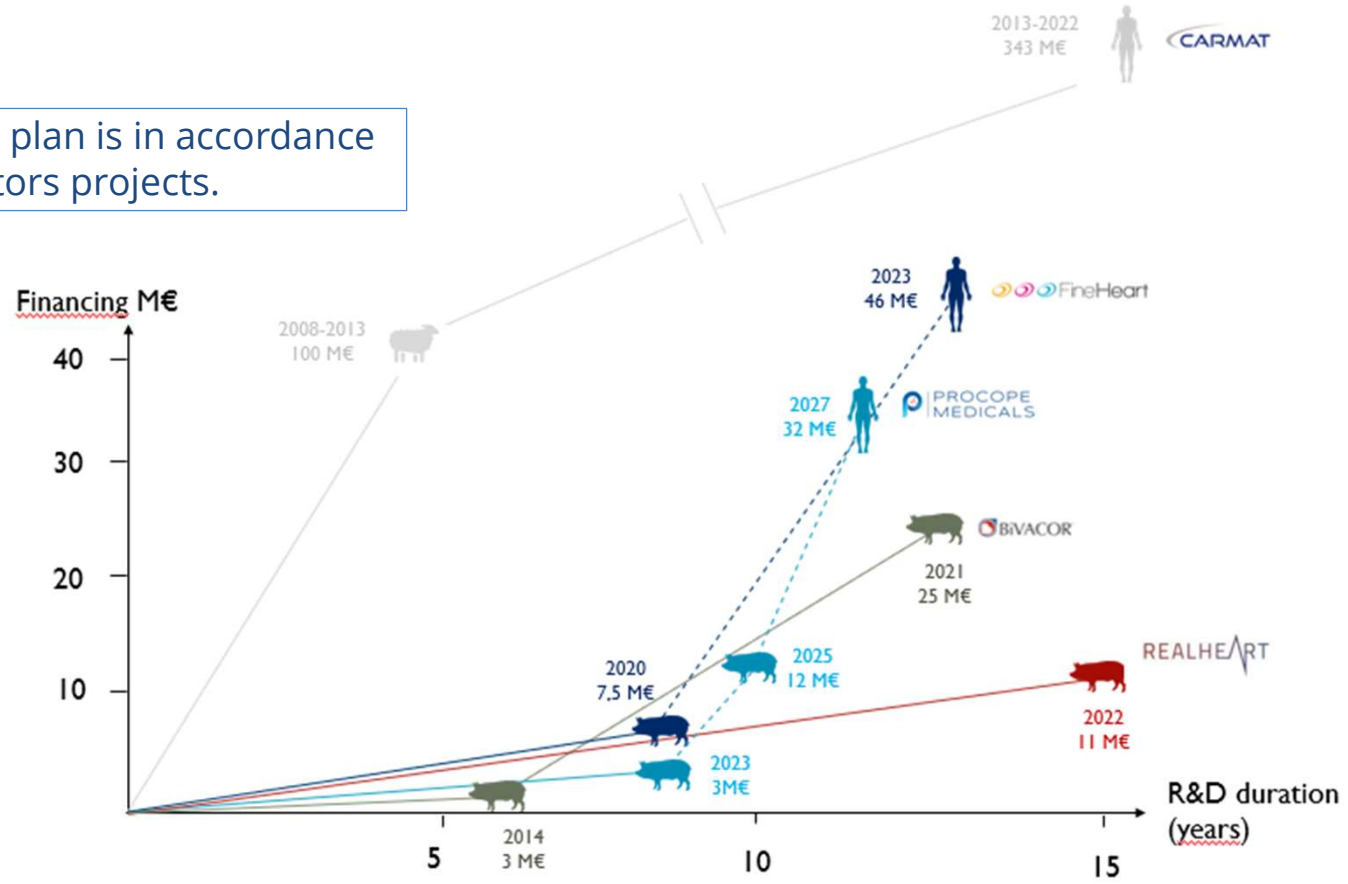
The development of a medical device requires mandatory R&D and regulatory steps to obtain **go-to-market allowances** (CE mark in Europe and FDA Approval in US).

The following study compares R&D costs of different competitors to reach the major steps :



# COMPETITORS R&D ANALYSIS

PROCOPE Medicals financing plan is in accordance with major competitors projects.



# Forecasted Balance Sheet

**Hypothesys :**

- **PROCOPE Medicals TAH Sale price : 150 k€ in Europe, 300 k€ in US. (Average price is 93k€ for a Syncardia and 300k€ for a CARMAT).**
- Market size estimation : **39 M$ estimated in 2021 with an estimated growth of 21,7 %** until 2031* (The market growth has been considered as constant during the projected period).
- 0,15% market share after 5 years that correspond to 100 sales.

Since his commercialization, Syncardia device has been implanted on 2000 patients that correspond to 0,05% of the market. This low rate is due to the poor quality of life of the implanted patient. With his innovative technology that will improve quality of life of patient, PROCOPE Medicals is waiting a higher penetration rate.

- Valuation of the company with a coefficient of 70x Gross Operating Surplus.

This important rate is common in the Medtech market. In 2012, a company working on the orthopedic market has been saled for 55x GOS, with a less innovative technology. PROCOPE Medicals can wait for a higher valuation.

** Total Artificial Haet Market Size & Share Analysis – Growth Trends & Forecast (2024 – 2031)*

The forecasted sheet consider a go-to market in 2029 . The projected period goes to 2036.

TAH implantation is considered as an emergency surgery. Hospitals pratice a inventory management.

GO TO MARKET

| | PRE-CLINICAL STUDIES | | | CLINICAL STUDIES | | FORECASTED SALES | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 | 2030 | 2031 | 2032 | 2033 | 2034 | 2035 | 2036 |
| Market size (M€) | 65 | 79 | 97 | 118 | 144 | 175 | 213 | 259 | 316 | 385 | 469 | 571 | 696 |
| Market share | | | | | | 1,5% | 3,2% | 5,0% | 8,1% | 11,1% | 15,1% | 20,0% | 25,0% |
| Estimated sales | | | | | | **12** | **30** | **58** | **114** | **190** | **314** | **508** | **774** |
| *Included implanted TAH* | | | | | | *6* | *15* | *29* | *57* | *95* | *157* | *254* | *387* |
| **SALES IN EUROPE** | | | | | | | | | | | | | |
| Sales | | | | | | **6** | **15** | **29** | **57** | **95** | **157** | **254** | **387** |
| *included implanted TAH* | | | | | | *3* | *8* | *15* | *29* | *48* | *79* | *127* | *194* |
| Unit Price (K€) | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| Turnover in (K€) | 0 | 0 | 0 | 0 | 0 | 900 | 2 250 | 4 350 | 8 550 | 14 250 | 23 550 | 38 100 | 58 050 |
| Margin (%) | 70% | 70% | 70% | 70% | 70% | 60% | 60% | 60% | 60% | 60% | 60% | 60% | 60% |
| Margin (k€) | 0 | 0 | 0 | 0 | 0 | 540 | 1 350 | 2 610 | 5 130 | 8 550 | 14 130 | 22 860 | 34 830 |
| **SALES IN US** | | | | | | | | | | | | | |
| Sales | | | | | | **6** | **15** | **29** | **57** | **95** | **157** | **254** | **387** |
| *included implanted TAH* | | | | | | *3* | *8* | *15* | *29* | *48* | *79* | *127* | *194* |
| Unit Price (K€) | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 | 300 |
| Turnover in (K€) | 0 | 0 | 0 | 0 | 0 | 1 800 | 4 500 | 8 700 | 17 100 | 28 500 | 47 100 | 76 200 | 116 100 |
| Margin (%) | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% | 80% |
| Margin (k€) | 0 | 0 | 0 | 0 | 0 | 1 440 | 3 600 | 6 960 | 13 680 | 22 800 | 37 680 | 60 960 | 92 880 |
| **TOTAL Turnover (k€)** | **0** | **0** | **0** | **0** | **0** | **2 700** | **6 750** | **13 050** | **25 650** | **42 750** | **70 650** | **114 300** | **174 150** |
| Plant assests (k€) | 1 094 | 4 298 | 2 807 | 3 199 | 1 500 | | | | | | | | |
| Total Margin (k€) | 1 094 | 4 298 | 2 807 | 3 199 | 1 500 | 1 980 | 4 950 | 9 570 | 18 810 | 31 350 | 51 810 | 83 820 | 127 710 |
| *Margin (%)* | | | | | | 73% | 73% | 73% | 73% | 73% | 73% | 73% | 73% |
| Inventory | | | | | | 338 | 844 | 1 631 | 3 206 | 5 344 | 8 831 | 14 288 | 21 769 |
| Subsidies (k€) | 829 | 14 | 2 000 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Employees | 10 | 12 | 14 | 14 | 24 | 38 | 50 | 60 | 90 | 120 | 170 | 220 | 250 |
| Salaries (taxes included) (k€) | 429 | 703 | 900 | 928 | 1 536 | 2 432 | 3 200 | 3 840 | 5 760 | 7 680 | 10 880 | 14 080 | 16 000 |
| External expenses (k€) | 1 218 | 4 304 | 2 789 | 3 174 | 2 760 | 4 370 | 5 750 | 6 900 | 10 350 | 13 800 | 19 550 | 25 300 | 28 750 |
| Gross Operating Surplus (GOS) (k€) | 276 | -695 | 1 118 | -903 | -2 796 | -5 160 | -4 844 | -2 801 | -506 | 4 526 | 12 549 | 30 153 | 61 191 |
| Break-even Point (k€) | N/a | N/a | N/a | N/a | N/a | 9 519 | 13 058 | 16 495 | 25 755 | 35 765 | 52 348 | 71 557 | 88 692 |
| Debts (k€) | 0 | 1 515 | 1 215 | 1 741 | 1 101 | 503 | 167 | 0 | 0 | 0 | 0 | 0 | 0 |
| Available Cash (k€) | 2 203 | 4 392 | 2 763 | 11 781 | 5 674 | 16 922 | 9 530 | 8 304 | 9 935 | 17 949 | 35 954 | 73 588 | 113 010 |

# FINANCING PLAN

To finance R&D and clinical trials, PROCOPE Medicals has built a financing plan based on private and public funds research.
**The total financial need before go-to-market is 45 M€.**

Animal Trial 1 — Animal Trial 2 — Start of clinical trials

| | | BA | Private Equity Fund | | | | |
|---|---|---|---|---|---|---|---|
| | | 2024 | 2025 | 2026 | 2027 | 2028 | 2029 |
| **Financing plan (k€)** | | | | | | | |
| + | Capital Increase | 2 170 | 7 000 | 0 | 12 000 | 0 | 22 000 |
| - | Reduction of capital | 0 | 0 | 0 | 0 | 0 | 0 |
| - | Dividend | 0 | 0 | 0 | 0 | 0 | 0 |
| + | Bank loan | 0 | 500 | 500 | 1 000 | 0 | 0 |
| - | Debt redemption | 0 | 356 | 300 | 473 | 640 | 598 |
| + | Current account vaiation | 0 | 0 | 0 | 0 | 0 | 0 |
| - | Finance charges | 0 | 0 | 0 | 0 | 0 | 0 |
| + | Subsidies | 829 | 14 | 2 000 | 0 | 0 | 0 |
| + | Investment incomes | 0 | 0 | 0 | 0 | 0 | 0 |
| + | Tax credit | 1 | 456 | 281 | 992 | 992 | 0 |

Possible exit

# INVESTMENT OPPORTUNITY

## Expected return

- PROCOPE Medicals give private investors the opportunity to support an **impact project** with **important expected return**.
- Investment in PROCOPE Medical is **eligible to french IR-PME program** (25% tax reduction).
- **Next R&D steps** lead to a important increase in the project valuation.

### Projected valuations

| | Investment in 2024 | Investment in 2025 |
|---|---|---|
| PROCOPE Valuation | 12 M€ | 30 M€ |
| Valuation in 2027 * | 60 M€ | 60 M€ |
| Valuation in 2028 * | 80 M€ | 80 M€ |
| Valuation in 2029 * | 100 M€ | 100 M€ |
| Valuation in 2033 ** | 334,8 M€ | 334,8 M€ |
| Valuation in 2034 ** | 914,4 M€ | 914,4 M€ |
| Valuation in 2035 ** | 2184,3 M€ | 2184,3 M€ |

* Estimated valuation by competitors analysis

** Estimated valuation by GOS method

### Projected return

| | |
|---|---|
| ***Exit in 2029*** | |
| Duration in Year | 5 |
| ROI | 31,7% |
| Coeff | 4,0 |
| ***Exit in 2033*** | |
| Duration in Year | 9 |
| ROI | 33,3% |
| Coeff | 13,2 |
| ***Exit in 2034*** | |
| Duration in Year | 10 |
| ROI | 43,2% |
| Coeff | 36,2 |
| ***Exit in 2035*** | |
| Duration in Year | 11 |
| ROI | 50,0% |
| Coeff | 86,4 |

Investment in 2024

| | |
|---|---|
| ***Exit in 2029*** | |
| Duration in Year | 4 |
| ROI | 16,6% |
| Coeff | 1,8 |
| ***Exit in 2033*** | |
| Duration in Year | 8 |
| ROI | 25,6% |
| Coeff | 6,2 |
| ***Exit in 2034*** | |
| Duration in Year | 9 |
| ROI | 36,9% |
| Coeff | 16,9 |
| ***Exit in 2035*** | |
| Duration in Year | 10 |
| ROI | 44,7% |
| Coeff | 40,3 |

Investment in 2025

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# THANK YOU

SCAN ME