DRIVING THE REVOLUTION IN CARDIOLOGY

September 2024

CARMAT

Safe Harbor

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September 2024, CARMAT SA, France

Speakers

Chief Executive Officer

- Over 25-year experience in the medical device business
- Previously Divisional Vice President Global Market Development at Abbott

Chief Financial Officer

- Over 25-year experience in finance and healthcare industry
- Previously VP Finance at GSK

CARMAT's Critical Mission

To solve the advanced heart failure transplant and destination therapy crisis

OUR MISSION

To provide **quality of life** to patients with advanced heart failure by creating innovative and reliable technologies that save lives

OUR VISION

Aeson® to become the primary **alternative to Heart Transplants**

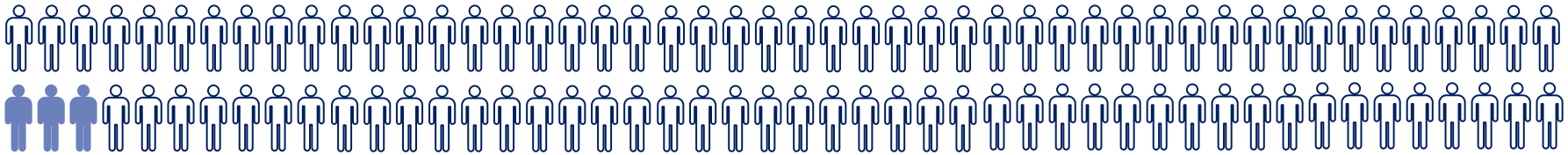
High unmet medical need in heart failure

200,000

Patients suffering from heart failure every year*

6,000

The number of hearts transplants**



97% of patients in need of a transplant are not treated

* Source: Global data, estimations de Carmat
** Source: J Heart Lung Transplant 2019;38:1056-66

Our Successful Journey

2008
Inception of CARMAT

2010
Listing on Euronext growth

2013
First in Man implant

2018
Manufacturing facility in Bois d'Arcy

2020
CE Marking for Bridge to Transplant (BTT*)

2021
First in Man implant in the US

2023
50 patient milestone

2024
A fully-fledged company to support the commercial uptake of the only CE marked TAH, and prepare for the Destination Therapy (DT**) indication

DESTINATION THERAPY

CARMAT outperformed all competing projects in terms of technology and pace of development

* BTT: bridge to transplant ** DT: destination therapy

Agenda

I. H1 2024 achievements

II. Clinical experience

III. Commercial development

IV. Manufacturing and finance

V. Outlook

Positive first-half performance

1 20 implants in H1 2024 (vs. 3 in H1 2023)

2 14 patients enrolled in EFICAS study since January 1, 2024
(i.e. a total of 25 patients since study kick-off)

3 42 centers trained for commercial implants in 14 different countries
(+9 vs. end-2023)

4 Inventory of 25 Aeson® hearts as of June 30, 2024
Manufacturing capacity of 500 devices per year

5 €33m raised in equity

6 Successful restructuring of the financial debt
Final maturity extended by at least 2 years

Data as of June 30, 2024 (inclusded), except for the EFICAS study (data to July 1, 2024)

Commercial development getting pace

CARMAT has done more in H1 2024 than in FY 2023.

	FY 2023 – 12 months	2024 – 6 months*
Sales	€2.8m	€3.3m
Implants	17	20
EFICAS study - Patients enrolled	10	13
Trained centers (commercial)	33	42 (+9)
Active countries (commercial)	Germany, Italy	Germany, Italy, Poland
Ready-for-implants countries	Austria, Slovenia, Greece, Israël	Austria, Slovenia, Greece, Israel, Switzerland, Croatia
Inventory	Ca. 20 devices	Ca. 25 devices

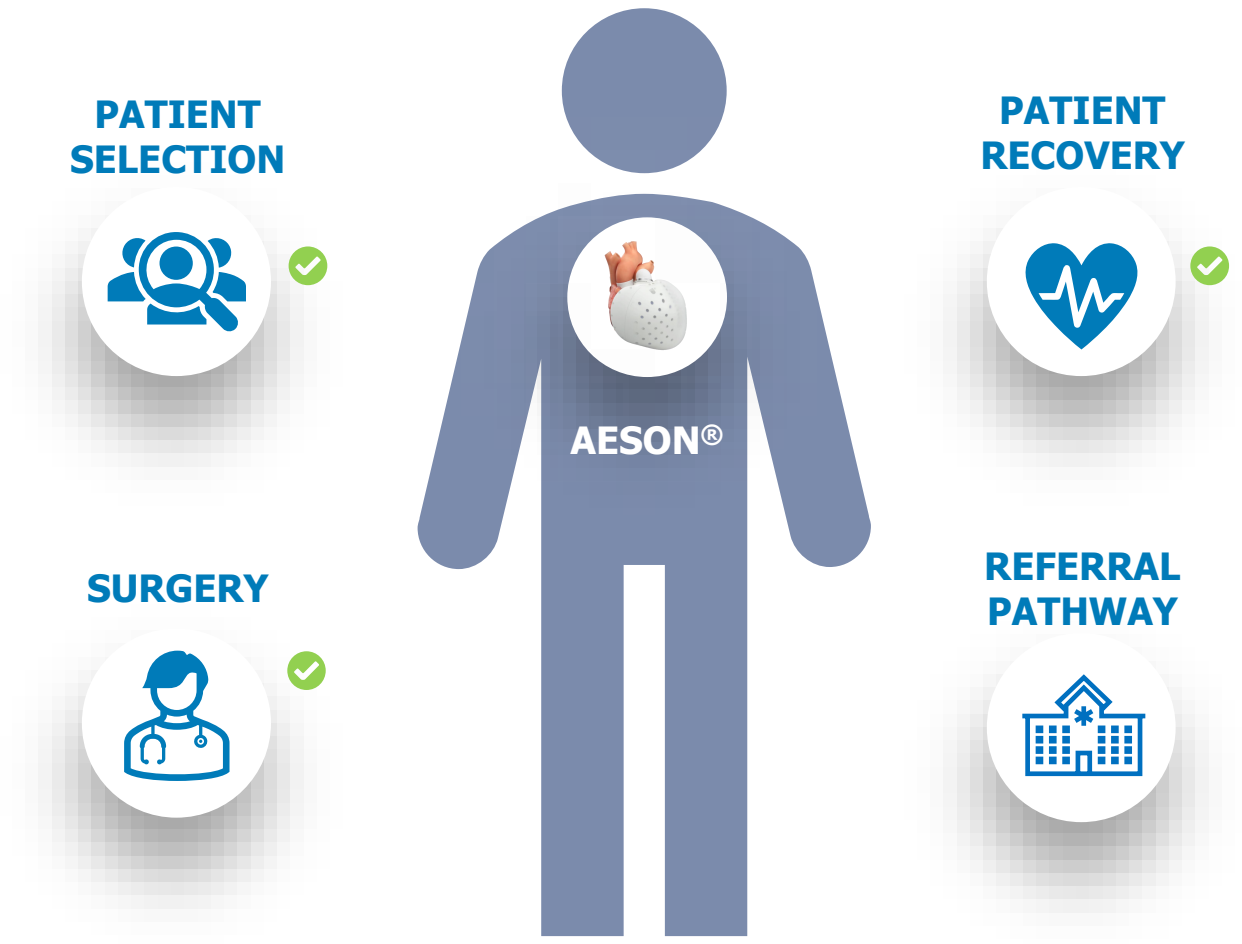
* Data as of June 30, 2024

The WOW Effect!

experienced at each first implant in a center reinforces our conviction that adoption of Aeson® will get momentum in 2024

Patient pathway to be progressively developed to unlock Aeson®'s full potential

Recent learning to build upon to gradually make Aeson® a first-line treatment



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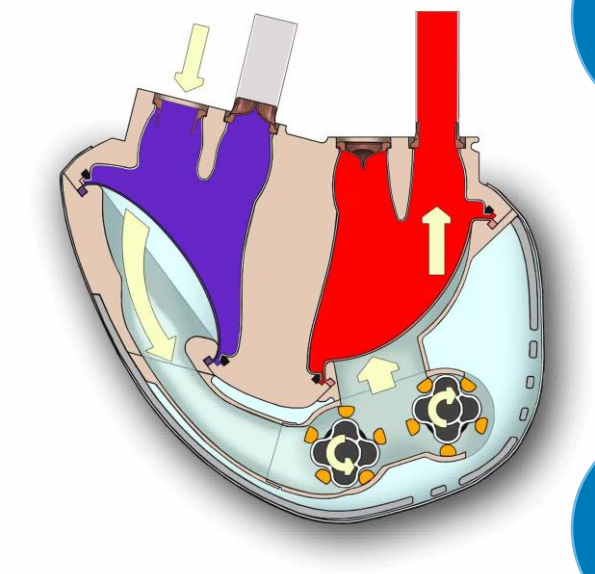
Aeson®'s physiological functioning

Volumetric pumps incorporated in a bag filled with silicon oil, activate the hybrid membranes allowing for blood to enter and exit the chambers



1

Blood Flow Assessment

In-flow pressure is measured by sensors every millisecond to calculate flow requirement.

2

Flow Auto-Regulation

Speed and rotation direction of volumetric pumps adapt every 2 milliseconds to deliver calculated pulsatile flow.

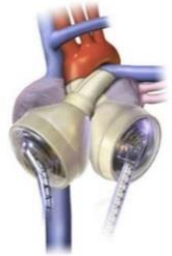
3

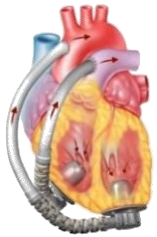
Flow Control

Membranes are checked by 2 ultrasound sensors every 2 milliseconds to ensure the volume of blood delivered by the pump is accurate.

Aeson®'s Unique Competitive Advantages

Four essential requirements to provide physiologic replacement without complications





	SynCardia TAH	BVAD	Aeson® TAH
01 Biventricular Support	✓	✓	✓
02 Pulsatility	✓	✗	✓
03 Autoregulation	✗	✗	✓
04 High hemocompatibility	✗	✗	✓

Full physiologic replacement

Unparalleled Safety Profile

No disabling stroke

No intestinal bleeding lesions

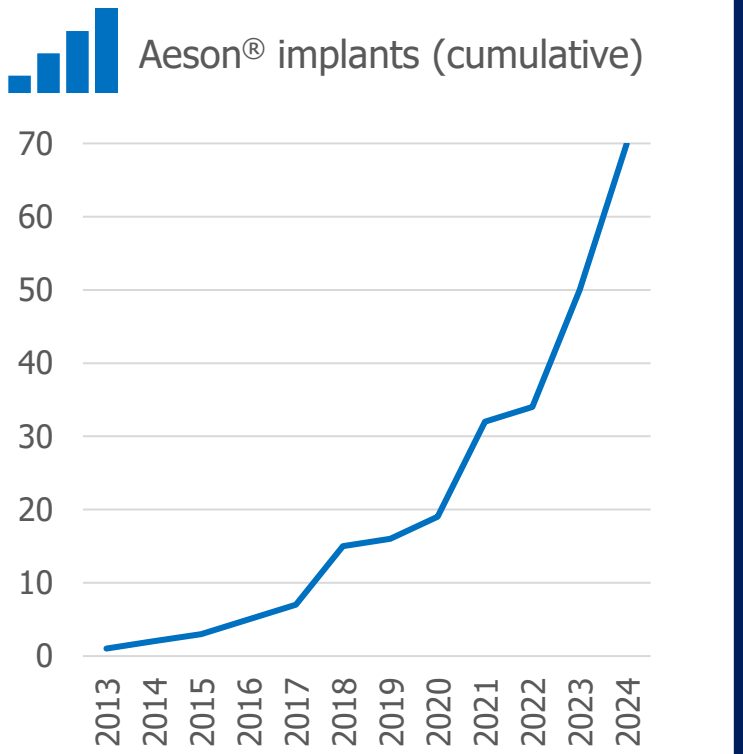
Over 10 years of convincing clinical experience since the first implant in 2013

70 PATIENTS
suffering from advanced heart failure treated with Aeson® TAH

The longest support duration exceeded
25 MONTHS

19 PATIENTS
transplanted after Aeson® support (Bridge To Transplant)

The cumulative experience is:
>27 PATIENT YEARS



Data as of June 30, 2024 (inclusive)

Profile of treated patients: increasingly severely ill people

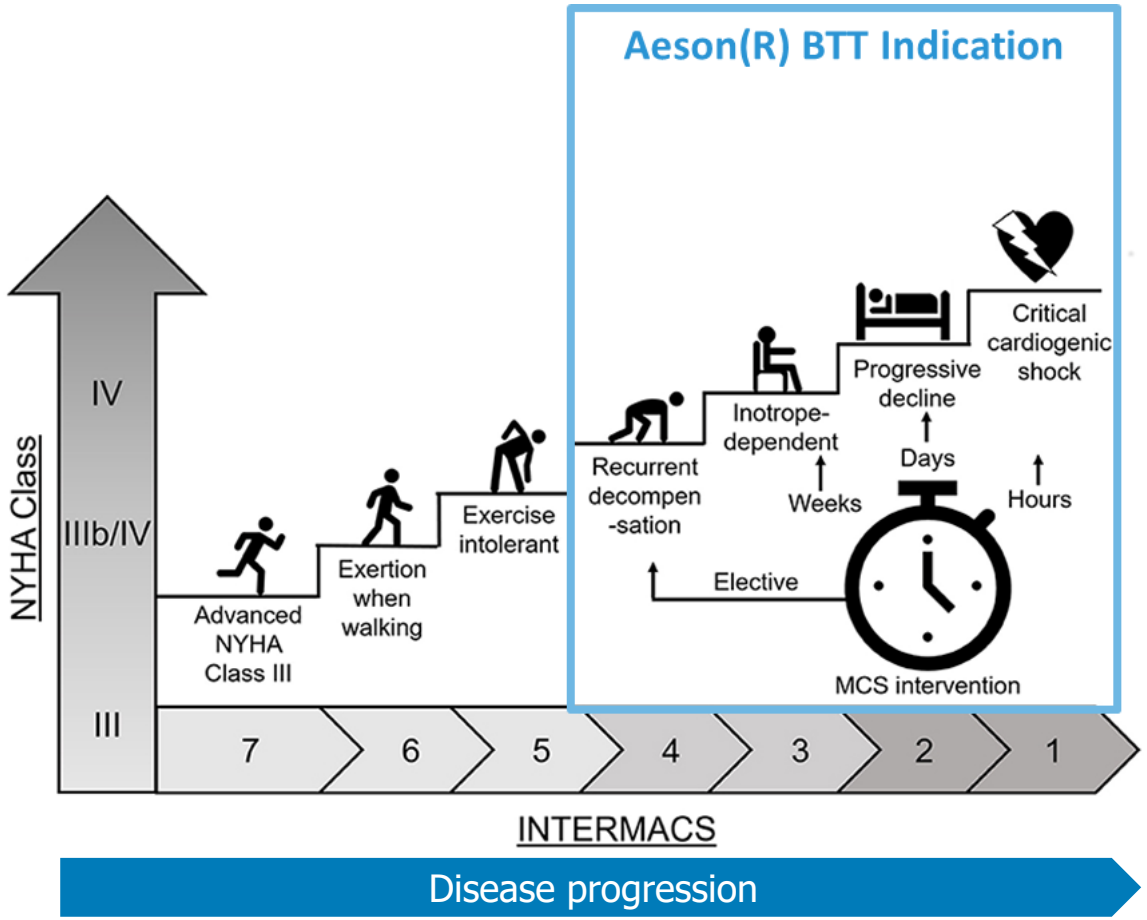
53 **YEARS** (average age)

50% **INTERMACS 1-2**

Patients at an advanced stage of heart failure

43% **tACM type ECMO**

Patients supported by temporary circulatory assistance before implantation



Cumulative data to June 30, 2024 (included) since the resumption of implants in November 2022

Game changing therapy for physicians & patients

Safe surgical procedure

- Patient selection with proctors
- 3D virtual implant tool
- 100% Successful procedure
- Fast recovery

Quality of Life

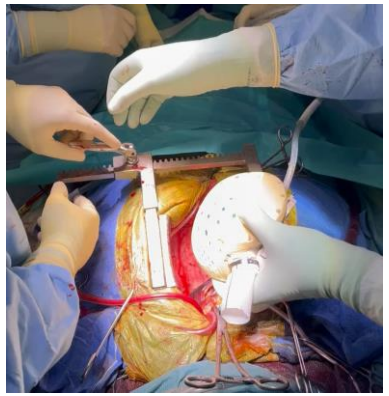
- Blood flow automatically adapting to patient's activities
- Few drugs and low-intensity anticoagulation
- Simple handling of external components

Sustainable support

- Auto-pilot mode: nothing to do
- Unique hemocompatibility profile: unparalleled safety profile

Example of real-life clinical experience (HEGP, Paris)

Implantation



Discharge from intensive care

- Education
- Accelerated rehabilitation

Transfer to rehabilitation center

- Training to effort
- Nutrition
- Bodybuilding

Return to home

Heart transplant

D 0 — **D 13** — **D 41** — **D 60** — **D 139**

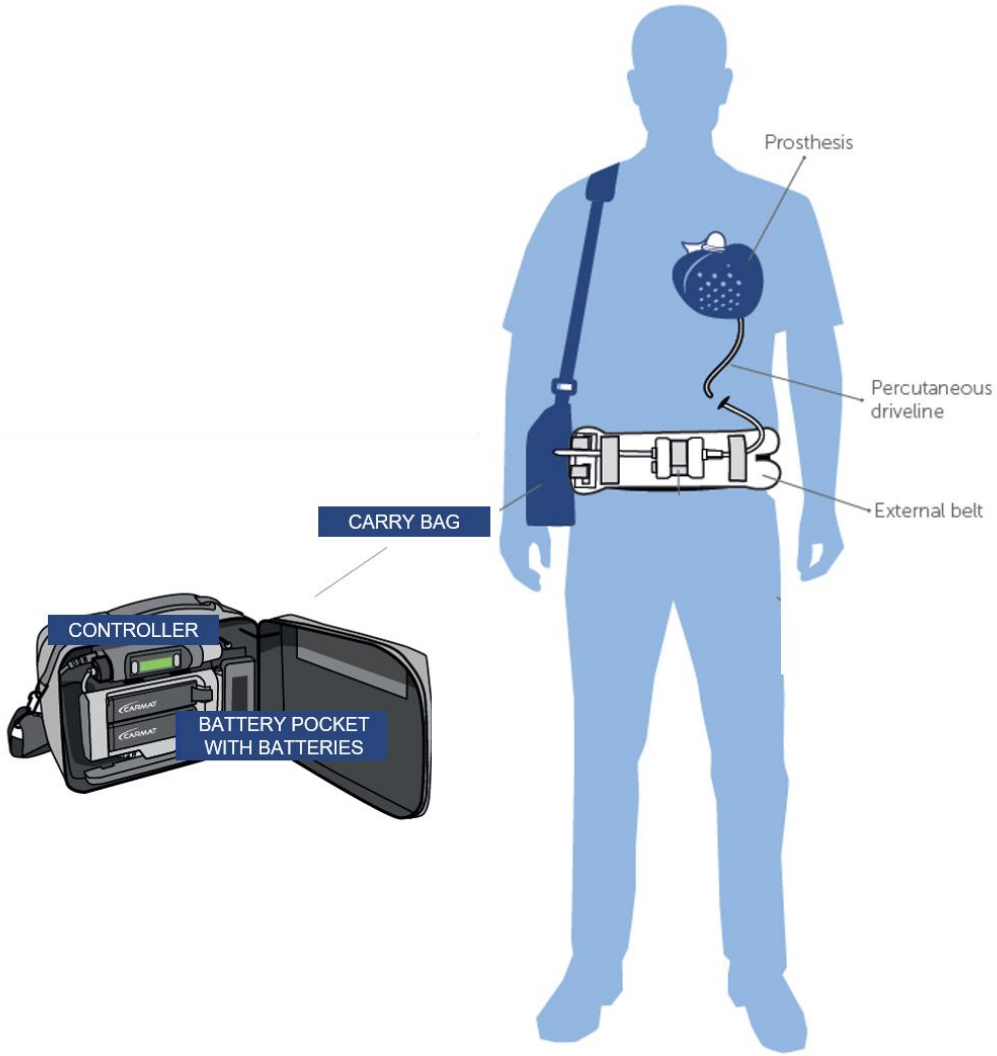
Wearable system allowing patient's autonomy and mobility

1 controller and 2 battery pockets
each containing 2 batteries

1 bespoke carry bag
to carry these items

4 to 6 hours of autonomy
at a blood flow rate of 6 litres/minute

Total weight of c.4kg/8.8lbs



Feedback from physicians: towards making Aeson® a first-line therapy

1 Trust the device

- Efficacy
- Reliability
- Safety (no stroke/bleeding)
- Ease of use

2 Select the right patients at the right time

- Aiming for maximum possible benefit for each patient
- Expanding the universe of possibilities

3 Integrate Aeson® into the therapeutic arsenal

- Make this therapy the first choice, rather than the exception
- Dare to take the plunge (as a team, with support from CARMAT)

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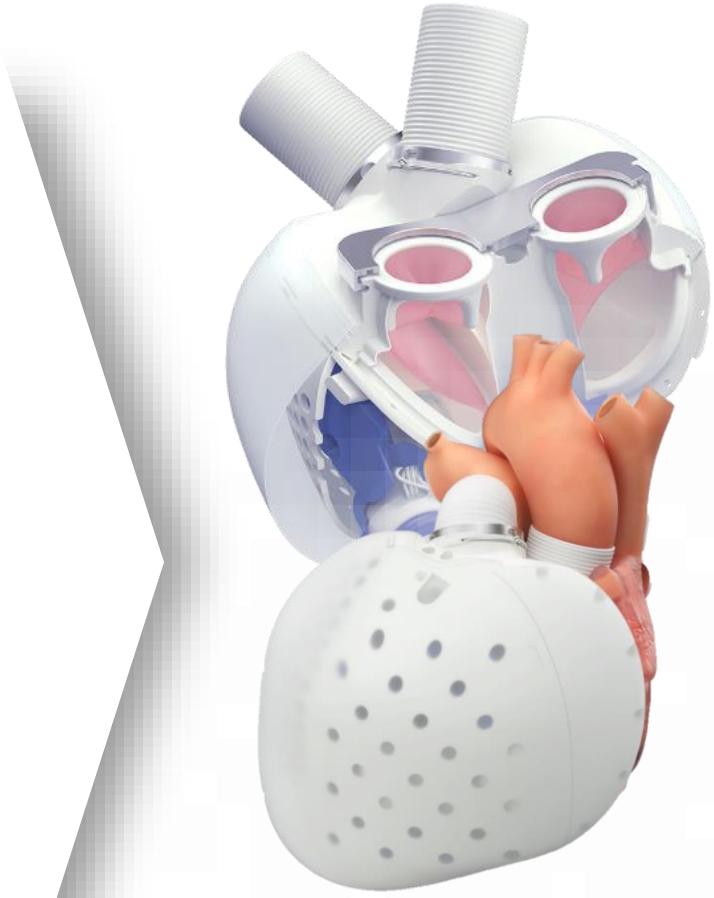
Continued commercial development

- 42 centers trained for commercial implants in 14 different countries
- Field force scaled for sales growth
- Appropriate supply to meet the demand
- Progressive development of patient pathway
- Patient selection broadening-up



Positive gradual increase of implants

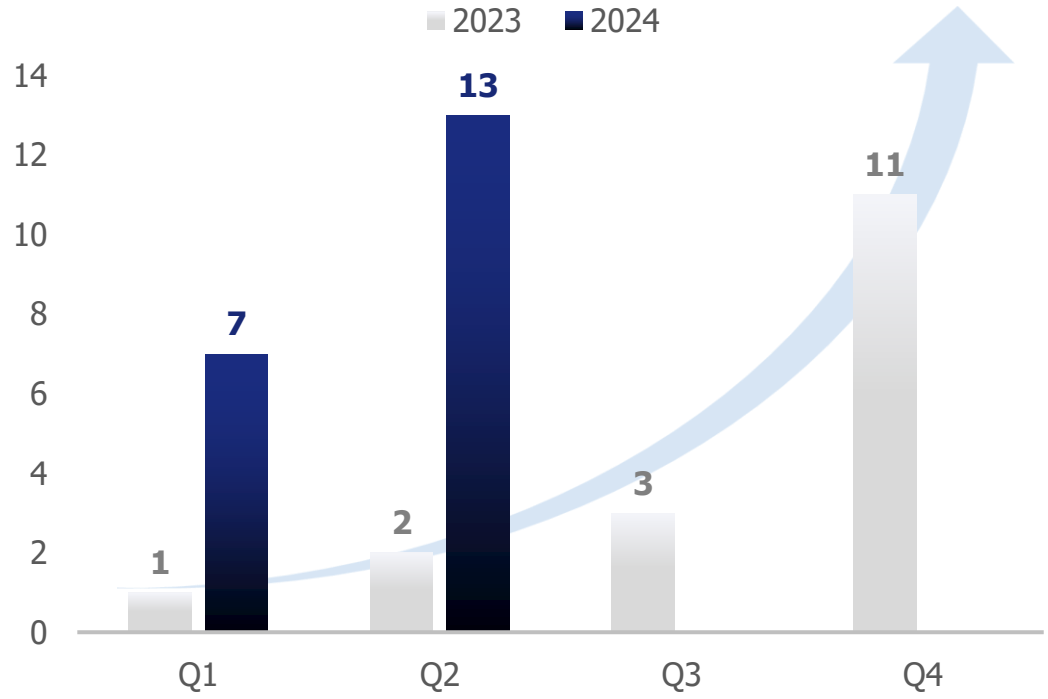
79% of trained hospitals referred patients

44% of trained hospitals made implants

9 new sites performed their first implants in H1 2024

>4 implants per month in Q2 2024 (vs. 2 in Q1 2024)

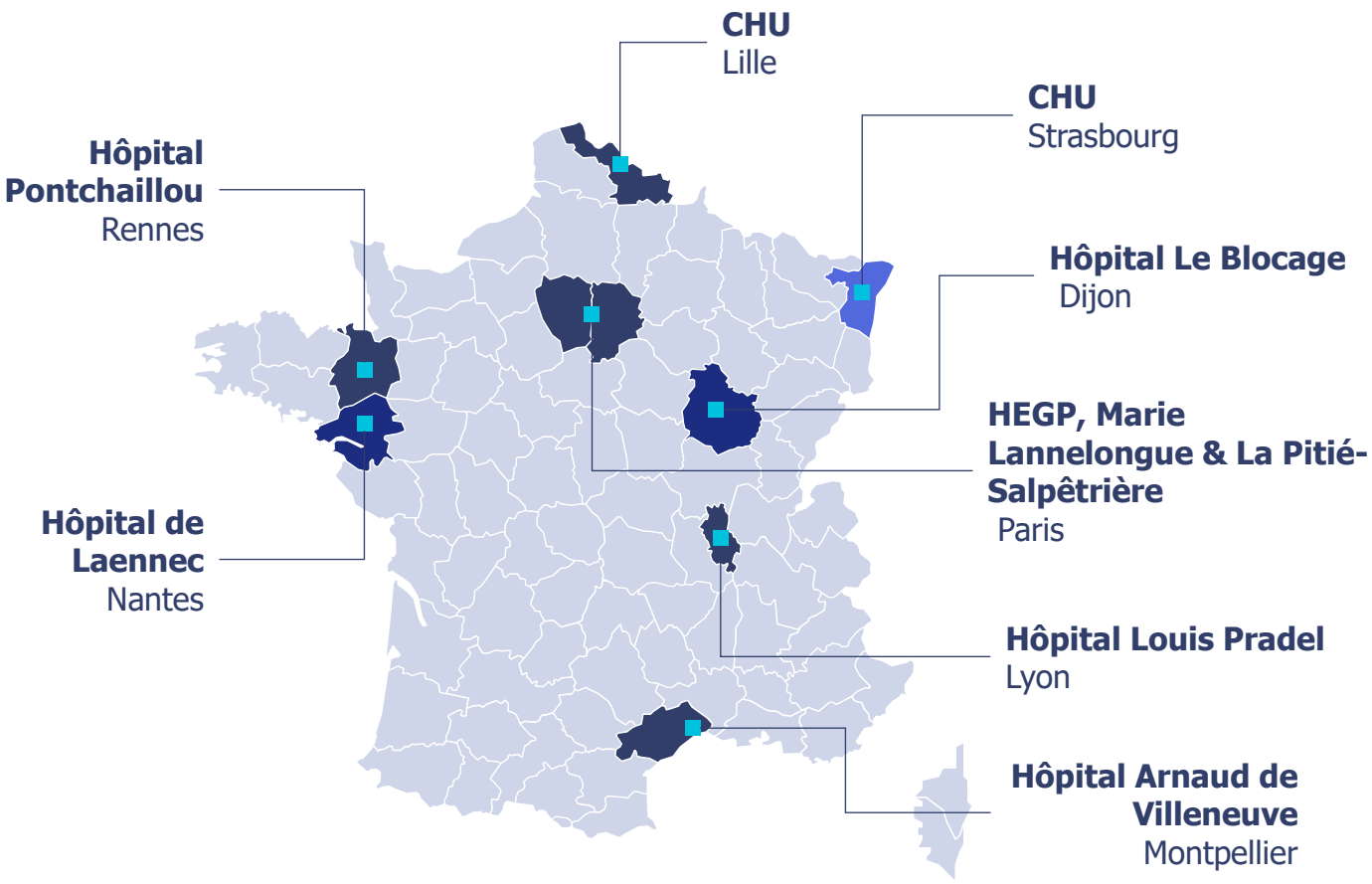
Sales trend (number of devices)



Implants doubled between Q1 and Q2 2024

Data as of June 30, 2024 (inclusive)

EFICAS study: a key catalyst for Aeson® adoption



Very good momentum - completion of enrollment anticipated in H1 2025

25 implants* to date including 14 in H1 2024

Sample size: 52 patients

Data:

Aeson® safety and performance data and medico-economic data

Calendar:

Enrollments completed in H1 2025, Results publisehd in Q4 2025

Objectives:

- drive product adoption
- support value proposition and get French reimbursement
- support PMA in the US

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* Data as of July 1, 2024 (inclusive)

Commercial levers supporting sales momentum in 2024

Market development

- Germany/DACH & Italy: key targeted areas
- Poland: first sales in H1 2024
- Geographic expansion underway in Europe and the Middle East (6 countries already "ready for implants")

➔ Train additional hospitals and activate new countries

➔ Convert trained hospitals into implanting centers

Secure reimbursement for Aeson®

- Extend reimbursement coverage in Germany
- Use fundings dedicated to innovation in other countries

Customer engagement

- Build upon growing clinical experience and KOL support
- Progressively build referral pathway

The publication of EFICAS study results, expected in Q4 2025, will be a key catalyst

Significant presence at major cardiology congresses

Closer relationships with prescribing doctors and decision-makers

National and European awareness boosted by communication from hospitals which have implanted Aeson®

Leipzig, German national television + PR (4 June)

Bremen, video (12 June)

Warsaw, PR (3 May)

Paris (15 June)

Hôpital Marie-Lannelongue

Dijon, Organ Donation Day (22 June)

Dresden, Social media

Montpellier, PR (19 March)

Set-up of a group of renowned scientists with a view to include Aeson® in the guidelines

Renowned international experts

- **Dr. Pappalardo, Coordinator** (Catania, Italy)
- 1 German physician (Kiel)
- 2 Italian physicians (Milan, Brescia)
- 3 French physicians (Paris, Lille)

Mission

- Issue Aeson® « case reports »
- Deliver an Aeson® consensus document
- Facilitate the update of guidelines for the management of patients with advanced heart failure

Key factor, along with EFICAS study results, to unlock Aeson®'s potential

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Manufacturing Scale-Up is underway

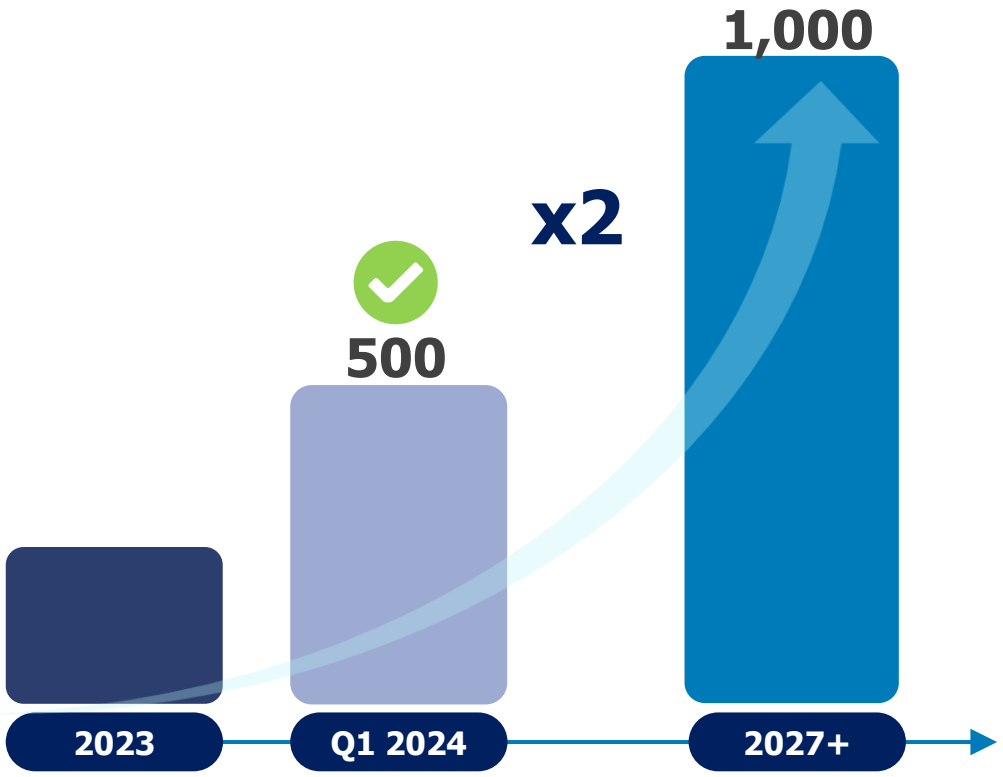
Production capacity increased to 500 hearts per year

- 2nd production building ('BDA2') certified and active since the end of 2023
- Anticipation of a new expansion phase by 2027

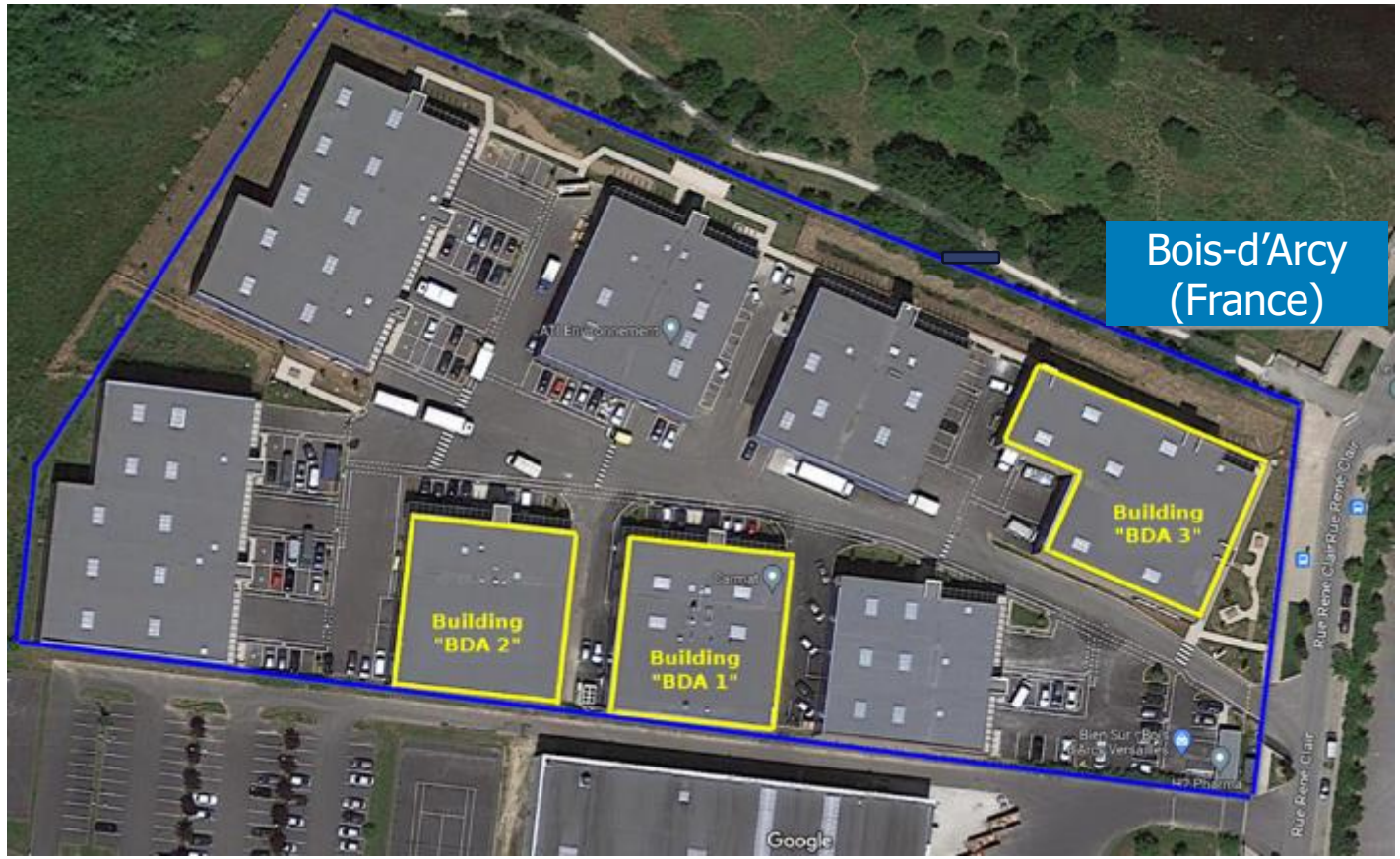
Production gradually becoming nominal

- Inventory of around 20-30 hearts
- Improvement of production processes
- Further strengthening of supplier base

Ramping up manufacturing capacity



New production building (“BDA2”) certified in Q4 2023 and active



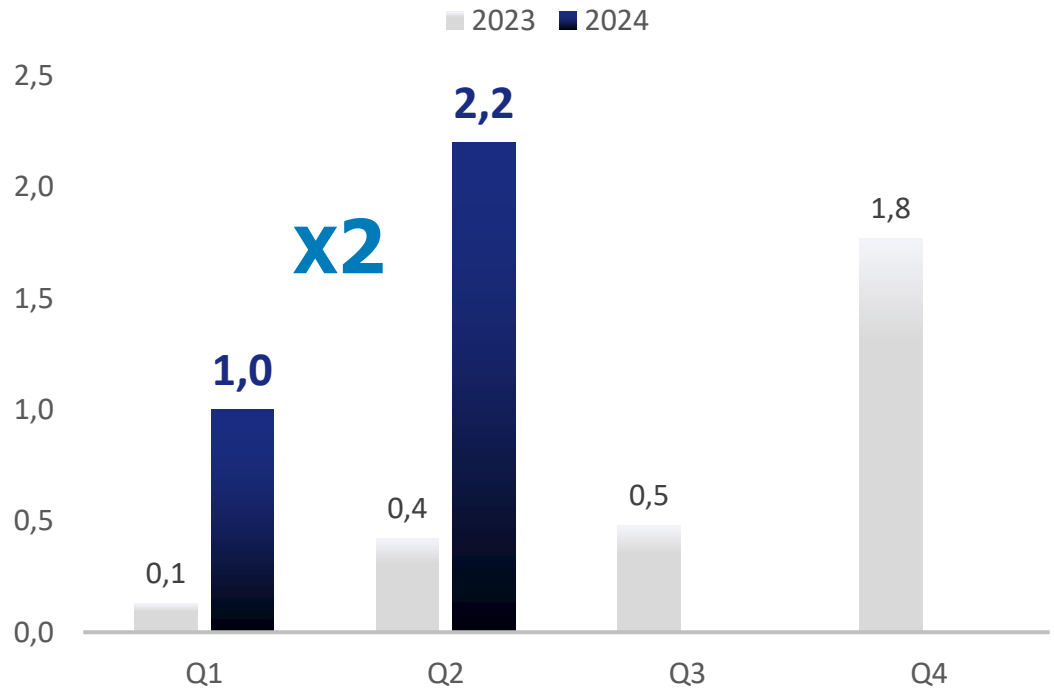
Manufacturing capacity increased to 500 hearts/year from early 2024

Accelerating sales momentum

Sales of €3.3 million in H1 2024

Exceeding 2023 annual sales (€2.8 million)

Sales doubling between the first and second quarters of 2024 (in €m)



CARMAT anticipates sales of € 8-12m in 2024

Data as of June 30, 2024 (inclusive)

Strengthening the financial structure is a priority

Gradual reduction in cash burn

- **Sales growth**
- **Strict financial discipline**
- **On track to reduce cash-burn to c. €4m/month in 2024 (-20% vs 2023)**

Financial debt successfully restructured

- **2024-2025: no significant repayments**
- **2026-2028: repayments in cash reduced via the equitization of EIB loan***

Current Cash runway until end-September 2024

- **Equity line of around €8m** over 24 months, of which €2.2m received on signature in July 2024.**

* Equitization of the first tranche of the loan began on June 13, 2024.
** Estimate based on the issuance of a maximum of 3,500,000 new shares over a period of 24 months, and the share price as of June 30, 2024 (i.e. €2.345).

Anticipate capital increase(s) in H2 2024

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A huge business potential

Total addressable market of $40+ bn by 2030

- **Out of 200,000 patients p.a., only 6,000 benefit from a heart transplant**
- **BTT leadership sufficient to generate more than $1bn p.a. within a 10-year horizon**

CARMAT poised to lead the heart replacement segment

- **Superior technology vs. alternatives**
- **Significantly ahead of all other artificial heart projects**

Appropriate hospital capacity

- **Build referral pathway for advanced Heart Failure patients**

Manufacturing capacity in place

- **Manufacturing capacity of 500 devices / year**
- **Continued investment behind manufacturing capacity to meet the demand for Aeson®**

Key 2025 value-creating milestones driving CARMAT towards its strategic goals

2024 Objectives

- **Commercial uptake** in Europe
- **75%** enrolment in EFICAS study (France)
- **Ca. 50 centers** trained for commercial implants
- **Ca. 20%** cash burn reduction vs. 2023
- Filing for **EFS resumption** (cohort 2) in the US

On track
FY Sales of €8-12m

2025 Key Catalysts

Q1 2025
Initiation of the 2nd cohort in US EFS

H1 2025
Publication of initial experience on ECLS patients

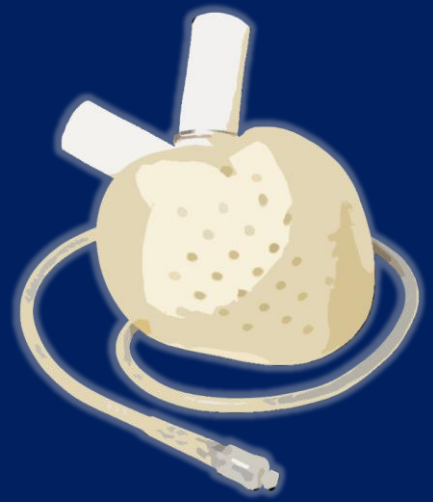
H2 2025
Resumption of PIVOTAL study with "**DT**" Patients

Q4 2025
Publication of EFICAS study results

Strategic Goals

- EU Commercial Development
- US Market Access
- Destination Therapy

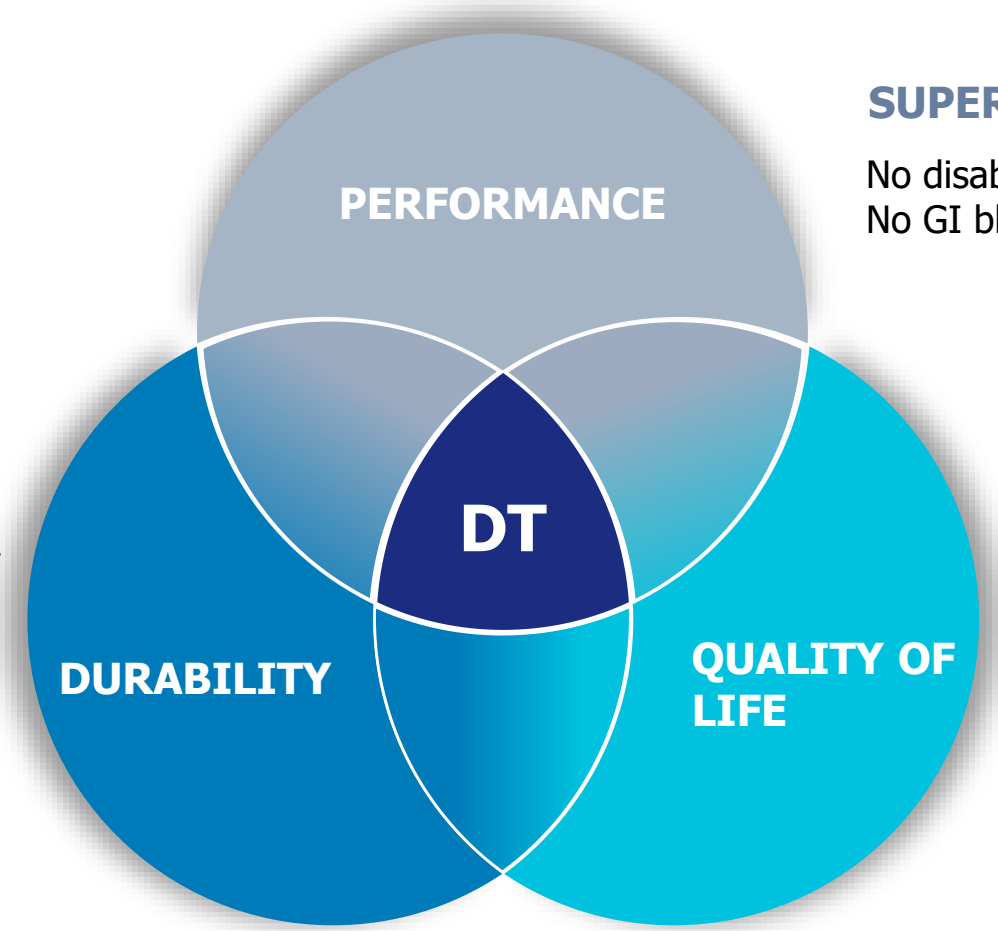
Profitable Growth



Targeting Destination Therapy

SUPERIOR CLINICAL RESULTS

No disabling stroke
No GI bleeding



EXTENDING DURABILITY

Continuous improvement driven by Real-life experience.

BETTER QUALITY OF LIFE

Plug & play device
Only autoregulated system
Right/left balance
Reduced drug regimen

➔ AESON® is the best positioned device for Destination Therapy (DT)

Why invest in CARMAT now?

1. A huge total addressable market
2. A superior and unique technology
3. A fully-fledged company
4. Sales taking-off
5. Significant value-creation milestones in 2025

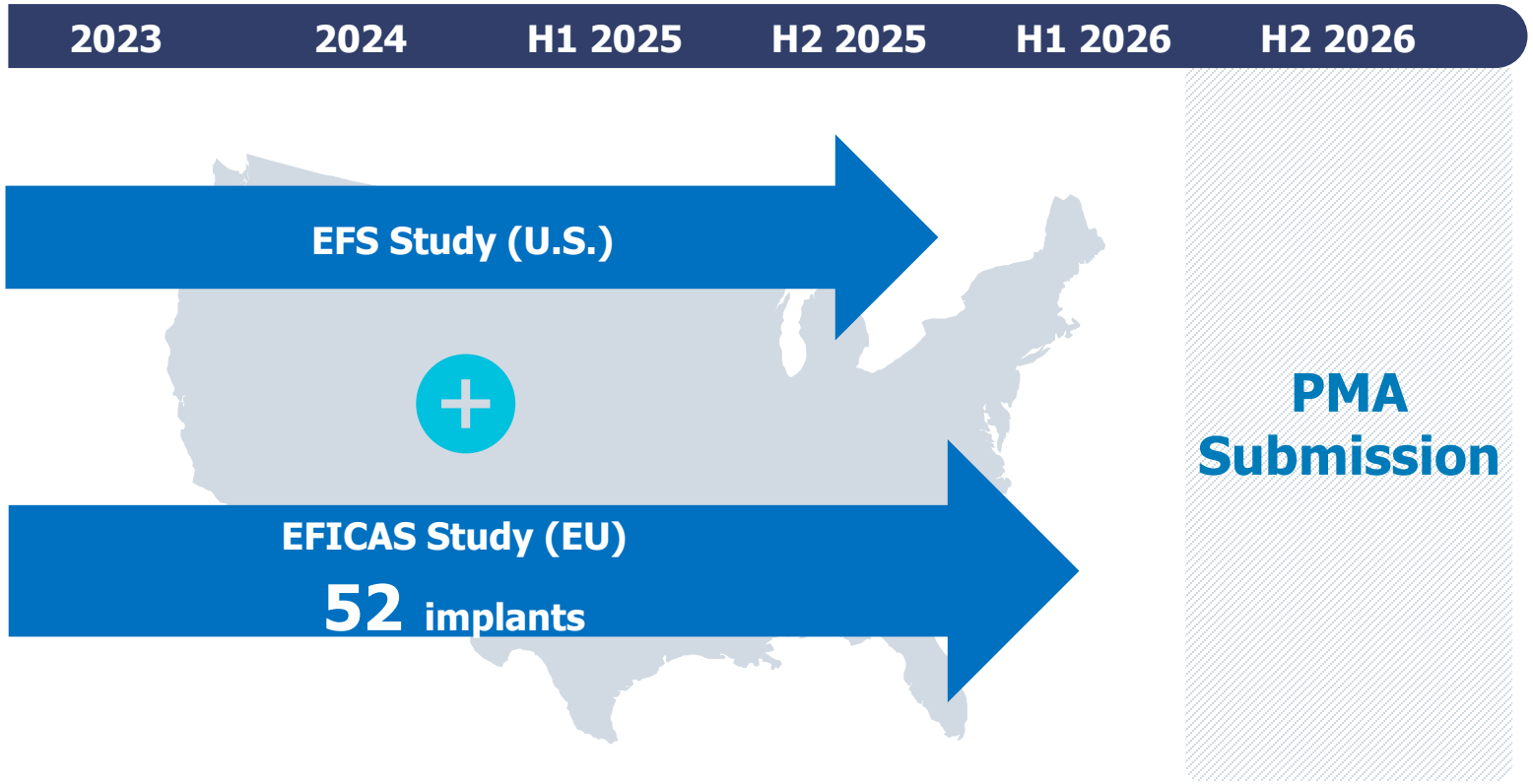
Our ultimate objective is for Aeson® to become the 1st total artificial heart approved for Destination Therapy to address the donor organ shortage

THANK YOU

CARMAT

U.S. market access targeted in 2027

Early Feasibility Study (EFS) and EFICAS data: Gateway to US approval (PMA)



Optimized US market strategy through leverage of EFICAS data