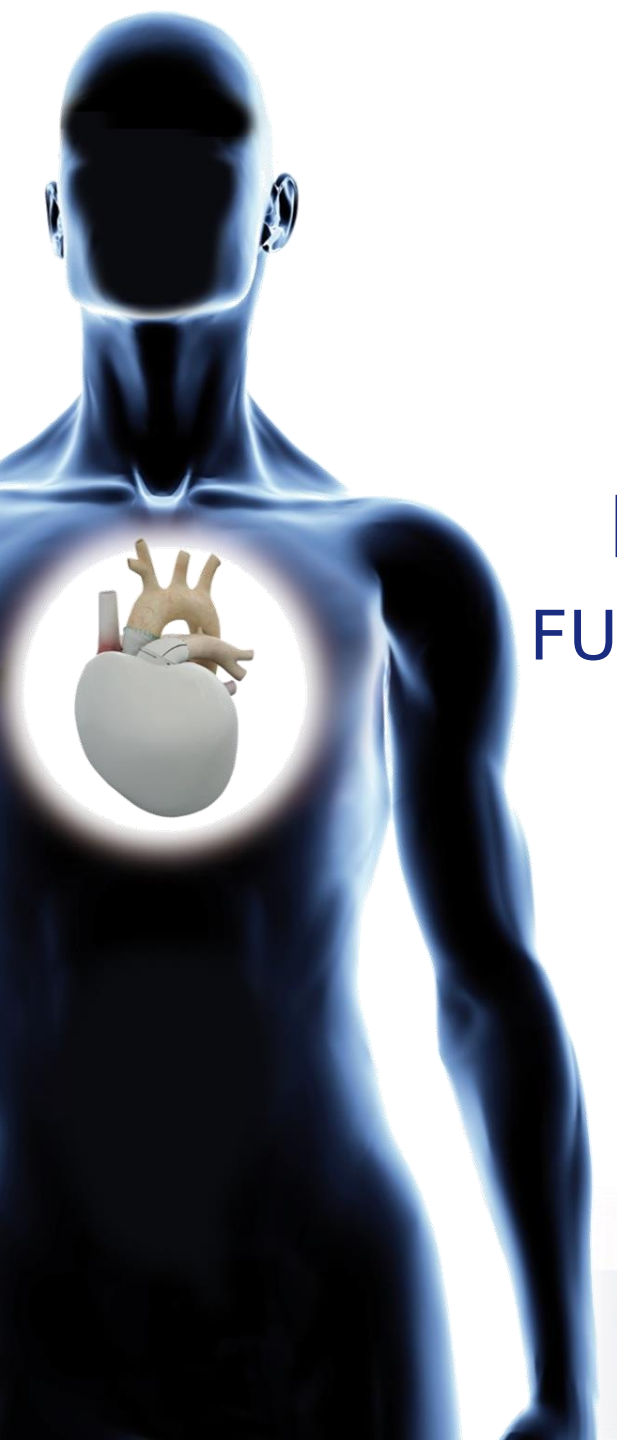


BECAUSE WE DON'T BELIEVE THE FUTURE CAN WAIT FOR THE FUTURE

CARMAT INTRODUCTION

March 5th, Nassau

Safe Harbor

The information in this document has been prepared by Carmat (the "Company") for information purposes only.

The information contained in this document does not purport to be complete and is qualified by reference in its entirety to the information the Company is required and does make public under the rules and regulations of the Autorité des marchés financiers*. The information herein is provided only at the date hereof and may be updated, supplemented, revised, verified or amended. The information herein may be subject to significant changes. The Company is under no obligation to update the information contained herein and any opinion expressed in this document is subject to change without prior notice. Neither the Company nor its subsidiaries, advisors or representatives accept any responsibility or liability whatsoever, for any loss arising from any use of this document or its contents or otherwise arising in connection with this document.*

This document contains information regarding the markets in which the Company does business as well as the Company's competitive position in such markets. This information is extracted from various sources or from estimates provided by the Company. They are not to be relied on in making any investment decision.

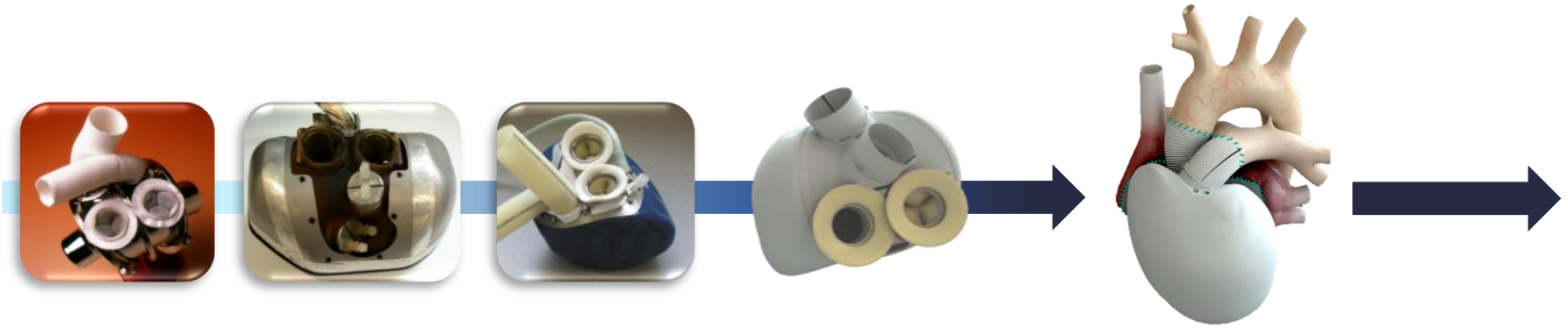
This document contains forward-looking statements. These forward-looking statements relate to the Company's future prospects, developments and strategy and are based on analyses of earnings forecasts and estimates of amounts not yet determinable. By definition, forward-looking statements are subject to a variety of risks and uncertainties as they relate to future events and are dependent on circumstances that may or may not materialize in the future. Forward-looking statements are not a guarantee of the Company's future performance. The Company's actual financial position, results and cash flows, as well as the trends in the sector in which the Company operates may differ materially from those contained in this presentation. Furthermore, even if the Company's financial position, results, cash flows and trends in the sector in which the Company operates conform to those anticipated in the forward- looking statements contained in this presentation, such elements cannot be construed as a reliable indication of the Company's future results or developments. The Company does not undertake any obligation to update or to confirm projections or estimates or to make public any correction to any forward-looking statement in order to reflect an event or circumstance that may occur after the date of this presentation.

Certain figures and numbers appearing in this document have been rounded. Consequently, the total amounts and percentages are not necessarily equal to the sum of the individually rounded figures, amounts or percentages.

This presentation does not constitute, and is not a part of, an offer or a solicitation to purchase or subscribe for the Company's securities in any jurisdiction whatsoever. This document, or any part thereof, shall not form the basis of, or be relied on in connection with, any contract, commitment or investment decision.

Key milestones

- **15 years of R&D** (Airbus Group, Prof. Alain Carpentier)
- **2008:** foundation of CARMAT
- **2010:** IPO on Euronext Growth (previously known as Alternext)
- **2013:** first successful human implantation
- **2014 – 2016:** proof-of-concept in the feasibility study
- **2016:** start of the PIVOTAL study
- **2017:** international expansion of the PIVOTAL study
- **2018:** opening of the **Bois-d'Arcy** facility and **approximately 180** employees



Vision and Mission

Vision

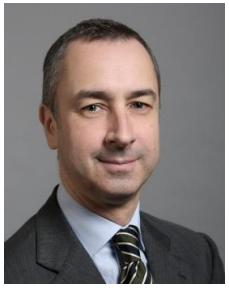
Carmat Total Artificial Heart (TAH) will become the primary alternative to Heart Transplants

Mission

With **innovative and convenient** technologies, Carmat aims to **save lives and improve the quality of life** of patients with advanced heart failure,
thus meeting a **huge unmet need**

CARMAT

Senior Management



Stéphane Piat
Chief Executive Officer

- Over 20-year experience in the medical device business
- Previously Divisional Vice President Global Market Development at Abbott
- Johnson & Johnson Cordis (2002-2007)

Pascale D'Arbonneau
CFO, IT

- Over 25-year experience in Finance
- Previously CFO and Head of EIBV (family office)
- Several VP positions at GSK in Finance, Compliance and Control Integration

Piet Jansen
Chief Medical Officer

- Solid clinical background in cardiology sector, notably in Mechanical Circulatory Support devices
- Former Medical Director at WorldHeart, Clinical Affairs Manager at Jarvik Heart

Marc Grimmé
Director of RnD

- In charge of technical operations of the CARMAT program since 1996

Wenzel Hurtak
Director of Manufacturing

- Solid RnD and Manufacturing background in cardiology sector
- Former Director at JnJ / Cordis, VP Operations at Integra Lifesciences
- Previously Head of New products Division at CMI

Thierry Dupoux
Sr Director of QA

- Solid QA / RA and RnD background in cardiology sector, notably in CRM and Surgery
- Previously WW Vice-President of QA at LivaNova

CARMAT

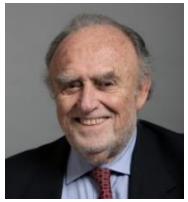
Committed board of directors

Jean-Pierre Garnier, Chairman

Former Chairman of Actelion (2011-2017)
Former CEO of GSK (2000-2008),
Officier de la Légion d'Honneur & Knight Commander of the Order of the British Empire
Graduated from the Louis Pasteur University in Strasbourg (PhD in pharmacology)
MBA from Stanford University

Mme. Anne-Pascale Guédon, Airbus Group representative

More than 25 years of international experience in investment and in Mergers & Acquisitions within French companies (Bouygues, Loxam, Crédit Agricole) and international companies (GE Capital in London and Man Group in Hong Kong).
Auditor of the 64th national session of the IHEDN (National Institute for Defense Studies)
Colonel in the French Air Force reserve force.
Graduated from HEC and SFAF (the French society of financial analysts)



Henri Lachmann, Chairman of the Supervisory Board of Schneider Electric

Chairman of the Board of Directors of the Centre chirurgical Marie Lannelongue
Many Leadership positions in other companies
Officier de la Légion d'Honneur
Officier des Palmes Académiques
Commandeur dans l'Ordre National du Mérite
Degree from Ecole des Hautes Etudes Commerciales (HEC) , CPA

Jean Luc Lemercier, Vice-President Transcatheter Heart Valve EMEA at Edwards Lifesciences

Over 20 years of experience and acknowledged leadership in the medical device industry. He has held a number of strategic positions in cardiology companies, notably at Johnson & Johnson Cordis (1996-2008), and lately at EW where he created and headed the Structural Heart Disease division devoted to the development and marketing of aortic valve replacement solutions.
Graduated in Pharma.

Complementary expertise:

Medical, financial, industrial and commercial

Professor Alain Carpentier, Founder and President of the Scientific Committee

Emeritus Professor - Pierre-et-Marie-Curie University, Paris
Professor at the Mount Sinai School of Medicine, New York
Founder and Director of the Heart Transplant and Prostheses Laboratory, Paris University
Winner of the Foundation for Medical Research Prize (1998)
Former President of the French Academy of Science (2011-2012)
Albert Lasker Award for Clinical Medical Research for the invention of valvular bioprostheses (Carpentier-Edwards valves)

Dr Philippe Pouletty, Co-Founder and General Partner of Truffle Capital

Former Chairman of France Biotech and former VP of Europabio
Founder of 3 biotech companies in the US and Europe, two of which are listed on the stock market (NASDAQ and TSE)
Doctor in medicine, immunologist, former researcher at the University of Stanford, former Paris Public Hospitals group intern, 2 majors from the Pasteur Institute (immunology) - 29 patents
Chevalier de la Légion d'Honneur, winner of the American Liver Foundation Prize in 1999

Dr Antonino Ligresti, Director of Abivax

Former Chairman and core shareholder of Générale de Santé, acquired by Ramsay group in 2014.
Graduate of Medicine and Surgery at the University of Catania
Specialization in Cardiology and Internal Medicine (Universities of Siena and Parma)
Founder of private hospital group Gruppo Antonino Ligresti Sanita in 1986

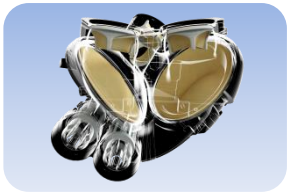
Dr. Michael Mack, Director of Cardiovascular Research at the Heart Hospital Baylor Plano (Texas)

A globally-reputed American cardiothoracic surgeon, particularly in the emerging field of transcatheter aortic valves and Mitral devices.
Author of more than 250 scientific publications, a member of the Editorial Board of the Annals of Thoracic Surgery and a scientific reviewer for over 10 other medical journals.
President of the TSFRE (Thoracic Surgery Foundation for Research and Education) and the STSA (Southern Thoracic Surgical Association) and the Second Vice-President of the STS (Society of Thoracic Surgeons).
Graduated of Boston College (Massachusetts), St. Louis University (Missouri) and the University of Texas Southwestern Medical School in Dallas (Texas).

Pierre Bastid, Babalia representative

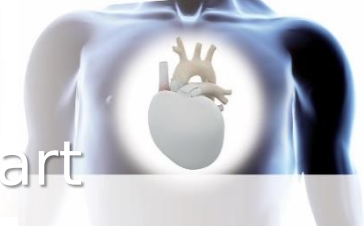
Pierre Bastid has spent more than 25 years in senior executive positions at major international business groups such as Schlumberger, Schneider Electric, Valeo and Thomson. Former President and CEO of Converteam Group, acquired from Alstom, he developed and sold to General Electric after the value increased by 30. His fund ZAKA has especially invested in several biotechnology companies including Carmat and Cellectis of which he is Board member.

CARMAT



A groundbreaking innovation: the physiological artificial heart

The Only Bio-prosthetic self-regulated Artificial Heart



When Medical meets Aerospace

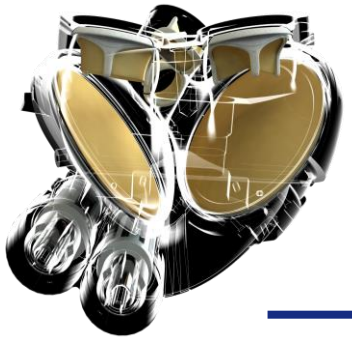
- **Professor Alain CARPENTIER:** international leadership in biomaterials and pericardial valves

- **Airbus Group (formerly EADS MATRA):** aerospace know-how of complex embedded systems

To fulfill an unmet need

- **>100,000 patients** in need…but only 5 000 transplants each year
- **No alternative therapeutic solution**: 60%-94% dies within 1 year.

Providing a unique solution



- A **physiological** artificial heart offering a real alternative to heart transplantation
- An implantation technique easily **reproducible** by any transplant surgeon
- A return to **a full life for otherwise dying patients**

[1-4] Please refer to page 27 for references

CARMAT

CARMAT the most advanced BIVAD company

Large Market Opportunity with Few Treatment Options

- Over 100,000 patients in irreversible conditions at risk of death within weeks

First Bioprosthetic Physiological Replacement Heart

- Credible therapeutic and economic alternative to transplant with over 5 years of cumulated support achieved

Clear Market-Access Strategy

- CE mark trial under way
- Clear FDA strategy
- KOL advocacy
- Address VAD, BTT and DT

Short-term Value Creating Milestones

- Completion pivotal study in 2019
- US EFS approval in 2019

Large market opportunity

Advanced Heart Failure

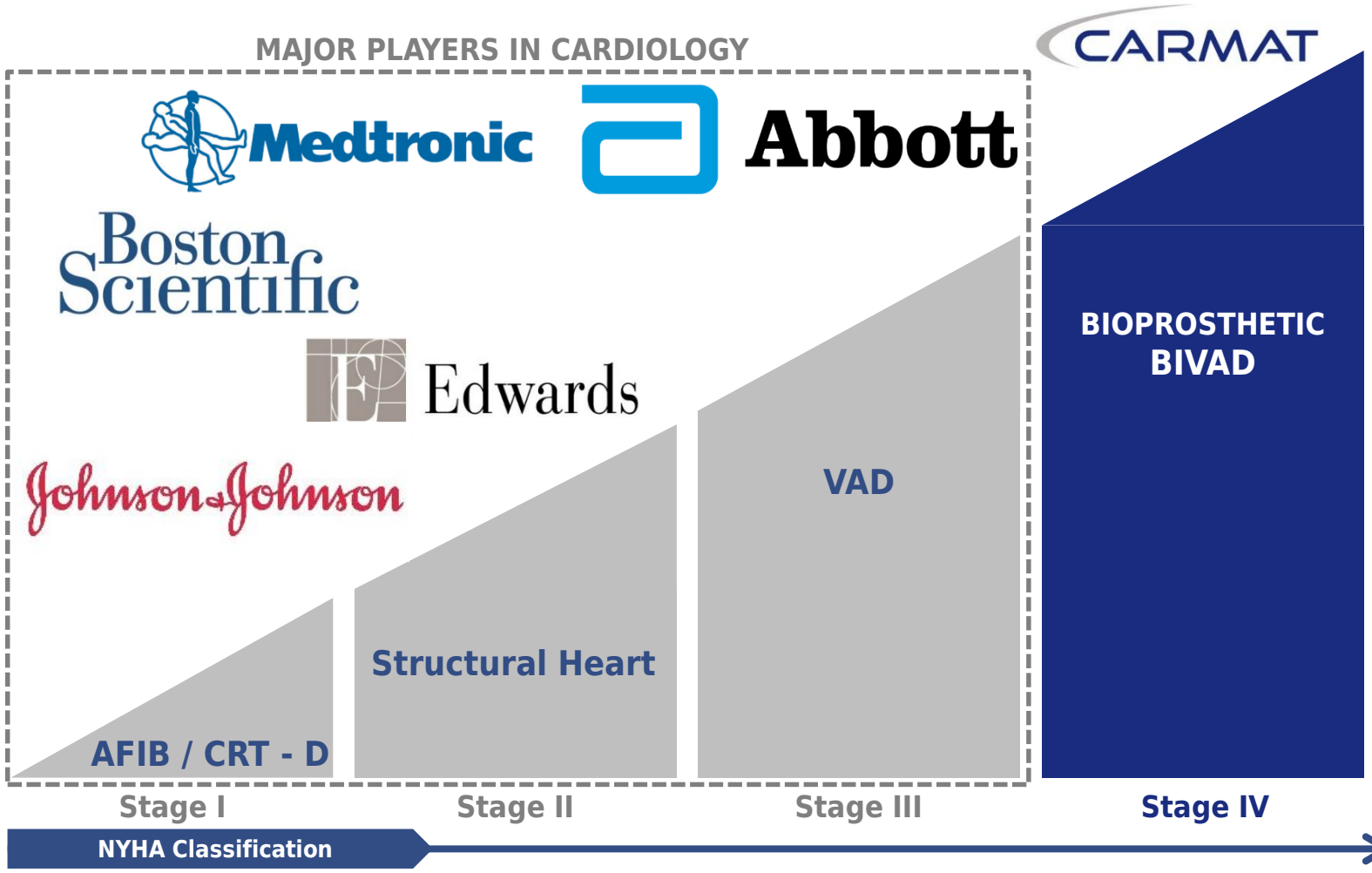
5,000 heart transplants a year

Only covering **3%** of the total need

Between **60** and **94%** death rate within a year

CARMAT

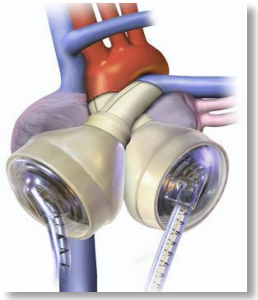
CARMAT's technology addresses the untapped BIVAD segment



Severe Unmet Need with Few Treatment Options

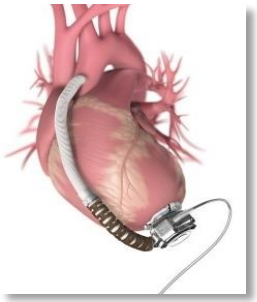
NYHA Class	INTERMACS Patient Profiles	Time to intervene	Prevalence[7]	
IV	1 – Critical cardiogenic shock	Hours	14%	Total Artificial Heart
	2 – Progressive decline	Days	41%	
	3 – Stable, inotrope dependent	Weeks	28%	
	4 – Resting symptoms	Months	12%	VAD
	5 – Exertion intolerant		5%	
	6 – Exertion limited			
III	7 – Advanced NYHA Class III			

SYNCARDIA



THORATEC®

HEARTWARE®



Few treatments available with mixed outcomes

CARMAT

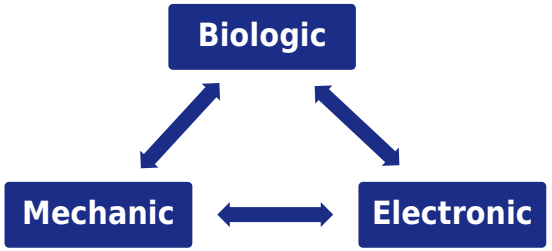
The world’s only bioprosthetic self-regulated artificial heart

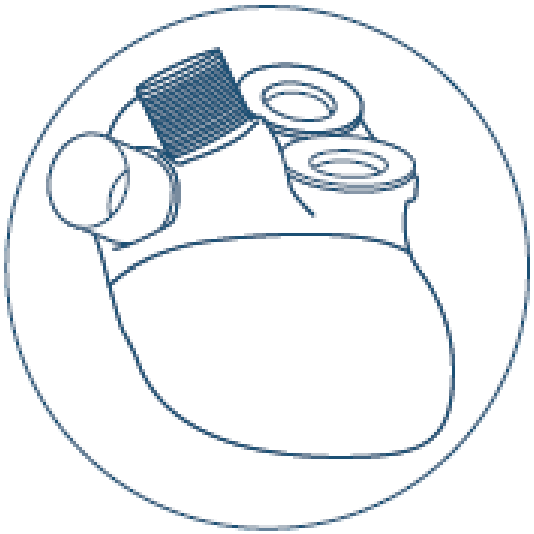
CARMAT's Solution

KEY FEATURES

- First auto-regulated, sensor-based Total Artificial Heart
- Highly bio-compatible pump
- High level of patient convenience

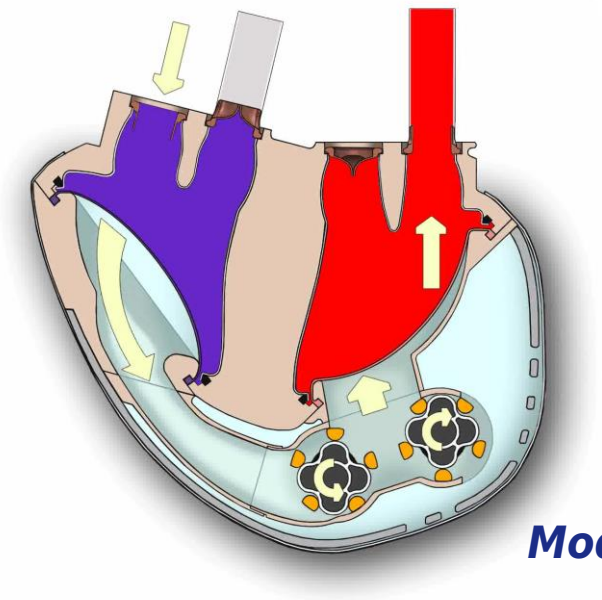
The only system combining three areas of expertise to improve patient quality of life





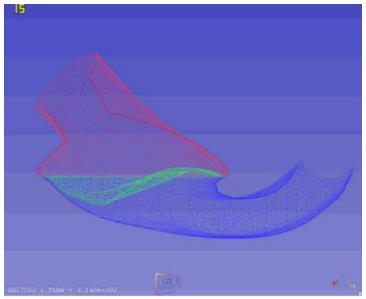
An innovative leading position with strong intellectual property and significant barriers to entry thanks to Prof. Carpentier's scientific leadership and the technological excellence of Airbus Group

Mechanism of the pump



Overall principle :

- Volumetric pumps move the silicone oil within the bag in order to activate the hybrid membranes allowing the blood to enter and leave the chambers



Mode of operation :

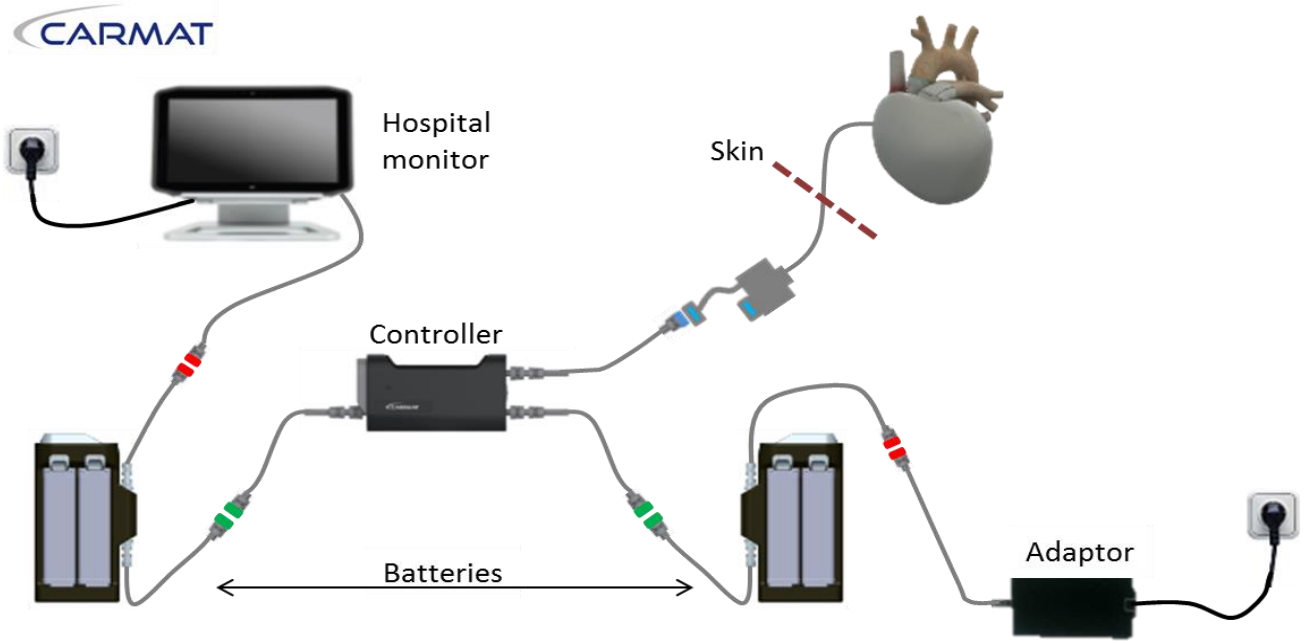
1 – Blood flow assessment :
In-flow pressure measured by sensors every millisecond to calculate flow required

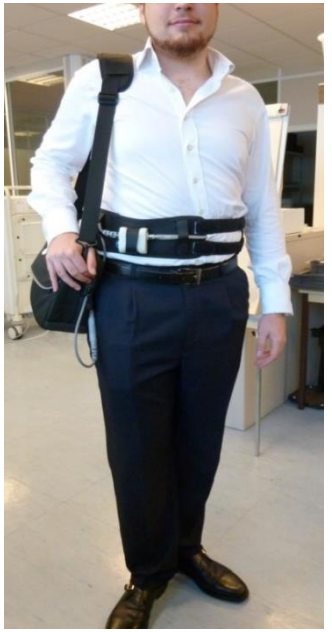
2 – Flow auto-regulation :
Speed and direction of rotation of volumetric pumps adapted every 2 milliseconds to deliver the necessary pulsatile flow

3 – Flow Control :
Position of the membranes checked by 2 ultrasound sensors every 2 milliseconds to ensure the amount of blood delivered by the pump is optimal

CARMAT

Portable system significantly increases patient convenience and autonomy





Wearable System

- Controller/monitor + 2x2 batteries
- Total weight 3 kg
- Rechargeable battery providing up to four hours of autonomy

Carmat – a unique positioning

	CARMAT	VADs	TAH
Activation	Hydraulic	Pumps	Pneumatic
Biocompatibility	High	Low	Low
Autoregulated	Yes	No	No

A unique technology to overcome :

- **Hemolysis**
- **GI Bleeding**
- **Thrombosis**
- **Right Heart Failure**

The European Registry for Patients with Mechanical Circulatory Support (EUROMACS) of the European Association for Cardio-Thoracic Surgery (EACTS): second report

Theo M.M.H. de By[a,*†], Paul Mohacsi[b,*†], Brigitta Gahl[b], Armin Zittermann[c], Thomas Krabatsch[d], Finn Gustafsson[e], Pascal Leprince[f], Bart Meyns[g], Ivan Netuka[h], Kadir Caliskan[i], Evaristo Castedo[j], Francesco Musumeci[k], André Vincentelli[l], Roland Hetzer[m] and Jan Gummert[c], on behalf of the EUROMACS members

RESULTS: Fifty-two hospitals participated in the registry. This report is based on 2947 registered implants in 2681 patients. Survival of adult patients (>17 years of age) with continuous-flow left ventricular assist devices with a mean follow-up of 391 days was 69% (95% confidence interval 66–71%) 1 year after implantation. On average, patients were observed for 12 months (median 7 months, range 0–70 months). When we investigated for adverse events, we found an overall event rate per 100 patient-months of 3.56 for device malfunction, 6.45 for major bleeding, 6.18 for major infection and 3.03 for neurological events within the first 3 months after implantation.

CARMAT

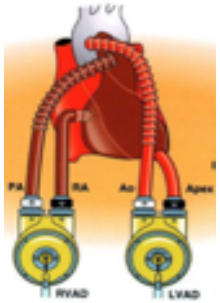
Clinical development

Ongoing PIVOTAL study

- Enrollment completed for the first part of the study
- First patient of the second part of the study enrolled
- Enrollment objective: **20 patients**
- Primary endpoint of the study: **6 months** survival

Results from the first cohort of the PIVOTAL study

- 6-month survival rate among the first 10 patients: 70%
- Improvement expected with the second patient cohort as a result of the experience gained



	6-month survival rate
CARMAT FIM	50%
CARMAT PIVOTAL (part 1)	**70%**
SynCardia*	54% - 62%
BIVAD**	46% - 68%
LVAD***	90% - 92%

* Kirklin JK *et al.*, J Heart Lung Transplant 2018;37:685-691. Arabia F *et al.*, J Heart Lung Transplant, 2018;37:1304–1312
** Lavee J *et al.*, J Heart Lung Transplant 2018;37:1399−1402. Arabia F *et al.*, Ann Thorac Surg 2018;105:548–56
*** Strueber M *et al.* J Am Coll Cardiol 2011;57:1375–82. Netuka I *et al.*, J Am Coll Cardiol 2015;66:2579–89

Confirmation of the FIM study results

- Positive 6-month safety profile in 10 patients compared to other therapies

Adverse events	Stroke	Bleeding – surgical repair	Gastrointestinal bleeding	Infection linked to percutaneous cable
CARMAT FIM	0%	75%	0%	0%
CARMAT PIVOTAL (part 1)	**0%**	**40%**	**0%**	**0%**
SynCardia*	23%	41%	20%	22%
BIVAD**	7%	n/a	7%	7%
LVAD***	8%	14%	8%	10%

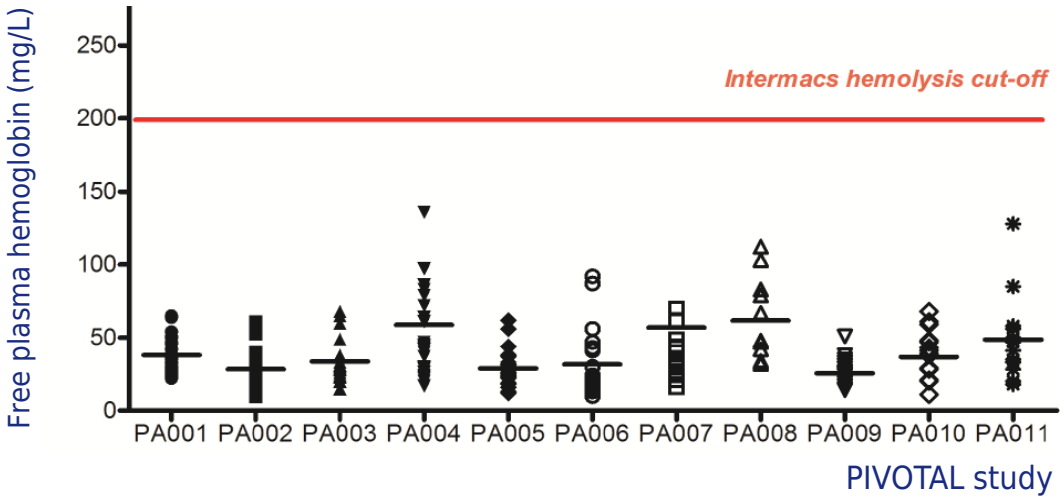
* Arabia F *et al.*, J Heart Lung Transplant, 2018;37:1304–1312. Demondion P *et al.*, Eur J Cardiothorac Surg. 2013 Nov;44(5):843-8.
** Lavee J *et al.*, J Heart Lung Transplant 2018;37:1399−1402.
*** Netuka I *et al.*, J Am Coll Cardiol 2015;66:2579–89

CARMAT

No hemolysis

- Factors causing hemolysis (red blood cell rupture) negligible for CARMAT
- Hemolysis markers (free plasma hemoglobin) ↓↓ in all patients

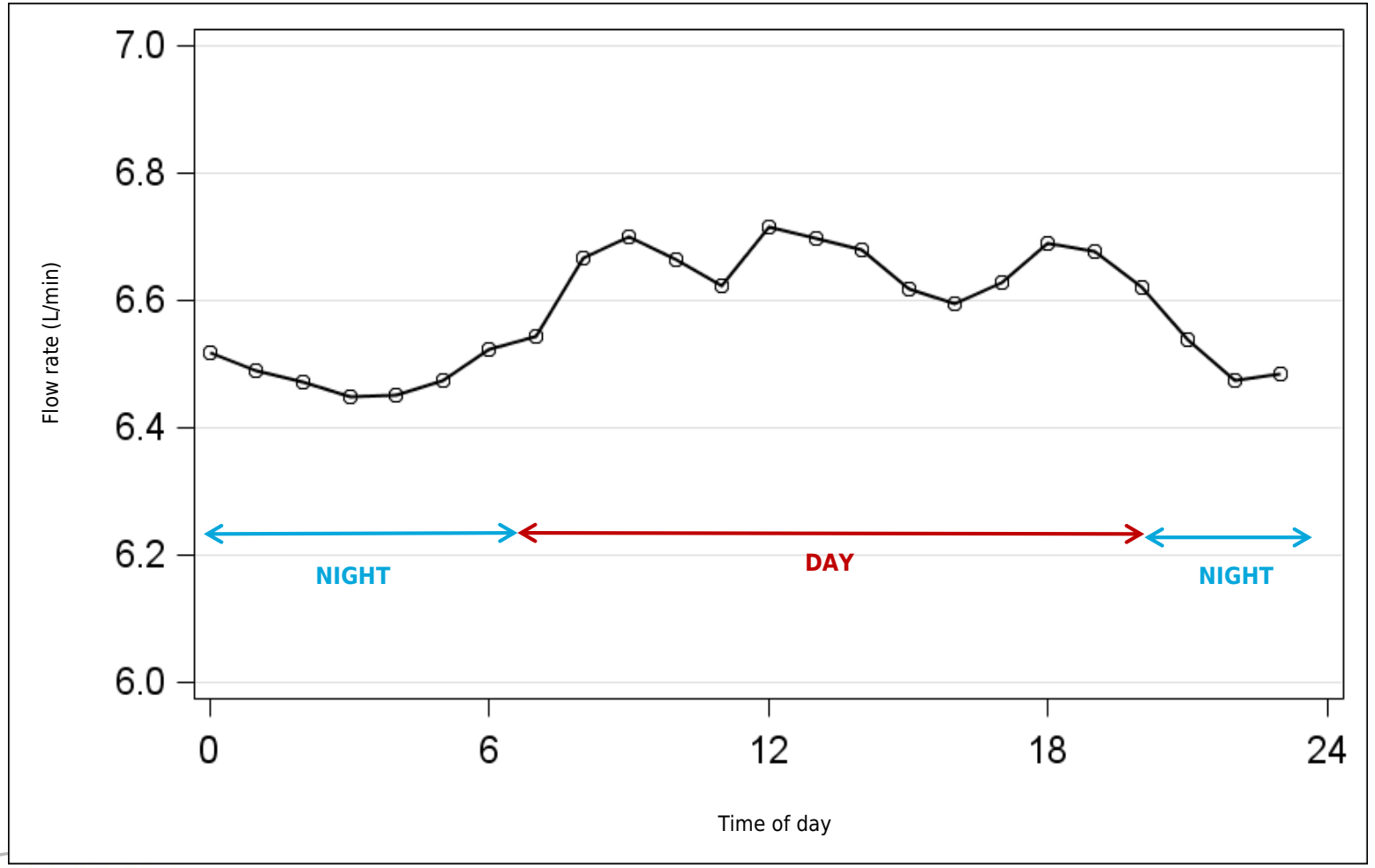
Factor causing hemolysis is present	LVAD	SynCardia	CARMAT
Shear stress	++	+++	-
Synthetic material	+++	+++	+



The prosthesis continues to work as a human heart

Circadian cycle

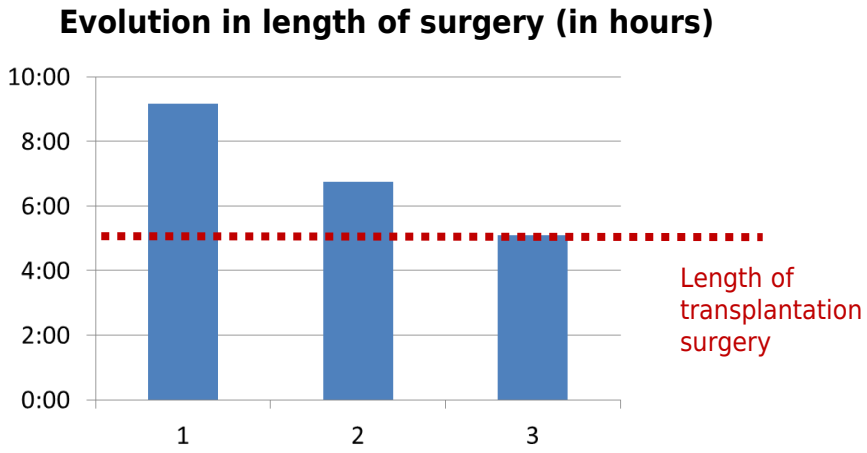
over 10 months of support



CARMAT

Optimization of the surgical experience

- 100% success rate for the procedure
- Length of surgery shortened with the benefit of experience



- Heart transplantation is possible following the CARMAT implantation: 3/3 successfully completed
- Pre-graft waiting times with CARMAT: between 109 and 243 days
- No tissue adhesion around the CARMAT prosthesis

Improvement in the quality of life

The device offers major improvements to the patient quality of life:

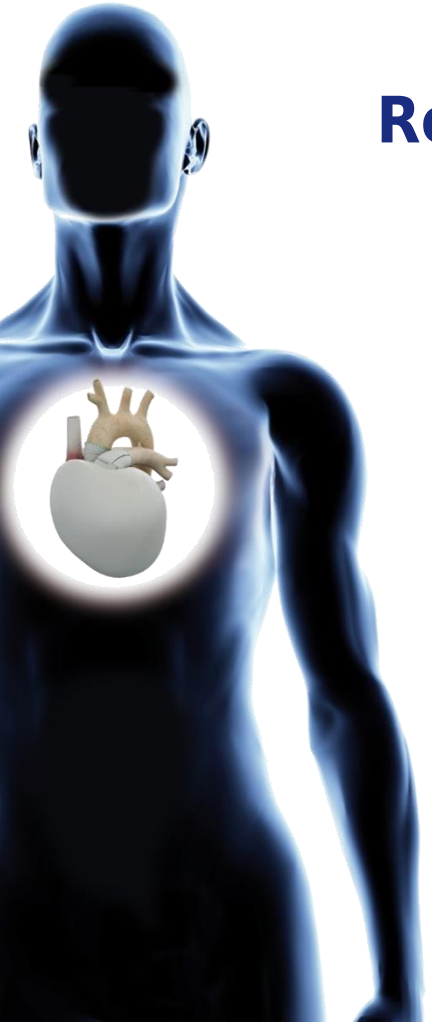
- Greater mobility
- Regained independence
- Autonomy comparable to LVAD

Effort with the CARMAT heart

Post-transplantation effort

Post-transplantation consultation

Conclusion



Results better than in the FIM feasibility study

Validation of study objectives

Clinical study in progress, encouraging results waiting for the completion of the second cohort

CARMAT

CARMAT - a clear path for success

Promising technology with a solid concept:

- Addresses both ventricles
- Hemocompatibility
- Autoregulation

Feasibility study successfully achieved

Pivotal study initiated

CE mark within reach

EU Launch

US Launch

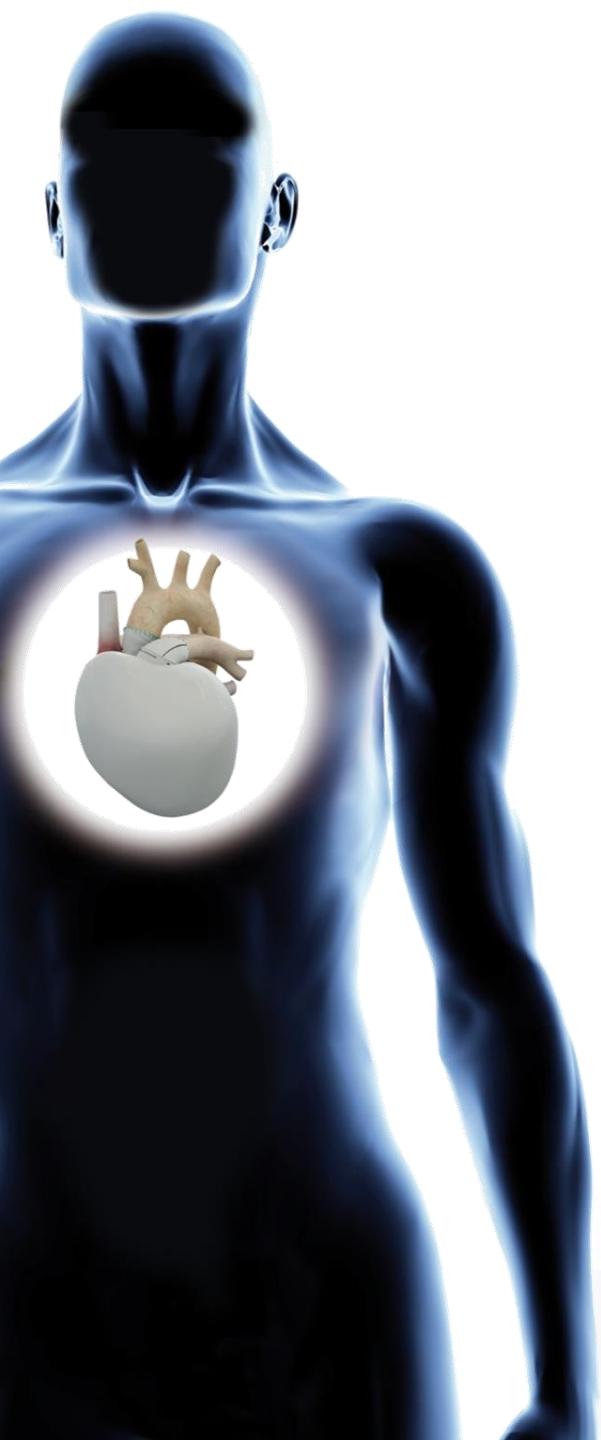
Fully embedded TAH

2008 **2016** **2018** **2020**

CARMAT

CARMAT, a company built to become a leader in its field

- **Technological breakthrough**, unprecedented worldwide: first bioprosthetic heart based on physiological functions
- Credible solution to the problems associated with **terminal biventricular heart failure**, a condition steadily becoming more and more prevalent
- **Significant** clinical and technical progress to submit the **CE marking application in early 2020**
- Support from first-class **industrial** and **financial partners**, as well as **leading players in cardiology**
- **Acceleration** in its **transformation** towards an industrial and commercial company, to become a **leader in its field**



CARMAT

Thank you !