CARMAT

BECAUSE WE BELIEVE THE FUTURE STARTS NOW

Company Update

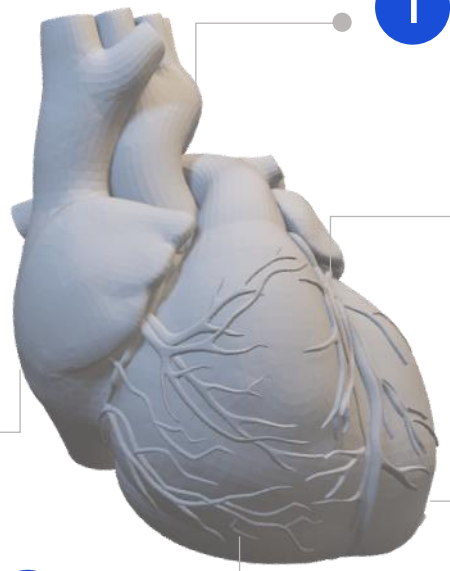
January, 6th 2021

Agenda

- 2020 Review
- CE Mark Opportunity
- Clinical Development
- Business Strategy and Commercial Launch

2020 Review

Recent Highlights



1. CARMAT is granted €13 million in national innovation funding to conduct the EFICAS study in France
2. 3 US centers successfully trained and ready to start enrolment of first US patient in Q1 2021
3. CE marking to market our total artificial heart in the EU as a bridge to transplant
4. Key objectives achieved despite COVID situation
5. Fully prepared for anticipated commercial launch in 2021

CE Mark Opportunity

CE Mark Milestone Achievement

- **CE marking granted to CARMAT's total artificial heart system** as a bridge to transplant in patients suffering from end-stage biventricular heart failure (Intermacs Classes 1-4) who are not amenable to maximal medical therapy or the LVAD and who are likely to undergo heart transplant in the 180 days following implantation.

*LVAD: Left Ventricular Assist Device

- Anticipate ramp-up of manufacturing activities and discussions with core target customers to achieve smooth **commercial launch in Q2 2021**

- CE mark allows Carmat access to a larger pool of patients

Advanced Heart Failure

5,500

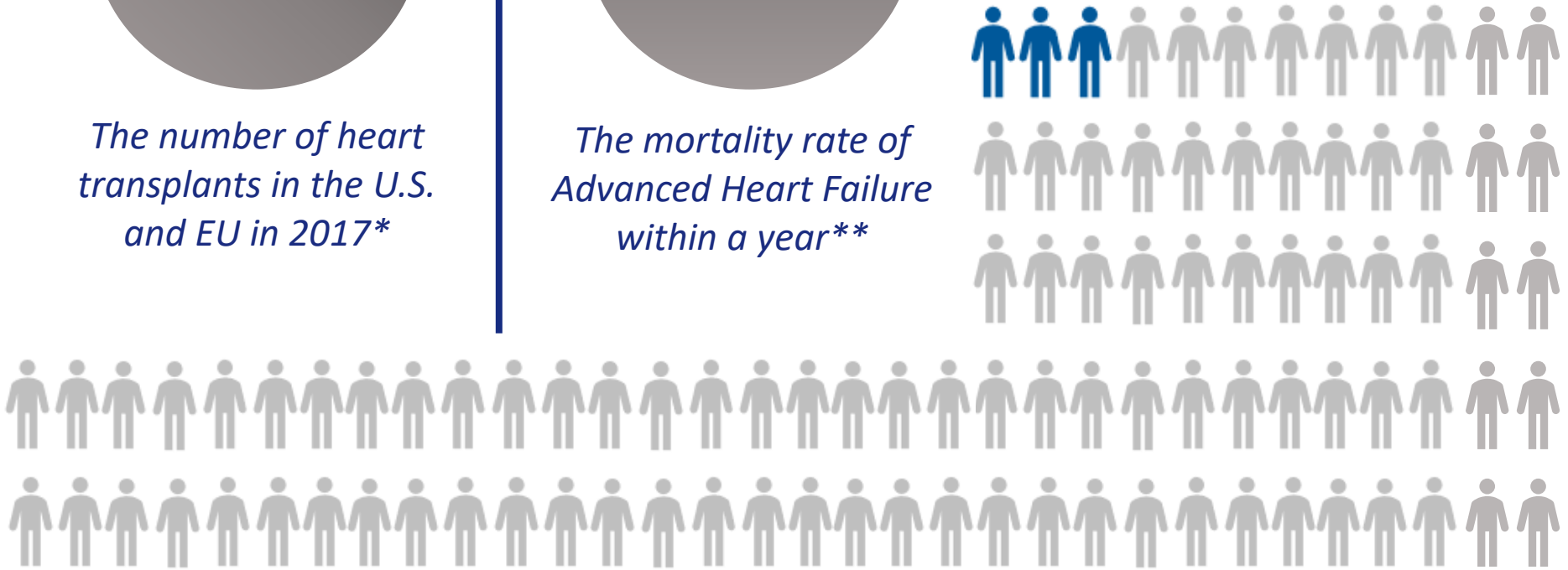
*The number of heart transplants in the U.S. and EU in 2017**

55-77%

*The mortality rate of Advanced Heart Failure within a year***

The percentage of patients treated in need of transplants

3%***



* Source : J Heart Lung Transplant 2019;38:1056-66
** Source : Circ Heart Fail. 2009;2:320-324.
*** Source : GlobalData, CARMAT estimates

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Total Addressable Market

A large waiting list not served → 700 patients in active waiting list* in Germany and 900 in France** at the end of 2019

No strong alternative for patients not getting a heart transplant → Only 14 BVAD and 15 Syncardia performed in Germany in 2019, about the same in France ***

The BTT indication gives access in EU to a minimum of 2,000 patients per year

* Source : statistics.eurotransplant.org: 9023P_2019
** Source : https://rams.agence-biomedecine.fr
*** source : ISHLT 2020 BVAD Virtual

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CARMAT's Unique Solution

Unparalleled Safety Profile

Thanks to its technology, CARMAT is the only device which does not generate any of the following:

No Stroke*

No GI Bleeding*

No Infection at Cable Site*

The CARMAT heart is a game changer for patients suffering with end-stage biventricular heart failure

* Source: Clinical Evaluation Report

Clinical Development

European Studies

Pivotal Study

Objective : Safety & Performance data
Sample size: Target 20
Enrollment : 15 patients to date (2 patients treated in France in December)
Study Results : Support Clinical Evaluation Report for CE Marking

EFICAS in France

Objective : Safety & Performance data and Health Economics
Sample size : 52
Enrollment : Starting in Q2 2021
Study Results : Drive product adoption, support value proposition and get French reimbursement

PMCF (Post-Market Clinical Follow up)

Objective : Device Safety & Performance data monitoring within BTT indication
Sample size : Target 95
Enrollment : Starting in Q2 2021
Study Results : LT data (>1 year) to support indication extension for Destination Therapy on sicker patients

U.S. Early Feasibility Study

Objective	• Safety and Performance data
Sample size	• 10 (2 step-study ; 3 + 7)
Enrollment	• Enrollment expected to begin in Q1 2021
Study Results	• Support design of PIVOT study for FDA Approval

Business Strategy & Commercial Launch

CARMAT creates a new product category

From TAH – Total Artificial Heart

To *PHRT – Physiological Heart Replacement Therapy**

Adding autoregulation and higher hemocompatibility*** to allow**

AN ENHANCED QUALITY OF LIFE**

aeson
Because Life Beats

* Source: . Richez U et al.; Hemocompatibility and safety of the CARMAT Total Artifical Heart hybrid membrane. Heliyon. 2019 Dec; 5(12): e02914. Published online 2019 Dec 8. doi: 10.1016/j.heliyon.2019.e02914
** Source: . Bizouarn P et al. ; Effects of pre-load variations on hemodynamic parameters with a pulsatile autoregulated artificial heart during the early post-operative period. J Heart Lung Transplant. 2018;37(1):161-3.
*** Source: . JACC 2017 Smadja, Bioprosthetic total artificial heart induces a profile of acquired hemocompatibility with membranes recellularization, July 2017:403-9
**** Source: . Clinical Evaluation Report

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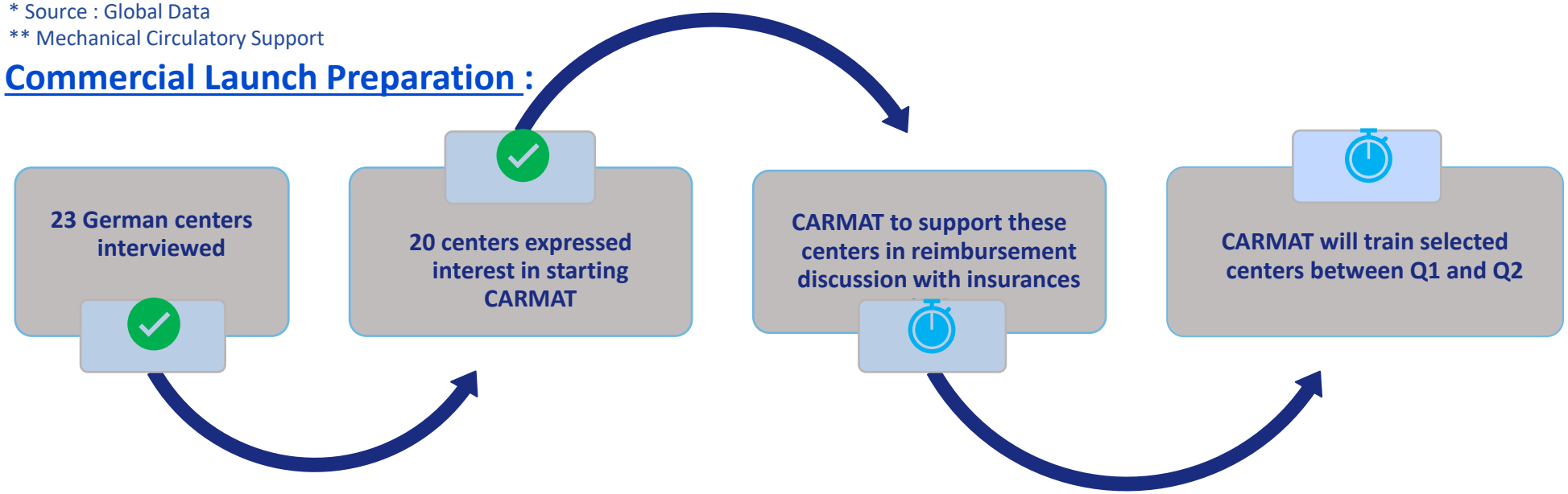
Corporate Strategy Focused on Execution

2021 Plan : Concentrate Resources in Germany and France

- Focus commercially on Germany which represents 40 %* of the MCS** market in EU5
- Address France (15 % of the MCS market*) through 52 patients in the EFICAS study

* Source : Global Data
** Mechanical Circulatory Support

Commercial Launch Preparation :



First commercial sales in Q2

CARMAT, the New Opportunity in Cardiology

1

Large Market Opportunity

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

2

First bioprosthetic physiological replacement heart

- Credible therapeutic and economic alternative to transplant

3

Clear market-access strategy

- CE marking granted
- EFS undergoing
- KOL advocacy

4

Short-term value creation milestones

- EFICAS start
- US EFS start
- First sales

Their life. Your skills. Our technology.

CARMAT

Their life. Your skills. Our technology.