

HORIZON
2020

The next-generation heart pump to change patients' lives and create a new standard of care

Results

Project Information

Calypso

Grant agreement ID: 954151

[Project website](#) 

DOI

[10.3030/954151](https://doi.org/10.3030/954151) 

Project closed

EC signature date

9 July 2020

Start date

1 October 2020

End date

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INDUSTRIAL LEADERSHIP - Innovation In SMEs

Total cost

€ 3 565 250,00

EU contribution

€ 2 495 675,00

Coordinated by

CORWAVE

 France

CORDIS provides links to public deliverables and publications of HORIZON projects.

Links to deliverables and publications from FP7 projects, as well as links to some specific result types such as dataset and software, are dynamically retrieved from [OpenAIRE](#) .

Publications

Conference proceedings (6)



[The CorWave LVAD - Synchronized Pulsatility with Improved Hemodynamics](#) ↗

Author(s): T. A. Snyder, F. Cornat, N. Jem, R. Pruvost, D. Marino, S. Benoit, E. Monticone, L. Fagot, F. Condemi, F. Tesser, A. Olive, P. Quenlenn, L. Polverelli, A. Massiot, F. Silva, M. Danfakha, C. Botterbusch

Published in: 2022

Publisher: International Society of Heart and Lung Transplantation

DOI: 10.1016/j.healun.2022.01.240

Design Optimization Of The Corwave Membrane Lvad

Author(s): Trevor A. Snyder, PhD, François Cornat, BS, Nicolas Jem, BS, Rémi Pruvost, BS, MS, Eugenio Monticone, BS, MS, Diego Marino, BS, Francesca Condemi, PhD, Francesca Tesser, PhD, Antoine Olive, BS, MS, Mattias Scheffler, PhD, Pierre-Yves Quenlenn, BS, MS, Luc Polverelli, BS, MS, Michel Vernizeau, PhD, Carl Botterbusch, MBA

Published in: 2021

Publisher: American Society for Artificial Internal Organs Journal

[DEVELOPMENT AND TESTING OF THE CORWAVE MEMBRANE PUMP](#) ↗

Author(s): Cornat F., Jem N., Pruvost R., Monticone E., Fagot L., Tapolsky N., Condemi F., Tesser F., Olive A., Quelenn P., Wittig B., Polverelli L., Snyder T., Botterbusch C.

Published in: 2023, ISSN 0391-3988

Publisher: European Society of Artificial organs

DOI: 10.1177/03913988231184027

NUMERICAL AND EXPERIMENTAL OPTIMIZATION OF CORWAVE LVAD PERFORMANCE

Author(s): Condemi F, Olive A, Tesser F, Cornat F, Goudeau Y, Baërd L, Scheffler M, Jem N, Pruvost R, Polverelli L, Marino D, Snyder T, Botterbusch C

Published in: 2021

Publisher: The international Journal of Artificial Organs

The CorWave LVAD, Designed For Pulsatility: In Vitro And In Vivo Evaluation Of The Control Algorithm

Author(s): Jem N, Monticone E, Fagot L, Benoit S, Tapolsky N, Massiot A, Scheffler M, Pruvost R, Polverelli L, Cornat F, Snyder T, Botterbusch C

Published in: 2021

Publisher: The international Journal of Artificial Organs

[Rethinking Early Clinical Trials: Design of the CorWave LVAD Feasibility Trial](#) ↗

Author(s): J.A. Cowger, W. Cornwell, C. Hayward, P. Jansz, M. Strueber, D. Zimpfer, Y. Pya, M. Kanwar, A. El Banayosy, P. Leprince, F. Gustafsson, S. Tsui,

T.A. Snyder

Published in: The Journal of Heart and Lung Transplantation, Issue Vol 42, No 4S, April 2023, 2023, ISSN 1053-2498

Publisher: Elsevier BV

DOI: 10.1016/j.healun.2023.02.787

Peer reviewed articles (3) ▼

[Extended finite element method for fluid-structure interaction in wave membrane blood pump](#) ↗

Author(s): Marco Martinolli, Jacopo Biasetti, Stefano Zonca, Luc Polverelli, Christian Vergara

Published in: International Journal for Numerical Methods in Biomedical Engineering, 2021, ISSN 2040-7939

Publisher: John Wiley & Sons Ltd.

DOI: 10.1002/cnm.3467

[Pre-Clinical Development & Testing of the CorWave Membrane LVAD](#) ↗

Author(s): W.K. Cornwell, C. Hayward, P. Jansz, M. Strueber, D. Zimpfer, J. Cowger, M. Kanwar, A. El Banayosy, P. Leprince, F. Gustafsson, S. Tsui, Y. Pya, T.A. Snyder

Published in: The Journal of Heart and Lung Transplantation, Issue 42, 04/2023, 2023, Page(s) S181, ISSN 1053-2498

Publisher: Elsevier BV

DOI: 10.1016/j.healun.2023.02.1686

[Progress in the Development of the Pulsatile CorWave LVAD](#) ↗

Author(s): C. Botterbusch, N. Barabino, F. Cornat, N. Jem, R. Pruvost, D. Marino, S. Benoit, E. Monticone, L. Polverelli, T. Snyder, V. Loobuyck, A. Rauch, S. Susen, A. Vincentelli

Published in: The Journal of Heart and Lung Transplantation, Issue 40/4, 2021, Page(s) S104, ISSN 1053-2498

Publisher: Elsevier BV

DOI: 10.1016/j.healun.2021.01.338

Datasets ▼

Datasets via OpenAIRE (1)



[Experimental data of hydraulic performance of wave membrane blood pumps](#) ↗

Author(s): Martinolli, Marco; Polverelli, Luc; Vergara, Christian

Published in: Zenodo

Last update: 16 October 2024

Permalink: <https://cordis.europa.eu/project/id/954151/results>

European Union, 2025