

The first-ever transplantation with a donor heart transported across the Atlantic Ocean – made possible by the use of XVIVO's heart technology

The Lancet reports[1] that for the first time in medical history, transportation of a donor heart has been performed across the Atlantic Ocean. After preservation outside the body for more than 12 hours using XVIVO's Heart Assist Transport a successful transplantation was performed in Paris in January. The recipient has recovered well and is now at home.

The transplantation is the first within the investigator-Initiated Study 'PEGASE' conducted by the Pitié-Salpêtrière Hospital in Paris, France. The trial aims to investigate the feasibility and safety of donor heart preservation during extended transport times using hypothermic, oxygenated perfusion (HOPE). This is made possible by XVIVO's patented heart technology, a perfusion device with a proprietary solution. Patients in the French West Indies with terminal heart disease need to travel to Paris for a transplant procedure. Due to the vast distance, it has up until now not been possible to transport a donated heart the same route across the Atlantic ocean.

The prestigious medical journal The Lancet now reports about this extraordinary case that stands out for three key reasons:

Unprecedented distance: This marks the first instance of a donated heart being flown across the Atlantic Ocean, covering a distance of 6750 kilometers or 3659 nautical miles, from the French West Indies to Paris - previously unimaginable in heart transplantation.

Extended preservation time: The donated heart was preserved outside the body for 12 hours and 06 minutes, and immediately regained normal function after transplantation.

Commercial air transport: Unlike conventional donor heart transport practices involving private jets, the donor heart was transported in the XVIVO Heart Assist Transport in the passenger cabin aboard a commercial airliner, Air France.

"This transplant may be a monumental breakthrough in heart transplantation allowing for increased access to unused donor hearts, that now can be utilized and safely transported across vast distances. Additionally, it suggests a reorganization of transplant procedures, allowing for better scheduling and expert-led surgeries. These changes might improve overall outcomes and redefine the approach to cardiac transplant care. It is striking that the donor heart after more than 12 hours outside of the body was still soft and viable. This in contrast to donor hearts transported on ice that already after a couple of hours may be stiff, slow to start and require mechanical circulatory support after the transplant", says Professor Guillaume Lebreton, Principal investigator of the PEGASE trial and transplant surgeon at Hôpital Pitié-Salpêtrière, Paris, France.

Andreas Wallinder, CMO at XVIVO, continues, "We are extremely proud of our heart technology that is now under investigation in several clinical trials. Together with the recently reported successful outcomes from an Australian/New Zealand trial, the PEGASE study may be leading the way in a transformation of heart transplant practices as we know it today. Improved patient outcomes and bridging of geographical distances will allow for more and safer transplantations. This will also mean that the wish and precious gift of the donor can be respected as more organs are utilized."

"I'd like to express my sincere congratulations to Professor Lebreton and his team. It makes me very proud that XVIVO's heart technology has once again broken records. The success achieved in this instance, where distance and transport time are no longer limiting factors, demonstrates that this technology has the potential to change the paradigm of heart preservation. XVIVO has now taken another significant step toward realizing our vision that 'nobody should die waiting for a new organ'", says Christoffer Rosenblad, CEO XVIVO.

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Christoffer Rosenblad, CEO
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[1] [https://www.thelancet.com/journals/lancet/article/PIIS0140-6736\(24\)00258-7/fulltext](https://www.thelancet.com/journals/lancet/article/PIIS0140-6736(24)00258-7/fulltext)

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About Us

Founded in 1998, XVIVO is the only medical technology company dedicated to extending the life of all major organs - so transplant teams around the world can save more lives. Our solutions allow leading clinicians and researchers to push the boundaries of transplantation medicine. XVIVO is headquartered in Gothenburg, Sweden, and has offices and research sites on two continents. The company is listed on Nasdaq and has the ticker symbol XVIVO. More information can be found on the website www.xvivogroup.com.

Attachments

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