



Donor Assist

The normothermic regional perfusion device for restoring donor body circulation

XVIVO

Donor Assist

Designed for maintaining physiologic conditions of the donor body

XVIVO's Donor Assist is intended to be used for normothermic, regional, pulsatile and oxygenated machine perfusion of the donor abdominal body, for a period up to 6 hours. Small, easy to use and affordable.

Foldable trolley

Light-weight foldable trolley

Hard-shell fluid reservoir

With integrated filter, allows for rapid flushing

Pump unit

With centrifugal pump for efficient pulsatile perfusion

Easy to operate

Single button control

Leukocyte reduction filter

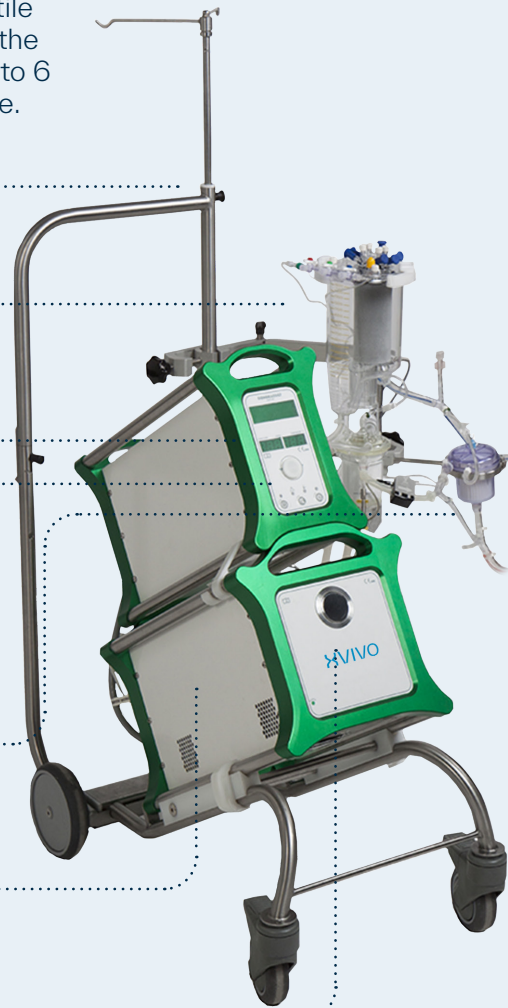
Removing remaining blood platelets and white blood cells from the circulating blood

Thermo unit

Control perfusion temperature

Water filling port

Front-side water filling port allows easy filling



Oxygenator for efficient oxygenated perfusion



Temperature control (30-37°C) with integrated heat exchanger



The centrifugal pump design allows for true pulsatile perfusion, offering superior perfusion characteristics and air handling.

Normothermic Regional Perfusion (NRP) is used to perfuse organs in situ. The potential benefits of NRP to abdominal organs from Donors after Circulatory Death (DCD) include:

- Interrupting or reversing the injury from warm ischemia by restoring oxygen supply to the organs during retrieval^{1,7}
- Improving post-transplant outcomes^{2,6,7,8}
- Enabling assessment in situ^{1,7}
- Increasing organ recovery rates compared with standard DCD donation^{1,2,5,7,8}
- Facilitating the organ recovery process and overcoming logistical challenges^{1,2,3,4}
- Allowing elective scheduling of transplant procedure without the consequence of longer cold ischemic times¹

Clinical results to date with application of NRP in abdominal DCD transplantation⁴



Kidney

Lower rates of immediate post-transplantation delayed graft function and primary non-function and improved ongoing graft function among both uDCD and cDCD allograft recipients.



Liver

Lower rates of post-transplantation biliary complications, including ischemic type biliary lesions, and less graft loss among cDCD livers; considered essential for the evaluation and recovery of uDCD livers.



Pancreas

Feasible, though more experience is required to determine its true impact

References:

1. Johnston, C et al. Transplantation of discarded livers: the complementary role of normothermic regional perfusion. Nat Commun 2021; 12:4471.
2. Oniscu G, et al. In situ normothermic regional perfusion for controlled donation after circulatory death--the United Kingdom experience. Am J Transplant 2014 Dec;14(12):2846-54.
3. Magliocca, J et al. Extracorporeal Support for Organ Donation after Cardiac Death Effectively Expands the Donor Pool. J Trauma 2005 June; 58(6):1095-110.
4. Hessheimer, A and Fondevila, C. Normothermic Regional Perfusion in Solid Organ Transplantation. Advances in Extracorporeal Membrane Oxygenation 2018; 3.
5. De Carlis, R et al. Successful donation after cardiac death liver transplants with prolonged warm ischemia time using normothermic regional perfusion. Liver Transplantation 2016; 12:166-173.
6. Hessheimer, A et al. Normothermic regional perfusion vs. super-rapid recovery in controlled donation after circulatory death liver transplantation. J Hepatol 2019 April; 70:658-665.
7. Watson, C et al. In situ normothermic perfusion of livers in controlled circulatory death donation may prevent ischemic cholangiopathy and improve graft survival. Am J Transplant 2019; 19:1745-1758.
8. Rojas-Peña, A et al Donation after circulatory determination of death: the university of Michigan experience with extracorporeal support. Transplantation 2014 Aug; 98(3):328-34.

Nobody should die waiting for a new organ

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.

Scan this QR-code to get in touch with us!

