



## **Organ Recovery Systems Corporate Fact Sheet**

Organ Recovery Systems, a division of Lifeline Scientific Inc, develops advanced perfusion techniques to improve the quality and quantity of organs, tissues and cells for transplantation. Working with a team of leading transplant professionals, Organ Recovery Systems develops medical devices, chemical solutions and techniques to improve the process by which cells, tissues and organs are treated - from the time of donation to the time of transplantation.

Organ Recovery Systems initial product is the LifePort<sup>®</sup> Kidney Transporter portable machine preservation system. Designed with the challenges of organ recovery and transport in mind, the LifePort provides a sealed, sterile, protected environment where a chemical solution is gently pumped through the kidney at cold temperatures to minimize tissue damage while the organ is outside the body. The LifePort is lightweight and portable allowing organs to be perfused from the time of recovery until transplantation. It can travel unaccompanied by land or air, safely transporting the kidneys across town or between countries. While the kidney is being perfused, the LifePort records data on temperature, flow rate, vascular resistance and pressure every 10 seconds providing surgeons with important additional data.

Results from the landmark Machine Preservation Trial published in the *New England Journal of Medicine* in 2009 demonstrated for the first time that use of a LifePort can reduce the odds of experiencing a delay in recovery of kidney function by 43 percent. In addition, these kidneys are 48 percent less likely to fail within a year compared to those stored in the traditional box of ice. <sup>1</sup> These results build upon those from retrospective studies showing that machine preservation improves the quality of a kidney from a cadaveric donor prior to transplantation in comparison to those stored in a cool box. <sup>2</sup>

Additionally, unlike cold storage, LifePort may increase the number of kidneys available for transplantation by giving surgeons additional information to evaluate kidneys from marginal and non-heartbeating donors.

Since receiving FDA clearance and CE Marking in 2004, over 240 LifePorts have been installed in transplant programs across Europe and North America treating over 12,000 kidneys.

Medical devices for *ex vivo* preservation of the heart, lung, pancreas and liver are in pre-clinical development.

Organ Recovery Systems, founded in 1998 by chief executive David Kravitz, is a business division of Lifeline Scientific Inc, a Chicago-based global medical technology company. Its European headquarters are located in Brussels.

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<sup>1</sup> Moers C, Smits JM, Maathuis M-HJ et al. Machine perfusion or cold storage in deceased-donor kidney transplantation. *N Engl J Med* 2009;360:7-19.

<sup>2</sup> Schold JD et al. Are we frozen in time? Analysis of the utilization and efficacy of pulsatile perfusion in renal transplantation. *Am J Transpl* 2005; 5: 1681-1688.