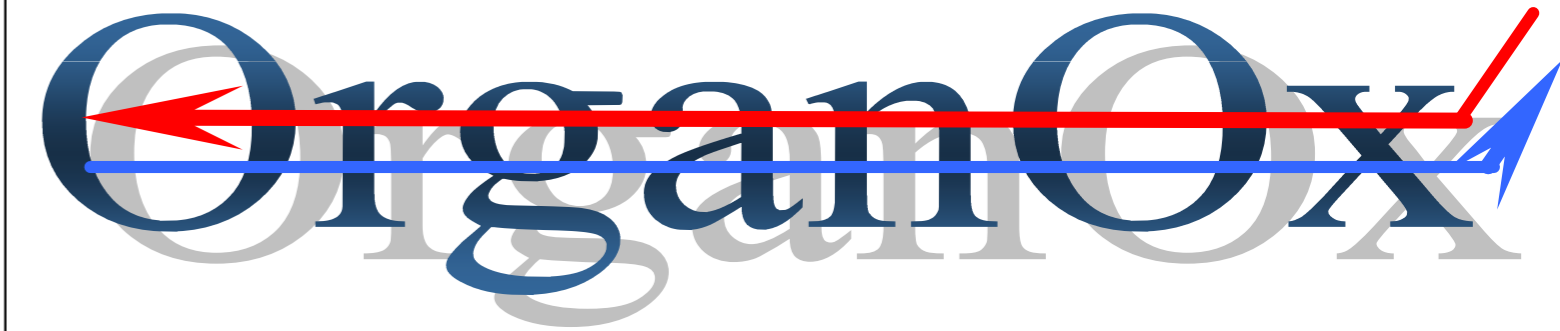


Royal Society Enterprise Fund Investment Company

OrganOx Ltd.

Prof. Peter Friend, Prof. Constantin Coussios, Dr. Toni Day, Dr. Colin Story and Dr. Les Russell

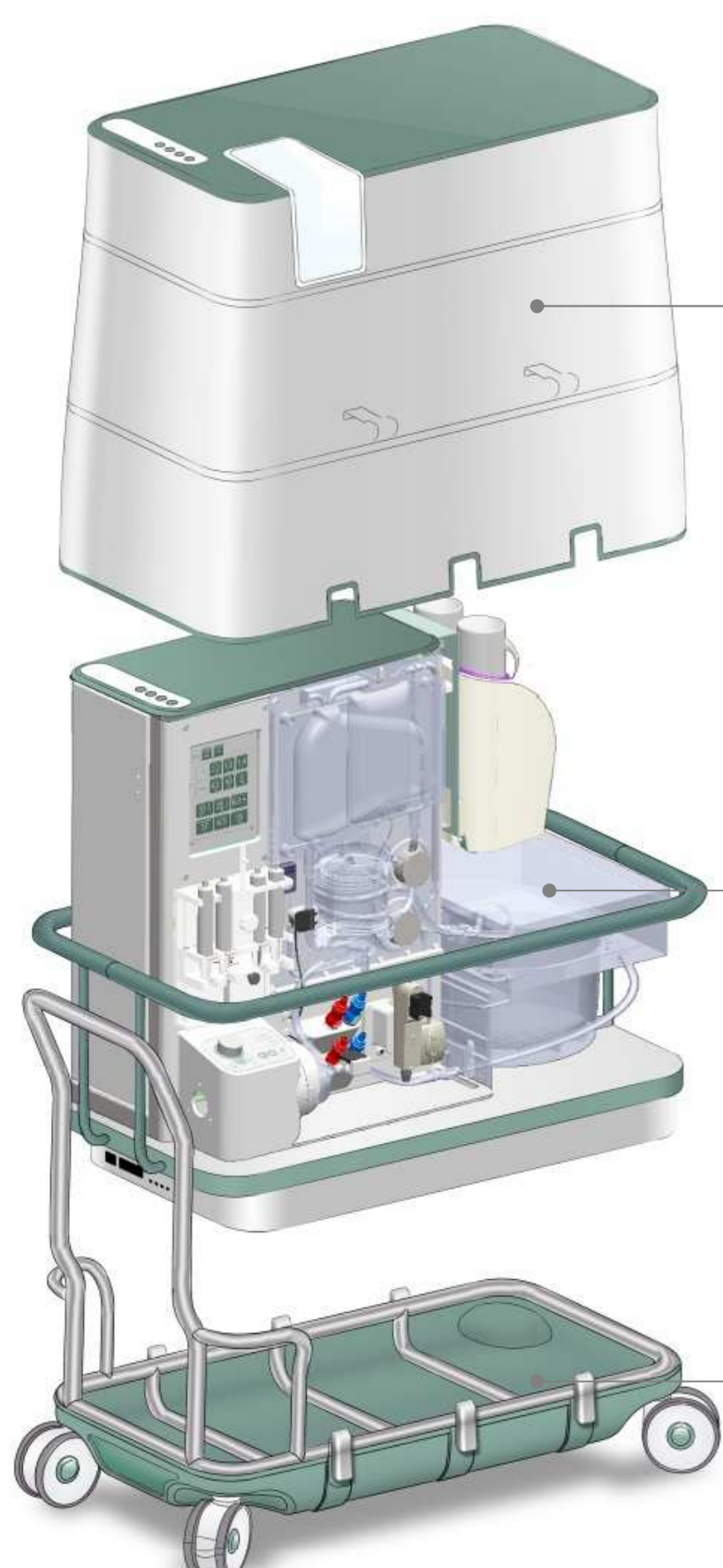


The Unmet Clinical Need

- In Europe and the USA, there are some **30,000** patients on liver transplant waiting lists, yet only **12,000** transplants are performed each year.
- **At least a third** of potential donor organs are discarded due to limitations of cold preservation.
- Organs from **non-heart-beating donors** sustain warm hypoxic damage before retrieval and many are discarded.
- **Organ viability** cannot be objectively assessed during preservation: most organs perceived as marginal during retrieval are thus discarded.

The OrganOx METRA: Unique Product Features

- **Fully automated** organ perfusion in theatre and **in transit**, using oxygenated whole blood at 37°C.
- Patented **autoregulation** technology enables the organ to 'choose' its own blood supply.
- Automated monitoring of haemodynamic, metabolic and synthetic organ function enables quantitative **assessment of organ viability during perfusion**.



Removable protective cover with integrated transparent panel to enable viewing of GUI

Functional unit consisting of (i) fully automated hardware for organ perfusion and (ii) disposable organ container, perfusion set and infusions.

Detachable trolley with foldable handle for easy stow.

Fig. 1: The transportable OrganOx METRA enables fully automated normothermic perfusion of donor livers in theatre and in transit.

Pre-clinical Data using the OrganOx METRA

- Experimental studies on porcine organs have demonstrated successful preservation for up to **72 hours** and **successful transplantation of non-heart-beating donor organs** after 40 minutes of hypoxia.
- 13 severely damaged **discarded human livers** have now been successfully perfused using the METRA, demonstrating clinical applicability of the technology.



Fig. 2: Macroscopic appearance of discarded human liver following 24 hours of preservation on the OrganOx METRA, showing uniform perfusion and minimal necrosis throughout the organ.

- 6 out of the 13 severely damaged discarded human livers exhibited **normal metabolic, synthetic and haemodynamic function** during perfusion and **clinically acceptable histological appearance** following 24 hours on the METRA.

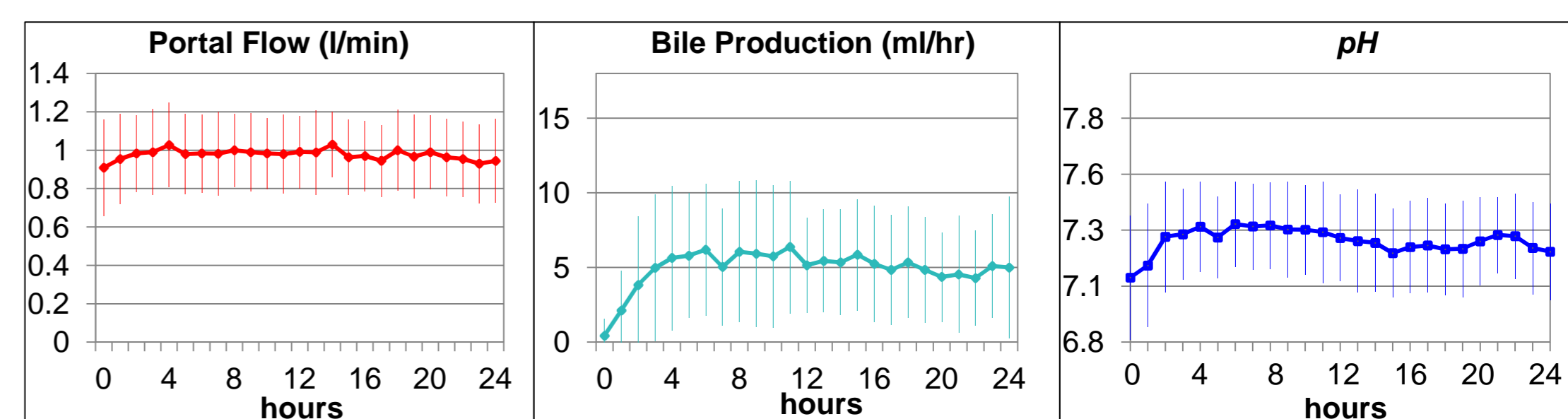


Fig. 2: The OrganOx METRA enables maintenance of (i) haemodynamic function (illustrated by portal flow); (ii) synthetic function (illustrated by bile production) and (iii) metabolic function (illustrated by maintenance of physiological pH) over 24 hours.

Towards Clinical Uptake

- Clinical transplantation studies of organs preserved with the OrganOx METRA scheduled during 2012.
- CE marking and first sales in key centres expected in 2013.