
OrganOx Metra®

Initiative Type

Technology

Status

Deliver

Added

01 September 2017

Last updated

12 July 2023

URL

<https://clinicaexcellence.qld.gov.au/improvement-exchange/organox-metrar>

Summary

Currently, transplant livers are transported in static cold storage at 4°C. The OrganOx Metra is a self-contained unit for the preservation and transport of transplant livers that uses normothermic machine perfusion, which seeks to recreate an environment similar to the human body. The transplant liver is perfused with oxygen-carrying red cells at 37°C, maintains physiological pressures and flows, and provides nutrition. The liver remains functional during the preservation period, and produces bile,

metabolises glucose, and maintains a physiological pH, which demonstrates organ viability prior to transplantation.

Key dates

Oct 2017

Sep 2019

Implementation sites

Queensland Liver Transplant Service, Princess Alexandra Hospital

Partnerships

Healthcare Improvement Unit

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Aim

Provides an opportunity to pilot and evaluate new technologies within 'real world' clinical settings and in the Queensland context.

Benefits

The potential benefits of this technology includes:

- The OrganOx Metra should increase the number of potential transplant livers.
- The OrganOx Metra should successfully preserve functional donor livers during transport.
- The OrganOx Metra should result in reduction of early allograft dysfunction post-transplant.
- The OrganOx Metra should decrease patient liver transplant wait list time.
- The OrganOx Metra should result in reduced operating times and length of stay for the patient.
- The OrganOx Metra should result in normalised post-transplant liver function in the short to long term.

Background

This technology was funded through the New Technology Funding and Evaluation Program (NTFEP). The NTFEP funds the introduction and evaluation of new technologies that:

- Are safe and effective
- Provide better health outcomes
- Provide value for money
- Provide greater access to care.

The evaluation findings will inform recommendations regarding the future use and/or investment of the technology within Queensland.

Evaluation and Results

This technology is currently under evaluation and results will be published on this site on completion.

Resources

[Technology evaluation summary](#)

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