

Organ Perfusion

First CE certified product for cytokine removal in ex-vivo organ perfusion

*Protect
Your
Organs*

▼ Organ transplant trends

Increasing number of needed organs - decreasing quality of available organs

Globally, more than 125,000 organs are transplanted every year. While a transplantation is often the last resort for the patient, organ availability and access remain a problem.

An increased life expectancy and medical technology advances, especially in organ support and bridging therapies, have resulted in a larger population of potential transplant recipients.

At the same time, the mean age of potential organ donors has increased. This has been associated with age and disease-related changes affecting the quality of available organs.

In addition, reference centers and specialists are scarce, implying delays in organ donor assessment, harvesting, transporting and transplant surgery. These delays and related organ damages are associated with poorer overall outcomes.

▼ Ex-vivo organ perfusion

A potential solution to improve organ quality

- Novel approach for expanding the organ pool by treating previously unacceptable donor organs.
- Provides a better solution to organ preservation than conventional cold ischemic storage.

▼ Cytokine adsorption during ex-vivo organ perfusion

Reducing inflammation in healthy or damaged organs

Cytokine adsorption in healthy organs can help restoring from exposure to prolonged ischemia. It allows for greater transportation times and facilitates scheduling of operations.⁽¹⁾

In organs damaged at the explantation time, cytokine adsorption can *reduce inflammation and restore organ function during the perfusion procedure*. It can *restore functions and decrease inflammation following transplantation*.⁽²⁾



Introducing ECOS-300CY[®] cytokine adsorption

Versatile application in different organs, procedures and platforms

The new ECOS-300CY[®] Therapy is an integrated adsorption system for the dialysis of organ perfusion solutions. It has demonstrated the reliable removal of inflammatory mediators like IL-6, IL-8, TNF-alpha and can be used in normothermic and hypothermic machine perfusion procedures.⁽³⁾

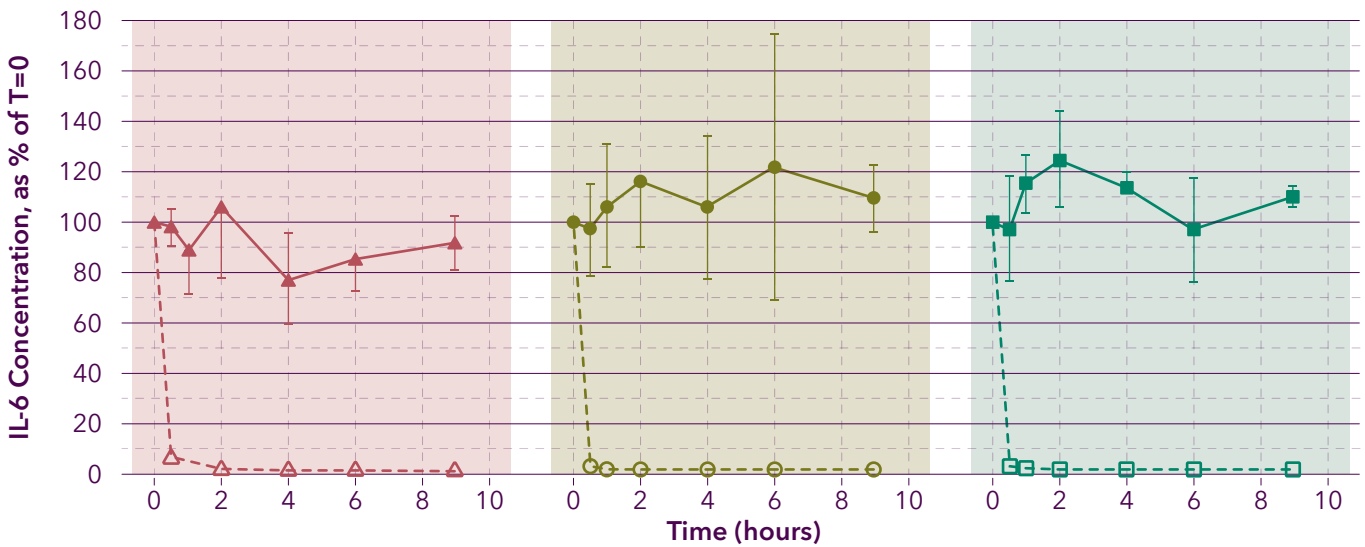
Preclinical data proves the efficacy in Steen and Belzer solutions.

—▲— Control vs.
-▲- Treat for Steen Solution
at 40 mL/min

—●— Control vs.
-○- Treat for Belzer Solution
at 40 mL/min

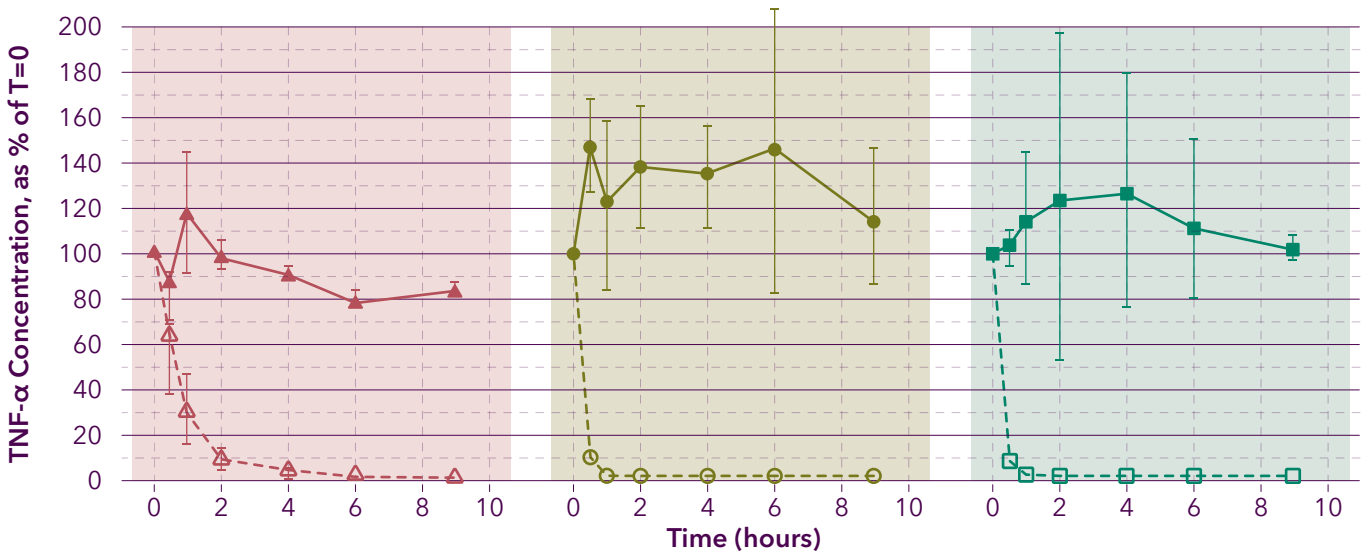
—■— Control vs.
-□- Treat for Belzer Solution
at 200 mL/min

Mean Human IL-6 (% of T=0) vs. Time



CytoSorbents R&D 145
Removal of cytokines from
organ preservation solutions

Mean Human TNF-α (% of T=0) vs. Time



The new ECOS-300CY[®] Therapy system is the first and only specifically certified product for cytokine removal in organ perfusion.

ECOS-300CY[®]

Demonstrated removal of inflammatory mediators: IL-6, IL-8, TNF-alpha...

Preclinical data proves the efficacy in Steen and Belzer solutions

First CE certified product for cytokine removal in ex-vivo organ perfusion

Contact us today to learn more about the new ECOS-300CY[®] Therapy

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References:

1. Iskender I et al. J Heart Lung Transplant. 2017;S1053-2498(17)31802-8.
2. Ghaidan H et al. Nat Commun. 2022;13(1):4173.
3. ECOS-300CY IFU, issued 01/2022

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