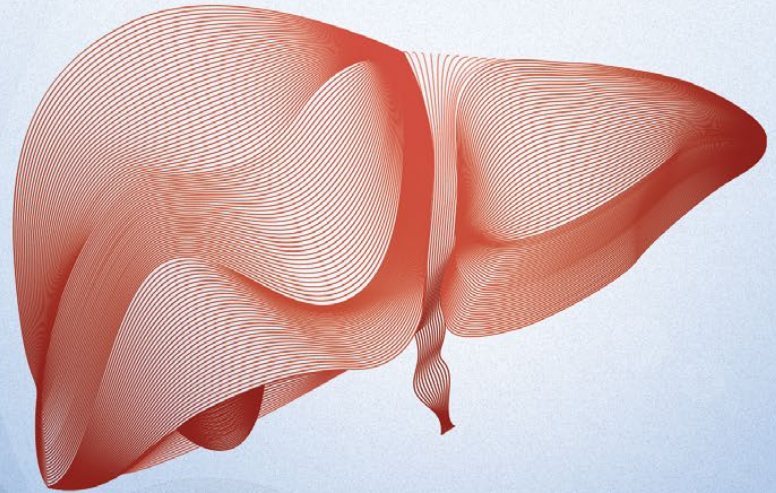


CytoSorb® Therapy

Decision support
in liver dysfunction



CytoSorb® Therapy - Initiation

Goal: Removal of liver toxins (bilirubin) and modulation of concomitant hyperinflammation

Criteria to consider use of CytoSorb® Therapy

- ❓ Bilirubin > 10 mg/dl (> 170 µmol/l)
- ❓ Hepatic encephalopathy grade 3-4
- ❓ Acute liver failure (ALF)
- ❓ Acute on chronic liver failure (ACLF) grade 2-3
- ❓ Concomitant vasoplegic shock not responding to standard therapy (best to be used within first 24 hrs.)
- ❓ Onset of liver failure after surgery or transplantation
- ❓ Intractable pruritus

Integration of CytoSorb® into extracorporeal circuit

Integrate CytoSorb® into:

- Hemoperfusion
- CRRT
- ECMO

Learn more in detail
cyto.zone/setup



CytoSorb® Therapy - Continuation

Start of CytoSorb® Therapy



Sufficient stabilization / clinical improvement

Sufficient reduction of liver toxin levels (and vasopressor demand in case of shock)

End CytoSorb® Therapy

Insufficient stabilization / clinical improvement

Only minor reduction of liver toxin levels (and vasopressor demand in case of shock)

- Consider change of the adsorber after 8 - 12 hrs.

Re-evaluate every 8 to 24 hrs.

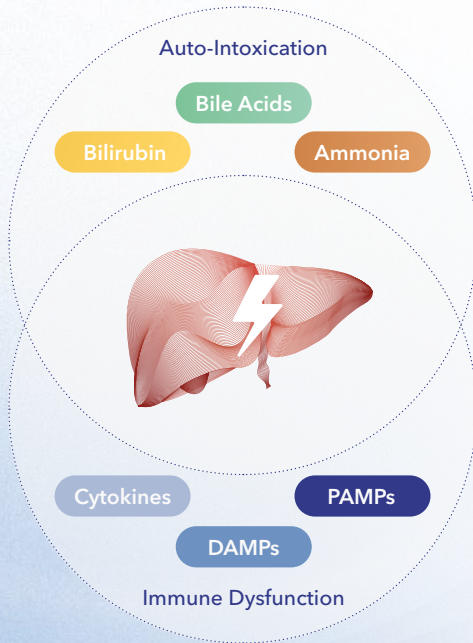


Unsatisfactory results after several adsorbers

Consider futility of CytoSorb® Therapy

Adequate causative therapy is the base for therapeutic success

Liver failure is a complex clinical syndrome *



* Busuttill R et al., Transplantation of the liver 2015

Literature

Title	Aim	Outcome
<p>Ocskay et al., J Clin Med 2021; 10(21):5182</p> <p>Hemoadsorption in 'Liver Indication' - Analysis of 109 Patients' Data from the CytoSorb International Registry</p>	<p>Analysis of 'liver indication' subgroup pts from the CytoSorb® International Registry (total 1434 pts)</p>	<p>Baseline serum bilirubin levels were significantly reduced pre versus post CytoSorb® use</p>
<p>Scharf et al., Sci Rep 2021; 11(1); 10190</p> <p>Successful elimination of bilirubin in critically ill patients with acute liver dysfunction using a cytokine adsorber and albumin dialysis: a pilot study</p>	<p>Compare bilirubin removal by CytoSorb® with removal by ADVOS in pts with acute liver dysfunction (various etiologies)</p>	<p>Both devices led to significant bilirubin removal and lower than expected mortality rates. However, the use of CytoSorb® also resulted in a significant reduction in norepinephrine and hemodynamic stabilization, and was easier to use</p>
<p>Tomescu et al., Int J Artif Organs 2021; 44(8): 560-4</p> <p>Haemoadsorption by CytoSorb® in patients with acute liver failure: a case series</p>	<p>Assess clinical effects of CytoSorb® in biochemical parameters in pts. with acute liver failure. Pts. treated with 3 consecutive 24 hrs sessions</p>	<p>Suggest use of CytoSorb® as a therapeutic option for management of liver impairment providing biochemical control, aiding bridge to liver transplantation, or until spontaneous remission</p>

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This decision guidance is non-binding and cannot replace the therapy decisions of the treating physician, who is in all cases responsible for the development and implementation of an adequate diagnostic and therapeutic plan for each individual patient.

The clinical and preclinical data and results obtained with the CytoSorb adsorber are not transferable to other products. CytoSorb should only be administered by personnel who have been properly trained in administration of extracorporeal therapies. CytoSorb is not available for commercial sale in USA. CytoSorb and CytoSorbents are trademarks of the CytoSorbents Corporation, USA. © Copyright 2022, CytoSorbents Europe GmbH. All rights reserved. B1104R02ENG2022