



Polymyxin B Hemoperfusion Therapy
TORAYMYXIN®

Direct endotoxin neutralization and immune cell apheresis

Restoration of immune balance • Improvement of lung function • Rapid recovery of hemodynamics

TORAYMYXIN® – Polymyxin B hemoperfusion (PMX-HP)

Complementary therapy for endotoxic septic shock

PMX-HP is a safe therapy combining the potent endotoxin neutralizing capabilities of Polymyxin B with hemoperfusion. Endotoxin is the most potent trigger of the septic cascade. During the progress of sepsis, circulating endotoxin levels can increase up to 1000-fold. Elevated endotoxin levels are associated with organ dysfunction and mortality in critically ill patients.

Endotoxemia is often found in the blood of patients with COVID-19 pneumonia, indicating that loss of intestinal barrier function significantly contributes to the pathogenesis of COVID-19 and it is therefore rational to consider Polymyxin B Hemoperfusion as an additional therapy in unresponsive patients affected by COVID-19.

- 150,000 patients treated with PMX-HP globally.
- 400 peer-reviewed publications.
- Authorized by FDA and Health Canada for specific cases of COVID-19.
- Severe unresponsive COVID-19 patients treated in Europe, Russia, Asia and U.S.

In the webinar “[Adsorptive extracorporeal therapies in septic and COVID-19 patients](#)” the pathophysiology of septic shock and COVID-19, the role of endotoxemia and rationale of PMX-HP in specific populations is discussed and recent data from COVID-19 patients are presented.

Focus On:

[Endotoxemia in patients with severe forms of COVID-19](#)

[Extracorporeal organ support in COVID-19 patients: expert review and recommendation](#)

[COVID-19: The gut-lung axis](#)



EAA™ – Endotoxin Activity Assay

A rapid and reliable test for endotoxin activity in whole blood

EAA™ is the only FDA-approved diagnostic assay to detect endotoxin activity in human whole blood. The test is performed in < 30 minutes. EAA™ is used to evaluate the state of endotoxemia and to support the clinical decision to implement PMX-HP therapy.

Recent findings demonstrated endotoxemia in COVID-19 patients and high levels of endotoxin activity are frequent in COVID-19 patients hospitalized in ICU.

ProLUNG® Mini-invasive extracorporeal CO₂ removal system

A lung-protective strategy

ProLUNG® is the reference system for mini-invasive extracorporeal CO₂ removal (ECCO2R). The system has all the features necessary to guarantee quality ventilatory support with a clinical rationale: high CO₂ removal capacity ($VCO_2 > 100$ mL/min), low invasiveness for the patient (13-14 Fr bilumen catheter) and possibility of monitoring CO₂ removal with ProLUNG® Meter Technology.

In the webinar "[Minimally Invasive CO₂ Removal: From Theory to Practice](#)", experts analyze the potential of mini-invasive ECCO2R. The differences between a lung in the clinical context of ARDS and COVID-19 are discussed and the rationale for a mini-invasive ECCO2R system to manage the patient's ventilatory support and to prevent ventilator-induced lung injury is explained.