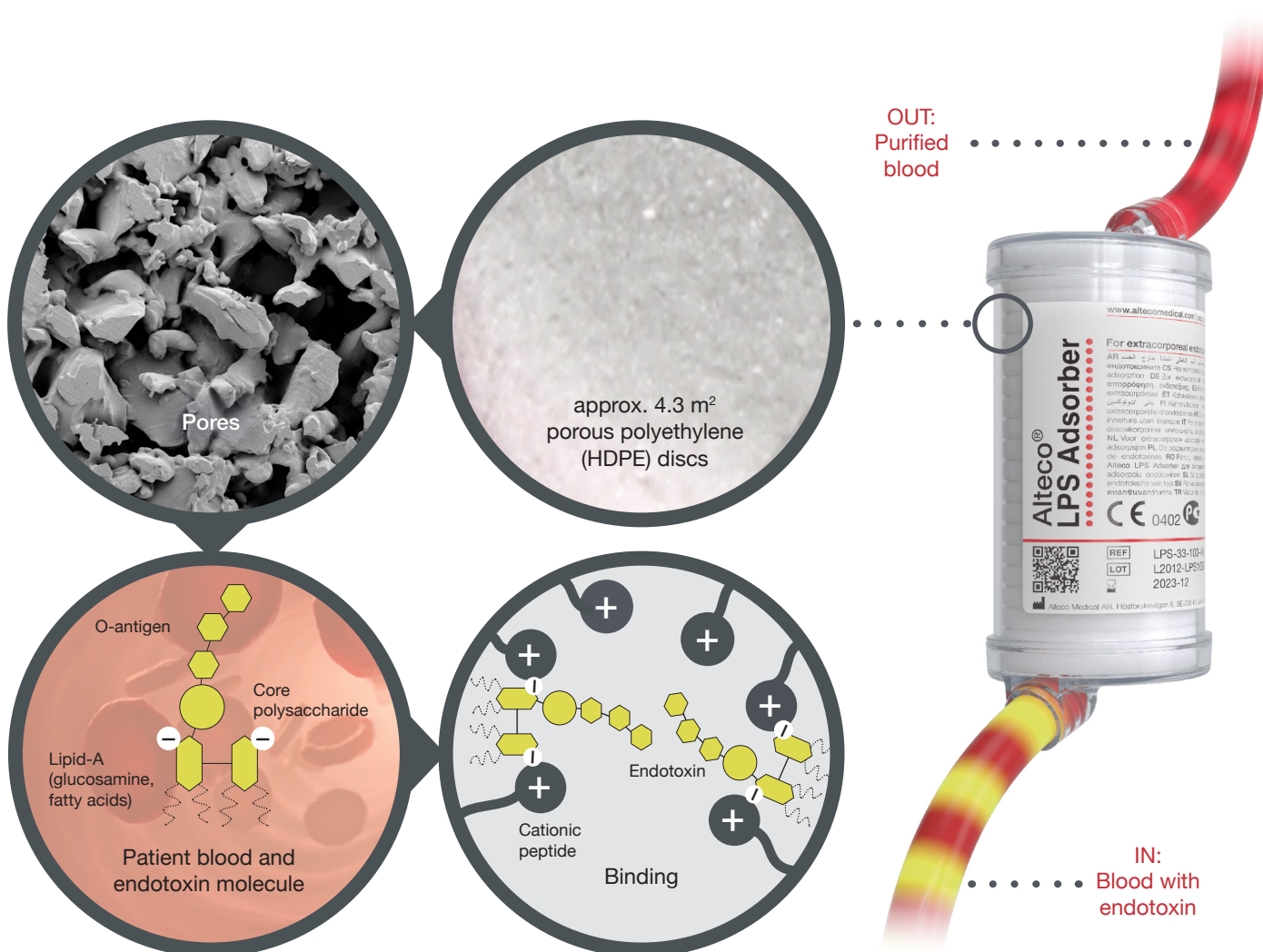
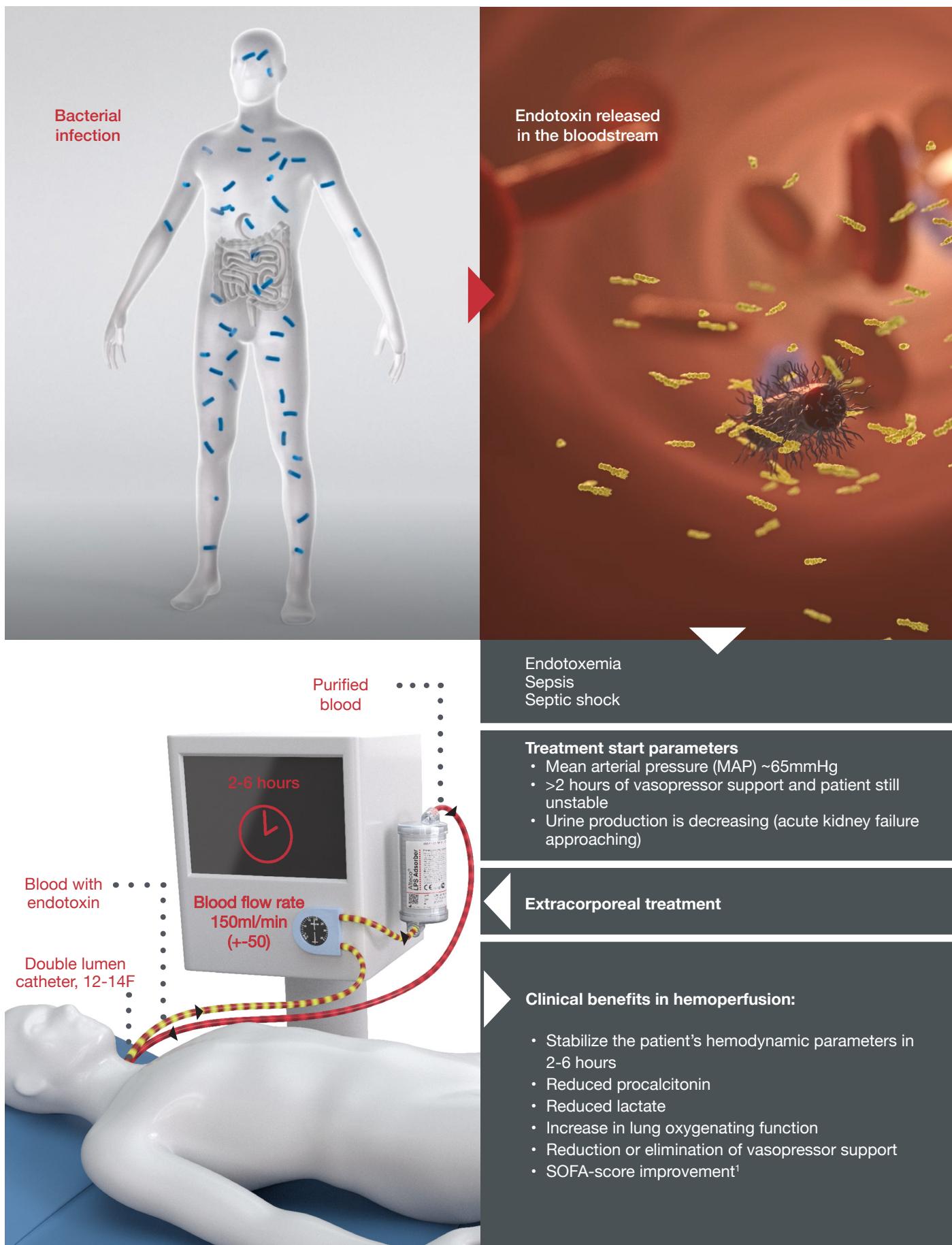


Alteco® LPS Adsorber

Unique endotoxin adsorption technology

- The active component in the Alteco LPS Adsorber is a **tailor-made peptide**, specifically designed to **bind endotoxin (lipopolysaccharide, LPS)**. The peptide is 100% synthetic and its structure is composed of 27 amino acid molecules. The peptide binds with high affinity to the **toxic part of gram-negative bacteria: lipid-A**, which is constant in all gram-negative bacterial strains.
- The Alteco LPS Adsorber **does not contain pharmaceuticals** and **has no known interactions**. It is the only endotoxin removal product on the market that uses tailor-made peptide technology.
- The matrix in the Alteco LPS Adsorber consists of **19 porous polyethylene (HDPE resin) discs** with an average pore size 120 microns. The cationic peptide is covalently immobilized onto the porous surface of the discs. During treatment, negatively charged **endotoxin molecules are captured by the peptide**. The Alteco LPS Adsorber works through adsorption; binding and thereby **removing endotoxin from the patient's bloodstream**.
- The Alteco LPS Adsorber uses a surface area of approx. 4.3 m². The smaller the surface area, the less complement activation in the immune system – hence, an optimized surface area is beneficial. Thanks to kinetics, blood comes into contact with the peptide quickly, allowing a **fast onset of action** and a **short treatment time of 2-6 hours** to stabilize the patient. If new endotoxin enters the bloodstream, the product is safe for multiple treatments.





1. Adamik B, Zielinski S, Smiechowicz J, Kübler A. Endotoxin Elimination in Patients with Septic Shock: An Observation Study. Arch Immunol Ther Exp (Warsz). 2015 Dec;63(6):475-83. doi: 10.1007/s00005-015-0348-8. Epub 2015 Jun 21. PMID: 26093653; PMCID: PMC4633444.