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ADVANCED BIOMEDICAL THERAPIES



MARS® is a registered trademark of TERAKLIN AG

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MARS® is not for sale in the USA

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MARS®
THE LIVER SUPPORT THERAPY



MARS®

THE LIVER SUPPORT THERAPY



MARS® has positive influence on

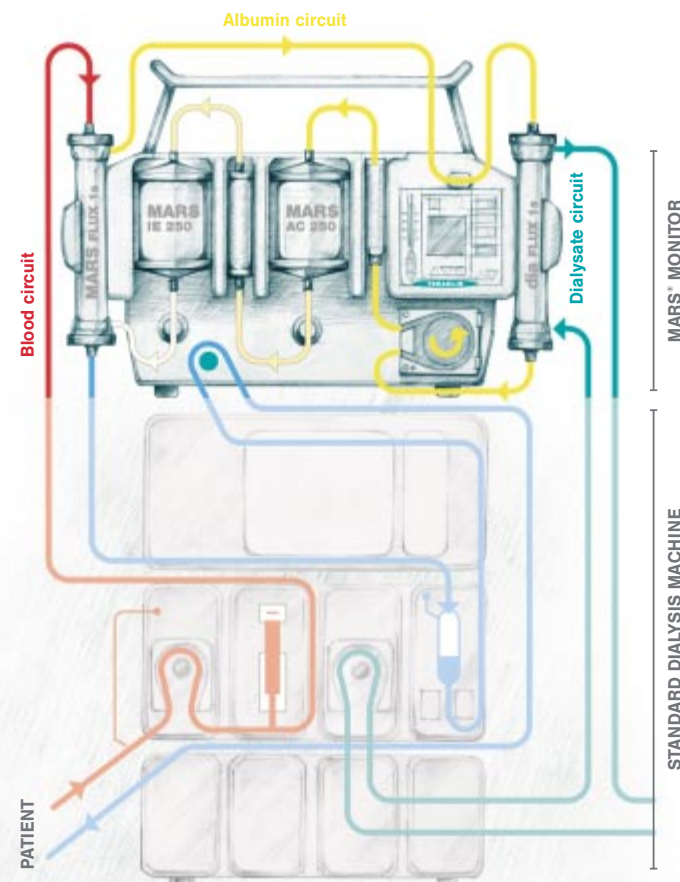
- Mortality
- Hemodynamics
- Liver function
- Hepatic encephalopathy
- Renal function
- Intrahepatic cholestasis
- Albumin binding capacity

The MARS® Therapy supports the function of the liver while waiting for recovery or until a donor organ becomes available.

Main indication groups for MARS® Therapy*

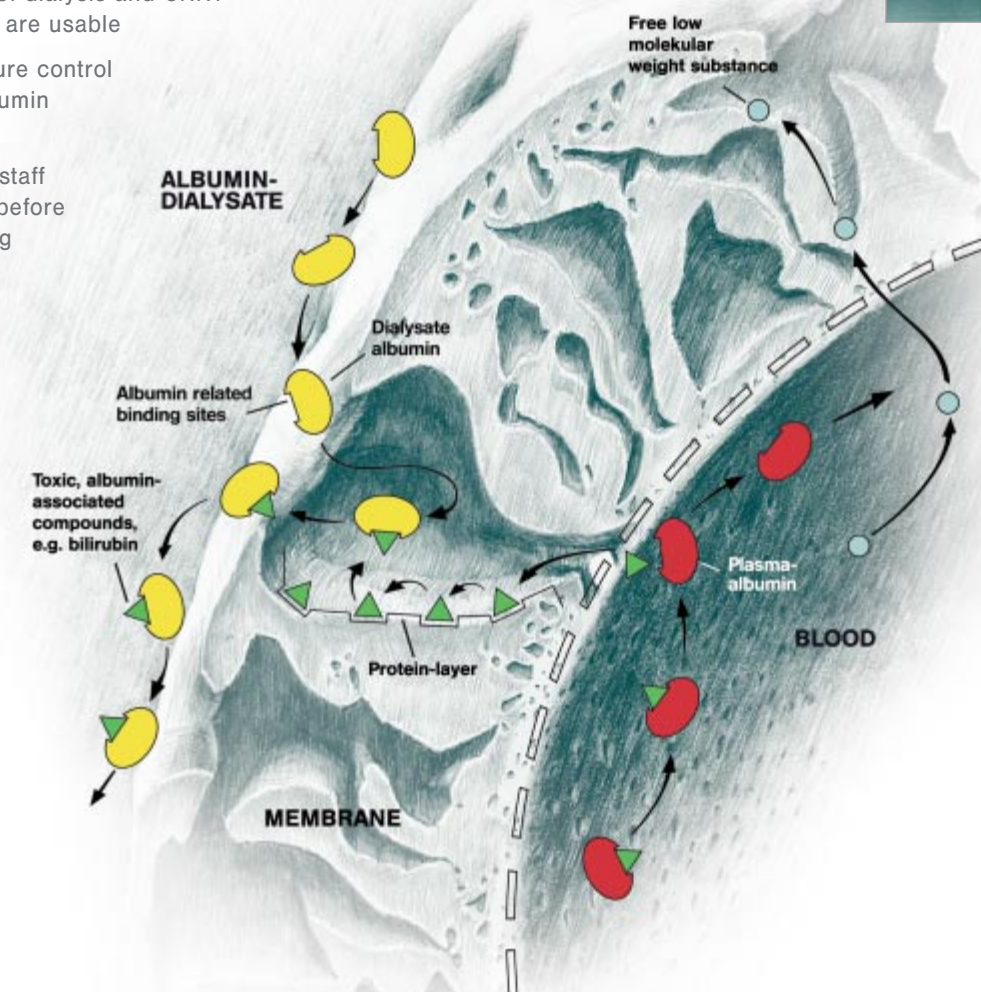
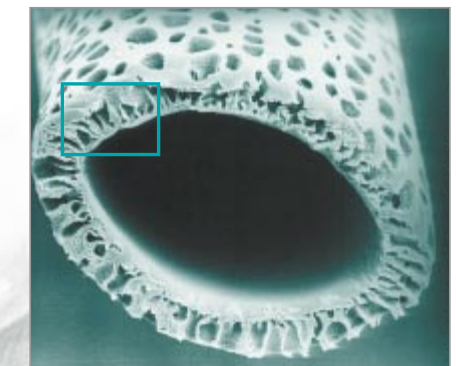
- Acute decompensation of chronic liver disease in chronic viral hepatitis, alcoholic liver disease, autoimmune, metabolic as well as other chronic liver diseases
- Acute liver failure and liver dysfunction of varying aetiology i.e. ischemic hepatitis, acute viral hepatitis, drug induced liver failure incl. paracetamol overdose, mushroom poisoning, acute fatty liver etc.
- Graft failure or dysfunction after liver transplantation in primary graft dysfunction, delayed function
- Liver failure/dysfunction after liver surgery
- Intractable pruritus in chronic cholestatic syndromes i.e. PBC, PSC and BRIC

* one MARS® treatment kit, 600ml of 20% albumin, approx. 6l priming solution as well as the dialysate/substitutes are necessary for one MARS® treatment



Advantages of the MARS® System

- Effective and selective elimination of protein-bound and water-soluble toxins
- Management of electrolyte, fluid, acid/ base balance
- Control of glucose and lactate level of the patient possible
- High safety standards by high biocompatibility of the membrane, cell-free operation and safety barrier (humane serum albumin) between patient's blood and adsorber's columns.
- Cost-effectiveness by continuous regeneration of the albumin dialysate during the treatment
- Compatible with standard dialysis machines and CRRT-devices
- Features of dialysis and CRRT-machines are usable
- Temperature control of the albumin dialysate
- Minimum staff handling before and during treatment



Removable protein-bound and water-soluble substances**

- Ammonia
- Bilirubin
- Bile acids
- Aromatic amino acids
- Middle- and short chain fatty acids
- Tryptophan
- Copper
- Creatinine
- Urea
- Diazepam

**Mitzner et al., Curr Opin Nephrol Hypertens 2001; 10: 777-83

