THE MEMBRANE THAT MATTERS.

Clearum™ HS Dialyzers
Clearum™ high flux steam sterilized (HS) dialyzers are standard hemodialysis (HD) dialyzers with a biocompatible, high-flux membrane that provides adequate balance between diffusion and convection. Clearum™ HS dialyzers promote toxin removal and retention of critical proteins to provide safe, effective therapy.

**BIOCOMPATIBILITY AND SAFETY**

The Clearum™ membrane is highly biocompatible.

- The inner lining of the capillary and smooth potting surface help to decrease potential negative effects of hemolysis, which improves hemocompatibility.
- Steam sterilization helps maintain membrane stability by minimizing the transfer of pyrogens into the patient’s bloodstream. This can prevent potential patient side effects such as inflammation and the release of cytokines.
- Bisphenol A (BPA) has been associated with diabetes and cardiovascular diseases and is widely accepted as a uremic toxin that, by the nature of renal dysfunction, can accumulate in ESRD patients. Clearum™ HS dialyzers are BPA-free.

**OPTIMIZED DIALYZER PERFORMANCE**

The Clearum™ membrane helps ensure optimal dialyzer performance by delivering:

- Diffusive clearance of urea is best enhanced by undulation of capillaries and a balanced packing density which enhance dialysate flow penetration. During treatment, this keeps the membrane sufficiently hydrated to enhance blood depuration via diffusion.
- The sieving profile ensures useful proteins, like albumin, are preserved. It also helps with removal of medium molecular weight toxins, like myoglobin and B2M.
CARE FOR THE PATIENT AND THE ENVIRONMENT

- The benefits of polypropylene also translate in reducing the global carbon footprint by 60 percent as compared to polycarbonate. Up to 95 percent of the water and solvent used during fiber manufacturing can be recycled to reduce environmental waste.
- Steam sterilization helps ensure ozone is not released into the atmosphere.

HANDLING AND PRIMING

Clearum™ HS dialyzers are designed to help deliver effective treatments.

- The dialyzer packing density and the hydrophilicity of the membrane aid in achieving efficient priming and adequate air removal which may help prevent potential clotting issues.
- Clearum™ HS dialyzers are manufactured with polypropylene, to help reduce the weight of the dialyzer.
- Wide range of surface areas are available to meet a variety of patient needs.
**IN VITRO PERFORMANCE**

<table>
<thead>
<tr>
<th>Code</th>
<th>Item</th>
<th>Urea (mL/min)</th>
<th>Creatinine (mL/min)</th>
<th>Phosphates (mL/min)</th>
<th>Vitamin B12 (mL/min)</th>
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</thead>
<tbody>
<tr>
<td>IBP4370</td>
<td>HS 13</td>
<td>246</td>
<td>220</td>
<td>205</td>
<td>141</td>
</tr>
<tr>
<td>IBP4371</td>
<td>HS 15</td>
<td>264</td>
<td>240</td>
<td>226</td>
<td>160</td>
</tr>
<tr>
<td>IBP4372</td>
<td>HS 17</td>
<td>266</td>
<td>243</td>
<td>231</td>
<td>167</td>
</tr>
<tr>
<td>IBP4373</td>
<td>HS 20</td>
<td>271</td>
<td>253</td>
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<tr>
<td>IBP4374</td>
<td>HS 22</td>
<td>275</td>
<td>258</td>
<td>248</td>
<td>194</td>
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</tbody>
</table>

In vitro clearances: Qb = 300 mL/min; Qf = 10 mL/min; Qd = 500 mL/min

The performance data provided refers to in-vitro tests performed in accordance with ISO 8637-1. The values indicated are to be considered approximate and may vary due to measurement methods, inherent variations of the membrane, manufacturing and storage conditions. During the treatment, performance on the individual patient may vary due to variable clinical parameters of the patient.

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>Code</th>
<th>Name</th>
<th>Description</th>
<th>Quantity</th>
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</thead>
<tbody>
<tr>
<td>IBP4370</td>
<td>CLEARUM™ HS 13</td>
<td>1.3 m² high – flux dialyzer sterilized by moist heat</td>
<td>21 per box</td>
</tr>
<tr>
<td>IBP4371</td>
<td>CLEARUM™ HS 15</td>
<td>1.5 m² high – flux dialyzer sterilized by moist heat</td>
<td>21 per box</td>
</tr>
<tr>
<td>IBP4372</td>
<td>CLEARUM™ HS 17</td>
<td>1.7 m² high – flux dialyzer sterilized by moist heat</td>
<td>21 per box</td>
</tr>
<tr>
<td>IBP4373</td>
<td>CLEARUM™ HS 20</td>
<td>2.0 m² high – flux dialyzer sterilized by moist heat</td>
<td>18 per box</td>
</tr>
<tr>
<td>IBP4374</td>
<td>CLEARUM™ HS 22</td>
<td>2.2 m² high – flux dialyzer sterilized by moist heat</td>
<td>18 per box</td>
</tr>
</tbody>
</table>

References

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