Introducing Xenium XPH
High-Flux Synthetic Dialyzers
Xenium XPH Dialyzers

- Latest innovation in Baxter’s HD product portfolio
- Builds on success of Xenium dialyzer to deliver exceptional performance
Xenium XPH Dialyzers

- Available in six surface area sizes
- Incorporates Polynephron synthetic membrane
Next-generation polyethersulfone (PES) offers
- Improved middle molecule clearances\(^1\)
- Excellent urea clearances\(^1\)
- Biocompatibility

1. Manufacturers’ published data sheets (Baxter Xenium XPH series, Gambro Polyflux H series and Revaclear series dialyzers, and Fresenius Optiflux series dialyzers)
Competitive Comparisons

- Urea and Vitamin $B_{12}$ clearance comparisons
  - Xenium XPH Dialyzer
  - Polyflux
  - Optiflux
  - Revaclear
Xenium XPH vs. competition

**HIGH-FLUX DIALYZER IN-VITRO CLEARANCE COMPARISONS**

Optiflux, Polyflux and Revaclear data adjusted to 10 mL/min Ultrafiltration Rate $Q_f$

<table>
<thead>
<tr>
<th>Small Molecule Clearance (Urea, mL/min)</th>
<th>Middle Molecule Clearance (Vitamin B$_{12}$, mL/min)</th>
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<tbody>
<tr>
<td>Improved middle molecule clearance</td>
<td>Excellent urea clearance</td>
</tr>
<tr>
<td>Advanced synthetic membrane</td>
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Xenium XPH vs. Optiflux

HIGH-FLUX DIALYZER IN-VITRO CLEARANCE COMPARISONS

Optiflux data adjusted to 10 mL/min Ultrafiltration Rate Qf

Best-in-class features:

- Improved middle molecule clearance
- Excellent urea clearance
- Advanced synthetic membrane

Xenium XPH vs. Polyflux

HIGH-FLUX DIALYZER IN-VITRO CLEARANCE COMPARISONS (Q<sub>f</sub> 300 mL/min  Q<sub>f</sub> 500 mL/min)
Polyflux data adjusted to 10 mL/min Ultrafiltration Rate Q<sup>f</sup>

Best-in-class features:
- Improved middle molecule clearance
- Excellent urea clearance
- Advanced synthetic membrane

Does size matter?

- The Polynephron membrane allows the **Xenium** XPH dialyzer to achieve better clearance rates with similar or smaller surface areas
Does size matter?

HIGH-FLUX DIALYZER IN-VITRO CLEARANCE COMPARISONS (Q₀ 300 mL/min  Q₀ 500 mL/min)
Optiflux and Polyflux data adjusted to 10 mL/min Ultrafiltration Rate Qf†

Best-in-class features:
- Improved middle molecule clearance
- Excellent urea clearance
- Advanced synthetic membrane

Xenium XPH vs. Revaclear

HIGH-FLUX DIALYZER IN-VITRO CLEARANCE COMPARISONS (Q_0 300 mL/min, Q_0 500 mL/min)
Revaclear data adjusted to 10 mL/min Ultrafiltration Rate Qf†

Best-in-class features:
- Improved middle molecule clearance
- Excellent urea clearance
- Advanced synthetic membrane

Xenium XPH performance factors

- Polynephron fiber
  - Designed with micro-undulations built into fibers\(^2\)
  - Delivers optimal flow dynamics to avoid dialysate channeling
  - Provides for ideal dialysate distribution

2. Data on file
Xenium XPH performance factors

Polynephron membrane (magnified)

- **Xenium XPH fibers’ optimized structure**\(^3\)
  - Provides uniform pore distribution and wall thickness

3. Data on file
Endotoxin adsorption

- A recent study titled “Cytokine-Inducing-Substances with New High Flux Membranes”\(^4\) conducted by Pokropinski, S., et al, concluded that **Xenium** XPH’s Polynephron fibers:
  - Exhibit remarkable capacity to adsorb endotoxins
  - May be impermeable to endotoxins

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Xenium XPH performance factors

- Casing technology
  - Designed with slim-line chamber
    - Allows for tight fiber pack-factor
    - Facilitates optimized dialysate flow
Xenium XPH safety features

- Safety features
  - Unique, oxygen-free gamma sterilization process helps reduce risk from free radical formation during sterilization
Xenium XPH safety features

- Safety features
  - Added caps on dialysate ports
  - Easily identifiable blood inlet and outlet colors
  - Easy-to-distinguish color-coded labels, by size
Warning: This product is intended for single use only.

Caution: Federal (US) law restricts these devices to sale by or on the order of a physician or other licensed practitioner.

For safe and proper use of these devices refer to the device instructions.
References:

1. Manufacturers’ published data sheets (Baxter Xenium XPH series, Gambro Polyflux H series and Revaclear series dialyzers, and Fresenius Optiflux series dialyzers)

2. Data on file

3. Data on file


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