Vantive

Polyflux 210H
Dialyzer

Polyflux 210H

DESIGNED FOR:	OTHER APPLICABLE THERAPIES:	MEMBRANE:
CONVECTIVE (HDF-HF)	**HFHD** (High flux)	**POLYAMIX** (PAES/PVP/PA, BPA-free)

FOR EFFECTIVE CONVECTIVE THERAPIES

The **Polyflux** H dialyzer series deliver proven biocompatibility[1] with consistent performance. The **Polyflux** H dialyzers effectively support the delivery of high-volume convective therapies[2] while helping control the loss of essential proteins such as albumin[3], particularly challenging at high flows and TMPs.

DESIGNED TO PROMOTE BIOCOMPATIBILITY[1]

The **Polyflux** H dialyzers deliver convective treatments (HDF or HF mode), as well regular high-flux hemodialysis.

> Since 1988, over 300 million **Polyflux** dialyzers have been used globally[4]
> Composed of the **Polyamix** membrane, which is BPA-free, the **Polyflux** H dialyzers may limit the risk of clotting events[1]
> The **Polyflux** H dialyzers are steam sterilized inside-out, designed to promote biocompatibility, avoiding the risks associated with the exposure to chemicals such as ethylene oxide and manufacturing residues[5,6]

WITH HIGH CONVECTIVE VOLUMES IN MIND

The **Polyflux** H dialyzers are aimed at delivering stable and high performing convective treatments, supporting a consistent reach of high volumes of substitution fluid.

> Narrow pore size distribution is responsible for a carefully controlled albumin selectivity, combined with an effective permeability to small and conventional middle molecules[1]
> The 3-layer-membrane structure has been designed to optimize the combination of high diffusive and convective transport rates, while acting as a barrier to endotoxins[7]
> Facilitates obtention of high convective flow rate, and provides effective clearance of conventional middle molecules such as β_2-microglobulin (β_2m)[8,9]

Polyflux 210H Specifications

MATERIALS	POLYFLUX 210H
Membrane	**Polyamix** Polyarylethersulfone, Polyvinylpyrrolidone and Polyamide blend BPA-free
Potting	Polyurethane (PUR)
Housing	Polycarbonate (PC)
Gaskets	Silicone rubber (SIR)
Protection caps	Polypropylene (PP)
Sterilization	Steam (inside-out)
Sterile barrier	Medical Grade Paper

SPECIFICATIONS	
UF-Coefficient (mL/(h*mmHg))*	85
KoA urea*	1452
Blood Compartment volume (mL)	125
Minimum recommended priming volume (mL)	500
Maximum TMP (mmHg)	600
Recommended Q_B (mL/min)	300–500
Storage conditions	< 30°C (or < 86°F)
Units per box	24
Gross/net weight (g)	317/300

MEMBRANE	
Effective Membrane Area (m^2)	2.1
Fiber inner diameter (µm)	215
Fiber wall thickness (µm)	50

SIEVING COEFFICIENTS*	
Vitamin B12 (1.4 kDa)	1.0
Inulin (5.2 kDa)	1.0
β_2-microglobulin (11.8 kDa)	0.82
Myoglobin (17 kDa)	0.37
Albumin (66.4 kDa)	0.0022

*According to EN 1283/ISO 8637:
> UF-Coefficient: measured with bovine blood, Hct 32%, Pct 60 g/L, 37°C
> KoA urea: calculated at Q_B = 300 mL/min, Q_D = 500mL/min, UF = 0 mL/min
> Sieving coefficients: measured with bovine plasma, Q_B = 300 mL/min, UF = 60 mL/min
> Clearances In-Vitro: measured at UF = 0 mL/min, ± 10%
HDF/HF mode: measured at UF = 60 mL/min, ± 10%

CLEARANCES IN VITRO (mL/min)*	POLYFLUX 210H
	HEMODIALYSIS MODE (HD)
Urea (60 Da) (Q_B–Q_D, mL/min)	
300/500	281
400/500	339
500/500	378
Phosphate (95 Da)	
300/500	249
400/500	289
500/500	317
Creatinine (113 Da)	
300/500	259
400/500	303
500/500	334
Vitamin B12 (1.4 kDa)	
300/500	183
400/500	203
500/500	218
Inulin (5.2 kDa)	
300/500	131
400/500	143
500/500	151
	HEMODIAFILTRATION MODE (HDF/HF)
Urea (60 Da) (Q_B–Q_D, mL/min)	
300/500	290
400/500	359
500/500	406
Phosphate (95 Da)	
300/500	266
400/500	314
500/500	347
Creatinine (113 Da)	
300/500	274
400/500	327
500/500	363
Vitamin B12 (1.4 kDa)	
300/500	208
400/500	232
500/500	249
Inulin (5.2 kDa)	
300/500	161
400/500	174
500/500	183

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5. Golli-Bennour EE, et al. Cytotoxic effects exerted by polyarylsulfone dialyser membranes depend on different sterilization processes. *Int Urol Nephrol.* 2011;43:483–490.
6. D'Ambrosio FP, et al. Ethylene oxide allergy in dialysis patients. *Nephrol Dial.* 1997;12:1461–1463.
7. Schepers E, Glorieux G, Eloot S, et al. Assessment of the association between increasing membrane pore size and endotoxin permeability using a novel experimental dialysis simulation set-up. *BMC Nephrology.* 2018;19:1.
8. Panichi V, et al. Divert to ULTRA: differences in infused volumes and clearance in two on-line hemodiafiltration treatments. *Int J Artif Org.* 2012;35 (6):435–443.
9. Meert N, et al. Effective removal of protein-bound uraemic solutes by different convective strategies: a prospective trial. *Nephrol Dial Transplant.* 2009;24:562–570.

For safe and proper use of the device, please refer to the Instructions for Use.

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