

CLEVER HDF ON-LINE THERAPY

OLpūr™
MID dilution dialyzers

The difficulties to achieve high convective volumes

Target convective volumes can be difficult to achieve for many patients with common conditions such as poor vascular accesses with limited blood flow, high hematocrit levels, coagulation projects, and high ultrafiltration rates.¹

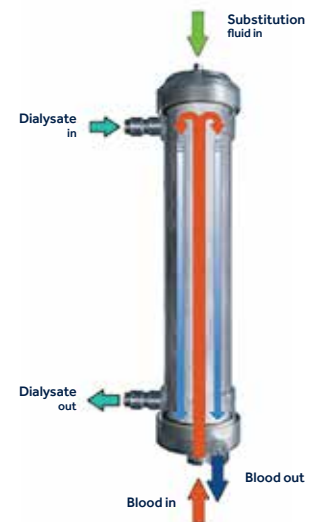
Although there are several approaches that can be used to increase the convection volume, one of the key features of increasing the reinfusion volume is by the use of the smart combination of post- and pre-dilution technique obtained by the clever design of the Mid-Dilution dialyzer.

The OLpūr™ MID dilution dialyzers are single use devices indicated for extracorporeal dialysis treatments in hemodiafiltration (HDF) mode. They can be used in any machine that can perform HDF online. They are designed to enable pre-dilution and post-dilution at the same time.

There are two headers:

1. A blood header with both a blood inlet port and a blood outlet port
2. An infusion header which allows the entrance of the substitution fluid


The arrangement of the two headers produces a dialyzer capable of mid dilution hemodiafiltration: post-dilution takes place in the core section and pre-dilution occurs in the external circular section.



A typical circuit diagram

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BENEFITS OF MID DILUTION

<p>INCREASE OF RE-INFUSION VOLUME</p>	<p>ATTENUATION OF INFLAMMATORY STATUS</p>	<p>HIGH REMOVAL OF SMALL AND MIDDLE MOLECULES EVEN WITH LESS EFFECTIVE BLOOD FLOW</p>
<p>MAXIMIZATION OF SIGNIFICANT CONVECTIVE VOLUME EVEN WITH LIMITED VASCULAR ACCESS</p>	<p>INCREASE OF REMOVAL OF MIDDLE MOLECULES VERSUS HDF POST</p>	 <p>OLpūr™ MID dilution dialyzers</p>

CLINICAL EVIDENCE TO SUPPORT MID DILUTION

Clinical Condition	Results	References
Patients with difficulties to achieve high convective volume in online HDF	Significant increasing of convective volume reinfused in post-dilution for MID group (>25.4 L) vs HDF Post (post-dilution group).	Creput C, et al. <i>Nephrol Dial Transplant</i> 2014; 29 (suppl 3): iii209-iii222
	Attenuation of inflammatory pattern in MID group correlated with higher convective volume.	Borrelli S, et al. <i>Nephrol Dial Transplant</i> 2014; 29 (suppl 3): iii287-iii303
Patients with inadequate blood flow	High removal of small molecular- weight and medium-molecular-weight solutes, even in patients with permanent central venous catheters and fistulas with less than optimal effective blood flows.	Mandolfo S, et al. <i>Hemodialysis Int</i> 2008; 12: 55-61

ORDERING INFORMATION

Code	Name	Description	CND	GMDN
IB0958079	OLpūr™ MD190	Hemodialyzers for Mid-dilution hemodiafiltration	F01060303	47072
IB0958105	OLpūr™ MD220	Hemodialyzers for Mid-dilution hemodiafiltration	F01060303	47072

Reference:

1. Maduell F. Is There an 'Optimal Dose' of Hemodiafiltration? *Blood Purif* 2015;40(suppl 1):17-23.

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