



HighVolumeHDF

Do it for your patients: **Just push the button**

What is HighVolumeHDF?



HighVolumeHDF

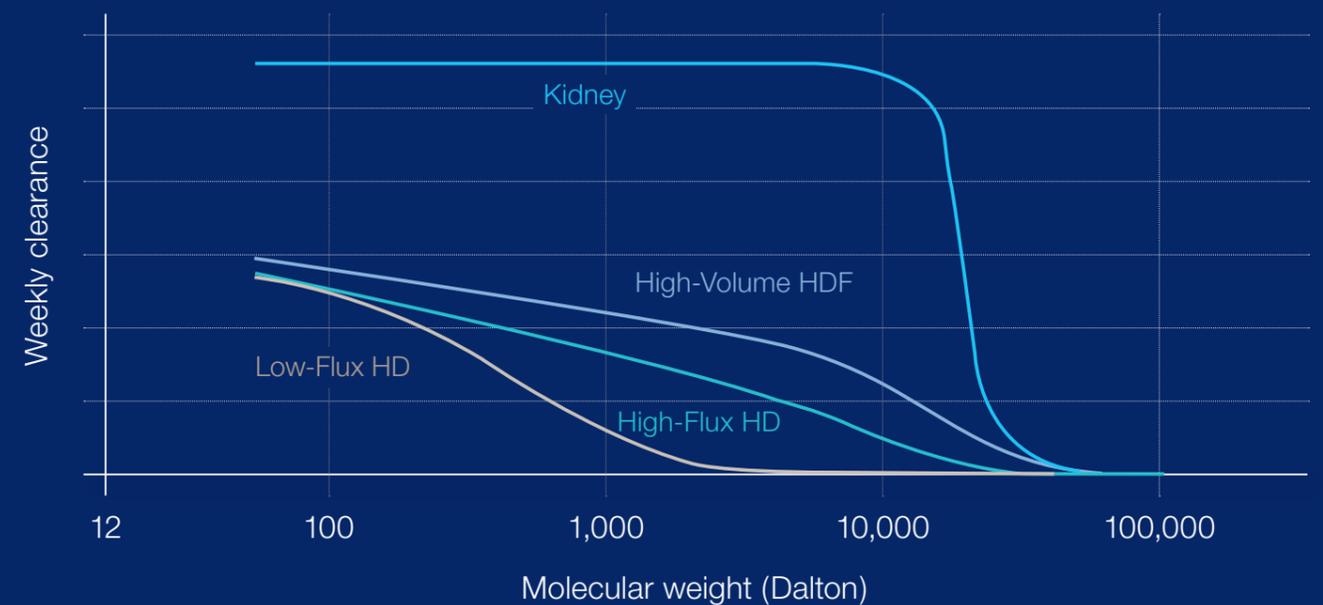
is the renal replacement therapy that comes closer to the purification profile of natural kidneys, thanks to the combination of two principles¹:

Diffusion



Convection

It is the most effective modality in the typical in-center 4-hour hemodialysis setting with regards to patient survival.^{2,3}



Schematic graph adapted from Benz MR et al. 2012¹

Why HighVolumeHDF?



“ For me, HighVolumeHDF is a form of dialysis that I really feel is more comfortable for me and provides greater relief. I just feel more at ease than during normal hemodialysis. ”

Ibrahim, HighVolumeHDF patient from Germany



“ I can climb the stairs, attend all classes. I started practicing sports. I started to have a much more active life, date more... ”

Danielle, HighVolumeHDF patient from Brazil



Survival



30%
risk reduction in all-cause mortality
(ESHOL Study – 2013)⁴

31%
risk reduction in mortality from cardiovascular causes – unadjusted data*
(HDF European Pooling Project – 2016)⁵

23%
risk reduction in all-cause mortality in the HDF vs. HD groups
(CONVINCE Study – 2023)²

High volume HDF as well as HDF reduce the risk for all-cause mortality and for cardiovascular mortality.⁹

Treatment tolerance and patient reported outcomes



28%
risk reduction in intradialytic hypotension episodes
(ESHOL Study – 2013)⁴

May reduce dialysis-related amyloidosis
(NICE RRT Guidelines – 2018)⁶

Positive effects on quality of life with hemodiafiltration¹⁰:

- Physical functions
- Pain interference
- Cognitive function
- Ability to participate in social roles and activities

Cost effectiveness



up to 9%
estimated reduction in requirement for EPO with HDF compared to HD
(NICE RRT Guidelines – 2018)⁶

23%
approximate reduction in sevelamer phosphate binder dose with HDF compared to HD
(Pedrini Study – 2011)⁷

28%
Savings water, energy and concentrates with AutoFlow feature in HighVolumeHDF can be achieved when using 5008 series and 6008 CAREsystem
(internal calculation)⁸

23%
risk reduction in hospitalization
(ESHOL-Study, 2013)⁴

* In the patient subgroup with more than 23L of convective volume. Unadjusted data.

How

With excellent support

Our expertise helps you to establish simple and uncomplicated processes.

We have 35 years of commitment to HDF.



In 2022, more than 55,000 patients were prescribed with hemodiafiltration in our dialysis centers.



Technical service

With certified planning, installation, support, and maintenance of equipment.

Water Quality Assurance

Concerned about water quality? We cover you from tap to needle.

Automation & Documentation

Create therapy evidence effortlessly with automation.

HDF disposables

We deliver what you need: Consumables specifically designed to fulfill both adults and pediatric prescriptions.

Medical & Scientific Information

Access scientific evidence and our extensive therapy implementation experience. Open to address medical questions and provide solutions.

Education & Guidance

Therapy implementation and guidance for the clinic stakeholder through online and on-site medical and technical trainings, medical forums, and practical experience in **HighVolumeHDF** centers with experience.

Technology

Work with technology to perform reliable and high-quality **HighVolumeHDF** while improving use of resources.

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References:

1. Benz et al. (2012). Technical Aspects of Hemodialysis in Children. In: Warady, B., Schaefer, F., Alexander, S. (eds) Pediatric Dialysis. Springer, Boston, MA. https://doi.org/10.1007/978-1-4614-0721-8_17.
2. Blankenstijn PJ et al. CONVINCe Scientific Committee Investigators, Effect of Hemodiafiltration or Hemodialysis on Mortality in Kidney Failure N Engl J Med. 2023;389(8):700-709.
3. Strippoli GFM, Green SC. Actioning the findings of hard endpoint clinical trials as they emerge in the realm of chronic kidney disease care: a review and a call to action. Clin Kidney J. 2024 Feb 9;17(2):sfae035. doi: 10.1093/ckj/sfae035. PMID: 38425707; PMCID: PMC10903297.
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5. Peters S.A.E. et al., Haemodiafiltration and mortality in endstage kidney disease patients: a pooled individual participant data analysis from four randomized controlled trials, Nephrol Dial Transplant (2016) 31: 978-984.
6. www.nice.org.uk/guidance/ng107, Renal replacement therapy and conservative management, published date: October 2018. *All statements and assessments by NICE are based on care practice and costs in England.
7. Pedrini, L. et al., Long-term effects of high-efficiency on-line haemodiafiltration on uraemic toxicity. A multicentre prospective randomized study. Nephrol Dial Transplant. 2011 Aug;26(8):2617-24. doi: 10.1093/ndt/gfq761. Epub 2011 Jan 18. PMID: 21245130.
8. Internal calculation is based on an example at QB = 300 mL/min and a 240-minute treatment. There are savings of 34 L of dialysis fluid with post HDF at AutoFlow factor 1.2, with QD = 360 mL/min, compared to post HDF, with a fixed QD = 500 mL/min.
9. Vernooij RMW et al. Haemodiafiltration versus haemodialysis for kidney failure: an individual patient data meta-analysis of randomised controlled trials. The Lancet 2024; 404: 1742-49
10. Rose M et al., The CONVINCe randomized trial found positive effects on quality of life for patients with chronic kidney disease treated with hemodiafiltration, Kidney Int 2024 Nov;106(5):961-971.