# 5008 CorDiax & 5008S CorDiax



## HighVolume**HDF** as easy as HD

- AutoSubplus Automatically maximizing substitution volume for HighVolumeHDF
- Venous Access Monitoring (VAM) Optimized monitoring of the venous path
- Easy handling
- Efficient and sustainable

# **HighVolumeHDF** as standard

5008S CorDiax

With the new AutoSub*plus* function of the 5008 and the 5008S HighVolume**HDF** becomes as simple and reliable as HD without any additional need for user interaction.



## Opening a world of possibilities

# 5008 CorDiax

Beyond your expectations

5008S CorDiax enables HighVolume**HDF** as a standard in dialysis thanks to AutoSub*plus* for automatically maximized substitution volumes and the Venous Access Monitor (VAM) for increased probability of early detection of needle dislodgement.

Next to AutoSub*plus* and VAM the 5008 CorDiax also offers patients with challenging conditions the possibility for a high convective therapy – MIXED HDF.

# **HighVolumeHDF** therapy

#### HighVolumeHDF — The standard in cardioprotective hemodialysis



AutoSubplus — Automatically maximizing substitution volume for HighVolumeHDF

The innovative AutoSub*plus* system is much more than just another automatic pressure control:

Very precise information on the conditions in the dialyzer is available - not just across the membrane but also along the blood flow pathway

Several checks per minute enable the continuous optimization of the substitution rates

The system is automatically activated at the start of treatment

AutoSub*plus* supports the nephrologist in establishing HighVolume**HDF** as standard therapy.



# Insight and continuity make the difference

While other systems check and adjust the transmembrane pressure (TMP) in defined time intervals, AutoSubplus measures and evaluates the conditions directly inside the filter several times per minute. The innovative technology behind it is based on a dynamic signal analysis of pressure pulses. As a result, substitution volumes can be maximized individually for every patient without any user interaction.

MIXED HDF – HDF without exceptions

In order to achieve the full benefits of HDF therapy large convective volumes in post-dilution mode are required. In the past many users were concerned that these high volumes may lead to excessive hemoconcentration and subsequently high transmembrane pressures if the treatment settings are not continuously monitored and adjusted.

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A close up of two substitution pumps that make Mixed HDF possible.

Although most patients will reach sufficient substitution volumes with AutoSubplus, there might be patients with unfavorable conditions unable to reach sufficiently high convective volumes. For these patients we have intensified our research and developed the MIXED HDF option for the 5008 CorDiax.

#### MIXED HDF – High convective transport under unfavorable patient conditions

The 5008 CorDiax enables the simultaneous delivery of post- and pre-dilution volumes — the so called MIXED HDF. With its two substitution pumps, the convective transport can be increased by adding a pre-dilution share to avoid the risk of hemoconcentration or to compensate for low blood flows.

#### Safety creates confidence



Venous Access Monitoring (VAM) — Optimized monitoring of the venous path

VAM is a unique and intelligent safety feature. It enables dynamic and highly-sensitive monitoring of the venous pressure by combining arterial and venous pressure signals with an adaptive algorithm. In this way, VAM is designed to indicate sudden, small drops in venous pressure of approximately 15 mmHg, even when the venous pressure does not exceed the lower alarm limit. VAM has been developed to support the health-care professionals in early detection of venous needle dislodgement. Still, the user remains responsible for patient safety at all times during treatment. VAM also includes an alarm management system: an alarm is activated if the monitored signals show exceptional or abnormal variations to the previous pressure profile.

If an alarm is emitted, the blood pump is stopped immediately and the venous clamp is closed. This aims to give the nursing staff more time to react appropriately to critical pressure changes.

In particular during HighVolume**HDF** where high blood flows are aspired for, monitoring of the venous access is essential as a blood loss would become critical within a very short time. The 5008 CorDiax and 5008S CorDiax offer as standard in all machines a sophisticated safety feature to minimize the risk of external blood loss:

### Easy handling

#### ONLINE*plus* – Reducing workload, increasing usage

Historically, the required amounts of substitution fluid had to be provided in infusion bags. This added to the workload of the nursing staff and deterred dialysis-centers from using HDF. In order to give more patients access to the benefits of HDF, we have developed a dialysis system, which prepares the substitution fluid directly at the bedside – The ONLINE*plus* system. Based on the highly reliable two stage filtration process ONLINE*plus* facilitates the online production of sterile and nonpyrogenic substitution fluid very cost-efficiently. Online hemodiafiltration was born.

## Blood lines

Our innovative blood lines are developed based on the idea that HighVolume**HDF** shall be as easy and safe to handle as HD. With a standard setup of a 5008 CorDiax or 5008S CorDiax you can already perform HighVolume**HDF**.

#### Efficient and sustainable

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It is not only the advanced treatment options that makes the 5008 series unique, but also its eco-friendliness: with the 5008 CorDiax series, Fresenius Medical Care supports the sensible and sustainable use of resources by saving dialysate, water and energy. This in turn leads to significant cost savings.

- ONLINE plus technology for production of sterile, endotoxin-free and bicarbonate-buffered electrolyte solutions<sup>1</sup>
  - Extensive amounts of substitution fluid for HDF available
  - No more need for ready-made rinse solutions: priming, reinfusion and bolus with ONLINE fluid in all treatment modes (also in HD)<sup>2</sup>
- AutoFlow automatically adjusts the dialysate flow rate to the effective blood flow rate during treatment
  - Substantial saving of water, waste water, concentrates and energy, leading to significant cost reductions
  - Automatic selection of AutoFlow factor based on treatment mode, always accomplishing an optimal ratio between economic considerations and treatment quality
- EcoFlow for minimized dialysate and energy consumption during preparation and after reinfusion while avoiding bacterial growth

## Related content



#### HighVolumeHDF >

HighVolumeHDF is Fresenius Medical Care.