

# **HD<sub>x</sub>** THERAPY. **YOUR WAY.**

An integrated approach to renal care



# BAXTER IN-CENTER TREATMENT OPTIONS

## CARE FOR YOUR PATIENTS, YOUR WAY.

Our integrated treatment options have been created to reach two objectives:



## PATIENT OUTCOMES

Improving the quality of treatment for the patients

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## AN INTEGRATED TREATMENT OPTION TO ACHIEVE HDF PERFORMANCE AND BEYOND\*, AS SIMPLE AS HD

By combining monitors and features, consumables, systems and services into one integrated treatment option, we aim to help healthcare professionals with improving outcomes for their patients, all while controlling their operational efficiency.

The integrated treatment options are designed to help improve quality of treatment while considering governmental and economic factors at work in a particular environment.

This is how we are **Making Possible Personal.**

\* Do not use THERANOVA dialyzers in HDF or HF mode

We believe every person suffering from kidney disease deserves the right therapy, at the right time, in the right clinical environment.

What's more, as a global provider, we understand that every patient, and clinic, is different and has different needs.

One of the main challenges healthcare professionals face is achieving balance between clinical targets and operational requirements. Attaining these two objectives can be challenging.

It is for this reason that we have designed **a wide range of treatment options, that help enable healthcare professionals overcome their challenges, their way.**



## OPERATIONAL EFFICIENCY

Controlling and minimizing operational costs



The expanded hemodialysis therapy, HDx, provides HDF performance and beyond in the removal of large middle molecules, using regular HD infrastructure

\* Do not use THERANOVA dialyzers in HDF or HF mode

# FOCUS ON LARGE MIDDLE MOLECULES

1

## **Removal of large middle molecules; an unmet need in helping patient's long term health?**

Kt/V still plays a role as dose marker.<sup>1</sup> Then beta 2 microglobulin came in focus as high-flux dialysis was more commonly applied<sup>6</sup> Today, large middle molecules, larger in size than beta 2 microglobulin, are increasingly seen as important to consider when prescribing dialysis.<sup>5</sup>

2

## **Many large middle molecules are not cleared effectively using current HD technologies<sup>6</sup>**

Current dialyzer design, limited by membrane permeability, does not provide effective reduction of large middle molecules, and their concentration increases in body fluids as renal function deteriorates.<sup>5</sup>

3

## **Switching to HDF requires new workflow and additional quality assurance procedures<sup>7</sup>**

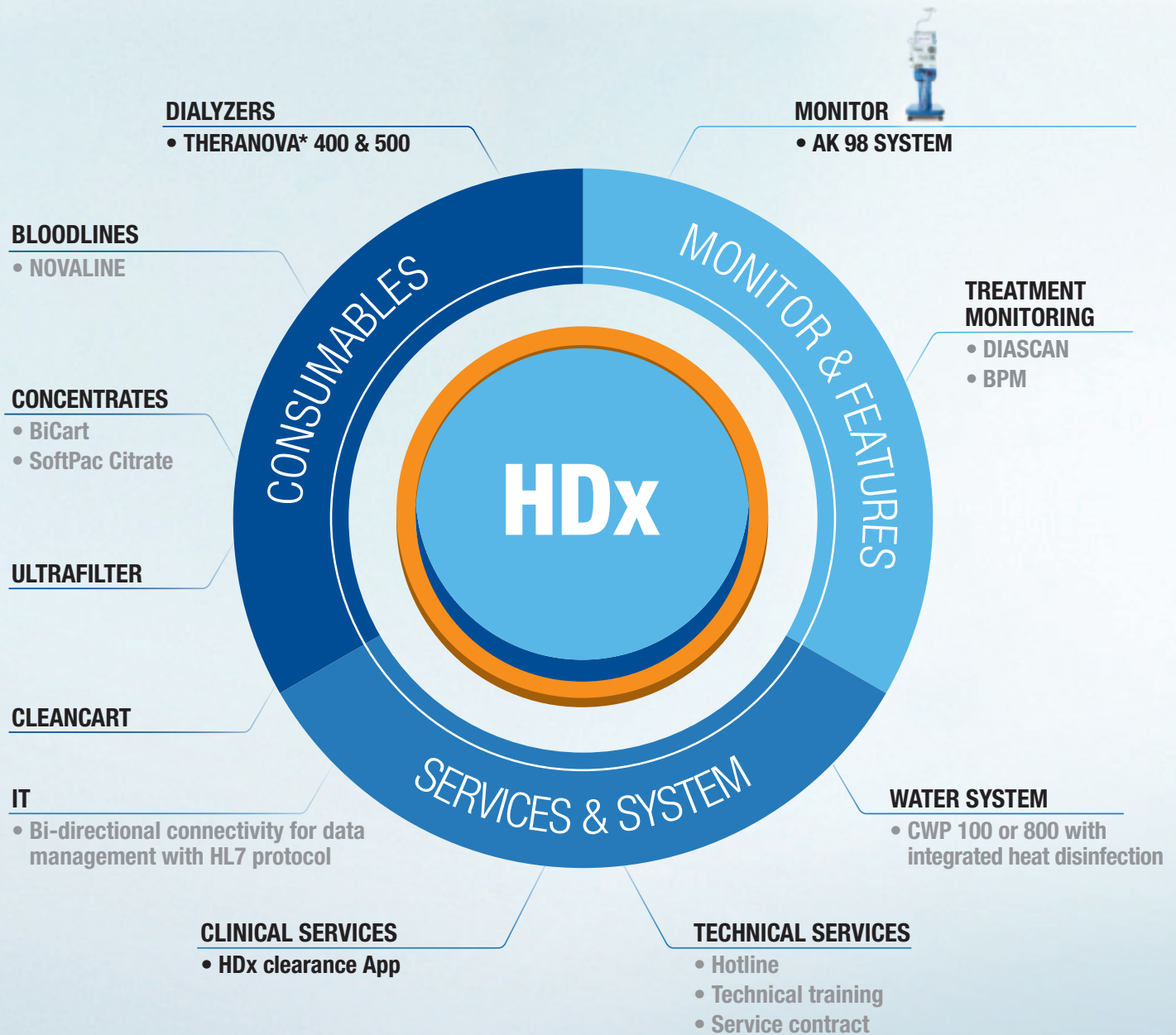
Moving from HD to HDF can improve removal of middle molecules, but maintaining staff proficiency and satisfaction is also crucial, while changing operating procedures takes major efforts.

4

## **Consistent delivery of high volume post dilution HDF may be challenging<sup>7</sup>**

HDF requires well-performing vascular access with large needle size to allow high blood flow.<sup>7</sup> Hemoconcentration or pressure alarms may require nurse intervention, and may not allow the targeted convective volume to be reached.<sup>9</sup>

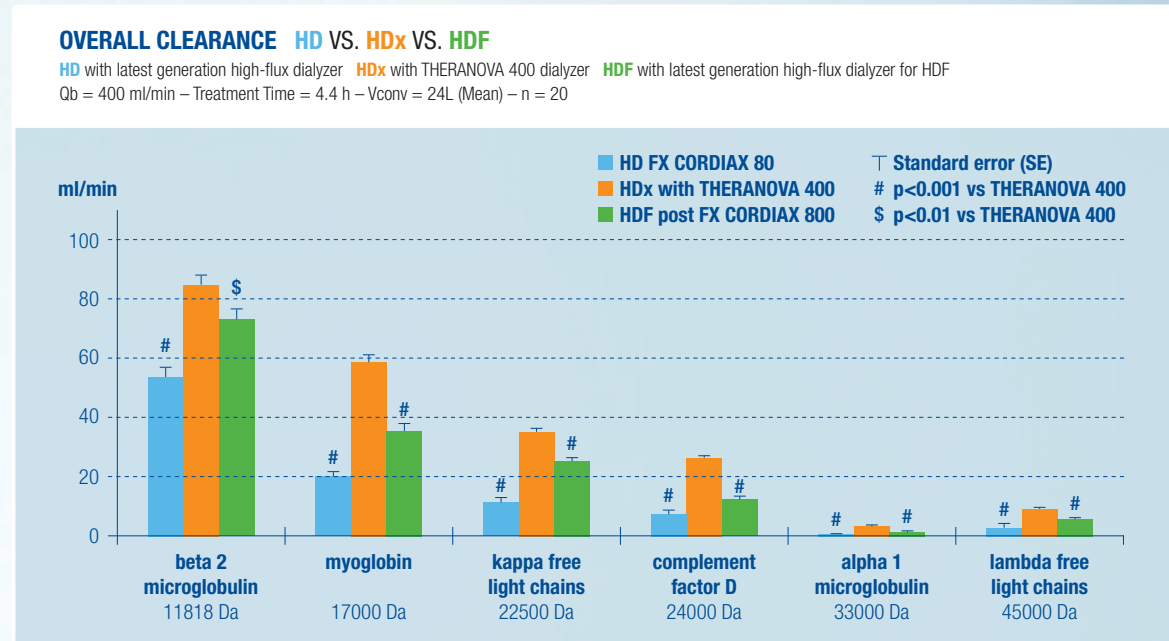
# AN INTEGRATED TREATMENT OPTION ACHIEVING HDF PERFORMANCE AND BEYOND, AS SIMPLE AS HD



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# MEMBRANE INNOVATION DESIGNED TO TARGET LARGE MIDDLE MOLECULES EFFECTIVELY

Thanks to the unique permeability and selectivity properties of the THERANOVA membrane, the clearance of large middle molecules is significantly higher than with conventional high-flux membranes.<sup>9</sup>



Adapted from 8) Kirsch et al. *Nephrol Dial Transplant* 2017.

## SIMPLIFIED OPERATIONS WITH THE AK 98 SYSTEM

### The THERANOVA dialyzer is validated for the AK 98 system<sup>10</sup>

- Including Assisted priming with programmable priming volume<sup>10</sup>
- Programmable extra priming or recirculation may be performed according to the procedures of the clinic<sup>10</sup>

### Simple HD operations with the AK 98 system

- **Ease of use**  
Touch screen user interface and discernible alarm light
- **Compatible with the busiest clinics**  
Automated and short disinfection enabling low time between treatments
- **Effective integration and compliance**  
A number of parameters can be preset to adapt to local procedures



# OUR HDx TREATMENT OPTION MAY HELP DELIVER HDF PERFORMANCE AND BEYOND IN HD MODE

1

## Shifting focus to large middle molecules

Mortality from cardiovascular and infectious events in HD remains unsatisfactorily high with current dialytic therapies.<sup>4</sup> Large middle molecules have been associated with inflammation, cardiovascular events and other dialysis-related comorbidities.<sup>5</sup>

2

## The HDx therapy provides HDF performance and beyond in the removal of large middle molecules

Despite its higher permeability, the membrane of the THERANOVA\* dialyzer retains essential proteins and does not seem to have any impact on serum albumin levels after 6 months compared to HDF<sup>2</sup>; it also remains an effective barrier to potential dialysis fluid contaminants.<sup>3</sup>

3

## The HDx therapy enabled by the THERANOVA dialyzer is as simple as HD

The HDx therapy is compatible with existing HD environment and can be implemented with limited training effort. It does neither require large volumes of sterile infusion fluid, nor extra monitoring of TMP.

4

## The HDx therapy is simple and can be delivered effectively to all patients

The HDx therapy does not induce high hemoconcentration often observed in HDF<sup>9</sup> and high clearances for the large middle molecules are also achieved with a blood flow rate of 300 ml/min.<sup>8</sup>



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For further information visit

[hdxtheranova.com](http://hdxtheranova.com):



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

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