

Baxter



ak98

YOUR PATH TO TARGET



OUR PATIENT AND CLINIC CENTRIC APPROACH TO RENAL CARE

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

It is for this reason we have designed the AK 98 system, to provide healthcare professionals with an HD solution to help overcome their challenges, potentially improve the quality of life for their patients and find the balance between clinical targets and operational requirements. When combined with Baxter's wide range of consumables and services this integrated treatment option enables you to find the right solution for you and your clinic, no matter where in the world you are.

This is how we help to keep you on your path to target.



OPERATIONAL EFFICIENCY

The AK 98 system has been designed to help control and minimize operational and labour costs and improve clinical workflows.

- Easy to use and learn
- Short time between treatments
- Smart alarm design
- Bi-directional connectivity for prescription upload and download



PATIENT CARE

We aim to always provide healthcare professionals with integrated solutions for patients.

- The THERANOVA dialyzer provides HDx, an expanded hemodialysis therapy, providing HDF performance and beyond in the removal of middle and larger middle molecules on the AK 98 system.
- Do not use THERANOVA dialyzers for HDF (hemodiafiltration) or HF (hemofiltration) due to higher permeability of larger molecular weight proteins such as albumin.
- Reach treatment targets more frequently through real-time monitoring of the dose by using the DIASCAN function

THE AK 98 SYSTEM

The AK 98 system is a key component in our range of treatment options and is designed to meet the various needs of our customers. Used in combination with our latest innovations and consumables, the AK 98 system enables health care professionals to stay on their path to target in terms of both improving patient care and operational efficiency.



EASE OF USE IS AT YOUR FINGERTIPS

THE AK 98 SYSTEM FEATURES A USER-FRIENDLY TOUCHSCREEN FOR SMOOTH DIALYSIS MONITORING

It is important that any system introduced into a dialysis clinic is easy to use and supports the clinical workflow. Improving clinics efficiency and reducing staff stress is our top priority. From treatment setup, monitoring, disinfection and treatment management, the AK 98 system helps to accomplish this through a number of features.

A new graphical user interface (GUI) facilitates an easy-to-use treatment process. Treatment set-up now requires fewer button pushes while a new centrally positioned external alarm provides visible indicators to caregivers on treatment progress to support simple session monitoring. The AK 98 system also provides a short time-between-treatments to help prepare even the busiest clinic for their next patient.



MAKING EACH SESSION EASIER FOR YOU



GRAPHICAL USER INTERFACE (GUI)

Graphical user interface (GUI) navigates all working environments and helps ensure that each and every session is delivered easily and efficiently

- Straightforward prescription management
- Simple treatment supervision and report generation
- Easily-access blood and fluid settings
- Parameters are grouped by functions
- Operator messages help guide the decision-making process



EXTERNAL ALARMS

External alarms allow you to always keep warnings in sight

- Centrally positioned lights show when the machine is ready to start
- Alarms provide visible indicators to caregivers on treatment progress
- Easy to prioritize alarms which may defuse certain stressful situations or conditions
- Saves time, as caregivers immediately know which treatment needs to be corrected



IMPROVED TIME BETWEEN TREATMENTS

Improved preparation and disinfection aim to decrease time between treatments

- 32 minutes disinfection time
- Short heat and liquid citric acid ensure disinfection is never compromised
- Fewer button pushes make system preparation quicker and more efficient
- Complements the workflows of even the busiest clinics

REACH YOUR TREATMENT TARGETS

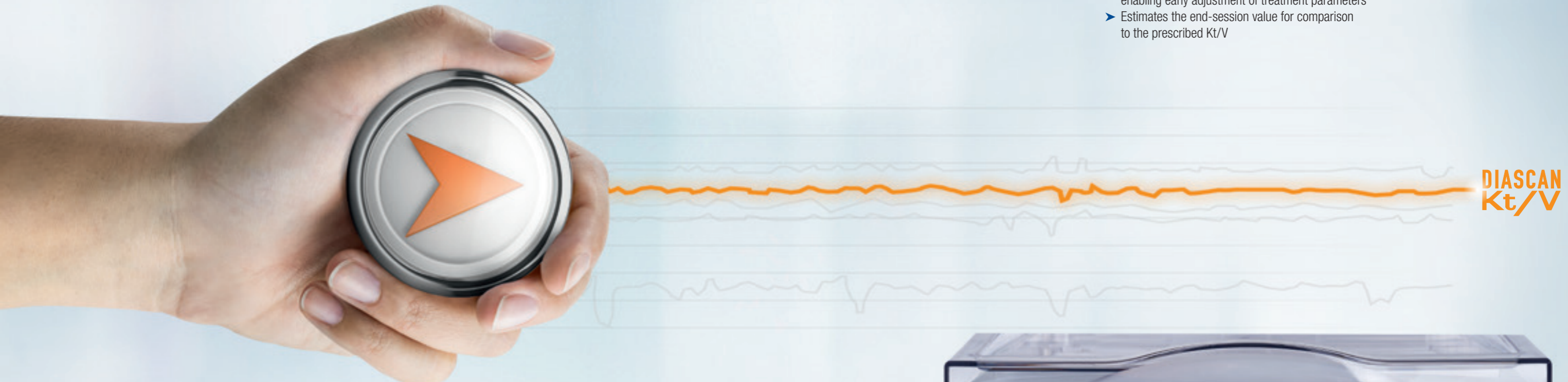
REAL-TIME KT/V CLEARANCE WITH THE DIASCAN FUNCTION

Hemodialysis places a huge responsibility on those delivering the therapy. It is up to you to monitor treatments and to make sure patients reach their treatment targets. It is important that your patients consistently reach their treatment targets as it may reduce the risk of all cause mortality and is essential if patients are to receive the benefits of the treatment.¹⁻³



THE DIASCAN MONITORING SYSTEM: DESIGNED TO REACH THE PRESCRIBED DOSE

- Real time measurement of treatment adequacy
- The repeated measurement of clearance during session is helpful to identify possible deviation
- Early alarm if prescribed target will not be reached, enabling early adjustment of treatment parameters
- Estimates the end-session value for comparison to the prescribed Kt/V



DIASCAN
Kt/V

The DIASCAN on-line monitoring system is an integrated feature of the AK 98 system. With no extra set-up time needed, you are now supported in your daily monitoring through the collection of immediate information.

Alarm system and GUI further support the DIASCAN function. Proactive alerts give you all the relevant information for dialysis dose tracking; therefore you may have the opportunity to adjust the settings in-treatment in cases when prescription targets are at risk.



IT CONNECTIVITY FOR SIMPLIFIED WORKFLOW

As clinical environments become more active and complex – connectivity and digitization becomes crucial to improving quality control and operational efficiency. The AK 98 system is ready to address this challenge.

Connectivity between the AK 98 system and your central IT network allows seamless management and integration of your clinic and patient information. Staff can easily access patient data and files eliminating time spent manually handling documents and decreasing the possibility of errors. At the end of each session treatment data is easily transferred and stored for traceability and quality assurance.



HDF PERFORMANCE AND BEYOND AS SIMPLE AS HD

HDx THERAPY ENABLED BY THERANOVA

The THERANOVA dialyzer, featuring an innovative membrane, effectively targets large middle molecules not efficiently removed by currently available dialysis treatments. It provides expanded hemodialysis therapy, HDx, providing HDF performance and beyond in the removal of middle and larger middle molecules, using regular HD infrastructure.

The premium performance and simplicity of the HDx therapy, enabled by the THERANOVA dialyzer, opens up another option for patients with chronic or acute renal failure requiring hemodialysis.

Do not use THERANOVA dialyzers for HDF (hemodiafiltration) or HF (hemofiltration) due to higher permeability of larger molecular weight proteins such as albumin.

DESIGNED TO TARGET LARGE MIDDLE MOLECULES EFFECTIVELY AND WITH SAFETY IN MIND

➤ Higher permeability

With an increased nominal pore size along the membrane, the THERANOVA dialyzer has a higher permeability for large middle molecules than conventional high-flux membranes.^{4,5}

➤ Enhanced selectivity by size exclusion

The THERANOVA dialyzer membrane, combining a unique asymmetric 3-layer structure^{6,8} with an increased nominal pore size along the membrane's inner layer, enables a stable separation profile and selectivity throughout the treatment.

➤ A step closer to the natural kidney

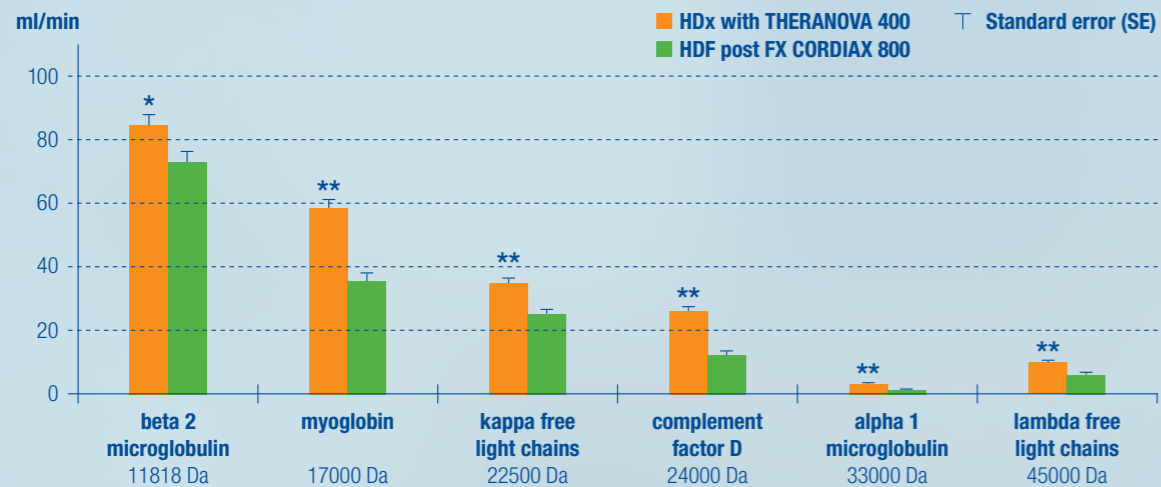
By expanding the range of solutes removed in dialysis, while retaining selectivity towards albumin and other essential proteins, the THERANOVA dialyzer is coming a step closer to the natural kidney.^{4,5}

THE THERANOVA DIALYZER EFFECTIVELY TARGETS MIDDLE MOLECULES, IN AN EQUIVALENT WAY TO HIGH-VOLUME HDF⁸

OVERALL CLEARANCE HDx vs. HDF⁹

HDx with THERANOVA 400 HDF with latest generation high-flux dialyzer for HD
Qb = 400 ml/min – Treatment Time = 4.4 h – Vconv = 24L (Mean) n = 20

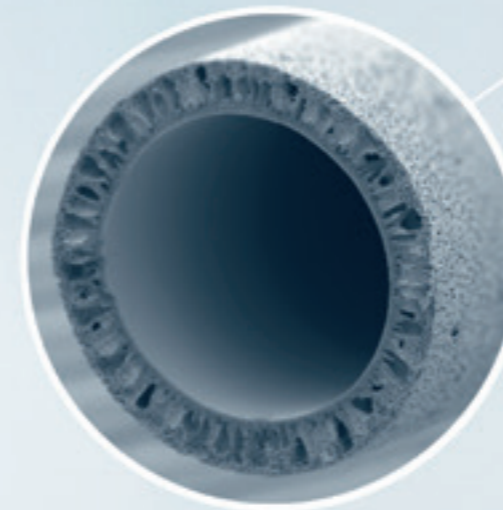
* p < 0.01 vs HDF
** p < 0.001 vs HDF



NEW INNOVATIVE MEMBRANE

The membrane cross-sectional structure is asymmetric and characterized by three distinct layers.

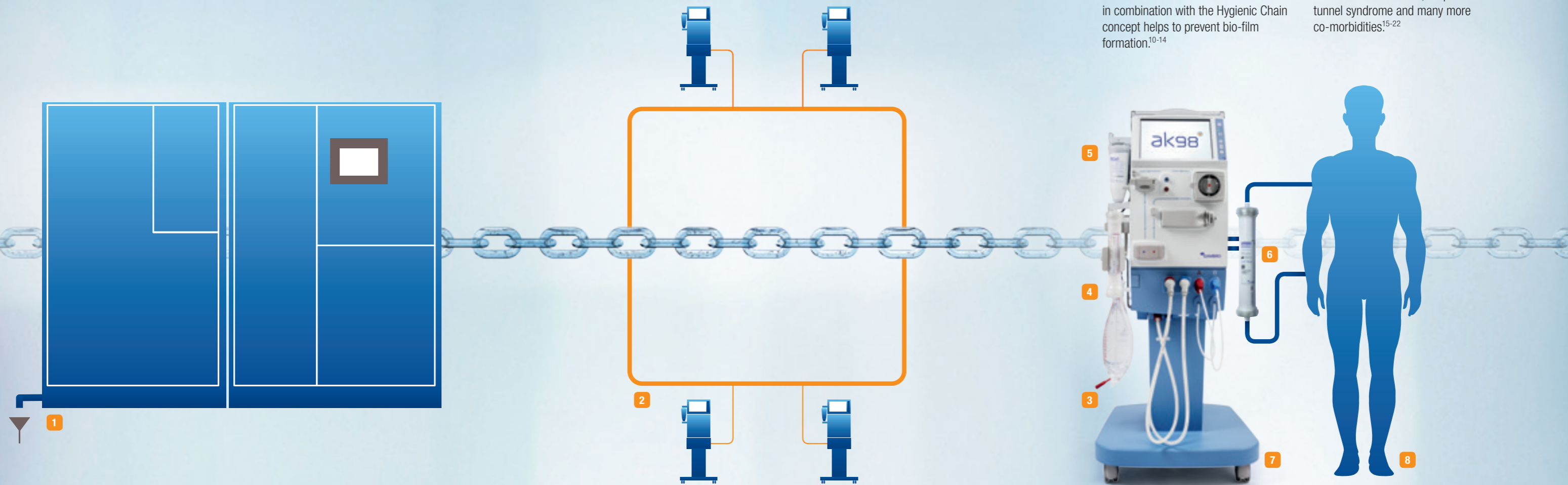
- a very thin inner layer (skin)
- a sponge-like intermediate layer
- a finger-like macro-porous outer layer



OBTAINING PURE FLUID FROM TAP TO NEEDLE

THE AK 98 SYSTEM IS A KEY LINK IN THE HYGIENIC CHAIN CONCEPT

Water and fluid purity are essential in order to achieve quality dialysis treatments and improved patient outcomes.¹⁰⁻¹⁴ Maintaining fluid purity means attending to the entire chain of components and processes involved within HD – from tap to needle. We ensure this through our Hygienic Chain concept.



1. CENTRAL WATER PLANT

Reverse osmosis water production systems such as the CWP 800 system help you deliver liquid purity through automated thermal disinfection technology.

2. DISTRIBUTION LOOP

A proactive disinfection regime of the loop, supply lines and dialysis machines is essential in limiting biofilm formation.²³⁻²⁵

3. PVC FREE SOFTPAC AND SOFTPAC CITRATE

A citrate-containing, acetate-free concentrate for hemodialysis and hemodiafiltration treatments. Citrate provides buffering capacity to the patient. In addition, citrate is a well-known antioxidant and anticoagulant with potential benefits in dialysis to reduce inflammation, a risk factor for cardiovascular disease.²⁶

4. CLEAN CART

With **CleanCart A** and **CleanCart C** cartridges, regular dialysis machine maintenance and disinfection assure proper dialysis machine function and may require less intensive machine operation from clinical staff.

5. BICART CARTRIDGE

Use of **BiCart** cartridge vs liquid bicarbonate minimizes the risk of microbial contamination and growth which is essential to ensure ultrapure dialysis fluid quality.²⁷⁻³¹

6. ULTRAFILTERS

Ensure that purified water feeds your machines interior and dialysis fluids, helping achieve sterile substitution and disinfection fluids.

7. THE AK 98 SYSTEM

The AK 98 system has been designed with a compact fluid pathway that eliminates dead spaces and recirculation of fluids. This minimal volume of fluid in combination with the Hygienic Chain concept helps to prevent bio-film formation.¹⁰⁻¹⁴

8. PATIENTS

The use of ultrapure dialysis fluid has advantages linked with a decline in malnutrition, atherosclerotic cardiovascular disease, carpal tunnel syndrome and many more co-morbidities.¹⁵⁻²²

FULLY INTEGRATED SOLUTIONS

SOLUTIONS TO KEEP YOU ON YOUR PATH TO TARGET

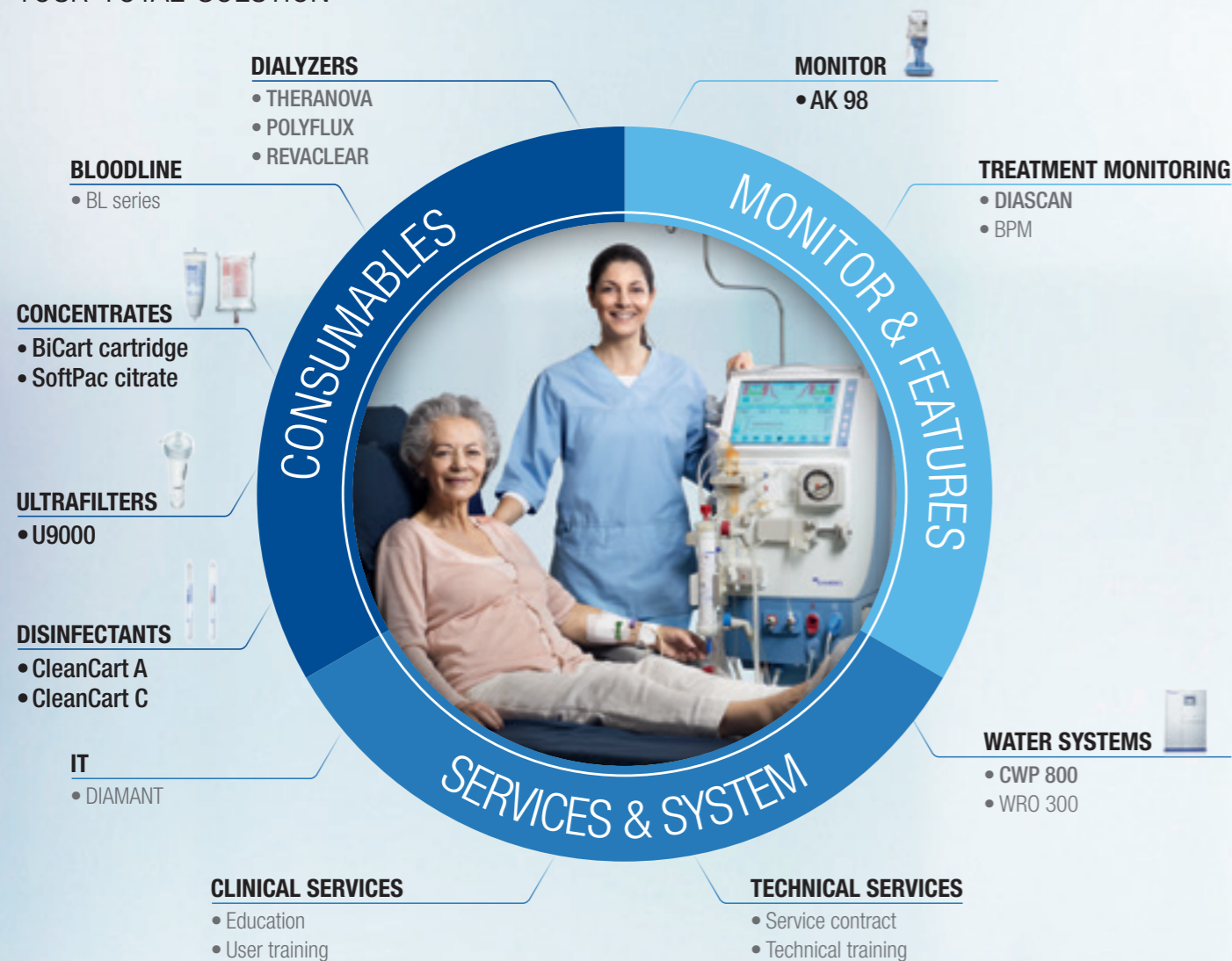
By combining monitors, features, consumables and services, into integrated treatment options, we aim to help healthcare professionals improving quality-of-life, and treatment outcomes, for their patients, all while improving their operational efficiency.

Our range of treatment options consider everything from patient's clinical needs to the governmental and economic factors at work in a particular region. This is the Baxter integrated treatment options approach to renal solutions.

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

The AK 98 system is a crucial part of our integrated treatment options and in combination with our consumables and services helps healthcare professionals improve quality-of-life and prognoses for their patients, while maintaining operational efficiency.

YOUR TOTAL SOLUTION



DISCOVER THE BENEFITS OF AN INTEGRATED HD SYSTEM

Reaching your targets is highly dependent on how well your dialysis monitor integrates with your consumables (dialyzers, blood lines etc.), procedures and other systems in your clinic. By fully integrating your AK 98 system with our portfolio of products you can maximise your treatment potential.

For more detailed information on the product below, please refer to the dedicated brochures and datasheets for the products in question.

CONSUMABLES

BLOOD LINES

Biocompatible and ergonomic blood tubing systems

High-quality blood tubing sets will help to meet your individual clinic and patient needs with safe and simple blood control.

- An electronic barcode for online data management for complete traceability.
- Color-coded connectors ensure that a patient's blood never comes in contact with chemical dyes or colorants
- Secure pressure transducer connections with a two-membrane protector



THE SOFTPAC CITRATE

Softpac solution in combination with BiCart cartridge is a convenient and easy way to handle concentrate

The **SoftPac Citrate** is an acid-concentrate dialysis solution giving clinics a closed hygienic system free from bacterial endotoxin for the AK 98 system.



THE BICART CARTRIDGE

The multi-purpose bicarbonate cartridge

BiCart cartridges provide sufficient bicarbonate for the majority of your in-center treatment needs.⁴¹

- Small, convenient and light cartridge available in different sizes
- Minimizes the risk of microbial contamination and growth which is essential to ensure ultrapure dialysis fluid quality.²⁷⁻³¹



THERANOVA DIALYZER

HDF performance and beyond as simple as HD

Clinics can maximize their performance by upgrading to the HDx therapy enables by the THERANOVA dialyzer.

Patient benefits:

- For patients requiring higher clearance of larger uremic toxins, without access to HDF
- Uses existing workflows and resources
- May help reduce the costs and complexity associated with the infrastructure of high-volume HDF



* Disclaimer: *In vitro* data cannot be extrapolated to the clinical setting.

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