The Dialog+ Dialysis System
Creating new dimensions in treatment quality
B. Braun Avitum

B. Braun has been a trusted partner in the supply of high quality, cost effective dialysis products for more than 30 years.
The Dialog+ haemodialysis treatment system – the right option for the future

B. Braun Global Commitment to Healthcare Excellence

Founded in 1839 as a family owned company, B. Braun has advanced to become one of the world’s leading healthcare companies. B. Braun supplies the healthcare community with more than 30,000 different medical and pharmaceutical products for dialysis, anaesthesia, intensive medicine, cardiology and surgery as well as services for hospitals, general practitioners and the homecare sector.

B. Braun has been a leading provider of dialysis care products for more than 30 years. The B. Braun Avitum product range includes advanced dialysis machines, water treatment systems, dialysis chairs and a full range of dialysis consumables such as dialysers, haemodialysis bloodlines, fistula needles, dialysis concentrates, UltraPureFluid filters and dialysis machine disinfectants.

B. Braun products are backed by comprehensive technical service and support designed to meet the demands of busy dialysis centres, healthcare practitioners and patients.

At B. Braun, innovation and improvement are the driving forces guiding our activities in serving the doctors, nurses and patients who use our products.

The new generation Dialog+ System: Inspired by users, developed by system specialists, to provide high quality cost effective dialysis treatment.

A system with many configuration possibilities and smart accessories so you get exactly the solution suited to your individual requirements.

Available in 3 basic configurations:

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<td>Haemodialysis (HD) Isolated Ultrafiltration (ISO UF)</td>
<td>Double-needle procedure Single-needle valve procedure</td>
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<tr>
<td>Dialog+ Double pump</td>
<td>Hospital, health centre, limited care, home</td>
<td>Haemodialysis (HD) Isolated Ultrafiltration (ISO UF)</td>
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B. Braun Avitum, a global systems provider with a full range of dialysis consumables

As a globally active group with an Australian presence for over 30 years, B. Braun offer the security of an international brand and the support and service of a local partner.

The modular dialysis systems by B. Braun feature all the components you need for comprehensive therapy from one single source. You also benefit from B. Braun’s dependable product quality.

Intelligent solutions by B. Braun:
One partner to cover all your haemodialysis blood treatment needs

- High quality cost effective products
- All B. Braun system components are compatible with each other
- First-class, international and local logistics network
- Global presence: products, services, and support

Intelligent solutions by B. Braun:
Dialysis machines
Dialysis Concentrates
Dialysis fluid filters
Dialysers
Haemodialysis bloodline systems
Fistula needles
Disinfectants

Sharing Expertise
Our commitment to treatment quality

Dialog+; simplicity of use driving advanced capability in patient safety monitoring

An intuitive touch screen makes set-up and operation of the system fast and easy. The Dialog+ offers the ability to monitor six combinable profiles:
- Ultrafiltration profile
- Sodium management profile
- Temperature profile
- Bicarbonate profile
- Heparin profile
- Dialysate flow profile

simplifying patient management with reminder functions for tasks such as drug administration, blood pressure measurements and heparin administration.

Other functions also include automatic blood pressure measurement and a patient therapy card reader.

Providing reliable treatment with Xevonta and measurable treatment with Adimea

Xevonta is a new generation dialyser which is characterised by highly efficient clearance and optimal selectivity. A high percentage of middle-molecular uraemic toxins, such as β2-microglobulin, can be removed with simultaneous extremely low albumin loss. Xevonta is ideally suited to deliver the right dialysis dose – and Adimea can be used to measure it.

Adimea measures dialysis efficiency (Kt/V) by determining the reduction in molar concentration of urinary excreted substances in the dialysate drain. As a result, Adimea allows continuous monitoring of dialysis efficiency throughout the treatment procedure.

Optimising the quality of patient management with bioLogic RR® Comfort® and simplifying data management with Nexadia

The bioLogic RR® Comfort biofeedback system through intelligent regulation of the ultrafiltration rate, helps to monitor and stabilise patient blood pressure while the treatment is still in progress. Nexadia® is a data management system which documents the entire treatment procedure introducing a new dimension of safety and efficiency. The intelligent software facilitates the management of patient data in a perfect workflow and reliably collects all treatment parameters.

A high standard of patient care with economical running costs

The Dialog+ System is economically efficient in daily running costs through incorporating innovative hardware and software features such as:
- a standard standby mode activated at the user’s request, which lowers operation costs by turning off the dialysate flow after a preset rinse time has elapsed. This function lowers costs through lowering the consumption of water, concentrate and electricity.
- the auto-priming function lowers costs through decreasing saline solution usage in online systems. This works not only during HDF/HR online treatments but also during standard haemodialysis procedures.
- flexibility in your choice of consumables. Our objective is to convince you with our product quality, without limiting your freedom of choice.
- cost and environmental conscious thinking is integrated into all Dialog+ models with an energy saving heat exchanger, which uses the counter-flow stream principle to draw thermal energy from flowing water. Less energy is used in achieving the desired temperature for the dialysis fluid, lowering electricity running costs.

Please contact us for your free individual business assessment and to discuss how the Dialog+ System can help you to run more economically.

1 Dialog+ Dialysis Machine Instructions for Use SW G 1x, IFU 38910010EN, Rev. 2.12.00, March 2012.
Xevonta – a new dimension in treatment Quality

Using advanced high-technology production, B. Braun has developed Xevonta, a new high-performance dialyser.

Xevonta’s performance profile is based on the innovative characteristics of the amembris fibre, which is used to form a high-performance, biocompatible, polysulfone-based synthetic membrane.

The amembris membrane has the high hydraulic and diffusive permeability required for high molecule clearance and a clear separation between molecules which have to be eliminated to the maximum extent (e.g. B2-microglobulin) and the molecules for which maximum possible retention is required (e.g. albumin).

Xevonta – ensuring treatment quality

Dialysis adequacy, assessed by urea kinetics, is an important clinical performance indicator. Xevonta, through its outstanding clearance profile, helps to optimise the dialysis dose and improve treatment outcome.

Xevonta demonstrates exceptionally high phosphate clearance values, which may contribute to increased phosphate removal.

With its outstanding selectivity, Xevonta efficiently eliminates middle molecules and also shows impressive albumin retention in achieving recommended serum albumin target ranges. Patients who are elderly, malnourished or who have co-morbidities may especially benefit from the performance characteristics of Xevonta.

Outstanding performance profile:
- to optimise the dialysis dose
- Optimal selectivity: maximal B2m-elimination with simultaneous minimal albumin loss
- Highly efficient phosphate clearance
- Excellent biocompatibility

Complete product range:
- 6 high flux and 6 low flux variants

Option of Xevonta Hi 2.3 with a 2.3 m² surface area for patients requiring an extra large filtration surface area

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Q_D = 500 ml/min, Q_F = 0 ml/min

Data from manufacturer’s published specification sheets
Adimea – Real-time monitoring of the dialysis dose for optimising treatment quality

Focus on the patient:
One of B. Braun’s aims is to provide doctors and nursing teams with the best possible support for giving patients the optimum dialysis dose. The basis for this is continuous precise measurement and display of the dialysis effectiveness during treatment.

To achieve this, B. Braun has developed the Adimea real-time monitoring system. Adimea measures dialysis efficiency by determining the reduction in molar concentration of urinary excreted substances in the spent dialysate.

Adimea is an innovative measurement method for reliable and continuous dialysis dose control (Kt/V) throughout the entire treatment. Medical and nursing staff can selectively adjust the treatment parameters during treatment, which is of great benefit to the patient. In other words, the equipment provides an optimum means for reaching the set treatment goals.

Precise, innovative real-time measurement of the dialysis dose
- Precise, innovative determination of the reduction of urinary excreted substances in the spent dialysate using UV technology
- Real-time monitoring during the entire treatment period via continuous effectiveness measurement

Easy and flexible operation
- Only one input parameter: “patient weight pre-dialysis”
- Configurable and clear display of URR, spKt/V, eKt/V as well as result prognosis
- Changes to treatment parameters possible at any time

Advanced dialysis technology
The innovative Adimea system utilises the principles of spectroscopy for determining the reduction in molar concentration of urinary excreted substances in the dialysate drain. A light source transmits ultraviolet (UV) light through the dialysate. The particles contained in the dialysate, which were removed from the plasma during dialysis, absorb the light. This absorption is measured by a sensor. The pioneering technology enables measurement in the spent dialysate. Adimea continuously analyses the changes in molar concentration and is therefore in direct contact with the patient. On the basis of this characteristic, Adimea is a highly reliable and accurate instrument for the online determination of the current Kt/V value during treatment.

Adimea is impressive, not only in terms of its technology, but also with regard to its simple and clear operation: The application merely requires the input of a single patient-specific parameter – the patient’s weight before dialysis.

Clinical trials demonstrate very close correlation between the laboratory-determined blood-spKt/V and the spKt/V determined by Adimea.

During a total of 64 treatments, blood was serially taken every twenty minutes for urea testing to determine the spKt/V from the blood as accurately as possible. The spKt/V value determined by Adimea was recorded at the same time.

An analysis of the degree of correlation between the Adimea method for determining Kt/V and the reference method for determining Kt/V gave a correlation coefficient of $r = 0.93$, which demonstrates excellent correlation between the two methods and reinforces the high degree of accuracy of the Adimea method for determining Kt/V. The measurement error recorded in these studies for the overall determination of the Kt/V is only 7%.

Adimea – a technical innovation in Kt/V monitoring.

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1 Werner, Günthner et al: data on file (B. Braun Avitum AG, Melsungen), 2009.
bioLogic RR® Comfort

Innovation in significantly reducing hypotensive episodes

bioLogic RR® Comfort biofeedback system

bioLogic RR® Comfort is a reliable system for managing haemodialysis patients who frequently suffer from hypotensive episodes during treatment.

bioLogic RR® Comfort biofeedback system can prevent excessive drops in blood pressure during treatment through automatically and predicatively adjusting the ultrafiltration rate. Intelligent guideline technology manages patient blood pressure by monitoring real-time blood pressure readings and referencing stored blood pressure curves from previous treatments.

The system is easily operated by just two key settings on the Dialog+ touch screen, thus providing nursing staff more time for patient care.

Clinical studies show bioLogic RR® Comfort achieves an outstanding reduction in the need for hypotensive treatment during dialysis:

- 52% reduction in treatments with hypotensive episodes (HE)
- 82% reduction in treatments with at least one HE symptom
- 64% reduction in treatments with at least one HE-induced therapeutic measure

bioLogic RR® Comfort

Innovation in significantly reducing hypotensive episodes

Dialog+ – peace of mind in managing hypotensive patients

Nexadia – streamlining processes and quality control in dialysis

Nexadia is a new modular patient data management system designed to simplify dialysis processes and maintain the documentation required for quality control.

Nexadia Monitor collects data from dialysis machines, analysers and patient scales. Data collected during treatment can be visualised, analysed and monitored to optimise treatment and improve treatment outcome.

Nexadia Expert is a powerful and user-friendly database for dialysis centre therapy management. Data from other medical information systems can be imported and managed from areas such as the patient master database, the laboratory and external physicians’ offices. Nexadia expert allows scheduling of future dialysis treatment including dates, medication and UHF rates. Functions include the editing and archiving of all treatment data and preparation of documents required for quality control.

- Increased cost efficiency
- Less administration activities and more time for patient care
- Consistent documentation to meet quality assurance requirements
- Simple to use
- Automated saving and filing of data

Results with Nexadia®

Prior to implementation of Nexadia® Monitor

Subsequent to implementation of Nexadia® Monitor

Nexadia® considerably reduces the time required for the administration of various workflows – time which nursing staff can devote to patient care.1

B. Braun: a trusted partner in dialysis treatment for more than 30 years.

As your healthcare partner, B. Braun is committed to supporting you with the level of service you need to provide the highest standard of care for your patients.

From our reliable worldwide logistics and supply chain to our clinical education programs and technical service support, our commitment is to provide service excellence.

At all times, innovation and improvement are the driving forces guiding our activities in serving doctors, nurses and patients who use our products.