



The system tailored &
precise for tiny patients



Carpediem™
cardio renal pediatric
dialysis emergency machine





Acute kidney injury and fluid overload in pediatric patients

Neonatal acute kidney injury (AKI) and fluid overload are under-recognized conditions often leading to morbidity and mortality.^{1,2}

The incidence of AKI in critically ill neonates

8–24%²

is associated with mortality rates between

10–61%²

Renal replacement therapy (RRT) for pediatric patients weighing less than 10 kg is administered with adult machines not designed for the needs of neonates or infants.^{3–8}

Most RRT are performed on pediatric patients with acute peritoneal dialysis. However, this may be limited by congenital defects involving the abdominal wall, organs, intraperitoneal surgeries, and complications related to fluid balance.^{9–11}

Carpediem™ system is a complete, dedicated, continuous renal replacement therapy (CRRT) solution for pediatric patients. Both continuous veno-venous hemodialysis (CVVHD) and continuous veno-venous hemofiltration (CVVH) modalities extend the application of extracorporeal blood purification to critically and non-critically ill patients.^{4, 12}

The added value of Carpediem

The Carpediem™ system is indicated for use in extracorporeal blood treatment of pediatric patients weighing 2.5 kg or more, with acute kidney injury, fluid overload, and / or electrolyte disorders, requiring hemodialysis, hemofiltration, or ultrafiltration / fluid removal.¹³

The Carpediem™ system:

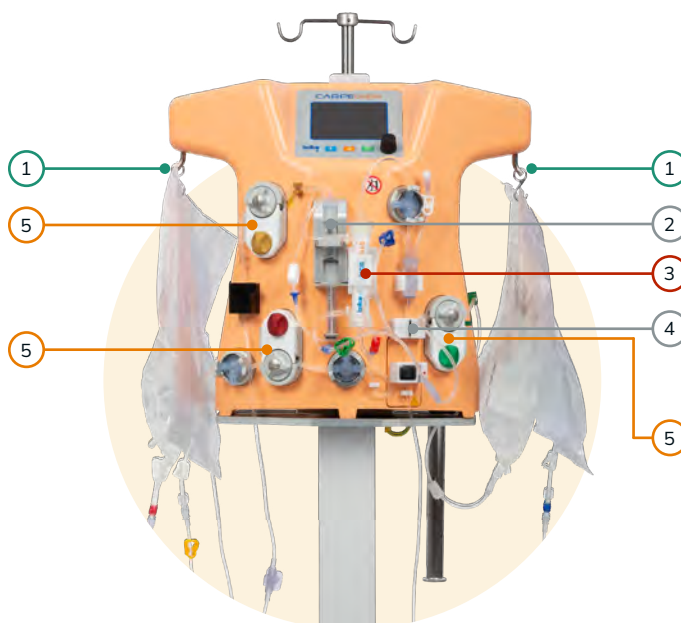
- Enables clinicians to achieve adequate diffusive clearance which reduces the need for high blood flow.⁴
- Optimizes the use of 5 Fr double-lumen catheters, favoring the catheter insertion and reducing the risk of causing central vessel stenosis.^{3,4}
- Includes high-precision scales with resolution of 1 g, and miniaturized peristaltic pumps featuring three rollers that ensure precision and accurate flows.^{10, 11}

97%

In a retrospective cohort analysis, there was higher survival to CRRT discontinuation in the patients treated with Carpediem™ system compared to the ppCRRT group.¹⁴

Tailored performance precise control⁵

1. Fluid balance controlled by high-precision scales
2. Heparin pump, continuous and / or bolus
3. Recognizes the type of filter and limitation of the convective rate to 20% of the blood flow
4. High sensitivity air bubble detector
5. Three miniaturized peristaltic pumps with three rollers for enhanced accuracy of blood, infusion / dialysis, and effluent flows



Simple and accurate



Weight loss accuracy

Only ± 30 g in 24 hours of treatment.



Reduced priming volume

Enables priming volumes as low as 26 mL, depending on the preassembled device model used.



Treatment flexibility

Performs continuous ultrafiltration, hemofiltration, and hemodialysis[†] treatments — all with the same single use preassembled device.

[†]Not applicable for preassembled device 0075

Capital		
CFN code	Name and Description	UOM
IB7010200	Carpediem™ machine	1 EA
LB22B2685	Biegler Warmer BW 685	1 EA

Disposable		
CFN code	Name and Description	UOM
IB0595510	Procedure pack: BL250 KIT 0075 CVVH	4 / CT
IB0595540	Procedure pack: BL250 KIT 015 CVVH / CVVHD	4 / CT
IB0595550	Procedure pack: BL250 KIT 025 CVVH / CVVHD	4 / CT
IB0930250	MD043 - HMB32 mL 500 + 1500	4 / CT
MD087	HMB32 mL 500 + 1500	4 / CT
IB0507007	3-litre waste bags	20 / CT
FP4600203	Biegler Warmer Extension set 46000	20 / CT

References

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Not for use in the U.S.

Carpediem™ machine is an active, non-invasive, class IIb medical device CE0123 manufactured by Bellco S.r.l.

Carpediem preassembled device 0075 is a non-active, non-invasive, class IIb medical device CE0123 manufactured by Bellco S.r.l.

Carpediem preassembled devices 015 and 025 are non-active, non-invasive, class IIb medical device CE0123 manufactured by Bellco S.r.l.

BD Plastipak syringe is a medical device manufactured by Becton Dickinson S.A. They are included in the Carpediem Procedure Packs.




HMB32 Haemofiltration and dialysis solution is a non-active, non-invasive, class IIb medical device CE0123 manufactured by Haemopharm Biofluids S.r.l.

The 3-litre waste bags are non-active, non-invasive, class I CE medical devices manufactured by Bellco S.r.l.

Biegler Warmer BW 685 is a medical device manufactured by Biegler GmbH.

Biegler Warmer Extension Set 46000 is a medical device manufactured by Biegler GmbH.

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