

# DISCOVER LYMPHA™ ACETATE-FREE DIALYSIS



Lympha™  
acid concentrate solution



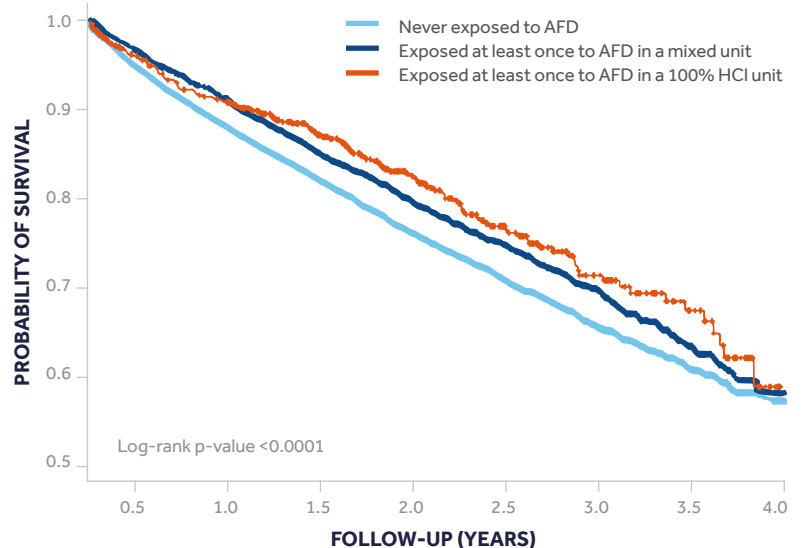
**Lympha™ solution is an acetate-free, glucose-based liquid hemodialysis concentrate used in extracorporeal renal replacement therapy.**

Unlike acetate-based solutions, Lympha™ concentrates – containing only hydrochloric acid (HCl) as a stabilizer – may help to ensure:

- Hemodynamic stability<sup>1</sup>
- Improved tolerance to dialysis<sup>1,2,3</sup>
- Better survival rates in elderly patients with End-stage Renal Disease (ESRD)<sup>1</sup>

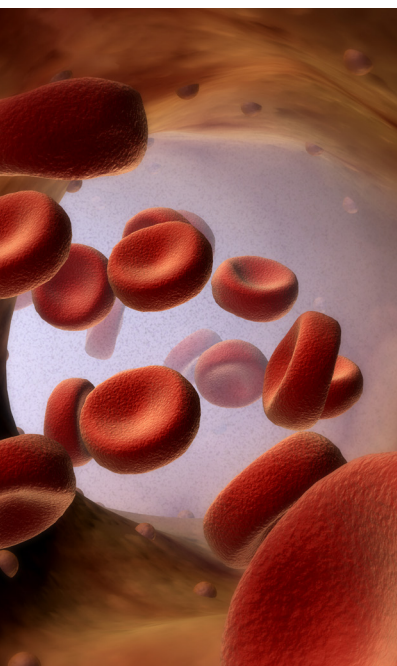
## HEMODYNAMIC STABILITY

A registry-based study — in which 658 patients treated only with HCl based solution — showed an improved survival rate in ESRD patients aged 70 or older in acetate-free dialysis (AFD).<sup>1</sup>



Number of patients at risk										
	Never exposed to AFD	11481	10587	9305	6825	4684	3138	1743	820	134
	Exposed at least once to AFD in a mixed unit	3021	2864	2586	2026	1465	1004	597	277	81
	Exposed at least once to AFD in a 100% HCl unit	658	620	565	447	312	208	121	66	19

Adapted by reference 1



Compared with standard dialysis, treatments performed with Lympha™ as acetate-free solution may improve patients' hemodynamic stability.<sup>4</sup> This might be one of the main reasons why ESRD elderly patients may experience higher survival rates and other benefits from AFD.<sup>1</sup>

- Lympha™ solution as acetate-free may not induce the activation of inflammation markers and mediators (cytokines, NF-κB, nitric oxide (NO)), avoiding inflammatory processes.<sup>5\*</sup>
- By avoiding NO synthesis induction, Lympha™ solution can reduce dialysis-related hypotension episodes.<sup>3,5\*</sup>
- Decreased cardiac troponin (cTnT) levels can improve cardiac microvascular function.<sup>6</sup>

\*Demonstrated by in vitro studies



# TOLERABLE ACETATE-FREE DIALYSIS

- Lympha™ solution without acetate helps improve tolerance to dialysis treatment. In ESRD patients with slow liver metabolism — like those with liver disease, or diabetes — it can also prevent liver function overload and acetate intolerance symptoms.<sup>1,2,3,7</sup>
- The solution is formulated without chelating agents. Ca<sup>++</sup> and Mg<sup>++</sup> mass balance stability may minimize further increase of cramps, arrhythmias, and hypotensive episodes in ESRD patients.<sup>8</sup>

## CONVENIENT BAG DESIGN

Lympha™ solution bags help in handling acid concentrates:

- A wide range of formulations and bag configurations support prescriptions tailored to patient's needs
- Phthalate-free bags avoid risk of potential endocrine, hormonal, and carcinogenic effects associated with phthalates exposure

Bag components include:

- A hole to hang the bag on the machine support, if available
- A bag connector with an ergonomic cap to prevent liquid leaks
- A clamp to block solution drainage when the bag is disconnected from the dialysis machine
- A frangible pin to allow liquid flow only when necessary

All bags are packed in multiple cardboard boxes to prevent damage during transport.



# ORDERING INFORMATION

## Solution specification

CODE	Volume (L)	Dilution	Na <sup>+</sup> (mmol/L)	K <sup>+</sup> (mmol/L)	Ca <sup>++</sup> (mmol/L)	Mg <sup>++</sup> (mmol/L)	Cl <sup>-</sup> (mmol/L)	H <sup>+</sup> (mmol/L)	C <sub>2</sub> H <sub>2</sub> O <sub>2</sub> (g/L)
BS642L038/T	3.8	1:45	103.00	2.00	1.50	0.50	111.00	2.00	1.00
BS643L038/T	3.8	1:45	103.00	2.00	1.25	0.50	110.50	2.00	1.00
BS644L038/T	3.8	1:45	103.00	2.00	1.65	0.50	111.30	2.00	1.00
BS645L038/T	3.8	1:45	103.00	3.00	1.50	0.50	112.00	2.00	1.00
BS646L038/T	3.8	1:45	103.00	3.00	1.65	0.50	112.30	2.00	1.00
BS648L038/T	3.8	1:45	103.00	2.00	1.75	0.50	111.50	2.00	1.00
BS652L038/T	3.8	1:45	103.00	2.50	1.50	0.50	111.50	2.00	1.00
BS653L038/T	3.8	1:45	103.00	1.00	1.25	0.50	109.50	2.00	1.00
BS654L038/T	3.8	1:45	103.00	1.00	1.50	0.50	110.00	2.00	1.00
BS655L038/T	3.8	1:45	103.00	1.00	1.75	0.50	110.50	2.00	1.00
BS656L038/T	3.8	1:45	103.00	3.00	1.25	0.50	111.50	2.00	1.00
BS657L038/T	3.8	1:45	103.00	3.00	1.75	0.50	112.50	2.00	1.00
BS642L055/T	5.5	1:45	103.00	2.00	1.50	0.50	111.00	2.00	1.00
BS643L055/T	5.5	1:45	103.00	2.00	1.25	0.50	110.50	2.00	1.00
BS645L055/T	5.5	1:45	103.00	3.00	1.50	0.50	112.00	2.00	1.00
BS648L055/T	5.5	1:45	103.00	2.00	1.75	0.50	111.50	2.00	1.00
BS652L055/T	5.5	1:45	103.00	2.50	1.50	0.50	111.50	2.00	1.00
BS653L055/T	5.5	1:45	103.00	1.00	1.25	0.50	109.50	2.00	1.00
BS654L055/T	5.5	1:45	103.00	1.00	1.50	0.50	110.00	2.00	1.00
BS655L055/T	5.5	1:45	103.00	1.00	1.75	0.50	110.50	2.00	1.00
BS656L055/T	5.5	1:45	103.00	3.00	1.25	0.50	111.50	2.00	1.00
BS657L055/T	5.5	1:45	103.00	3.00	1.75	0.50	112.50	2.00	1.00
BS658L055/T	5.5	1:45	103.00	3.00	1.75	0.50	112.50	2.00	1.00
BS682L055/T	5.5	1:45	103.00	4.00	1.50	0.50	113.00	2.00	1.00
BS942L038/T	3.8	1:45	103.00	2.00	1.50	0.50	112.00	3.00	1.00
BS943L038/T	3.8	1:45	103.00	2.00	1.25	0.50	111.50	3.00	1.00
BS945L038/T	3.8	1:45	103.00	3.00	1.50	0.50	113.00	3.00	1.00
BS948L038/T	3.8	1:45	103.00	2.00	1.75	0.50	112.50	3.00	1.00
BS957L038/T	3.8	1:45	103.00	3.00	1.75	0.50	113.50	3.00	1.00
BS973L038/T	3.8	1:45	103.00	3.50	1.50	0.50	113.50	3.00	1.00
BS942L055/T	5.5	1:45	103.00	2.00	1.50	0.50	112.00	3.00	1.00
BS943L055/T	5.5	1:45	103.00	2.00	1.25	0.50	111.50	3.00	1.00
BS945L055/T	5.5	1:45	103.00	3.00	1.50	0.50	113.00	3.00	1.00
BS948L055/T	5.5	1:45	103.00	2.00	1.75	0.50	112.50	3.00	1.00
BS954L055/T	5.5	1:45	103.00	1.00	1.50	0.50	111.00	3.00	1.00
BS956L055/T	5.5	1:45	103.00	3.00	1.25	0.50	112.50	3.00	1.00
BS957L055/T	5.5	1:45	103.00	3.00	1.75	0.50	113.50	3.00	1.00

## Pack factor

Model	Pcs/Box
Lympha™ 3.8 L bag	3
Lympha™ 5.5 L bag	2

## REFERENCES

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Lympha™ acid concentrate solutions are non-active, non-invasive, class IIb medical devices CE0123. Please refer to the Instructions for Use for the available instructions, contraindications, warnings and precautions.

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