



# Automated Cell Processing System

The easy-to-use, flexible, filtered way to wash and volume-reduce cell products.

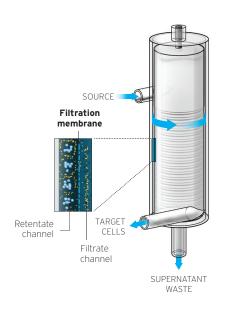




# Choose filtered to further your goals.

Whether you're focused on early stage trials or ramping up to full commercialization<sup>‡</sup>, Lovo's spinning membrane filtration technology enables fast, precise, and flexible procedures that help increase your lab's overall operational efficiency and processing consistency without compromising product quality.<sup>3</sup> You can rely on Lovo and the Fresenius Kabi team to work with you to address your lab's biggest challenges in developing cuttingedge cell therapy manufacturing solutions.

# Proprietary spinning membrane filtration technology



# Lovo supports your unique selection prep, thaw wash, or harvest wash processes.

### Immunomagnetic Selection Prep<sup>1</sup>

Remove platelets, incubate with beads, and remove unbound beads in a single procedure for fast and automated processing

### Fresh Leukapheresis Wash<sup>2</sup>

Remove platelets with precision and resuspend your cells in a preferred buffer for any custom manufacturing process

# Culture Harvest & Media Exchange<sup>3</sup>

Volume-reduce or exchange media for your expanded products with high cell recoveries and washout efficiency

# Thawed Wash & DMSO Removal<sup>4</sup>

Wash cryopreserved products to remove DMSO and resuspend cells in your preferred buffer or culture media









## Increase operational efficiency

Cells continually flow in and out of Lovo's spinning membrane module, minimizing overall processing time. Lovo handles source volumes up to 22 L and processes a standard apheresis product in approximately 11 minutes.<sup>3</sup>

# Increase product consistency and quality

Capture precisely the cells you need, optimizing recovery while maintaining viability – even for fragile cells. The membrane's 4  $\mu$ m pores enable >98% TNC recovery and <2% decrease in viability when targeting 99.9% supernatant removal.<sup>3</sup>

# Customize specific protocols to support your cell therapy manufacturing needs

Lovo's software has been designed to support your unique processes and technologies. Up to 10 protocols can be saved on the device and each wash cycle may be customized even further.

# Lovo Software 3.0

### Greater simplicity

- All-in-one immunomagnetic selection prep protocol
- Easy access to weigh scale calibration and log file
- Wash buffer volume tracking and alerts

### More flexibility

- Multiple Source container processing
- Expanded range of cell component concentration entry values
- Configurable middle cycle washout percentages and final rinse volumes
- Administrator ability to pre-fill and lock operator entry fields and options

#### **Fully connected**

- Secure wired or wireless data transfer directly from the Lovo
- Uneditable, downloadable or printable procedure records
- Filterable procedure records
- Exportable from DXT to Excel or LIMS

# **Lovo** Automated Cell Processing System

#### Instrument features

#### Cell types

Fresh, cryo-preserved, and culture-expanded white blood cells, including, but not limited to, leukapheresis CD34+ cells, CAR T-cells, TILs, NK cells, and MSCs

#### Volume range

 Source
 Up to 22 L

 Output\*
 50 mL - 50 L

Theoretical Wash-out range Up to 99.9999%\*

#### System components

- 73 lb, 35.3" x 17.6" x 24.5" (W x D x H) benchtop instrument
- · Single-use processing kit with spinning membrane module
- \* Actual lowest achievable volume will depend on cell type, cell concentration, and source volume.
- The Lovo Cell Processing System is for laboratory use only and may not be used for direct transfusion. Appropriate regulatory clearance is required by the user for clinical use. Refer to the Lovo Cell Processing System Operator's Manual for a complete list of warnings and precautions associated with the use of this device. For additional information, please visit www.chooselovo.com.

#### References

- LOVO 2.X Blood Run Protocol Report: 223-DER-048957 Data on file at Fresenius Kabi USA.
- 2. LOVO 2.X Product Quality Test Results Design Review: 223-DER-048958 Data on file at Fresenius Kabi USA.
- 3. Lovo New Membrane Cultured Cell Testing Results: 223-DER-066723 Data on file at Fresenius Kabi USA.
- B.Mfarrej, et al. Pre-clinical assessment of the Lovo device for dimethyl sulfoxide removal and cell concentration in thawed hematopoietic progenitor cell grafts. Cytotherapy, Volume 19, Issue 12, 1501-1508.

Code	Item	Quantity
X6R4909A	Lovo Cell Processing Disposable Kit with Bag Access (Compatible with Lovo software version 3.0)	6 units/case
X6R4906A	Lovo Cell Processing Disposable Kit (Compatible with Lovo software versions 2.0 and 3.0)	6 units/case
X6R4902	Lovo Ancillary Bag Kit	20 units/case
X6R4907	Lovo Pouch Kit	6 units/case
X6R4917	Lovo Valve and Filter Disposable Kit	6 units/case
YM020	20mm Vialok Vented Vial Access Device	100 units/case
6R4900	Lovo Cell Processing System	n/a

Learn how choosing Lovo can help make your lab more productive: Call 1.800.333.6925 or visit chooselovo.com

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