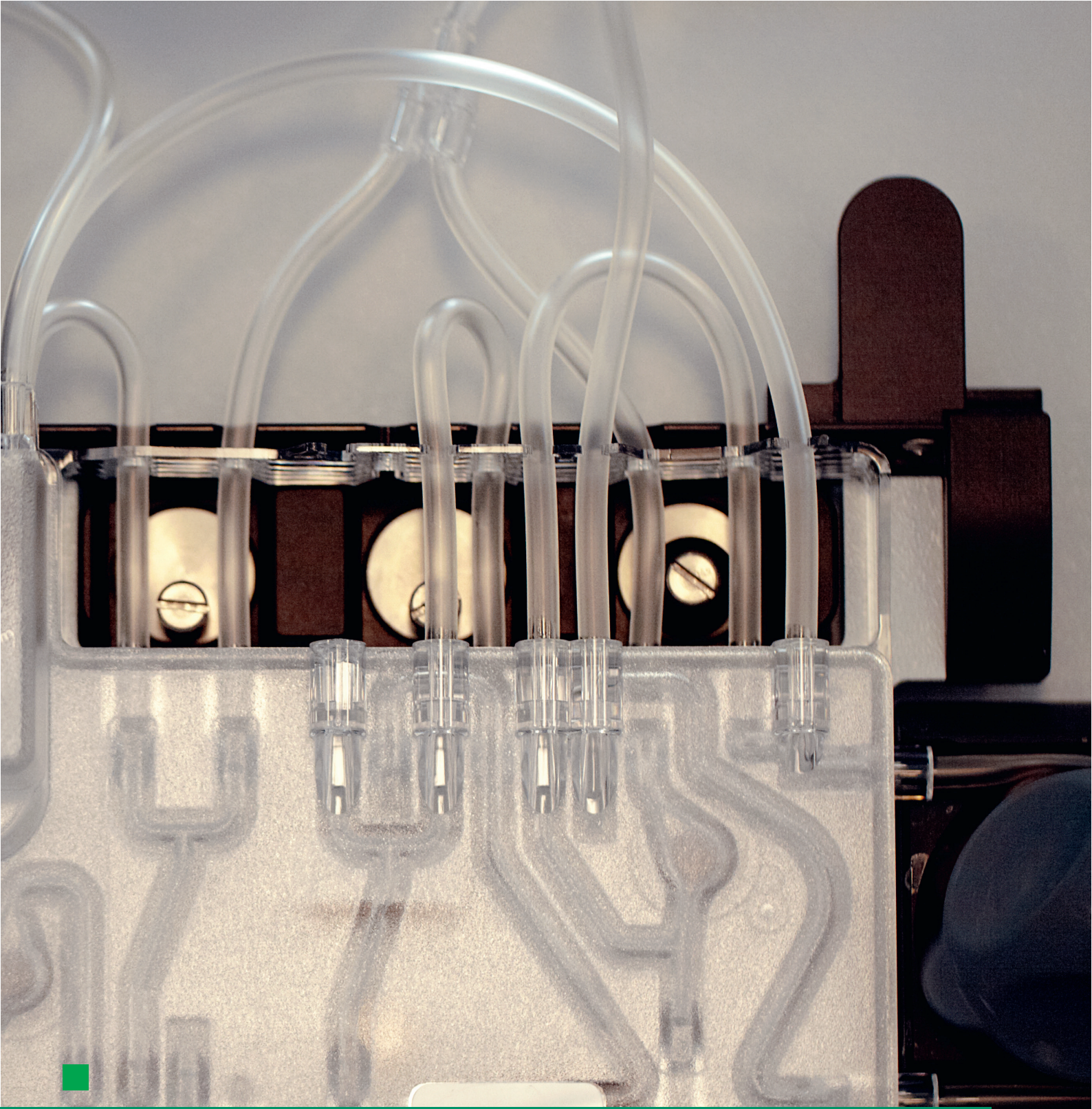




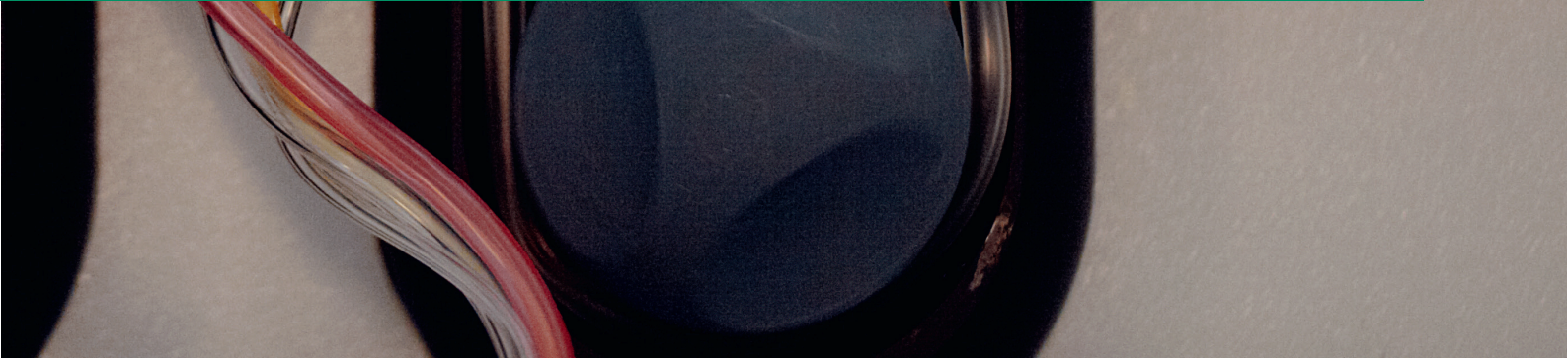
Spectra Optia® Apheresis System
Advancing Therapeutic Apheresis and Cell
Collections to the Next Level of Patient Care

 **TERUMO**
BLOOD AND CELL
TECHNOLOGIES



Advanced Technology That Gives You Choice and Precision

A single platform that delivers unprecedented versatility

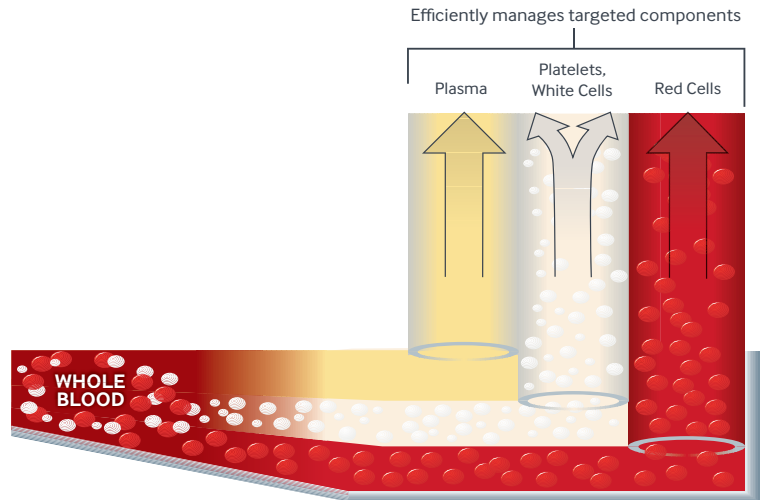


How it works

Automated Interface Management (AIM) System

Using a patented optical detection system, the AIM system continuously manages the separated layers, allowing the platelet and white blood cell layer to accumulate. AIM then directs the system to efficiently remove the targeted components.

- Automates interface adjustments without sacrificing your control
- Monitors and interprets the interface continuously so you don't have to rely solely on your vision
- Helps you efficiently remove targeted components
- Achieves highly predictable results through interface stability



AIM continuously manages the interface

Time	AC	Inlet	Plasma	Replace	Plasma
16:51	0.0/0	0.0/0	0.0/0	0.0/0	0
16:51	Mode was changed to Semi-Automatic.				
16:52	0.0/0	0.0/0	0.0/0	50.0/1	0
16:52	AC was not detected.				
16:52	Low level reservoir sensor detected excess fluid.				
16:52	Replacement fluid was not detected.				
16:53	Number of plasma volumes exchanged was changed to 1.0.				
16:53	4.777	142.0/201	73.4/775	69.0/350	0
16:53	Number of plasma volumes exchanged was changed to 0.5.				
16:53	4.775	141.8/190	73.4/204	69.0/171	0
17:06	4.767	142.0/2002	73.4/1906	69.0/925	0
17:21	4.7138	142.0/4132	73.4/2094	69.1/1947	0
17:36	4.7209	141.8/1642	73.4/1802	69.1/2968	0
17:47	Remove bag method opportunity.				
17:51	4.7280	142.0/8989	73.4/4278	69.0/3998	0
18:06	4.7291	142.0/19513	73.4/1567	69.0/5021	0
18:11	Patient's fluid balance may be 5% higher than reported.				
18:21	4.7422	142.0/12645	73.4/1455	68.9/1645	0

Detailed procedure report

Flow Rates (mL/min)/Volumes (mL)	Initial	Final
Replacement Fluid	Saline/Albumin	Saline/Albumin
Fluid Balance (mL)	0	-4
Plasma Removed (mL)	100	100
Plasma Removed (mL)	8023	8182
Run Time (min)	104	90
Plasma Volumes Exchanged	1.1	0.8
AC (mL)	491	426
Inlet (mL)	14755	12782
Remove Bag (mL)	8084	6527 (AC 328)
Replacement Used (mL)	7090	8313

Fluid Balance (mL)	Value
AC	426
Remove Bag	6527
Replacement Used	6113
Tubing Set	16
Kit/Back	0
Subtotal	-5
Bolus	0
Additional Fluid	0
Total Fluid Balance	-4

Operator: _____

Summarized procedure report

Convenient data management

- Prints reports or exports the data
- Captures and stores procedure data, reducing your need to manually transcribe data
- Helps you address regulatory requirements
- Tracks and records alarms during each of your procedures
- Gives you access to historical data, storing up to 100 procedures

Focus on patient comfort and safety

- Pump precision contributes to optimized fluid balance
- Low-volume tubing set accommodates smaller patients
- System verifies when you have the correct tubing set in place for the selected protocol
- Procedural automation enables you to spend more time with patients and donors
- Low operating noise adds to patient comfort

Working with you

Each and every interaction we have with you is important. By fostering open and ongoing relationships, we bring more value to you and the patients we're all focused on serving.

Even after the technology is in place, we continue to serve you with:

- Education and training
- Technical support
- Clinical and scientific support
- Customer support
- Users groups and professional networks

Features and Specifications

Intuitive graphical user interface (GUI)

- Connects you to the relevant information using a high-resolution, color touch screen
- Guides you through each step of the procedure
- Helps you enter the necessary patient and procedure information
- Gives you the right information at the right time to enhance procedure efficiencies
- Provides clear alarm messages that you can see at a glance

Ready-to-use tubing sets designed to handle multiple procedure types

- You can load the snap-in-place cassette in a few steps
- The system verifies when you have the correct tubing set in place for the selected procedure
- Low-volume tubing set accommodates your smaller patients
- With minimal set types to keep in inventory, you can achieve storage efficiencies
- Seal Safe System is incorporated for convenient, reliable tubing seals

Highly maneuverable system

- Telescoping IV pole that you can easily raise or lower
- Folding screen to help you simplify moving and storage
- Large, durable wheels on pivoting casters brings you a high level of system maneuverability
- Advanced wheel pedal enables you to move or secure the system depending on your needs

Dimensions

- Weight: 91.6 kg (220 lbs)
- Height (lowered IV pole): 115.6 cm (45.5 in)
- Height (extended IV pole): 174 cm (68.5 in)
- Width: 52.7 cm (20.75 in)
- Depth: 81.3 cm (32.0 in)
- Floor space required: 0.43 m² (4.6 ft²)



Shown with a tubing set for therapeutic plasmaexchange procedures.

Availability of the Astotherm blood warmer is subject to regulatory approval in each country.



Terumo Blood and Cell Technologies is a medical technology company. Our products, software, and services enable customers to collect and prepare blood and cells to help treat challenging diseases and conditions. Our employees around the world believe in the potential of blood and cells to do even more for patients than they do today. [TerumoBCT.com](https://www.terumobct.com)

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