Veeva Vault

Electronic Certificate

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Document Name: WBC Depletion and Platelet Depletion

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Product: Spectra Optia

Type: Commercial Material

Sub Type: Brochure

Classification:

Certification Statement
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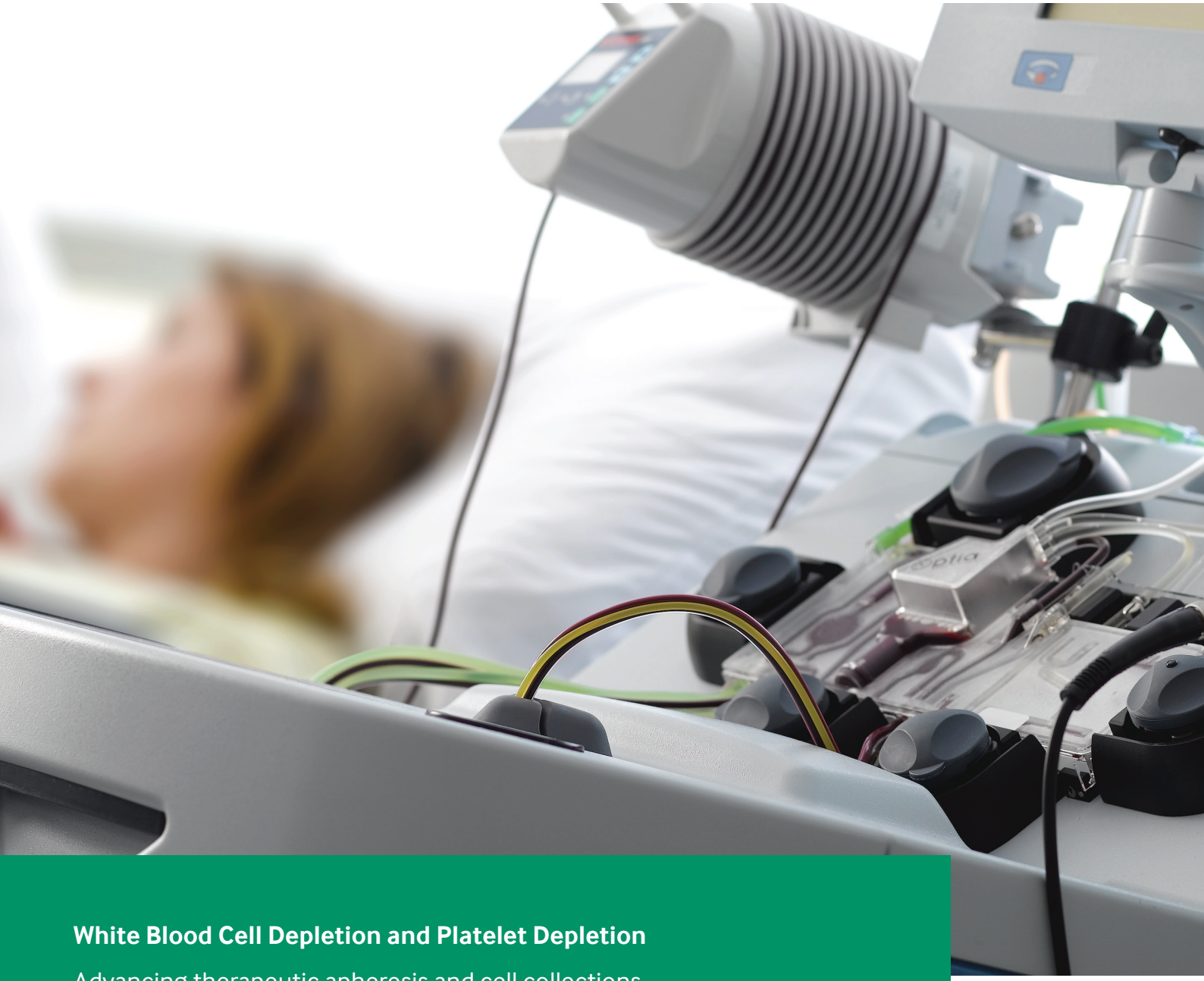
TERUMO BLOOD AND CELL TECHNOLOGIES



White Blood Cell Depletion and Platelet Depletion

Advancing therapeutic apheresis and cell collections to the next level of patient care

Spectra Optia® Apheresis System

Bringing you choice and precision

Whether you need to perform a white blood cell (WBC) or a platelet depletion procedure, the advanced Spectra Optia system is designed to provide choice and precision. With flexible control over collection preference, packing factor, and collect pump flow rate, you can optimize each procedure.

Procedure and System Highlights	
Procedural flexibility	Versatile software is designed for a wide range of device interaction preferences and operator skill levels
Depletion efficiency	Maintains efficiency across the range of inlet pump flow rates by automatically adjusting collect pump flow rate
Choice of replacement fluids	Delivers a variety of replacement fluids (fresh frozen plasma, saline, albumin, red blood cells [RBCs], or custom fluids) to meet specific patient fluid requirements
Integrated fluid balance management	Allows you to target a specific fluid balance without performing manual calculations
Intuitive hydroxyethyl starch (HES) option	Establishes the appropriate packing factor automatically, based on the use of starch
Procedural automation	Calculates collect pump flow rate automatically based on the patient cell count you enter Allows you to spend more time with patients
Intuitive graphical user interface	Streamlines your procedure management with touch-screen instructions and simple data entry
Automatic recovery	Maintains your targeted collection preference during flow rate interruptions Recovers from power failures at the point where the power failed

How it works

The performance you expect

The Automated Interface Management (AIM) system provides continuous interface monitoring, interpretation, and adjustment for an efficient WBC or platelet depletion.

- Monitors the collect port and interface position up to 25 times per second with a resolution of approximately 10 microns
- Interprets interface information using a patented optical detection system
- Adjusts the pumps and valves to manage the interface position and efficiently remove the targeted components

Continuous processing

Whole blood enters the channel

- WBC depletion – low packing factor and channel design allow for the separation of WBCs (with or without the use of HES)
- Platelet depletion – high packing factor and channel design allow for the separation of platelets

Interface is established

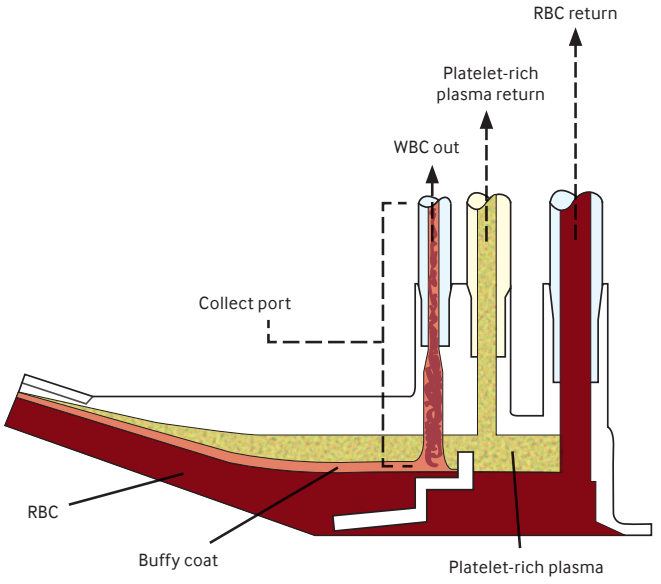
- AIM system quickly establishes the interface at the collect port
- Buffy coat accumulates
- AIM system detects the presence of cells in the collect port and automatically adjusts the plasma pump flow rate to optimize the collection

RBCs and plasma are pumped back to the patient

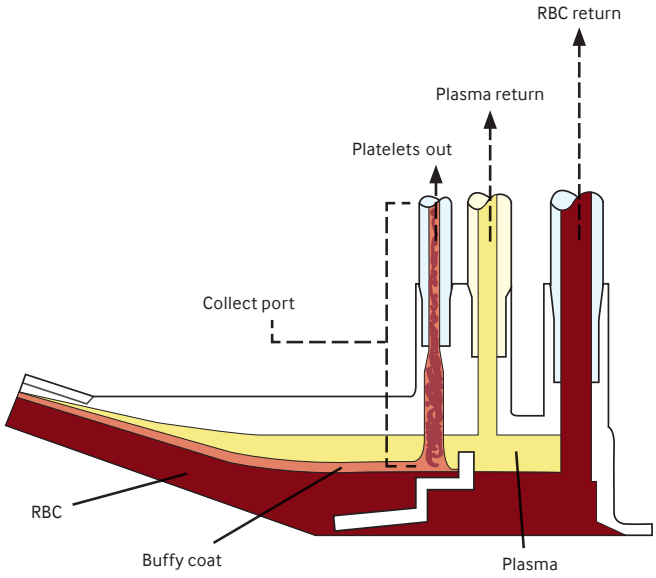
Targeted cells are continuously pumped into the collection bag

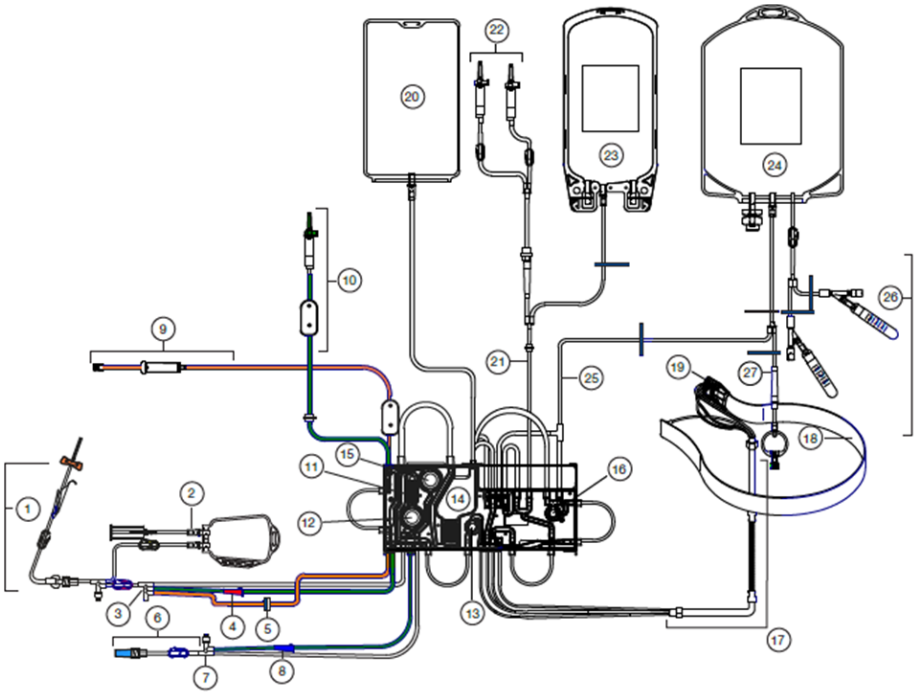
- You may monitor and adjust the depth at which the cells are collected within the buffy coat layer based on the desired hematocrit of the collected product

WBC depletion



Platelet depletion





1. Inlet line
2. Diversion bag
3. Inlet line manifold
4. Inlet saline line clamp (red)
5. AC check valve
6. Return line
7. Return line manifold
8. Return saline line clamp (blue)
9. Anticoagulant (AC) line (orange)
10. Saline line (green)
11. Inlet line trap
12. Inlet pressure sensor diaphragm
13. Centrifuge pressure sensor diaphragm
14. Reservoir
15. Return pressure sensor diaphragm
16. Collect pressure sensor diaphragm
17. Centrifuge loop
18. Channel
19. Connector
20. Vent bag
21. Plasma line/Replace line
22. Spikes for replacement fluid (white)
23. Plasma bag
24. Collection bag
25. Collect line
26. Sample bulb assembly
27. Accessory line

ECV	Typical ECV is 253 mL, maximum ECV is 297 mL with full reservoir
Single set, multiple protocols	Performs WBC and platelet depletions on the same tubing set used for granulocyte collections
Functionally closed	Reduces the risk of microbial contamination in the collected product
Compact packaging	Minimizes the space required for storage
Color-coded components	Simplifies setup and operation

Working with you

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
- User groups and professional networks

Not for distribution in the U.S. and Canada.

TERUMO BLOOD AND CELL TECHNOLOGIES

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**

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