



## Association Bulletin #25-02

**Date:** December 19, 2025

**To:** AABB Members

**From:** Jose Cancelas, MD, PhD – President Debra BenAvram – Chief Executive Officer

**Re:** Status of the COBE™ 2991 Discontinuation and Impact on Blood Cell Processing

Association Bulletins provide a mechanism for publication of documents that have been approved by the Board of Directors for distribution to individual and institutional members, such as:

- Standards that were adopted after publication of the most recent edition of *Standards*.
- Statements of AABB policy intended for distribution to members.
- Guidance, recommendations, and reports that have been developed by AABB Committees or National Office staff for distribution to members.

This bulletin contains information related to the COBE™ 2991 cell processor device discontinuation and the status of the industry's transition to alternative approaches for cell processing.

This bulletin does not contain specific recommendations, nor does it create a standard or accreditation requirement. This bulletin:

- Was developed by an ad hoc working group of AABB members with relevant expertise in transfusion medicine, including members of the Technical Practices, Serology, and Genomics Subsection of the Transfusion Medicine Section.
- Provides important information and resources to AABB members to inform the management of the discontinuation of the COBE™ 2991 cell processor device.

*Please note, references to products in this Association Bulletin are for informational purposes only and do not imply endorsement.*

### Background:

Terumo BCT, the manufacturer of the COBE™ 2991 cell processor, announced that the manufacture, maintenance, and upkeep of the device will be discontinued due to challenges in obtaining essential components and parts. The final date for when Terumo BCT will end support for spares, repairs, service agreements and technical service is **March 31, 2031**.

The COBE™ 2991 is licensed and currently used by blood centers and hospital-based facilities throughout the globe for the following procedures:



- Washing Red Blood Cells (RBC)
- Deglycerolizing frozen RBCs
- Platelet washing
- Marrow processing
- Cell concentration
- Intraoperative blood recovery processing
- Density gradient separation
- Creation of red cell stroma for use as an immunohematology reagent

At this time, there is no other device currently available on the market that performs all of the functions licensed for the COBE™ 2991 device.

#### **AABB User Survey Summary:**

In late 2023, the American Rare Donor Program (ARDP) conducted a survey of its member facilities to determine the impact of the impending change on the instrument landscape for managing frozen rare RBC units and to identify the methods in place to thaw, deglycerolize and distribute such units.<sup>1</sup> The findings indicated that a majority of ARDP members use the COBE™ 2991 for deglycerolizing RBCs with approximately 20% of surveyed members using an alternative method. At that time, respondents reported having more than 11,000 frozen rare RBC units in inventory in the United States. Nearly 10,000 units (81%) of the frozen rare RBC inventory were prepared using the COBE™ 2991 cell processor and approximately 25% were collected via apheresis.

Subsequently, a work group of the AABB Technical Practices, Serology, and Genomics Subsection conducted a survey of AABB membership to gauge current usage of the COBE™ 2991 device across hospitals and blood centers, while also providing awareness of the upcoming device sunsetting to the community, and providing an opportunity for the community to give broad feedback.<sup>2</sup> The survey found that:

- For deglycerolizing frozen RBCs, 40% of respondents indicated they planned to transition to ACP® 215 (Haemonetics) and 20% to a manual method.
- For washing RBCs, 62% of respondents indicated they planned to transition to ACP® 215 and 29% to a manual method.
- For washing platelets, 33% of respondents indicated they planned to transition to ACP® 215 and 26% to a manual method. Of note, software for platelet washing using the ACP® 215 is not currently licensed in the United States.

#### **Key Considerations:**

- There is no other device on the market that performs all the functions licensed on the COBE™ 2991 cell processor.



- One alternative automated cell processing device, the ACP<sup>®</sup> 215 is widely licensed for washing, glycerolizing and deglycerolizing whole-blood-derived RBCs, but not for apheresis RBCs.
- Another alternative to using the COBE<sup>™</sup> 2991 is to transition to manual washing and deglycerolizing RBCs, although this method is more labor-intensive and requires alternative equipment such as a floor model centrifuge and expressor.
- There is at least one alternative device for marrow processing (Spectra Optia<sup>®</sup> Apheresis System, Terumo BCT).
- Manual protocols may be an option to explore to continue the production and offering of red cell stroma to immunohematology reference laboratories.
- The different methods for glycerolizing and deglycerolizing RBCs with the ACP<sup>®</sup> 215 (Valeri) and the COBE<sup>™</sup> 2991 (Meryman) are not directly compatible. Therefore, if any existing frozen RBCs were processed with the Meryman method, the approach to deglycerolize with the ACP<sup>®</sup> 215 must be modified to bridge the methodological differences.<sup>3,4</sup>
- There is no automated device for platelet washing in the United States. Therefore, organizations may need to consider manual processing; protocol standardization across the industry would be beneficial. A protocol used in Japan for platelet washing with the ACP<sup>®</sup> 215 has not been licensed in the United States and the software supplied with the ACP<sup>®</sup> 215 devices purchased in the US do not support this procedure.<sup>5</sup>
- Verbal communications from several blood centers indicate that the ACP<sup>®</sup> 215 has been validated and is already in use for licensed processes and for deglycerolizing Meryman frozen rare RBC units.
- It is unclear if hospitals that currently use the COBE<sup>™</sup> 2991 for RBC and/or platelet washing will transition to an alternative device and/or process or look to their blood suppliers to fulfill their needs for these products.
- The ACP<sup>®</sup> 215 device is not licensed to wash, glycerolize and deglycerolize apheresis, sickle cell trait and high hematocrit RBC units. The need for, and benefits of, continuing to offer these products must be evaluated through institutional discussion. Where applicable, validation and licensing studies will need to be conducted in collaboration with the device manufacturer to allow these uses.
- Several reagent manufacturers (eg, Werfen, QuidelOrtho) use the COBE<sup>™</sup> 2991 to prepare reagents used in hospital transfusion services and blood centers for serologic antigen typing and antibody identification. The plans for how manufacturers will prepare reagents without the device are not yet available.



The work group of the Technical Practices, Serology, and Genomics Subsection will continue to review new information as it becomes available and will be updating the information contained on the AABB [website](#)<sup>6</sup> dedicated to the discontinuation of the COBE™ 2991. This website contains additional resources, including articles, validation protocols, etc, to assist users in their preparation for the discontinuation.

## References

1. Keller MA, Kavitsky V, Maurer J and ARDP member facilities. Managing a frozen rare blood inventory—a survey of American rare donor program member facilities. *Vox Sang* 2024;119(S1):438.
2. Wortman S, Keller M. The changing landscape of managing a rare blood frozen inventory. Presented at the AABB Annual Meeting, October 23, 2024. [Available at <https://education.aabb.org/p/s/am24-sn-08-o-the-changing-landscape-of-managing-a-rare-blood-frozen-inventory-enduring-17760>]
3. Howell A, Kurach J, William N, et al. Deglycerolization of manually glycerolized, frozen red cell concentrates using a closed system cell processor. *Transfusion* 2025;65(4):664-8.
4. Laforce-Lavoie A, Constanzo-Yanez J, Chevrier MC, Cloutier M. Automated processing of Meryman-frozen red blood cells: A novel protocol for deglycerolization. *Transfusion* 2025;65(4):732-9.
5. Oikawa S, Minegishi M, Endo K, et al. Washing of platelets can be fully automated using a closed-system cell processor and BRS-A platelet additive solution. *Vox Sangs* 2016;111:437-40.
6. <https://www.aabb.org/blood-biotherapies/blood/transfusion-medicine/transfusion-medicine-resources/information-for-cobe-2991-sunsetting>