

Terumo Blood and Cell Technologies and Sanquin to automate whole blood processing across the Netherlands

Sanquin integrates Terumo BCT's Reveos™ Automated Blood Processing System to enhance blood processing efficiency and increase production of essential blood products

Lakewood, Colorado, 3 October 2024 – [Terumo Blood and Cell Technologies](#) (Terumo BCT), a medical technology company, and [Sanquin Blood Supply Foundation](#), the Netherlands national blood supply authority, today announced a 10-year agreement to automate the country's blood processing facilities using Terumo BCT's Reveos™ Automated Blood Processing System. Sanquin is known for pioneering the buffy coat process to produce blood components, which is widely used around the world. [1] It is transitioning from buffy coat to this advanced automation technology to produce more blood components, such as platelets and plasma, without needing to increase donations.

Donor recruitment and retention remains a critical challenge for blood transfusion organizations globally. Meanwhile, demand continues to rise for blood components to treat various acute and chronic diseases — platelet transfusions are crucial in cancer treatment, acute and chronic anemia, and bleeding disorders, while red blood cell transfusions are needed for certain liver diseases.

Implementing Reveos across the nation's production sites will allow Sanquin to increase efficiency and produce a unit of platelets from four blood donations instead of five. This automation technology also streamlines Sanquin's processes, significantly reducing complexity from 26 manual steps to just nine automated steps[2], alleviating the physical demands on staff.

As a result, Sanquin, which processes approximately 400,000 whole blood donations annually[3], stands to reduce the cost of blood collection by increasing platelet production — without the need to increase the number of either whole-blood or platelet-specific donations. Moreover, Reveos enhances plasma recovery, which supports the production of plasma-derived medicines and therapies.

"Implementing Terumo BCT's technology will have a tremendous impact on our nation's blood supply," said Peter Verheggen, Director of Blood Supply at Sanquin. "Blood donors provide an invaluable gift, and we have a duty to maximize its patient impact. Transitioning to the Reveos technology will help us ensure we can continue to meet patient demand with increased efficiency, consistent quality and a smaller production footprint."

Says Chetan Makam, General Manager, Global Blood Solutions, Terumo BCT: "We are dedicated to supporting Sanquin in achieving operational excellence through the Reveos platform. Automation brings efficiencies — speed, consistency, quality and reduced waste — to the complex work of producing lifesaving blood components to deliver life-changing therapies."

[1] <https://onlinelibrary.wiley.com/doi/pdf/10.1111/vox.13280>

[2] *Data on file at Terumo Blood and Cell Technologies. May vary depending on the manual or semi-automated process in the blood processing facility.*

[3] <https://www.sanquin.nl/binaries/content/assets/sanquinnl/over-sanquin/pers--actueel/jaarverslagen/jaarverslag-stichting-sanquin-bloedvoorziening-2023.pdf>

About 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 worldwide believe in the potential of blood and cells to do even more for patients than they do today. This belief inspires our innovation and strengthens our collaboration with customers.

Terumo Blood and Cell Technologies' customers include blood centers, hospitals, therapeutic apheresis clinics, cell collection and processing organizations, researchers and private medical practices. Our customers are based in over 150 countries across the globe. We have 750+ granted patents, with more than 150 additionally pending. We have global headquarters in Lakewood, Colorado, U.S.A., along with five regional headquarters, seven manufacturing sites and six innovation and development centers across the globe. Terumo Blood and Cell Technologies is a subsidiary of Terumo Corporation (TSE: 4543), a global leader in medical technology.

About the Reveos™ Automated Blood Processing System

Reveos is the first and only device of its kind. This easy-to-use automated system integrates the manual steps of whole blood processing. Whole blood units are collected from donors and have traditionally been separated into components — platelets, plasma and red blood cells — using a semi-automatic and manual method that takes up to 26 steps. Reveos simplifies this process and eliminates over half of the steps, depending on the blood processing facility. The system aims to help blood centers manage staffing and improve overall efficiency by obtaining more blood products from the same number of donors. It has been used in 52 countries for more than a decade. Reveos is expected to help U.S. blood centers meet the growing demand for platelets, which control bleeding and are used to treat patients facing trauma, cancer and chronic conditions, among others. Up to four units of whole blood are loaded into the Reveos system. The rotor begins to spin, and the whole blood is separated into components. Plasma, platelets and red blood cells are expressed into their respective product bags, and each bag is sealed. After the procedure, the data is recorded. Availability varies by region and country. Reveos™ is either a registered trademark or a trademark of Terumo BCT, Inc. in the United States and/or other countries. See [TerumoBCT.com/trademarks](https://www.terumobct.com/trademarks) for details.

About Sanquin

Sanquin ensures the safe and efficient collection, production and supply of plasma and blood and cell products for the treatment of patients. In addition, Sanquin offers complex diagnostics, high-quality scientific research and education with a focus on transfusion medicine, hematology, oncology and immunology.