Unlocking Potential

Together, we can unlock the potential of **blood and cells** — and turn hope into reality.

TERUMO BLOOD AND CELL TECHNOLOGIES

The **Answer Within** Us

A trauma victim struggling for survival.

A child diagnosed with cancer.

A patient with a debilitating illness.

For these individuals, their care teams, and so many others in healthcare, the need for hope is always front and center. Yet it can feel intangible and just out of reach.

At Terumo Blood and Cell Technologies, hope is concrete. Evidence-based. Real. And it's living within us all — thanks to the blood and cells that flow through every human body.

From lifesaving blood transfusions to next-generation therapies, blood and cells are leveraged daily as essential medicine in an extensive range of treatments throughout the world.

Our purpose-driven associates and patient-focused innovations play an important role in the collection, processing, development, and delivery of those treatments.

Pioneering technologies to help raise standards for quality, efficiency, and safety.

Creating game-changing collaboration to help increase patients' access to high-quality care, no matter who they are or where they live.

Delivering expert insights and leadership to help the blood and cell therapy infrastructure continuously improve its critical work.

Together with healthcare systems around the globe, we are unlocking the potential of blood and cells to do more for patients.

Our technology and solutions, in use by customers around the world, ultimately touch a patient's life **every second of every day.**

A Patient's Story

Jason Gutierrez was born with hypoplastic left heart syndrome. At age 6, he received a transplant, but soon after, his body began producing antibodies that attacked his new heart. Fearing a rejection was imminent, his care team began a procedure called therapeutic plasma exchange, using a device created and manufactured by Terumo Blood and Cell Technologies.

The device enabled a continuous process that withdrew Jason's blood and returned it after removing the attacking antibodies. The treatment helped his physicians prevent the failure of his lifesaving organ transplant.

A Rich History of
Empowering Progress

Thanks to a storied 60 years of innovation in medical technology, Terumo Blood and Cell Technologies remains a thriving leader in its home state of Colorado, with an expansive international presence.

Our customers — hospitals and clinicians, blood and plasma centers, processing labs and cell collection sites, researchers, and cell therapy developers — serve patients in more than 150 countries on six continents.

Throughout our company's history, our goal has always been to help customers tackle the tough challenges that keep them up at night.

For instance, as collection centers struggled to meet fluctuating demand for different blood components, our scientists and engineers created a groundbreaking device to collect individual components — platelets, plasma, and red blood cells — in any combination, at the same time, from one qualified donor. Now, more than 11,000 of those devices are in use worldwide.

Early in the COVID-19 pandemic, we received the first Emergency Use Authorization for a medical device from the U.S. Food and Drug Administration. The authorization allowed hospitals to use our technology to filter out inflammatory proteins from a patient's blood to aid in COVID-19 treatment.

When cell therapy developers needed to investigate ways to increase the consistency and quality of the starting material that forms the foundation of their cutting-edge therapies, our specialists helped author industry guidelines for cell collection best practices and launched the first education program of its kind for the market.

Today, our legacy of problem-solving and invention continues to push our teams to find the answers that will fuel industry growth and improve patient outcomes.

With each success, we gain momentum to make history again.

Part of Something Larger:

Terumo Corporation

Terumo Blood and Cell Technologies is one of three companies that make up the world-renowned Terumo Corporation (TSE: 4543) based in Tokyo, Japan. As a healthcare innovator for more than 100 years, Terumo has an expansive portfolio, from diabetes care to vascular intervention. The corporation's leadership and support allow us to deepen our impact, and we are inspired by Terumo's patient focus, influence, and commitment to meeting vital healthcare needs since its origin in 1921.

Terumo continues to serve a wide range of stakeholders and addresses issues important to society, including human rights and the environment.

Group Mission

Contributing to Society through Healthcare

Facts at a Glance

Founded in
1964

4 regional offices

Customers in
150+

Independently operated and headquartered in the U.S.

5 research and development centers

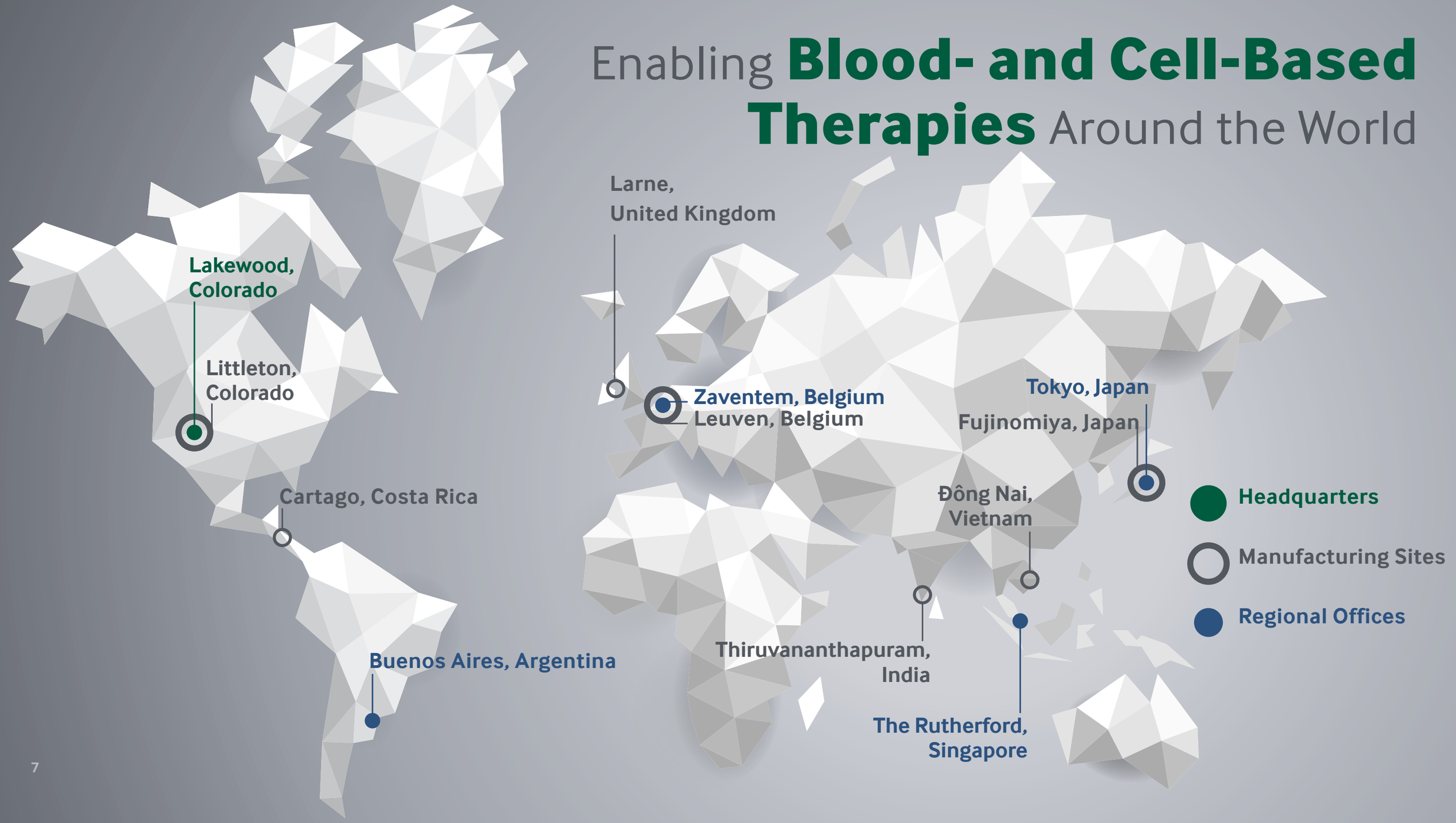
7 manufacturing sites

7,900+
team members

400+
distributors worldwide

750+
patents, with more than 150 pending

Enabling **Blood- and Cell-Based Therapies** Around the World



Champions for a
Stronger World Blood Supply

About 118.5 million units of blood are donated every year, provided by voluntary donors to help their neighbors and communities. Yet ensuring patients have ready access to a safe supply of blood products remains a significant and universal concern.[1]

Demand is increasing.

Collection and processing workloads can be unrelenting.

Recruiting eligible blood donors is a challenge.

And in some countries, the blood supply may still be at risk of carrying transmissible infections.

The consequences: Lives may be impacted and even lost.

That's why we're doing all we can to address these issues with technology, software, insights, and advocacy.

Our work ranges from designing materials that allow platelets to be safely stored for longer periods of time to helping make automation and data connectivity in blood processing the standard in every corner of the world.

With digital transformation and other advances, processes can become more consistent and faster, human errors can be limited, and costs and waste can be reduced.

Perhaps most importantly, organizations can do more with the blood they collect.

We're also proud to help shepherd best practices and improvements such as pathogen reduction technology and provide assistance to organizations like the Global Blood Fund and Blood Emergency Readiness Corps.

As transfusion medicine continues to evolve, we are committed to enabling the work required for fragile drops of blood to make their way safely and efficiently from selfless donors to patients in need.

Our Values in **Action**

Through our From the Heart Blood Donation Awareness Program, our associates are empowered to amplify the message that voluntary blood donations are paramount to maintaining a sustainable blood supply. Associates use the program's education and activism tools to let others know everyone can help save lives, whether through donating blood, volunteering, or motivating friends and family. Associate efforts lead to hundreds of successful local blood drives and related events each year.

From the Heart
Blood Donation Awareness Program

A Patient's Story

Lilian Chebet lives in Nandi, Kenya. Minutes after giving birth to her third child, she experienced severe bleeding, known as postpartum hemorrhage. Her care team's quick action and the availability of blood for an urgent transfusion saved her life. Others like Lilian may not be as fortunate; sub-Saharan Africa has the world's highest maternal mortality rate at 200,000 deaths each year.[2] Building awareness and infrastructure is imperative. It's the reason we work with non-governmental organizations, hospitals, and advocacy groups — in Africa and in nearly every other corner of the world — to foster change.

Hear more about Lilian's story in this video.

Higher Standards of Care
for More Patients

Imagine if there were a proven therapy option, using existing medical technology, that could potentially help millions of patients dealing with challenging health conditions such as leukemia and sickle cell disease.

Now imagine that each patient who could benefit from the life-changing treatment has affordable and nearby access to it.

At Terumo Blood and Cell Technologies, we're devoted to making this scenario a reality by leaning into the **untapped promise of a treatment called therapeutic apheresis.**

Therapeutic apheresis is a procedure that simultaneously separates a patient's blood components, removes targeted cells or other elements that are associated with a disease or condition, and returns the rest to the patient. It can also replace targeted cells with healthy donor cells. The procedure has applications for patients with not only blood disorders and cancer, but also autoimmune illnesses and certain diseases of the heart, lungs, kidneys, and other vital organs.

Yet the therapy isn't always available to patients due to barriers such as high cost, a patient's ability to travel, policy challenges, and more.

What does that look like in action?

A bone marrow transplant center is established in Tanzania — bringing a vital treatment option, leveraging cells processed with our device, to cancer patients in the sub-Saharan region for the first time.
A biotechnology company partners with us on a selective blood filtration approach to treat triple-negative breast cancer.*

Officials in the U.K. select red blood cell exchange, performed with our technology, as a best-practice therapy for sickle cell disease, opening the gates for patient access.

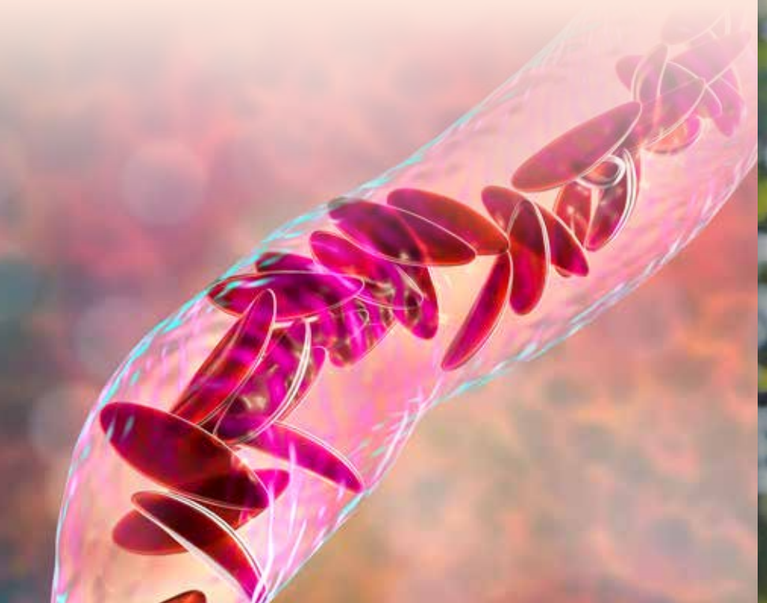
In China, programs are developed to bring lower-cost therapeutic apheresis via our technology to a population of 4 million.

Our apheresis technology is an industry standard,[3] used for more than 80% of therapeutic apheresis procedures worldwide.[4] That makes our leadership in this area key.

*Not available in all geographies.

Our Values in
Action

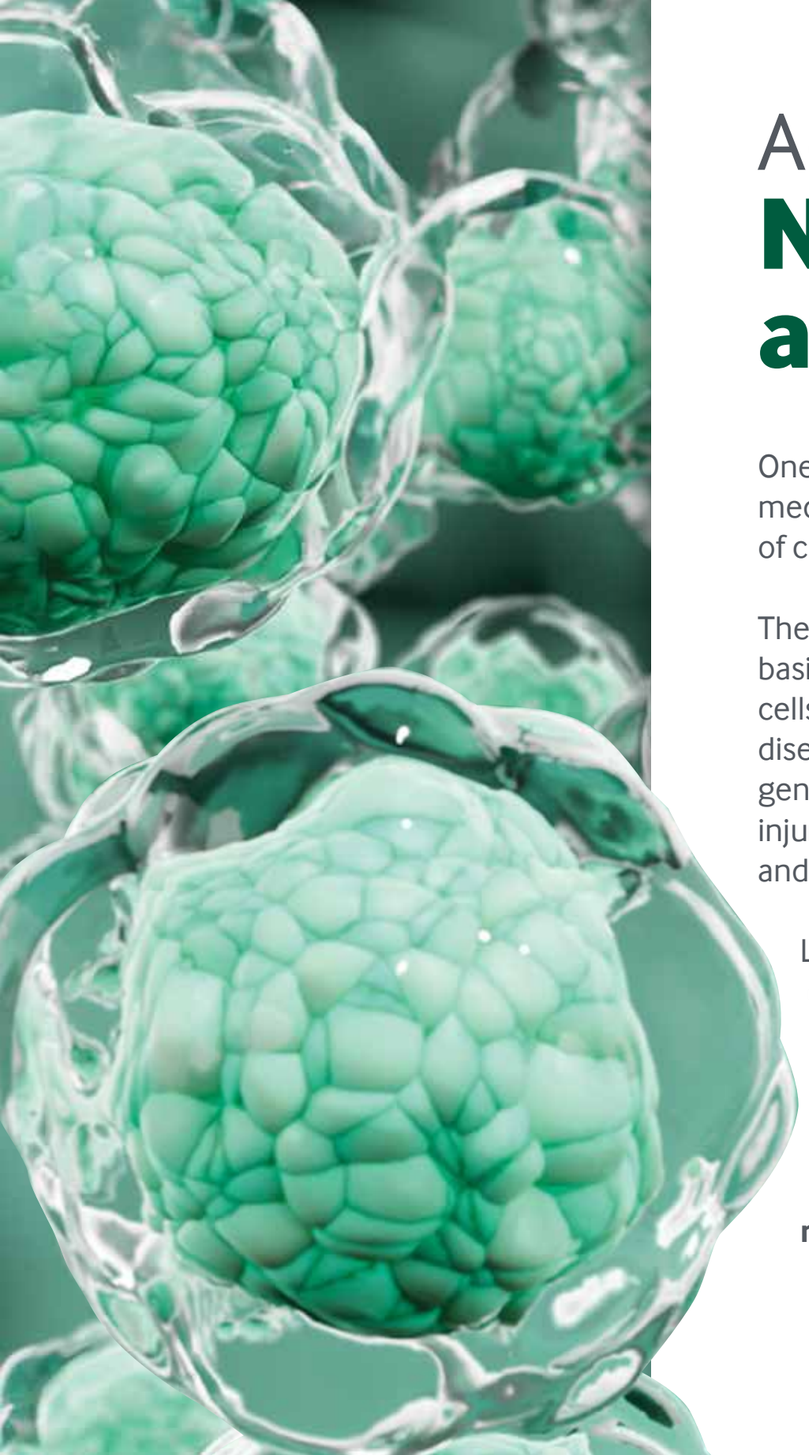
Our organization believes that improved care for patients with sickle cell disease — an inherited disorder affecting 120 million people[5] — is an urgent need in the U.S. and globally. Treatment inequities are extensive, so we're working to overcome obstacles by teaming up with clinicians, education and advocacy groups, and governments. Studies supported by our patient access efforts are underway in countries as diverse as Brazil, France, and Saudi Arabia.



A Patient's Story

Like many patients with sickle cell disease, Nigeria-born Bola Jibodu lived with frequent pain and serious infections. Describing her pain as a 12 on a scale of 1 to 10, she said: "It takes your breath ... it's like something is pressing your heart down and your bones." Once Bola moved to the U.K., her care team was able to offer red blood cell exchange therapy. Her quality of life improved, and she no longer considers the hospital her "second home." Bola's story highlights the importance of expanding access to high standards of care, no matter where a patient lives.

Learn more about Bola's challenges and treatment, in her own words.



Acceleration of
Next-Generation Cell and Gene Therapies

One of the most exciting areas of medicine today is the development of cell and gene therapies.

These therapies leverage the most basic of the body's building blocks — cells — to stop or slow the effects of disease. They hold promise for treating genetic diseases, cancer, spinal cord injuries, neurological disorders, and more.

Like so many of our customers, cell and gene therapy developers and their healthcare partners are heroes working to cure patients in a complex environment.

They're up against difficult time, resource, and regulatory challenges.

Our role? To assist them from the earliest phases of process development to scaling up and out for clinical trials and commercialization.

The foundation of that assistance lies in two areas: One, our well-established knowledge and proficiency in cell collection and handling, and two, helping developers transition away from manual steps to flexible and precise automation systems, which can limit unpredictability and the waste of precious cells.

But we're not stopping there.

We're collaborating with early adopters on technologies and software to meet their fast-changing landscape, including compliance and data management needs.

We're researching ways to use smaller numbers of donor and patient cells to produce larger volumes of finished product.

Patients need new options now. As cell therapy developers work to quicken the pace of treatment advances, we'll be here as a catalyst for speed, quality, and growth.

A Patient's Story

Just as he was enjoying his teen years, Julius suffered burns over 95% of his body. Before, if more than 50% of a child's body was burned, there was very little doctors could do. But with a compassionate care qualification, the use of our automated cell expansion platform, and just a small biopsy, a Swiss life-sciences company was able to produce large quantities of bioengineered skin in less than a month by culturing Julius's own skin cells. The treatment approach allowed Julius to get back to living his life.

▶ Take a moment to learn more about Julius's care and recovery.

Our Values in **Action**

The collection of cells from critically ill patients for their individual drug therapies can be a challenge that impacts when those patients receive treatment. That was the case at a South Dakota health center, where collections were falling short of target yields. We partnered with them to analyze data and implement a custom prediction algorithm that could more accurately calculate the volume of blood needed from each patient to achieve the desired therapy dose. The success rate of reaching target yields jumped from 47% to 92% — a win for patients and the hospital care team.[6]

From
Possible to Tangible

At Terumo Blood and Cell Technologies, we believe the future of blood- and cell-based therapies is rich with opportunities to change lives.

Our job is — and always has been — to help transform ideas into real-world solutions that patients, and our customers and partners who serve them, can count on.

As we fortify and expand from our roots, we remain energized by what's ahead. We are continuing to invest in innovation at the intersections of expertise, technology, access, and patient care management.

Along the way, we remain dedicated to asking questions like:

How can we better listen to patients and gain understanding of their needs?

How can we enhance disease management and get care to patients faster?

What new areas of research are needed to advance care?

How can we gain better visibility into and optimize procedures and processes?

For our teams, every day presents another chance to make a difference — and to turn what's possible into an enduring reality.

Our Values in **Action**

Making a difference in many distinctive ways is woven into our culture at Terumo Blood and Cell Technologies. To contribute to a diverse and inclusive workplace, associates create dynamic resource groups to share insights, increase awareness, and empower each other.

Enhancing diversity in the sciences is also a focus; associates host educational events to excite local youth.

Our teams have won awards for environmental sustainability programs, and they regularly raise funds for industry and community causes. To date, they have raised nearly USD $2 million for the Leukemia & Lymphoma Society alone.

A Patient's Story

We recently worked with one of the world's leading plasma collection companies to develop the industry's first end-to-end plasma technology ecosystem, designed to redefine efficiency. That's important to patients like Peter Atherton, who has common variable immune deficiency. To stay healthy, Peter needs plasma-derived infusions every month for the rest of his life. It can take 130 plasma donations to treat one patient with a primary immunodeficiency for a year,[7] and only small numbers of people eligible to donate actually do. This makes creating positive donor experiences crucial. On the new system, one plasma donation takes less than 35 minutes on average — making it attractive for donors to stop in to donate.

▶ Listen to Peter discuss his story and treatment in this video.

Our
Core Values

Based on our Group Mission of Contributing to Society through Healthcare, we believe we have a responsibility to lead the advancement of healthcare and the enhancement of patient quality of life. To achieve this, we must create solutions of value and spread those solutions globally.

Our core values drive not only that work, but also our culture and business decisions.

Respect - Appreciative of others

Integrity - Guided by our mission

Care - Empathetic to patients

Quality - Committed to excellence

Creativity - Striving for innovation

Online Additional Resources Available

Click each image to view.

TERUMO
BLOOD AND CELL TECHNOLOGIES

Visit Terumo Blood and Cell Technologies online.

Browse news and events information.

Watch our About Us video.

Hear more patient stories.

Learn about life as a Terumo Blood and Cell Technologies associate.

Discover how cell therapies are enabling the use of “cure” and “cancer” in the same sentence.

Click each image to view.

Learn about the Blood Emergency Readiness Corps.

Learn more about Terumo Corporation.

Visit the Terumo Global website.

Read about our sustainability efforts.

Hear a heartfelt success story highlighting stem cell transplants, presented by MedTech Europe and produced by BBC StoryWorks Commercial Productions.

Sources

[1]Global status report on blood safety and availability 2021. Geneva: World Health Organization; 2022. License: CC BY-NCSA. 3.0 IGO.
[2]World Health Organization. Maternal mortality: Key facts. Published February 22, 2023. Accessed September 10, 2023. https://www.who.int/news-room/fact-sheets/detail/maternal-mortality.
[3]Data on file at Terumo Blood and Cell Technologies. Market Share: Spectra Optia. September 2020.
[4]Data on file at Terumo Blood and Cell Technologies.
[5]World Health Organization. Published August 23, 2022. Accessed September 14, 2023. https://www.afro.who.int/news/african-health-ministers-launch-drive-curb-sickle-cell-disease-toll.
[6]Terumo Blood and Cell Technologies. Customer success story: Hospital decreases cell collections not meeting target from 53% to 8%. 2022.
[7]Plasma Protein Therapeutics Association. Accessed September 20, 2023. https://www.pptaglobal.org/plasma.

Connect With Us

To learn more about our story, please reach out via our contact information below or visit us online at TerumoBCT.com.

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