

TAKEDA'S PLASMA-DERIVED THERAPIES BUSINESS UNIT:

Our ambition is to transform the lives of patients through innovation and sustainability from plasma donation to delivery of medicines

Takeda's Plasma-Derived Therapies (PDT) Business Unit (BU) is **fully dedicated to serving the needs of communities around the world who rely on plasma-derived therapies** based on the therapeutic proteins in plasma.

One of the **top three plasma organizations** in the world, Takeda's PDT BU is **rethinking the entire plasma value chain** to help ensure a more sustainable supply of these therapies today and for the future.

80 year legacy

of leadership in using plasma therapies to treat rare and complex, chronic diseases

17,000

employees

recognized leader

in rare disease, with global pharma scale and expertise¹

Donors

Vein to Vein Strategic Planning

Patients

Plasma Sourcing

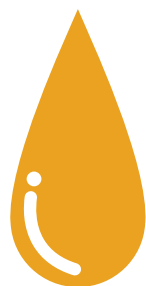
Manufacturing

Portfolio

Business Operations & Distribution

Research and Development

PLASMA



- **Straw-colored liquid portion of blood** that remains after red blood cells, white blood cells and platelets are removed.
- Essential for treating patients with a variety of **rare and complex, chronic diseases** for which there are few or no other treatment options.
- Can only be **collected from healthy individuals**; cannot be created in an artificial environment.

>57 million

liters of plasma are used worldwide to produce life-saving medicines that **treat millions of people every year.**²



Global demand for PDTs has dramatically **increased over the last 20 years** and continues to grow.³⁻⁴

Plasma donations needed for **1 patient for 1 year** to provide adequate therapy⁵...

100's - 1,000+

ONE OF THE MOST INNOVATIVE PLASMA DONATION NETWORKS IN THE WORLD:

BioLife, Takeda's network of plasma donation centers

Global plasma donation network recognized for its industry-leading donation safety standards.⁶ Modern, high-quality centers that offer an unparalleled donation experience.⁷

Reaching more patients through a differentiated donor experience through investments in:

- In-person and omni-channel personalized engagement, from initial consideration to actual donation.
- Harnessing data and digital to drive value.
- Collaborations with technology leaders.

>8,000
staff

3 dedicated
screening labs

>200

state-of-the-art plasma collection facilities in the US and Europe

>30

centers in Austria, Czech Republic and Hungary

on track to deliver **>65%**
growth in collection FY18 - FY23

¹ Takeda Rare Diseases Areas of focus. Available at <https://www.takeda.com/what-we-do/areas-of-focus/rare-diseases/>, last access June 2021. ² An Analysis of the impact of International Transfer of Plasma on the availability of Immunoglobulin Therapies, The Marketing Research Bureau, Inc., The Source, Fall 2019. ³ Analysis of supply, distribution, demand and access issues associated with Immune Globulin Intravenous (IVIg). Available at <https://aspe.hhs.gov/system/files/pdf/75031/report.pdf>, f%20last%20access%20June%202021 https://aspe.hhs.gov/system/files/pdf/75031/report.pdf last access June 2021. (p.12). ⁴ Marketing Research Bureau, Inc., European Blood Alliance and International Plasma and Fractionation Association (EBA-IPFA) Amsterdam, the Netherlands 14-15 January 2020. ⁵ Plasma Protein Therapies - Who needs plasma protein therapies. Available at <https://www.pptaglobal.org/plasma-protein-therapies>, last access June 2021. ⁶ Takeda. Plasma-Derived Therapeutics. Pathogen Safety Monograph. ⁷ Bain & Co. Plasma donor survey 2015.



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MAKING THE MOST OF EVERY DONATION: *State-of-the-art manufacturing advances*

Global network of **8 world-class manufacturing facilities**



World-class capabilities in pathogen safety and virology through our Biosafety Level 3 (BSL-3) lab to safeguard donors and patients.



Significant **investment across our manufacturing network**, with a focus on efficiency gain, operational excellence and sustainability, has driven year on year increase in capacity.



Highly complex biologics production. PDTs can take **between 7 and 12 months** from donation to delivery vs. **3 months** for typical pharmaceuticals.



Increasing capacity by more than 65% (FY18-FY23) through next-generation production processes, digital technologies and novel partnership approaches.⁸

LIFE-LINE THERAPIES: *our PDTs support people with life-threatening, rare and chronic diseases*

A broad, differentiated portfolio of **more than 20 plasma-derived products**,⁹ including a diverse offering of subcutaneous IG (SCIG) therapies.

Hundreds of thousands of people worldwide rely on our therapies.



PDTs treat a range of diseases, including:

Immune deficiencies and certain neurological disorders, blood volume replacement, Alpha-1 Antitrypsin deficiency, Hemophilia, Hereditary Angioedema and shock/trauma.

DELIVERING MORE THERAPIES TO MORE PATIENTS: *Innovation focused on patient impact*



- Dedicated, expert R&D team working to uncover new transformative solutions for the benefit of patient communities worldwide.
- Enhancing our current portfolio.
- Expanding indications and reaching new geographies to help more people.
- Finding new ways to improve the patient experience with complete care solutions.
- Pioneering discovery efforts to pursue novel plasma-based therapies, mining the significant untapped therapeutic potential in plasma.
- Discovering new approaches in areas where plasma could be uniquely beneficial.
- **100+ registrations and approvals** planned over the next three years.

LOOKING AHEAD: *A continual pursuit to deliver greater impact, in line with Takeda's values*



- Aspiring to bring better health for people and a brighter future for the world through a future-ready organization.
- Drawing on rich data, digitalizing and collaborating in innovative ways to set new standards for our industry.
- Leading a community dialogue to support more reliable global plasma supply through collaborations with governments and policy makers.
- Supporting Takeda's sustainability goals to be **100% carbon neutral** by 2040, have **0% waste to landfill** by 2030 and **5% reduced water use** by 2025.
- Nurturing a diverse, equitable, inclusive and stimulating environment to attract and retain expert teams.

⁸ Realizing the Potential of Plasma-Derived Therapies Investor Relations Day, Covington, GA, November 2019 https://www.takeda.com/4ab4df/siteassets/system/investors/report/quarterlyannouncements/fy2019/pdt_20191115.pdf. ⁹ Takeda Plasma derived therapies portfolio. Available at <https://www.takeda.com/what-we-do/are-as-of-focus/plasma-derived-therapies/>, last access June 2021.