Plasma Donation: Essential and Safe

Without plasma – the straw-colored liquid in human blood – essential lifesaving medical therapies cannot be manufactured.

Plasma Collection

CSL Plasma collects plasma using a process called plasmapheresis that separates the plasma from the blood and collects it in a bottle, returning other parts of the blood back to the donor.

- Trained medical staff associates assess the health of each donor.
- CSL Plasma collection centers and manufacturing sites adhere to strict regulatory policies and Good Manufacturing Practices.

Manufacturing

After plasma is collected, a manufacturing process called fractionation separates the plasma into immunoglobulins (Ig), clotting factors and albumin. Individual proteins are included in plasma-derived therapies for patients who are missing, or who otherwise benefit from, certain proteins.

Plasma-Derived Medicinal Products Save Lives

- Ig are essential for defense against infectious agents and for regulation of the immune system.[1]
- Ig are considered effective and safe to meet the needs of health systems and are included on the WHO's Essential Medicines lists.[2]

CSL Plasma is a subsidiary of CSL Behring and a member of the CSL Group of companies. CSL Limited (ASX:CSL; USOTC:CSLLY) is headquartered in Melbourne, Australia.

CSL Behring Focuses on Five Selected Therapeutic Areas

Therapeutic Areas	Immunology	Hematology	Respiratory	Cardiovascular and Metabolic	Transplant
Platform	**Plasma Fractionation**		**Recombinant Technology**		**Cell and Gene Therapy**

CSL Plasma

Plasma Donation: Essential and Safe

Plasma is used to manufacture protein therapies. This is different from blood components used for transfusion. Plasma-derived medicinal products (PDMPs) save lives and are essential components in:

Rare Disease Therapies

Rare conditions affect approximately **475 MILLION** people around the world, including a disproportionate number of children.[1,3,4]

PDMPs are often the only and/or most effective therapies for these conditions and serve to prevent premature death, reduce disease-related disabilities, and promote patients' quality of life.[5,6]

Since the introduction of immunoglobulin therapies, patient survival rates have increased from **37% IN 1971** to more than **90% BY 2008**.[6,7,8]

Everyday Medicines

- Cardiopulmonary issues
- Hepatitis
- Liver conditions
- Pediatric HIV
- RH incompatibility

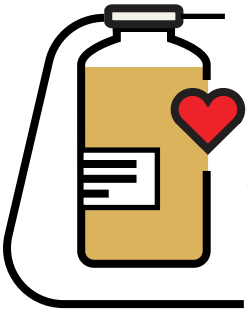
Emergency Therapies

- Shock
- Trauma
- Burns
- Animal bites

Surgical Medicine

- Major surgery
- Organ transplants

Plasma Donations Needed to Treat One Patient for One Year[9]



130 for primary immunodeficiency disease

900 for alpha-1 antitrypsin deficiency

1,000 for hereditary angioedema

1 EURORDIS, Breaking the Access Deadlock to Leave No One Behind. January 2018. Available from: https://www.eurordis.org/accesspaper **2** World Health Organization. The WHO Model Lists of Essential Medicines has been updated every two years since 1977. The current versions are the 21st WHO Essential Medicines List (EML) and the 7th WHO Essential Medicines List for Children (EMLc) updated in June 2019. Available from: https://www.who.int/groups/expert-committee-on-selection-and-use-of-essential-medicines/essential-medicines-lists **3** National Organization for Rare Disorders (NORD). **4** World Economic Forum White Paper: Global Data Access for Solving Rare Disease: A Health Economics Value Framework. February 2020. Available from: https://www.weforum.org/reports/global-access-for-solving-rare-disease-a-health-economics-value-framework **5** Manning, R., Grabowski, H. Key Economic and Value Considerations in the U.S Market for Plasma Protein Therapies. Bates White, February 2018. Available from: https://www.bateswhite.com/media/publication/154_Plasma%20Protein%20Therapies%20paper.pdf **6** Kluszczynski, T., Rohr, S., Ernst, R.: White Paper - Key Economic and Value Considerations for Plasma-Derived Medicinal Products (PDMPs) in Europe. March 2020. Available from: https://www.vintura.com/wp-content/uploads/2020/03/White-paper-key-economic-and-value-considerations-for-plasma-derived-medicinal-products-PDMPs-in-Europe_Vintura-and-PPTA.pdf **7** Plasma Protein Therapeutics Association (PPTA), 2021. **8** Chapel, H., Lucas, M., Lee, M., et al. Common variable immunodeficiency disorders: division into distinct clinical phenotypes. Blood 2008; 112(2):277-86. Available from: https://pubmed.ncbi.nlm.nih.gov/18319398/ **9** Plasma Protein Therapeutics Association (PPTA) Factsheet, 10 facts about Plasma Protein Therapies, 2021. Available from: https://www.pptaglobal.org/images/Fact_Sheets/Redone/PPTA_Fact_Sheet_10Facts_FINAL_rev2.pdf

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