

4. Plasma is different from blood



Blood plasma differs from whole blood. It is a liquid portion of blood that does not contain blood cells. Donating plasma is a more complex process than blood donation. Plasma donors can give more frequently and larger volumes.

Plasma-derived medicines treat many conditions for which no alternative treatments exist.

Plasma is different from blood

Plasma is a blood component. But it is unique and fundamentally different from blood in several ways:

Donating plasma takes longer than giving blood. Plasma can be donated directly through a process called plasmapheresis, where only the plasma is collected and the cellular components are given back to the donor. This process is longer than the time needed to give blood, but plasma can be given more frequently because the human body replenishes plasma more quickly.

Plasma protein therapies are unique medicines. The source plasma material for manufacturing these medicines is of human origin. For most of the conditions that these therapies treat, patients have no alternative treatment except for these plasma-derived medicines.

Direct donation of plasma (plasmapheresis), in dedicated plasma donation centres, is less prevalent in Europe than in North America. The US has some 900 dedicated plasma donation centres. There are currently 150 private sector plasma centres in the EU (2020), but this number is growing, as more public health systems enact policies to increase plasma giving to private centres in their countries.

Plasma donors are unique

Plasma is a unique source for producing life-saving biological medicines. Plasma donors are critical for supporting patients' health and in many cases their survival. To guarantee that patients have sustained access to plasma-derived medicines, long-term relationships are needed between plasma donation centre and donors.

Patients that take life-saving medicines made from plasma proteins require treatment throughout the year. To meet this need for 300,000 patients across Europe, and a wider group, such as trauma and accident victims, who benefit from these medicines, European countries rely on a committed community of plasma donors who agree to donate frequently, year-round.

Plasma can be separated from whole blood donation given to the public blood system or donated directly by people in a private plasma donation centre. Direct plasma donation – known as plasmapheresis – generates two to three times more plasma than when recovered from whole blood donation. The vast majority of plasma used to produce plasma protein therapies comes from directly donated plasma.



Do compensated plasma donations reduce the number of donors giving uncompensated blood donations?

Assessments of the decreases in blood donation have been found to be primarily due to Patient Blood Management.

There is no evidence to support the idea that plasma donations have a negative influence on traditional blood supplies in a country.

Data from several European countries that have opened private plasma donation centres show an opposite trend. When plasma donations increase in the private sector, they also increase in the public non-compensated sector.

The plasma donor's situation is very different from that of a blood donor:

- Giving whole blood takes 10 minutes; donors can donate 4-6 times yearly depending on gender
- Giving plasma through plasmapheresis takes 45 minutes; donation frequency varies between 20 to 60 times per year depending on national legislation.