

Plasma-derived products

Information for patients



You have been given this leaflet as your doctor has advised you that you may require plasma-derived products as a treatment for your bleeding disorder.

This leaflet explains what plasma-derived products are, how you will receive them, and any risks or side effects.

What is plasma?

Plasma is the fluid part of blood, which makes up the bulk of its volume. Blood is made up of four separate components, each of which performs a different function. They are:

- **red blood cells** – these carry oxygen around the body and remove carbon dioxide
- **white blood cells** – which help the body fight infection
- **platelets** – these are tiny cells that help the blood to clot
- **plasma** – a yellow fluid that transports blood cells and platelets around the body. It contains a number of substances, including minerals, salts, hormones and proteins

Clotting factors are proteins found in plasma which help control bleeding. They work together with platelets to make sure the blood clots effectively. These can be used to treat bleeding disorders.

If you are deficient in a clotting factor your blood may not clot properly. This may cause any bleeding you experience to last longer.

What are plasma-derived products?

Plasma-derived products include clotting factor concentrates and frozen plasma.

Plasma-derived products are made from **donated** human blood, from which the plasma or clotting proteins are separated or removed and made into clotting factor concentrates (specific clotting proteins, liquid or freeze dried as a powder) or fresh frozen plasma. These are then used to treat a variety of conditions, including bleeding disorders.

Sometimes plasma is mixed or 'pooled' when making certain types of plasma-derived products. This means the plasma is donated from a number of different people.

Which plasma-derived products will I receive?

A number of different plasma-derived products may be used to treat bleeding disorders. Each specific plasma-derived product contains different clotting proteins.

Your doctor will advise you which product is best suited to treat your condition, to stop or reduce the risk of bleeding. You can ask for further specific information once the doctor has chosen the appropriate product for you.

How will I receive the plasma-derived products?

All plasma-derived products are given intravenously (through a vein in your arm) by either a nurse or doctor whilst you are in hospital, unless you have received training to treat yourself at home.

The time it takes to administer the treatment or the number of doses you might need varies for each different product. Your doctor or nurse will be able to give you more information depending on the treatment you will need.

Risks and side effects

Virus safety

Treatments that are made from human blood or plasma are taken through certain steps to reduce the chance of infections being passed on through the plasma-derived product.

These include:

- careful selection and screening of blood and plasma donors, to make sure those at risk of carrying infections are excluded
- testing each donation and pooled plasma for signs of virus or infections, to make sure they are safe to use
- using heat or chemical processes to inactivate or remove viruses.

These measures are considered effective for screening out viruses such as HIV and hepatitis A, B and C. When you receive a plasma-derived product you will also be checked for signs of these viruses with a blood test at your routine follow-up clinic.

Although the plasma-derived product is thoroughly screened, the risk of passing on infection cannot be totally excluded. This also applies to any unknown or new viruses, or other types of infections.

It is important to note that there is also a risk of passing on a virus known as parvovirus B19.

Parvovirus B19 infection maybe serious for:

- pregnant women (as there is a risk of infection to the unborn child)
- people with a weakened immune system or with an increased production of red blood cells due to certain types of anaemia (such as sickle cell anaemia or haemolytic anaemia).

Your doctor may recommend that you consider being vaccinated against hepatitis A and B if you need plasma-derived products regularly or as part of your treatment.

There are currently no vaccinations for hepatitis C, HIV or parvovirus B19.

Side effects

Some people can experience problems or allergic reactions related to the treatment. Anaphylaxis is a rare but severe allergic reaction.

Signs of an allergic reaction include:

- swelling of your face or lips
- itching
- rash or hives (raised red marks on the skin)
- wheezing or shortness of breath.

You will be closely monitored during the infusion of the treatment for any signs or symptoms of a reaction. If you experience any of these side effects let you doctor or nurse know immediately.

Further advice

If you have any worries or questions about using plasma-derived products to treat your bleeding disorder, please contact the Haemophilia and Thrombosis Centre at the Churchill Hospital. Ask to speak to a haemophilia doctor or nurse.

Tel: **01865 225 316**

(9.00am to 5.00pm, Monday to Friday)

Tel: **01865 741 166**

After 5.00pm and at weekends please ask for the 'on-call' specialist registrar in haematology.

If you have a specific requirement, need an interpreter, a document in Easy Read, another language, large print, Braille or audio version, please call **01865 221 473** or email **PALS@ouh.nhs.uk**

Authors: Sayma Raza-Burton, Haemophilia Specialist Nurse Practitioner
Dr Nicola Curry, Consultant Haematologist

March 2017

Review: March 2020

Oxford University Hospitals NHS Foundation Trust

Oxford OX3 9DU

www.ouh.nhs.uk/information

