



Queen Victoria Hospital
NHS Foundation Trust

Autologous plasma eye drops

Patient information



Autologous plasma eye drops are made from the patient's own blood and are used to help treat their corneal surface defects and diseases.

This leaflet gives you some information about their preparation and use. If you have any further questions which are not answered in this leaflet, please ask your consultant or a member of the nursing staff at the Corneo Plastic Unit (eye clinic).

You can only get autologous plasma eye drops if they are prescribed by the doctor responsible for your treatment.

Why are autologous plasma eye drops used?

Some patients, for a variety of reasons, suffer from severe dryness of the eye that can lead to redness, itching and pain. Many are helped by treatment with artificial teardrops but for some patients these symptoms are not completely relieved.

An alternative to these artificial drops has been developed, made from the patient's own blood. They are called autologous plasma drops and contain natural ingredients known to speed up

healing and increase lubrication of the surface of the eye.

How are these eye drops made?

Autologous plasma eye drops are prepared at Queen Victoria Hospital (QVH) under a Medicines and Healthcare Products Regulatory Agency (MHRA) Blood Establishment Authorisation.

This licence allows medical staff at QVH to take a small volume of your blood and remove the blood cells from it which leaves a clear liquid called plasma.

The plasma will be packaged into small tubes which are used to apply single doses to your eyes. No additives or preservatives are added to your plasma although some anticoagulant will remain from the blood collection bag.

In compliance with MHRA licencing requirements QVH ensures your plasma eye drops have been prepared, labelled and stored according to standardised methods.

What will happen if I agree to try this treatment?

To make your eye drops we will collect some of your blood, in the same way that blood is collected from blood donors. The only difference is that your donation will be collected in a special pack and only used for the purpose of making your eye drops. This special pack containing your blood will be placed in a centrifuge, a machine that spins at very high speed, causing the red cells to separate from the plasma.

Before we take your blood we must assess your general health to make sure that donating blood will not harm you. You will be asked to complete a health check questionnaire and will have an assessment with a nurse.

If it is considered safe to proceed up to 450ml (almost a pint) of blood will be collected. **It will be tested for hepatitis B, hepatitis C, HIV, HTLV 1 and 2 and syphilis. You will be asked to consent to this testing when the blood is collected.**

Before you give blood you can withdraw from the process at any time.

Following collection of your blood, it will take approximately 2-3 weeks to test your blood and make the eye drops. When they are ready, you will be able to collect them from the eye clinic.

They will be supplied as frozen sachets so you will need to bring a cool bag and ice blocks with you for the journey home. You will be given a supply to last up to 14 weeks. However, the quantity will depend on several factors including how much blood we were able to collect from you.

These sachets need to be kept in a freezer at your home and you will need to remove a single day's worth of sachets every day, leaving them to thaw out in your refrigerator. The doctors will advise you how frequently you should use the drops. After thawing, the sachets should be kept in the refrigerator. At the end of the day any unused thawed sachets should be discarded. A fresh set of sachets should be used each day.

After care

The eye clinic staff will monitor your progress while you are receiving this treatment, and they will

decide whether the treatment should be continued.

If your treatment is to be continued, you will need to notify the eye clinic when only four weeks' supply of drops remain and we can arrange to collect more blood and make some more eye drops for you.

Any sachets left over after treatment has been stopped must be disposed of as a blood product either by the eye clinic or by your local GP surgery.

Will my blood definitely be returned as eye drops?

Usually the answer is yes. However, sometimes there are reasons why your blood cannot be used. The main reasons are:

- If there was a problem with the manufacturing process, e.g. the blood pack has become damaged during processing.
- If any of the blood screening tests are found to be positive.

If your blood is not able to be prepared as eye

drops, you will be informed and appropriate further action will be discussed. Left over blood and plasma will be disposed of according to our Trust policy for the disposal of human tissue.

What are the possible risks of this treatment?

There are some minor risks associated with collecting blood. These include fainting, anaemia and bruising or infection at the site where the blood was taken. We will try to minimise these risks by assessing you before and during the collection of your blood. This includes checking your iron (haemoglobin) level to make sure that you are not becoming anaemic.

Another possible risk is an infection caused by the eye drops as they do not contain any preservative. To minimise the possibility of this occurring, we will test each batch of drops for the presence of any infection before we issue the drops to you. The risk of infection can also be minimised by thawing only the required number of sachets each day and discarding unused thawed sachets and any remaining contents at the end of each day.

There is also a very small chance that a protein deposit could collect on the surface of the eye. This is very rare and can easily be resolved by stopping the treatment.

If you experience any adverse reactions when using the eye drops you should notify the **eye clinic** immediately on 01342 414470 and seek our advice.

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What will happen if I don't want to use these eye drops?

The alternative to not using autologous plasma eye drops is a likely persistence of the defect or disease affecting your cornea. This increases the risk of bacterial infection of your eye and also possible further corneal damage and perforation.

Safety requirements

As these eye drops are made from your own blood

they must not be used by anyone else. The eye drops are issued with an expiry date and must not be used if this date has expired.

Data protection

A record of all tests performed will be held by the department. Your data will be held securely, and in accordance with your rights, under the Data Protection Act (1998).

Who do I contact if I am worried or have any questions?

If you are concerned about any aspect of your treatment please contact:

Eye Emergencies: 01342 306752 Monday to Friday
9am-5pm

Ross Tilley Ward: 01342 414451 After 5pm,
weekends or bank holidays

Eye Clinic: 01342 414470 / 4166 / 4038 for
appointments

For advice out of hours (after 5pm or during the
weekend), please call the eye ward to speak to a
nurse

Tel: 01342 414466

Please ask if you
would like this leaflet
in larger print or an
alternative format.

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