



Information for patients

Intraoperative cell salvage

What is cell salvage?

Cell salvage collects blood that is lost during your operation and returns the red blood cells back to you.

Is this the right choice for me?

This leaflet provides Important information for patients who would like to know more about cell salvage use and if it may be appropriate during their surgery.

Cell salvage

This leaflet provides you with information about cell salvage, when and how it is used as well as the risks and benefits. This is to support you when giving your informed consent for cell salvage to be used during your surgery.

Any patient who is likely to bleed a moderate amount during their surgery, more than 500mls, could benefit from cell salvage.

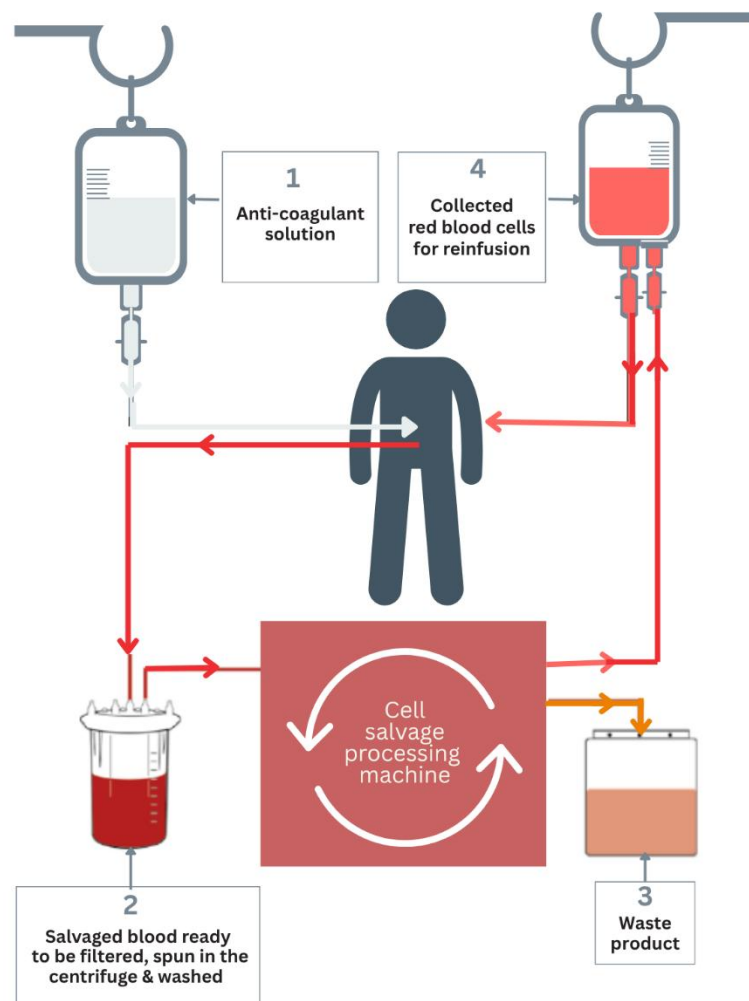
Blood is made up of different cells and substances: -

- Red blood cells carry oxygen around your body.
- White blood cells help you to fight infections or illnesses.
- Platelets help the blood to clot to prevent bleeding.
- Plasma is the liquid in blood that carries red blood cells, white blood cells and platelets around the body, it also contains substances that help blood clot.

How is cell salvage performed?

During your operation the blood lost from the surgery site is transferred to a special machine operated by a trained team.

1. The blood collected is washed with sterile salt water (saline) and an anti-coagulant solution is added to stop the blood from clotting.
2. The collected blood is filtered to remove most impurities and spun in a machine called a centrifuge, which allows the red blood cells to separate from the rest of the collected blood.
3. The waste material is emptied into a sterile bag
4. If enough red blood cells have been collected, they are washed in sterile salt water ready to be reinfused back to you through a tube directly into your vein.



Why might I need a blood transfusion?

It is normal when having major surgery to lose blood. The healthcare professional looking after you for your surgery will discuss the bleeding risk and will discuss the appropriate treatment options. In some cases, you may be offered a blood transfusion to replace the blood you have lost. Blood transfusions can be:

- Your own blood returned to you (red blood cells) – this is called cell salvaged blood transfusion (also known as autologous).
- Donated blood from a blood donor – this is called allogeneic blood transfusion.

In some surgeries blood from a donor may be offered to you as well as your own.

What are the benefits of receiving my own red blood cells?

- Receiving your own blood reduces the risks of allergic reaction or infection compared to receiving a blood transfusion from a donor.
- The reinfused red blood cells are likely to be better at carrying and releasing oxygen to your body than red blood cells from a donor. This may support your recovery and wound healing.
- By receiving your own red blood cells back, you are less likely to require blood from a donor.
- If you have only received your own blood back via cell salvage and not from donor blood you may still be eligible to donate blood if you wish.
- Cell salvage is beneficial for surgeries with significant blood loss.

What are the risks of receiving my own red blood cells?

- In some cases, there may not be enough blood lost to use cell salvage.
- It may not be suitable for all types of surgeries, for example if there is a risk of infection due to the type of surgery you are having, your healthcare team will consider the risks and the benefits of you receiving your own blood back before reaching a decision.

Where can I find further information?

Please ask your healthcare team for more information.

You may also find the following example questions useful when discussing your care with your healthcare team.

Is cell salvage relevant for my surgery?

What are the benefits of having my own red blood cells back?

Am I at risk of bleeding during my surgery?

What if I don't want my own blood back?

Are there any risks from having my own red blood cells back?

Is cell salvage available in this hospital?

I don't want to have donor blood; will I be offered cell salvage?

I am a Jehovah's Witness; can I still have cell salvage?

Will having cell salvage prevent me being a blood donor in the future?

Where can I get more information?

If you have any questions about intraoperative cell salvage or would like to know whether it is available at your hospital and appropriate for your planned surgery, please contact your healthcare team.

Additional information

This leaflet was prepared by the UK Cell Salvage Advisory Group. Please note hard copies are not available to order; a PDF version can be downloaded.

You may also find the patient information leaflet Receiving a Blood Transfusion helpful. This leaflet is available in a range of formats and can be accessed at:

<https://www.jpac.org.uk/transfusion-practice/consent/information-for-patients/>

If you have any problems downloading a copy of this leaflet, please contact UKCSAG@nhsbt.nhs.uk