Systemic anti-cancer therapy (SACT) extravasation

We have given you this factsheet because you have experienced extravasation while receiving systemic anti-cancer therapy (SACT). It explains what SACT extravasation is, what causes it and the signs you need to be aware of. We hope it helps to answer some of the questions you may have. If you have any further questions or concerns, please speak to a member of our acute oncology service team.

What is SACT extravasation?

Extravasation is the accidental leakage of certain medicines outside of the vein and into the surrounding tissue.

It mostly occurs when medicines are given intravenously (directly into a vein) through a cannula (a thin, plastic tube that goes into a vein in the back of the hand or forearm) or central venous access device 'CVAD' (a long, thin, flexible tube that is inserted into either the arm or chest). Most SACT treatments are given intravenously via these devices.

What are the signs of extravasation?

If extravasation occurs during your SACT treatment, you may experience:

- pain
- stinging
- swelling
- changes to the skin on your arm near the site of your cannula or CVAD
- changes to the skin at the site of your cannula or CVAD, such as:
  - a change in colour (redness or whiteness)
  - a tingling or burning sensation
  - leakage of fluid (weeping)
  - tight or hard skin
  - blistering
  - bruising

Alternatively, the nurse treating you may notice that the medicine is not flowing easily into your vein.

It is important that you are aware of the signs of extravasation, so you know what to look out for in the future.

What causes extravasation?

Extravasation can occur for a number of reasons, and it is not always possible to identify the exact cause.

Possible explanations for extravasation

- The medicine has irritated the vein, causing it to leak (some SACT medicines (known as vesicants) can cause blistering and other tissue damage).
- The cannula has moved out of the vein (for example, after going to the bathroom or accidentally pulling the intravenous (IV) line).
- The peripherally inserted central catheter (PICC) or implantable port (known as a portacath or PORT) has a blockage that was not detected.
- Previous treatments have caused damage to the veins.

While extravasation is rare, and all necessary precautions are taken to prevent it, it is not always avoidable. The important thing is that it has been detected and it is now being treated and monitored.

Are there any long-term side effects of extravasation?

Most people will experience no long-term side effects from extravasation. However, some people can experience further complications. Because of this, it is important that you let us know immediately if you experience any signs of extravasation so that we can give you any necessary treatment as soon as possible.

Location	Who to report your concerns to
In hospital	Tell the nurse treating you or the nurse-in-charge.
At home	Call our 24-hour acute oncology service on **023 8120 1345**.

What is the treatment for extravasation?

Treatment for extravasation varies depending on what SACT medicine you have been given. Your nurse or doctor will give you the recommended treatment for the specific medicine you have had.

Treatment may include:

- applying medication to the affected area
- administering another intravenous or subcutaneous (under the skin) medication
- flushing the medicine from the surrounding tissues with an intravenous wash out solution

The treatment for extravasation aims to stop you from experiencing any further complications from the medicine that has leaked. However, it is important that you check the area where your cannula or CVAD was inserted each day for any signs of extravasation (see the ‘What are the signs of extravasation?’ section on page 1).

What will happen if I don’t have treatment?

If left untreated, extravasation can lead to pain, stiffness, and tissue damage.

Will extravasation affect my SACT treatment?

Extravasation should not affect you having further SACT treatments.

If we detect extravasation while you are at the hospital, we will stop giving you the SACT medicine immediately. We will then aim to place another cannula in your opposite arm to give you the rest of the SACT treatment after we have reviewed and/or treated the extravasation.

For any future treatments, we will make sure that when we place the cannula, we avoid any areas of damage. Please note that if we are unable to place a cannula due to poor vein access, we may refer you to have a PICC or PORT placed instead.

Aftercare advice

Before you leave the hospital, the nurse or doctor treating you for extravasation will give you instructions on how to care for and monitor the affected area after you go home. They will give you specific advice about how and when to change your dressings and apply any medications to the wound.

We have included the information below as a guide for you to refer to.

Caring for the affected area

- Gently exercise your affected arm or hand.
- Take mild pain relief medication as needed (remember to always read the instructions that come with the medication). If you are unsure about what medications you can take, please contact us for advice.
- Elevate your arm by resting it on two to four pillows.
- Do not get the affected area wet or expose it to strong sunlight.
- Only apply medication or creams that the nurse or doctor treating the extravasation has instructed you to use.
- Avoid wearing tight clothing around the affected area.

Monitoring the affected area

Look at the affected area **at least once a day** to check for any changes.

- Has the area changed colour or is there increased redness or swelling?
- Is there any thickening or hardening of the skin?
- Is the area blistering, peeling or flaking?
- Is the area more uncomfortable or painful?
- Is the pain making it difficult to exercise your arm or hand?
- Is there loss of mobility (movement) without pain?

When should I seek urgent medical help?

Contact our 24-hour acute oncology service on **023 8120 1345** immediately if you notice any:

- increased redness
- new blistering
- increased pain or discomfort
- skin peeling

Sometimes extravasation is not noticeable until a few days after it has occurred. This is known as ‘delayed extravasation’.

If you experience any new symptoms at any time or your symptoms worsen, contact us immediately for advice.

What follow-up care will I receive?

A member of our acute oncology service team will telephone you once a day for three consecutive days after extravasation has occurred. We may ask you to come into hospital if we feel you need further review and/or treatment for extravasation.

Contact us

If you have any questions or concerns, please contact us.

Acute oncology service
Telephone: **023 8120 1345** (24-hour line)

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For help preparing for your visit, arranging an interpreter or accessing the hospital, please visit **www.uhs.nhs.uk/additionalsupport**

Version 1. Published November 2025. Due for review November 2028. 3918