Femoral lines for stem cell collection
Central venous access team

About this leaflet
This leaflet aims to answer some of the questions you may have about femoral lines. It explains what you can expect when the line is inserted, including the benefits, risks and any alternatives. If you have any questions or concerns after reading this leaflet, please speak to a doctor or nurse looking after you.

What is a femoral line?
A femoral line is a flexible tube that is put into a large vein in your groin. It is used for collecting stem cells from your bloodstream and has two ‘lumens’ or ports. One lumen is used for withdrawing blood to extract stem cells, and the other for returning blood.

A femoral line is only suitable for short-term use. Your stem cells will be collected by specialist nurses from the apheresis team. When the stem cell collection is finished, the line will be removed.

What are the benefits of having a femoral line?
A femoral line is useful for stem cell collection if the veins in your arms are difficult to access.

If you are not sure why you are being offered a femoral line, please speak to one of the nurses from the transplant, apheresis or central venous access teams.

Who are the central venous access team?
We are a team of nurses who specialise in intravenous lines (lines situated within a vein), including femoral lines. We will put in your femoral line and provide expert advice before and after the line insertion. Please feel free to ring us if you have any questions.

Are there any alternatives to femoral lines?
The alternative is to use the veins in both of your arms to collect the stem cells. You will probably only need a femoral line if the veins in your arms are not suitable.
How can I prepare for my line appointment?
Your transplant team will arrange for you to have any blood tests you may need before the femoral line is inserted.

On the day of your appointment please wear elasticated underwear, such as briefs rather than boxer shorts. If possible, try to drink plenty of fluids before you come for your appointment. This makes your veins easier to access.

If you take tablets or injections to thin your blood, these may need to be stopped for a short time. This is to prevent any bleeding during the femoral line insertion. If you are an outpatient, you should discuss this with the doctor who prescribes your blood-thinning medicine. One of the central venous access nurses or your transplant team will also talk through the plan with you.

If you have ever had an infection called MRSA (methicillin-resistant staphylococcus aureus), please let your doctor or nurse know. You may need to have a nose swab to see if the infection is still present before your femoral line can be put in.

Asking for your consent (permission)
We want to involve you in all the decisions about your care and treatment. The team looking after you will answer any questions you may have so please ask if anything is unclear. If you decide to go ahead, we will ask you to sign a consent form. This confirms that you agree to have the procedure and understand what it involves.

How is the line put in?
Your line will usually be inserted by a specialist nurse from the central venous access team. To reduce the risk of infection, the nurse will wear a surgical gown with a hat and mask.

We will ask you to put on a hospital gown and remove your trousers or skirt. You won’t need to take off your underwear.

The nurse will find a vein in your groin using ultrasound and inject local anaesthetic into the skin to numb it. This will cause some temporary discomfort but will wear off within a few seconds. Once the skin is numb the line insertion is usually pain-free, although you may feel a pushing sensation at times.

The nurse will put a dressing over the insertion site to hold the line securely in place. No stitches are needed.

It usually takes about 20 minutes to put the line in.

What happens after the line is put in?
Your femoral line can be used straight away for your stem cell collection.

When and how will the line be removed?
The femoral line will be removed by the apheresis or ward nurses as soon as your stem cell collection is finished.

You may briefly experience some discomfort when the line is removed. After a dressing is applied, you should press on the site for five minutes. You will also need to stay lying down for 25 minutes.

If you are an outpatient you will be asked to walk around for a few minutes before you leave. This is to check for any bleeding. You can remove the dressing after 24 hours.
Are there any risks of having a femoral line?

Risks during insertion
Most femoral line insertions go smoothly. There is a very small risk of puncturing a blood vessel in the abdomen or air entering your bloodstream. These complications can be serious but we take every precaution to prevent them and they are very unlikely to happen.

There is also a small risk of puncturing an artery in your groin which could cause bruising.

Bleeding
After the line is removed there could be some bleeding from the groin. We can usually prevent this by pressing on the site as described above and by checking for bleeding before you leave.

However, on rare occasions bleeding can start again some time later. As the femoral vein is large, there may seem to be a lot of blood. If this happens, please press on the site until the bleeding stops and lie down if possible. If you are an inpatient, call for assistance. If you are an outpatient, please return to the Apheresis Unit where your cells were collected to have your dressing changed when you are sure the bleeding has stopped.

Infection
Femoral lines used for stem cell collections usually only stay in for a few hours. This means that they are very unlikely to become infected.

If you notice any of the symptoms listed below, either while the line is in or after it has been removed, tell your doctor or nurse straight away:
- a high temperature (over 38°C)
- feeling shivery
- pain, redness or swelling around the insertion site.

If you have an infection, you will need to take a course of antibiotics.

Blood clot
Although rare, it is possible for a blood clot (thrombosis) to form in the vein used for the line. If you notice swelling or pain in the leg or foot, either while the line is in or after it has been removed, let us know straight away. If you have a clot, you will need medication to dissolve it.

There is also a small risk of a blood clot on the lungs. This is very rare. If you experience chest pain or sudden shortness of breath, either while the line is in or in the days after it has been removed, go to your local A&E (Accident and Emergency) Department or call an ambulance.

Malfunction
In a very small number of patients a femoral line may fail to function properly. If this happens, the line will need to be removed and replaced.

Blockage
Femoral lines can sometimes become blocked. We can usually unblock them by using a special flushing solution.

Scarring
After the line has been removed you will probably have a small scar in your groin (less than half a centimetre long).

What if I decide not to have a femoral line?
You should discuss your options with your transplant team, or contact the central venous access team on 020 3447 7491 if you have any concerns.
Things to look out for at home after the line has been removed
It is important that you contact us if you notice any of the following:
• a high temperature (over 38°C)
• feeling shivery
• any pain or swelling.

Contact details

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<tr>
<th>Central venous access team</th>
<th>Telephone: 020 3447 7491</th>
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<tr>
<th>Apheresis team</th>
<th>Telephone: 020 3447 8955</th>
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<td>Haematology patients: 07852 220 900</td>
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<td>Teenagers and young adults: 07908 468 555</td>
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If you need a large print, audio, braille, easy read, age-friendly or translated copy of this leaflet, contact us on 020 3447 7491. We will do our best to meet your needs.