

# Having a contrast-enhanced spectral mammography (CESM)

## Breast Imaging

Information for Patients

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### Introduction

This leaflet aims to answer your questions about having contrast-enhanced spectral mammography (CESM). It explains the benefits, risks and alternatives, and what you can expect when you attend the hospital for this procedure.

### What is CESM?

CESM is an X-ray of the breast. It will highlight areas of concern in the breast in more detail.

The difference between CESM and a standard X-ray of the breast is that a special dye is injected into your arm. The injection helps to see the breast in much more detail.

### Why do I need to have a CESM?

There are several reasons:

- A senior doctor has identified an area of concern that we would like to investigate further.
- Our team has decided that you need an MRI scan but you are unable to have one. A CESM can be done as an alternative test.

### What happens during CESM?

On arrival you will be asked to fill out a short questionnaire to check you are suitable to have the test.

**Health information and support is available at [www.nhs.uk](http://www.nhs.uk)  
or call 111 for non-emergency medical advice**

Visit [www.uhleicester.nhs.uk](http://www.uhleicester.nhs.uk) for maps and information about visiting Leicester's Hospitals  
To give feedback about this information sheet, contact [uhl-tr.informationforpatientsmailbox@nhs.net](mailto:uhl-tr.informationforpatientsmailbox@nhs.net)

The person doing the CESM (mammographer) will ask you a few questions about your general health. They will explain the procedure to you. Please feel free to ask any questions.

- We will put a small plastic tube (cannula) into the vein in the crease of your elbow (sometimes into the back of your hand). This may hurt briefly while it goes through the skin.
- A tight band may be used to squeeze your arm whilst this is being done.
- We will give you an injection of dye. This may make you feel warm and give a metallic taste in your mouth. This is normal and nothing to be worried about.
- We will then take you into the X-ray room where your breasts will be positioned. This will be done one at a time like during a routine mammogram.
- After the X-ray we will ask you to wait in the waiting room whilst the images are checked. We will remove the cannula after 15 minutes. We will give you 2 cups of water to drink before you go home.
- The procedure should last no longer than 30 minutes. But please allow longer in case of possible delay.

## What are the risks?

- **Radiation:** The amount of radiation from CESM is slightly higher than that from a standard mammogram X-ray. It is still within accepted safety guidelines.
- **Allergic reaction:** With every injection of dye there is a slight risk of a reaction. The dye contains iodine which some people are allergic to. Some people get a rash, a few may get a mild asthma attack, and rarely a more serious allergic reaction. Our staff are trained to recognise and treat these reactions.

If you know that you are allergic to iodine, please tell the mammographer or a member of our team.

- **Effects on your kidneys:** The contrast can have an affect on your kidneys. This is uncommon (happens in less than 1 in 100 cases). To reduce this from happening we will not offer you CESM if we are concerned about how your kidneys are working.

We may need to take a blood sample to check your kidney function before we can proceed with the procedure. This blood test will be arranged by the Breast Clinic. Once the results are available an appointment will be made for your CESM.

- **Leaking dye (extravasation):** This is a leakage of the special dye into the tissues around the needle. This complication is rare. We take great care to place the needle in the correct place. After the injection of dye we will be looking for early signs of leakage so that we can avoid problems if possible.

## Are there any other options?

As with any procedure, the risks and benefits need to be considered.

You should **not** have CESM if you:

- are pregnant
- are breastfeeding
- are allergic to iodine
- have kidney failure
- cannot give informed consent
- would be unable to manage to have a mammogram because of physical problems

Before we do the CESM we complete a checklist. This is to check the CESM is right for you. If the CESM is not right for you, we will talk about other options with you.

## How can I prepare for CESM?

You do not need to do anything to prepare for CESM. We recommend drinking plenty of water before and after CESM. You can eat as normal before and after.

Please read the below useful information:

- You have to take your clothes off from the waist up. Wear clothes that can be easily removed.
- Tell the mammographer upon arrival if you have breast implants.
- Do not wear deodorant, powder, lotion or perfume on your breasts and underarm areas on the day of your appointment.
- We do not have any childcare facilities. If you need to bring your children with you, please bring another adult who can look after them when your procedure is being done.
- Tell the mammographer if you are diabetic and taking metformin.

## Giving consent

You will be asked to sign a consent form to give us permission to perform CESM. If at any time you do not understand or need more time to think, please let a member of staff know. You can still change your mind, even after you have signed the consent form.

## What happens after CESM?

- You can eat as normal. Try to drink more water based fluids regularly for the rest of the day. You can go back to your usual activities straight after the procedure.
- The radiologist will look at your images. They will send a report to the consultant that referred you.



- You may need to have an ultrasound scan of your breast or we may need to arrange for you to have further investigations after the CESM.
- We will give you an appointment to talk about the result, before you go home.

## Data Protection

CESM is a relatively new procedure at University Hospitals of Leicester Breast Imaging Unit. We would like to collect information from your test to see how useful it is, and for education and training purposes. Your information will be kept in a secure database. Any pictures used for training or publication will have your details removed, so that you cannot be identified.

## Contact numbers

It is very unlikely that you will have any harmful effects after your CESM. However please use the numbers below if you feel you need any advice.

## Breast Care Nurses

If you have any questions, please call the Breast Care Nurses on **0116 250 2513**.

They are available from:

- Monday to Thursday, between 9am 4:30pm
- Friday, between 9am and 4pm.

An answerphone service is available on this number, but messages will only be listened to during working hours.

If you need advice **outside these hours** please contact:

- your on-call **GP**,
- NHS **111** (24 hours), the NHS non-emergency number
- Ward 24 (Glenfield Hospital) **0116 250 2490** (24 hours, Monday to Friday)

اگر آپ کو یہ معلومات کسی اور زبان میں درکار ہیں، تو براہ کرم مندرجہ ذیل نمبر پر ٹیلی فون کریں۔  
على هذه المعلومات بلغةٍ أخرى، الرجاء الاتصال على رقم الهاتف الذي يظهر في الأسفل  
જો તમને અન્ય ભાષામાં આ માહિતી જોઈતી હોય, તો નીચે આપેલ નંબર પર કૃપા કરી ટેલિફોન કરો

ਜੇ ਤੁਸੀਂ ਇਹ ਜਾਣਕਾਰੀ ਕਿਸੇ ਹੋਰ ਭਾਸ਼ਾ ਵਿਚ ਚਾਹੁੰਦੇ ਹੋ, ਤਾਂ ਕਿਰਪਾ ਕਰਕੇ ਹੇਠਾਂ ਦਿੱਤੇ ਗਏ ਨੰਬਰ 'ਤੇ ਟੈਲੀਫੋਨ ਕਰੋ।  
Aby uzyskać informacje w innym języku, proszę zadzwonić pod podany niżej numer telefonu

If you would like this information in another language or format such as EasyRead or Braille, please telephone 0116 250 2959 or email [uhl-tr.equalitymailbox@nhs.net](mailto:uhl-tr.equalitymailbox@nhs.net)