



York and Scarborough
Teaching Hospitals
NHS Foundation Trust

Contrast-enhanced Spectral Mammography (CESM)

Information for patients, relatives and carers

① For more information, please contact:

North Yorkshire Breast Screening Service

Magnolia Centre

York Hospital, Wigginton Road, York, YO31 8HE

Telephone: 01904 725590 or 01904 725591

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What is Contrast-enhanced Spectral Mammography (CESM)?

CESM is a type of mammogram which aims to highlight an area within the breast by using an x-ray dye (contrast medium) which is injected into the vein before the mammogram is performed. CESM will give more information about your breast condition.

How do I prepare for CESM?

No preparation is required for CESM. You can take your prescription medicines as well as drinking and eating as normal.

What happens during CESM?

The procedure will be explained to you, and you will be asked to complete a contrast questionnaire. This enables us to ensure you are suitable for the procedure. You will have the opportunity to ask any questions you may have.

A small plastic tube (cannula) will be inserted into a vein - usually the back of the hand or the crease of the elbow. This should not be painful though you will feel a sharp scratch as the tube goes in.

You will then be given an injection of the contrast medium through the cannula. You may have a warm feeling as the contrast medium flows around your body - this is normal and nothing to be concerned about. You may also have a metallic taste in your mouth. After a short wait, you will have a mammogram taken of both breasts in two views which involves each breast being compressed in the machine for a short amount of time.

Are there any risks from CESM?

Radiation

All x-rays involve radiation. The amount of radiation from a standard mammogram is small. The radiation dose from CESM is slightly higher than a standard mammogram, but still well within accepted safety guidelines. CESM has the same radiation dose as a flight to Australia.

Allergic reactions

The contrast medium that is used contains iodine, which some people may be allergic to. We will check if you have had any previous allergies before the test. Some people may develop a rash, and a few may get a mild asthma attack. The dye rarely causes a serious reaction, but if this happens it can be treated with medication.

Extravasation / leakage

There is less than a one in 1000 risk of the contrast medium used for your examination coming out of the vein into the soft tissue. This usually causes discomfort and swelling at the site of the cannula and requires a cold compress. It is very rare for a more extensive injury of the skin and soft tissue to occur. The radiographers are trained to look for early signs of this happening and will minimise any discomfort this may cause.

Are there any reasons why I could not have CESM?

Do not have CESM if:

- You are allergic to iodine.
- You have kidney (renal) impairment.
- You are diabetic – we may need to check your kidney function before CESM.
- You are pregnant.
- You are breastfeeding.
- If you are unable to tolerate a mammogram due to physical problems.
- You cannot give informed consent.

What happens after CESM?

You are advised not to drive or operate machinery for one hour after your injection. You can eat and drink as normal and resume your usual activities. Following CESM you should not have any adverse after-effects which cause concern. However, we have included contact numbers for advice if needed.

After your examination you may require further tests such as ultrasound or possibly a breast biopsy. This will depend on the results. Your doctor will discuss this with you, so you can be involved in deciding the best tests and treatment for you.

How do I contact the Breast Unit?

If you have any questions or concerns about your Contrast Enhanced Spectral Mammography (CESM) please contact the Breast unit at York Hospital on 01904 725590 or 01904 725591, Monday – Friday, 8:30am -5:00pm.

If you need advice outside these hours, please contact NHS 111 (24 hours) - the NHS non-emergency number.

Tell us what you think of this leaflet

We hope that you found this leaflet helpful. If you would like to tell us what you think, please contact the Breast unit at York Hospital, telephone 01904 725590 or 01904 725591.

Teaching, training and research

Our Trust is committed to teaching, training and research to support the development of health and healthcare in our community. Healthcare students may observe consultations for this purpose. You can opt out if you do not want students to observe. We may also ask you if you would like to be involved in our research.

Patient Advice and Liaison Service (PALS)

PALS offers impartial advice and assistance to patients, their relatives, friends and carers. We can listen to feedback (positive or negative), answer questions and help resolve any concerns about Trust services.

PALS can be contacted on 01904 726262, or email yhs-tr.patientexperienceteam@nhs.net.

An answer phone is available out of hours.

Leaflets in alternative languages or formats

If you would like this information in a different format, including braille or easy read, or translated into a different language, please speak to a member of staff in the ward or department providing your care.

Patient Information Leaflets can be accessed via the Trust's Patient Information Leaflet website:
www.yorkhospitals.nhs.uk/your-visit/patient-information-leaflets/

Owner	Breast Imaging Unit
Date first issued	July 2025
Review Date	July 2028
Version	1 (issued July 2025)
Approved by	Breast Imaging ISO quality management group CSCS care group CGG
Document Reference	PIL1745 v1

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