

# Sentinel Node Localisation (Nuclear Medicine)

Information for patients, relatives and carers

① For more information, please contact:

**Radiology Department**

The York Hospital,  
Wigginton Road, York, YO31 8HE

Nuclear Medicine  
Tel: 01904 725936

Or

Scarborough Hospital,  
Woodlands Drive, Scarborough, YO12 6QL

Nuclear Medicine  
Tel: 01723 342073

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## **About this leaflet**

This leaflet tells you about a Nuclear Medicine sentinel lymph node localisation. It explains what is involved and what the possible risks are. You should have been given separate information about your surgery and what happens afterwards. We hope you find the information helpful.

## **What is sentinel node localisation?**

The sentinel lymph node (gland) is the first lymph node that breast cancer can spread to. This is usually in the armpit.

Sentinel lymph node localisation is a procedure which helps to identify the sentinel node during your surgery. The sentinel node will be removed and examined under a microscope to find out if it has been affected by cancer cells.

## **Is there any preparation I need to do before the procedure?**

There is no special preparation needed for this procedure, although if you are having your surgery on the same day, you will have been given instructions in your admission letter. It is important that you follow those instructions.

# **What does the sentinel node localisation involve?**

You will be asked to undress from the waist up and put on a hospital gown. The procedure will be explained and you will have the opportunity to ask any questions beforehand.

You will be asked to sit in a special chair, or lie down on a bed. You will have a small injection of a radioactive tracer, under the skin next to the nipple of the affected breast. Because the injection goes under your skin, it usually stings a little but it is over very quickly. It is very rare to have any side effects from the injection. The radioactive tracer will travel to the sentinel node over a few hours.

Once the injection is done, you will be able to get dressed again and depending on when you are having your surgery, you will go back to the ward or go home.

During your surgery, the surgeon uses a small radiation detector, called a gamma probe, to localise the sentinel node, which will be removed for testing.

## **Are there any risks or complications?**

Nuclear medicine procedures are very safe and side effects are extremely rare. The amount of radioactivity in the injection is very low, much lower than the amounts used for scanning.

Further guidance has been published by Public Health England, visit website

<https://www.gov.uk/government/publications/ionising-radiation-from-medical-imaging-examinations-safety-advice>

## **Benefits of sentinel node localisation**

Historically, patients having surgery for breast cancer would have most of the lymph nodes in the armpit removed at the same time as the breast operation (to check for cancer cells). This can result in a side effect called lymphoedema (swelling of the tissues in your arm). Sentinel node localisation means the surgeon can remove fewer nodes (usually one to four) but gives the same information about the spread of cancer cells.

## **Alternatives**

A test can be performed during the surgery where a blue dye is injected into the breast and absorbed by the sentinel node. This is often done in addition to the sentinel node localisation, as it improves the accuracy of the localisation.

The other alternative is to have the majority of the lymph nodes removed (axillary clearance) during your surgery.

## **What if I have any other questions?**

If you have any worries or concerns about your sentinel node localisation, please feel free to telephone us in York on 01904 725936 or in Scarborough on 01723 342073 and we will do our best to help.

## **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:

Nuclear Medicine Department, The York Hospital,  
telephone 01904 725936.

## **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 [pals@york.nhs.uk](mailto:pals@york.nhs.uk).

An answer phone is available out of hours.

# Leaflets in alternative languages or formats

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Telephone: 01904 725566

Email: [access@york.nhs.uk](mailto:access@york.nhs.uk)

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