

A randomized trial of armpit (axilla) treatment for women with early stage breast cancer. POSNOC - POSitive Sentinel NOde: adjuvant therapy alone versus adjuvant therapy plus Clearance or axillary radiotherapy.

Submission date 25/02/2014	Recruitment status No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
Registration date 25/02/2014	Overall study status Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
Last Edited 01/11/2023	Condition category Cancer	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

Plain English summary of protocol

<http://www.cancerresearchuk.org/about-cancer/trials/a-trial-looking-treatment-armpit-breast-cancer-posnoc>

Contact information

Type(s)

Scientific

Contact name

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Additional identifiers

ClinicalTrials.gov (NCT)

NCT02401685

Integrated Research Application System (IRAS)

137785

Protocol serial number

16069, RD-5103-001-13

Study information

Scientific Title

POSNOC - POSitive Sentinel NOde: adjuvant therapy alone versus adjuvant therapy plus Clearance or axillary radiotherapy. A randomized controlled trial of axillary treatment in women with early stage breast cancer who have metastases in one or two sentinel nodes

Acronym

POSNOC

Study objectives

Current study hypothesis as of 14/06/2019:

The hypothesis of the POSNOC trial is that low axillary tumour burden patients with macrometastases in 1 or 2 sentinel nodes, receiving systemic therapy, would have non-inferior outcomes whether they are randomised to adjuvant therapy alone or adjuvant therapy plus axillary treatment (either axillary node clearance or axillary radiotherapy).

Previous hypothesis:

The hypothesis of the POSNOC trial is that low axillary tumour burden patients (clinically and ultrasound node negative) with macrometastases in 1 or 2 sentinel nodes, receiving systemic therapy, would have non-inferior outcomes whether they are randomised to adjuvant therapy alone or adjuvant therapy plus axillary treatment (axillary node clearance or axillary radiotherapy).

Ethics approval required

Old ethics approval format

Ethics approval(s)

Nottingham Research Ethics Committee 2, 13/EM/0459, First REC approval date 02/01/2014

Study design

Pragmatic randomised multi-centre non-inferiority trial

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Breast Cancer

Interventions

Current interventions as of 14/06/2019:

The trial interventions are either:

1. Adjuvant therapy alone (intervention)

Axillary radiotherapy is not allowed when randomised to this group.

2. Adjuvant therapy plus axillary treatment (standard care)

Axillary treatment can be either axillary node clearance or axillary radiotherapy as per local guidelines.

All participants will have adjuvant therapy according to local guidelines. Adjuvant therapy will include chemotherapy and/or endocrine therapy for all women, and radiotherapy to breast or chest wall if indicated. Human epidermal growth factor receptor 2 (HER2) targeted treatment may be administered when indicated.

Previous interventions:

The trial interventions are either:

1. Adjuvant therapy alone (intervention)

Axillary and supraclavicular fossa radiotherapy is not allowed when randomised to this group.

2. Adjuvant therapy plus axillary treatment (standard care)

Axillary treatment can be axillary node clearance or axillary radiotherapy as per local guidelines.

All participants will have adjuvant therapy according to local guidelines. Adjuvant therapy will include chemotherapy and/or endocrine therapy for all women, and radiotherapy to breast or chest wall if indicated. Human epidermal growth factor receptor 2 (HER2) targeted treatment may also be administered when indicated.

Intervention Type

Drug

Phase

Phase III

Drug/device/biological/vaccine name(s)

Adjuvant therapy

Primary outcome(s)

Axillary recurrence; Timepoint(s): at 5 years

Key secondary outcome(s)

1. Anxiety; Timepoint(s): assessed at 3, 6, 12, 24, 36 months

2. Arm morbidity; Timepoint(s): assessed at 3, 6, 12, 24 and 36 months

3. Axillary recurrence free survival; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

4. Contralateral breast cancer; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

5. Disease free survival; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

6. Distant metastasis; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

7. Economic evaluation; Timepoint(s): assessed at 3, 6, 12, 24, 36 months

8. Local (breast or chest wall) recurrence; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

9. Non-breast malignancy; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

10. Overall survival; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months
11. Quality of life; Timepoint(s): assessed at 3, 6, 12, 24, 36 months
12. Regional (nodal) recurrence; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months
13. Time to axillary recurrence; Timepoint(s): assessed at 6, 12, 24, 36, 48 and 60 months

Completion date

13/07/2026

Eligibility

Key inclusion criteria

Current inclusion criteria as of 14/06/2019:

Women will be eligible for inclusion only if ALL of the following criteria apply:

1. 18 years or older
2. Unifocal or multi-focal invasive tumour with lesion ≤ 5 cm in its largest dimension, measured pathologically or largest invasive tumour diameter on radiology should be used for women who are randomised intra-operatively or undergo sentinel node biopsy before neoadjuvant therapy (tumour size should be based only on the single largest tumour; do not add the sizes together from the multiple foci)
3. At sentinel node biopsy have 1 or 2 nodes with macrometastases (tumour deposit >2.0 mm in largest dimension or defined as macrometastasis on molecular assay)
4. Fit for axillary treatment and adjuvant therapy
5. Have given written informed consent

Previous inclusion criteria:

Women will be eligible for inclusion only if ALL of the following criteria apply:

1. 18 years or older
2. Unifocal or multifocal invasive tumour with lesion ≤ 5 cm in its largest dimension, measured pathologically or for women who are randomised intraoperatively largest tumour diameter on mammogram or ultrasound.
3. No axillary nodal metastasis on clinical and ultrasound examination.
4. At sentinel node biopsy have 1 or 2 sentinel nodes with macrometastases (tumour deposit >2.0 mm in largest dimension or defined as macrometastasis on molecular assay)
5. Fit for axillary treatment and adjuvant therapy
6. Have given written informed consent

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Adult

Lower age limit

18 years

Sex

Female

Total final enrolment

1900

Key exclusion criteria

Current exclusion criteria as of 14/06/2019:

Women will be excluded if they have:

1. Bilateral invasive breast cancer
2. More than 2 nodes with macrometastases
3. Neoadjuvant therapy for breast cancer except:
 - 3.1. If sentinel node biopsy performed prior to neoadjuvant therapy in women with early breast cancer
 - 3.2. Short duration of neoadjuvant endocrine therapy is acceptable (up to 3 months)
4. Previous axillary surgery on the same body side as the scheduled sentinel node biopsy
5. Not receiving adjuvant systemic therapy
6. Previous cancer less than 5 years previously or concomitant malignancy except:
 - 6.1. Basal or squamous cell carcinoma of the skin or
 - 6.2. In situ carcinoma of the cervix or
 - 6.3. In situ melanoma
 - 6.4. Contra- or ipsilateral in situ breast cancer

Previous exclusion criteria:

Women will be excluded if they have:

1. Bilateral breast cancer
2. More than 2 sentinel node macrometastases or extranodal invasion
3. Neoadjuvant therapy for breast cancer
4. Previous axillary surgery on the same body side as the scheduled sentinel node biopsy
5. Not fit or eligible to receive adjuvant systemic therapy
6. Previous or concomitant malignancy except:
 - 6.1. Adequately treated basal or squamous cell carcinoma of the skin or
 - 6.2. Adequately treated in situ carcinoma of the cervix or
 - 6.3. Adequately treated in situ melanoma
 - 6.4. Contra- or ipsilateral in situ breast cancer

Date of first enrolment

01/01/2014

Date of final enrolment

13/07/2021

Locations

Countries of recruitment

United Kingdom

England

Australia

New Zealand

Study participating centre
Royal Derby Hospital
Derby
United Kingdom
DE22 3NE

Sponsor information

Organisation

University Hospitals of Derby and Burton NHS Foundation Trust

Funder(s)

Funder type

Government

Funder Name

National Institute for Health Research (NIHR) (UK)

Alternative Name(s)

National Institute for Health Research, NIHR Research, NIHRresearch, NIHR - National Institute for Health Research, NIHR (The National Institute for Health and Care Research), NIHR

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

United Kingdom

Funder Name

National Health and Medical Research Council

Alternative Name(s)

National Health and Medical Research Council, Australian Government, NHMRC National Health and Medical Research Council, NHMRC

Funding Body Type

Government organisation

Funding Body Subtype

National government

Location

Australia

Results and Publications

Individual participant data (IPD) sharing plan

The data sharing plans for the current study are unknown and will be made available at a later date

IPD sharing plan summary

Data sharing statement to be made available at a later date

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article		02/12/2021	06/12/2021	Yes	No
HRA research summary			28/06/2023	No	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Study website	Study website	11/11/2025	11/11/2025	No	Yes