ISRCTN11908093 https://doi.org/10.1186/ISRCTN11908093

National study examining the treatment and outcome of patients diagnosed with breast cancer recurrence within the same breast/chest wall/nearby lymph glands

Submission date
16/09/2021

Recruitment status
No longer recruiting

Registration date
25/11/2021

Overall study status
Ongoing

Last Edited
11/12/2023

Condition category
Cancer

[_] Prospectively registered
[X] Protocol
[_] Statistical analysis plan
[_] Results
[_] Individual participant data
[_] Record updated in last year

Plain English summary of protocol

https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/a-study-looking-at-the-management-of-breast-cancer-that-has-come-back-in-the-same-breast-or-nearby#undefined (added 24/03/2022)

Background and study aims
Although the 5-year UK breast cancer survival rate is favourable at 86.6%, patients continue to develop breast cancer recurrence within the same breast after breast-conserving surgery, as well as in the remaining skin or chest wall after mastectomy. Patients also present with breast cancer recurrence in the nearby lymph glands (under the arms or above/below the collarbone). These recurrences are collectively termed locoregional recurrence (LRR). It is estimated that up to 8% of breast cancer patients are diagnosed with LRR 10 years after their diagnosis. Currently there is a lack of high-quality data and clinical guidance for the optimal management of breast cancer patients diagnosed with LRR. In the UK, breast cancer recurrence is under-reported at the individual hospital level to the national cancer registries. As a result, analysis of existing routine data sources is unlikely to provide data on patient management that is reflective of current national practice.
The aim of this study is determine the frequency, current management and prognosis of patients diagnosed with breast cancer LRR with or without distant metastasis in the UK with the aim of establishing best practice and informing future national guidelines. Over 50 UK breast units will participate in the study.

Who can participate?
Patients aged over 18 years treated for previous breast cancer

What does the study involve?
The researchers will establish a national prospective cohort of patients newly diagnosed with LRR (with or without distant metastasis) and describe how these patients are managed, and examine any geographical variation in the care received. The participants will be followed up at

two timepoints (3 and 5 years) in order to determine patient survival outcome (breast cancer related or not), as well as the development of any further locoregional re-recurrence or distant metastasis. Patient survival analysis will identify prognostic factors, which will in turn generate hypotheses for future related studies with an aim of improving patient outcomes.

What are the possible benefits and risks of participating?
The researchers cannot promise that the study will benefit the study participant directly, but the information provided will help to improve the future management of patients diagnosed with breast cancer locoregional recurrence. There are no specific risks related to study participation. Taking part in this study will not change any treatment plans or investigations recommended by the medical team.

Where is the study run from?
Leeds Teaching Hospitals NHS Trust (UK)

When is the study starting and how long is it expected to run for?
September 2020 to January 2029

Who is funding the study?
Association of Breast Surgery (UK)

Who is the main contact?
Mr Baek Kim
leedsth-tr.themarecastudy@nhs.net

Contact information

Type(s)
Scientific

Contact name
Mr Baek Kim

ORCID ID
https://orcid.org/0000-0001-9759-7533

Contact details
Department of Breast and Endocrine Surgery
St James's University Hospital
Beckett Street
Leeds
United Kingdom
LS9 7TF
+44 (0)113 20 68628
leedsth-tr.themarecastudy@nhs.net

Additional identifiers

Clinical Trials Information System (CTIS)
Nil known

Integrated Research Application System (IRAS)
285389

ClinicalTrials.gov (NCT)
Nil known

Protocol serial number
CPMS 50013, ABSGrantMARECA2020, IRAS 285389

Study information

Scientific Title
The MARECA study - National study of management of breast cancer locoregional recurrence and oncological outcome

Acronym
MARECA

Study objectives
For patients diagnosed with breast cancer locoregional recurrence (LRR), there is clinical uncertainty with regards to what constitutes optimal patient management and if geographical variations exist in patient care. The key areas that require evaluation include radiological staging investigations and the proportion of patients found to have distant metastasis at presentation, surgical management including the use of repeat breast-conserving surgery and sentinel lymph node biopsy, and information about adjuvant treatment modalities used, as well as the patient's subsequent prognosis. Collection of these data will provide a national picture of patient management and enable the identification of clinicopathological factors that predict patient prognosis.

Ethics approval required
Old ethics approval format

Ethics approval(s)
Approved 07/09/2021, London - Brighton & Sussex Research Ethics Committee (Health Research Authority, 2 Redman Place, E20 1JQ, UK; +44 (0) 207104 8202; brightonandsussex.rec@hra.nhs.uk), REC ref: 21/PR/1128

Study design
Observational cohort study

Primary study design
Observational

Study type(s)
Other

Health condition(s) or problem(s) studied
Breast cancer

Interventions

This is a prospective, observational, multicentre, longitudinal cohort study. This will be a national collaborative research study delivered in collaboration with the Association of Breast Surgery (ABS) Academic and Research committee and the breast surgery and oncology trainee associations (the Mammary Fold and UK Breast Cancer Trainees Research Collaborative Group).

The study will have two main phases:

National prospective cohort study: In 2021, over 50 UK breast units will aim to recruit consecutive eligible patients newly diagnosed with locoregional recurrence (LRR) +/- distant metastasis. The study will recruit patients for 24 months. Eligible patients will be identified at the breast MDT meetings or in breast and oncology clinics. We anticipate each unit to recruit 5 to 10 patients per year. Therefore, the anticipated sample size is 500 patients.

All prospective consecutive patients will be approached and those that fulfil all the eligibility criteria will be given the Patient Information Sheet and given time to read the information and ask any questions about the study. Once the patient has had time to consider the information and ask questions, and if they choose to participate in the study, written informed consent will be obtained. Consent can be taken by the consultant breast surgeon or oncologist, breast surgery or oncology trainees, research nurses, or appropriately trained clinical trials assistants where delegated by the Chief/Principal Investigator. The patient consent will include the permission to collect pseudonymised data on the patient's initial and recurrent cancer treatment. This will include permission to examine the patient's survival and re-recurrence at 3 and 5 years after their LRR diagnosis.

Patients will also be provided with the option of consenting for permission to access archival tumour tissue or slides of the initial and recurrent breast cancer for potential future related tissue substudy. Patients can participate in the main study without consenting to tissue or slide access.

The participating patients will receive standard care and study participation will not result in additional tests, interventions, or clinic visits. Once patient consent has been obtained, consultant breast surgeon or oncologist, breast surgery or oncology trainees, research nurses, or clinical trials assistant will collect data detailing the tumour pathology, imaging results, surgical treatment, radiotherapy, and systemic therapy of initial and recurrent cancer for the study participant. These data are routinely collected as part of standard clinical practice. The study data will be recorded in a pseudonymised format using a secure web-based database (REDCap; hosted at the University of Manchester). This will enable the description of the current national practice including:
1. Modality of radiological staging investigations used and determination of the rate of detection of distant metastasis
2. Proportion of patients undergoing repeat breast-conserving surgery (BCS)
3. Proportion of patients undergoing repeat sentinel lymph node biopsy (SLNB), techniques used, and their success rate in terms of SLN identification
4. Adjuvant treatment modalities used to treat LRR
5. Proportion of patients undergoing breast surgery for LRR in the presence of distant metastasis

Separately, a local secure record will be kept of the RedCap ID with corresponding NHS number (in England and Wales), Community Health Index number (in Scotland), or Health and Care number (in Northern Ireland) for future identification of patients. This is required for the research team at each participating centres to access the hospital electronic system to determine the follow up oncological outcome data for the study participants.

Oncological outcome evaluation: At 3 and 5 year follow up after the LRR diagnosis, the research team at each participating unit (Consultant PI, research nurse, and clinical trial assistants) will also access the hospital electronic system to record survival and re-recurrence outcome for each study participants.

Statistical survival analysis will be performed to determine patient survival and re-recurrence rates for the study cohort. There are planned statistical analyses to determine potential predictive factors that influence patient survival. A power calculation has determined that a subset of 330 patients diagnosed with LRR (without associated distant metastasis at presentation) are required to determine the study's primary endpoint (disease-free survival following LRR resection, stratified according to the type of surgery performed for the initial breast cancer; BCS and radiotherapy vs mastectomy).

The researchers will not anticipate direct patient contact for the study purpose during this follow up period as all the required information should be available on the hospital electronic system. In cases where the required information is missing or unclear, the research team may contact the patient or their General Practitioner via telephone.

Intervention Type
Other

Primary outcome(s)
Disease-free survival following locoregional recurrence resection measured using patient records at 3 and 5 years follow up

Key secondary outcome(s))
1. Progression-free survival in patients who present with breast cancer locoregional recurrence with distant metastasis (3 and 5 years follow up).
2. Overall survival in patients diagnosed with breast cancer locoregional recurrence +/- distant metastasis at presentation (3 and 5 years follow up)

Completion date
30/01/2029

Eligibility

Key inclusion criteria
1. Female or male patients more than 18 years old
2. Treated for previous unilateral or bilateral breast cancer (invasive cancer including all histological subtypes as well as ductal carcinoma in situ) with curative intent
3. No previous evidence of distant metastatic disease
4. Recently (within the last 6 months) diagnosed with new ipsilateral locoregional recurrence (biopsy-proven invasive cancer including all histological subtypes or ductal carcinoma in situ) +/- distant metastasis
5. Able to provide written informed consent
6. A minimum of 3 months interval between the resection surgery for the original cancer and the diagnosis of locoregional recurrence. There will be no maximum interval time period

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
All

Key exclusion criteria
1. Patients where the new breast cancer diagnosis is in the contralateral breast
2. For patients who present with new bilateral breast cancer, the side with no previous cancer will be excluded
3. Patients diagnosed with distant metastatic disease with no evidence of locoregional recurrence
4. Patients diagnosed with angiosarcoma
5. Patients with previous history of non-breast cancer treatment that was non-curative in intent
6. Patients who have had previous ipsilateral surgery for atypia, benign conditions, or phyllodes tumour and other breast sarcomas
7. Patients under 18 years old
8. Patients lacking the capacity to provide written informed consent

Date of first enrolment
08/11/2021

Date of final enrolment
31/12/2023

Locations

Countries of recruitment
United Kingdom

England

Northern Ireland

Scotland

Wales

Study participating centre
St. James's University Hospital
Beckett Street
Leeds

United Kingdom
LS9 7TF

Study participating centre
The Royal Marsden Hospital
Fulham Road
London
United Kingdom
SW3 6JJ

Study participating centre
Southampton General Hospital
Tremona Road
Southampton
United Kingdom
SO16 6YD

Study participating centre
Manchester Royal Infirmary
Oxford Road
Manchester
United Kingdom
M13 9WL

Study participating centre
Southmead Hospital
Southmead Road
Westbury-On-Trym
Bristol
United Kingdom
BS10 5NB

Study participating centre
Doncaster Royal Infirmary
Armthorpe Road
Doncaster
United Kingdom
DN2 5LT

Study participating centre
University College Hospital
250 Euston Road
London
United Kingdom
NW1 2PG

Study participating centre
Belfast Health & Social Care Trust
Knockbracken Healthcare Park
Saintfield Road
Belfast
United Kingdom
BT8 8BH

Study participating centre
Bradford Royal Infirmary
Duckworth Lane
Bradford
United Kingdom
BD9 6RJ

Study participating centre
Poole Hospital
Longfleet Road
Poole
United Kingdom
BH15 2JB

Study participating centre
Freeman Hospital
Freeman Road
High Heaton
Newcastle upon Tyne
United Kingdom
NE7 7DN

Study participating centre
Harrogate District Hospital
Lancaster Park Road
Harrogate

United Kingdom
HG2 7SX

Study participating centre
Hull Royal Infirmary
Anlaby Road
Hull
United Kingdom
HU3 2JZ

Study participating centre
Ysbyty Gwynedd
Penrhosgarnedd
Bangor
United Kingdom
LL57 2PW

Study participating centre
NHS Forth Valley
33 Spittal Street
Stirling
United Kingdom
FK8 1DX

Study participating centre
NHS Lanarkshire
14 Beckford Street
Hamilton
United Kingdom
ML3 0TA

Study participating centre
NHS Fife
Springfield House
Cupar
United Kingdom
KY15 5UP

Study participating centre

Royal Devon & Exeter Hospital
Barrack Road
Exeter
United Kingdom
EX2 5DW

Study participating centre
Pinderfields Hospital
Aberford Road
Wakefield
United Kingdom
WF1 4DG

Study participating centre
Milton Keynes University Hospital
Standing Way
Eaglestone
Milton Keynes
United Kingdom
MK6 5LD

Study participating centre
Royal Liverpool University Hospital
Prescot Street
Liverpool
United Kingdom
L7 8XP

Study participating centre
Huddersfield Royal Infirmary
Acre Street
Lindley
Huddersfield
United Kingdom
HD3 3EA

Study participating centre
Chesterfield Royal Hospital
Chesterfield Road
Calow
Chesterfield

United Kingdom
S44 5BL

Study participating centre
NHS Grampian
Summerfield House
2 Eday Road
Aberdeen
United Kingdom
AB15 6RE

Study participating centre
Southend University Hospital
Prittlewell Chase
Westcliff-On-Sea
United Kingdom
SS0 0RY

Study participating centre
North Manchester General Hospital
Delaunays Road
Crumpsall
Manchester
United Kingdom
M8 5RB

Study participating centre
East Sussex Healthcare NHS Trust
St Annes House
729 The Ridge
St. Leonards-On-Sea
United Kingdom
TN37 7PT

Study participating centre
Altnagelvin Area Hospital
Glenshane Road
Londonderry
United Kingdom
BT47 6SB

Study participating centre
Queens Medical Centre
Derby Road
Nottingham
United Kingdom
NG7 2UH

Study participating centre
Lincoln County Hospital
Greetwell Road
Lincoln
United Kingdom
LN2 5QY

Study participating centre
Airedale General Hospital
Skipton Road
Steeton
Keighley
United Kingdom
BD20 6TD

Study participating centre
The Maidstone Hospital
Hermitage Lane
Maidstone
United Kingdom
ME16 9QQ

Study participating centre
University Hospital of Hartlepool
Holdforth Road
Hartlepool
United Kingdom
TS24 9AH

Study participating centre
The Royal Bolton Hospital
Minerva Road

Farnworth
Bolton
United Kingdom
BL4 0JR

Study participating centre
Royal Surrey County Hospital
Egerton Road
Guildford
United Kingdom
GU2 7XX

Study participating centre
Royal Cornwall Hospital
Treliske
Truro
United Kingdom
TR1 3LJ

Study participating centre
Queen Elizabeth Hospital
Mindelsohn Way
Edgbaston
Birmingham
United Kingdom
B15 2GW

Study participating centre
Basingstoke and North Hampshire Hospital
Aldermaston Road
Basingstoke
United Kingdom
RG24 9NA

Study participating centre
Leicester Royal Infirmary
Infirmary Square
Leicester
United Kingdom
LE1 5WW

Study participating centre
King's College Hospital
Denmark Hill
London
United Kingdom
SE5 9RS

Study participating centre
Musgrove Park Hospital
Taunton
United Kingdom
TA1 5DA

Study participating centre
Countess of Chester Hospital
Liverpool Road
Chester
United Kingdom
CH2 1UL

Study participating centre
Norfolk and Norwich University Hospital
Colney Lane
Colney
Norwich
United Kingdom
NR4 7UY

Study participating centre
Kings Cross Hospital
Clepington Road
Dundee
United Kingdom
DD3 8EA

Study participating centre
Craigavon Area Hospital
68 Lurgan Road
Portadown

United Kingdom
BT63 5QQ

Study participating centre
Poole Hospital
Longfleet Road
Poole
United Kingdom
BH15 2JB

Study participating centre
Hywel DDA University LHB
Ystwyth Building
Hafan Derwen
St Davids Park
Jobswell Road
Carmarthen
United Kingdom
SA31 3BB

Sponsor information

Organisation
Leeds Teaching Hospitals NHS Trust

ROR
https://ror.org/00v4dac24

Funder(s)

Funder type
Other

Funder Name
Association of Breast Surgery

Alternative Name(s)
British Association of Surgical Oncology, ABS, BASO

Funding Body Type

Government organisation

Funding Body Subtype
Associations and societies (private and public)

Location
United Kingdom

Results and Publications

Individual participant data (IPD) sharing plan
The datasets generated and/or analysed during the current study will be included in the subsequent results publication.

IPD sharing plan summary
Other

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
HRA research summary			28/06/2023	No	No
Other publications	National practice questionnaire of United Kingdom multi-disciplinary decision making	01/07/2022	17/11/2023	Yes	No
Participant information sheet	version 3.0	29/08/2021	23/09/2021	No	Yes
Participant information sheet	version 3.1	26/10/2022	11/12/2023	No	Yes
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes
Protocol file	version 3.0	29/08/2021	23/09/2021	No	No
Protocol file	version 4.0	25/05/2022	11/12/2023	No	No
Study website	Study website	11/11/2025	11/11/2025	No	Yes