PRIMETIME – Post-operative avoidance of radiotherapy in minimal risk women: patient selection using biomarkers

Submission date	Recruitment status No longer recruiting	[X] Prospectively registered		
30/01/2017		[X] Protocol		
Registration date	Overall study status	[] Statistical analysis plan		
07/03/2017	Ongoing	[_] Results		
Last Edited 07/11/2023	Condition category Cancer	Individual participant data		
		[] Record updated in last year		

Plain English summary of protocol

https://www.cancerresearchuk.org/about-cancer/find-a-clinical-trial/study-radiotherapy-women-small-risk-breast-cancer-returning-primetime

Study website

https://www.icr.ac.uk/our-research/centres-and-collaborations/centres-at-the-icr/clinical-trialsand-statistics-unit/clinical-trials/primetime

Contact information

Type(s) Public

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Additional identifiers

EudraCT/CTIS number Nil known

IRAS number 190307

ClinicalTrials.gov number Nil known

Secondary identifying numbers CPMS 33217, IRAS 190307

Study information

Scientific Title

Post-operative avoidance of radiotherapy: biomarker selection of women categorised to be in a very low risk group by IHC4+C

Acronym

PRIMETIME

Study objectives

The aim of this study is to test whether radiotherapy can be safely avoided in a patient population considered to have such a low risk of local recurrence that the potential absolute gain from radiotherapy is so small as to not outweigh the established risks associated with breast radiotherapy.

Ethics approval required

Old ethics approval format

Ethics approval(s) East of England – Cambridgeshire and Hertfordshire Research Ethics Committee, 05/09/2016, ref: 16/EE/0305

Study design

Non-randomized; Interventional; Design type: Treatment, Radiotherapy, Management of Care

Primary study design Interventional

Secondary study design

Non randomised study

Study setting(s) Hospital

Study type(s) Treatment

Participant information sheet

Not available in web format, please use the contact details to request a patient information sheet

Health condition(s) or problem(s) studied

Breast cancer

Interventions

Patients consent and register for pre-screening Ki67 research testing and 5 slides from the diagnostic block are forwarded for analysis to the central laboratory. Breast conserving surgery will proceed according to standard practice. If a patient is confirmed as eligible (meets inclusion and exclusion criteria) they will then be consented for the main PRIMETIME study. The IHC4+C calculator is then utilised to direct treatment according to the patient's risk category (i.e. if they are deemed 'very low risk' they will be recommended to avoid radiotherapy). All patients will then receive either standard breast radiotherapy or no radiotherapy and standard adjuvant hormone therapy and any additional anti-cancer treatments.

For patients who receive radiotherapy they will have 5 years of annual mammograms, for patients who do not receive radiotherapy they will be required to attend for 10 years of annual mammograms. Patients will be followed up for 10 years in clinic and thereafter via routine data sources.

Intervention Type

Other

Primary outcome measure

Ipsilateral breast local relapse rate 5 years from study registration is assessed through patient note review.

Secondary outcome measures

1. Ipsilateral breast local relapse rate is measured by patient note review 10 years from study registration

- 2. Regional relapse rate is measured by patient note reviewat 5 and 10 years
- 3. Distant relapse rate is measured by patient note review at 5 and 10 years
- 4. Overall survival is measured by patient note review at 5 and 10 years
- 5. Breast cancer specific survival is measured by patient note review at 5 and 10 years

Overall study start date

01/07/2015

Completion date 19/05/2030

Eligibility

Key inclusion criteria

1. Provision of written informed consent to participate in the PRIMETIME study

2. Provision of slides for research testing and availability of KI67 result (contact ICR-CTSU to confirm)

3. Women aged ≥60 years (younger patients are eligible if they are post-menopausal and have comorbidities that imply a high risk of radiotherapy toxicity e.g. significant cardiovascular disease with left sided breast cancer)

4. Women having had breast conserving surgery with complete resection of tumour tissue (≥1 mm microscopic, circumferential margins of normal tissue from invasive cancer and DCIS)

5. AJCC staging of pT1/pN0/M0 (DCIS is allowed in combination with invasive breast cancer; isolated tumour cells in axillary nodes are allowed)

6. Histological confirmation of grade 1 or 2 invasive breast cancer

7. Oestrogen receptor (ER) positive according to local practice. The H score must be available. 8. Progesterone receptor (PR) positive according to local practice. The percentage positivity must be available.

9. Human epidermal growth factor receptor (HER2) negative according to local practice 10. Patients must be recommended for ≥5 years adjuvant endocrine therapy according to local policy and in the investigator's opinion, deemed able to comply with the duration of treatment

Participant type(s)

Patient

Age group

Adult

Sex Female

Target number of participants

Planned Sample Size: 2400; UK Sample Size: 2400

Key exclusion criteria

1. Patients known to have lymphovascular space invasion and/or axillary nodal micrometastases or macrometastases.

2. Patients with a past history of malignancy excep:

2.1. Basal cell skin cancer and CIN cervix uteri

2.2.Treated, localised squamous cell carcinoma of the skin

2.3. Malignancies treated with curative intent and the patient has been disease free ≥5 years

3. Patients who have had an ipsilateral mastectomy

4. Patients who have received neoadjuvant therapy (endocrine or cytotoxic chemotherapy with therapeutic intent) or who are deemed by the MDT to require adjuvant cytotoxic chemotherapy 5. Patients with mammographically occult breast cancers, ie. present with lump, but not visible on mammogram

Date of first enrolment

17/03/2017

Date of final enrolment 28/02/2022

Locations

Countries of recruitment England

Scotland

United Kingdom

Wales

Study participating centre Addenbrookes Hospital Hills Road Cambridge United Kingdom CB2 0QQ

Study participating centre Raigmore Hospital Old Perth Road Inverness United Kingdom IV2 3UJ

Study participating centre Wrexham Maelor Cresnewydd Road Wrexham United Kingdom LL13 7TD

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

Study participating centre Barts Hospital W Smithfield London

United Kingdom EC1A 7BE

Study participating centre Royal Free Hospital Pond Street London United Kingdom NW3 2QG

Study participating centre Mount Vernon Hospital Rickmansworth Road Northwood United Kingdom HA6 2RN

Study participating centre Lister Hospital Coreys Mill Lane, Stevenage United Kingdom SG1 4AB

Study participating centre Queen Elizabeth II Hospital Howlands Welwyn Garden City United Kingdom AL7 4HQ

Study participating centre Charing Cross Hospital

Fulham Palace Road London United Kingdom W6 8RF

Study participating centre

University Hospital of South Manchester Southmoor Road, Wythenshawe Manchester United Kingdom M23 9LT Study participating centre Churchill Hospital Old Road, Headington Oxford United Kingdom OX3 7LE

Study participating centre The Hillingdon Hospital Pield Heath Road Uxbridge United Kingdom UB8 3NN

Study participating centre

Clatterbridge Cancer Centre Clatterbridge Health Park, Clatterbridge Road, Birkenhead Wirral United Kingdom CH63 4JY

Study participating centre The Royal Marsden 203 Fulham Road London United Kingdom SW3 6JJ

Study participating centre The Royal Marsden Downs Road Sutton United Kingdom SM2 5PT

Study participating centre

The Royal Bournemouth Hospital

Castle Lane East Bournemouth United Kingdom BH7 7DW

Study participating centre Royal Glamorgan Hospital Ynysmaerdy Llantrisant United Kingdom CF72 8XR

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

Study participating centre West Suffolk Hospital Hardwick Lane Bury Saint Edmunds United Kingdom IP33 2QZ

Sponsor information

Organisation Institute of Cancer Research

Sponsor details Royal Cancer Hospital 237 Fulham Road London United Kingdom SW3 6JB

Sponsor type Research organisation ROR https://ror.org/043jzw605

Funder(s)

Funder type Charity

Funder Name Cancer Research UK

Alternative Name(s) CR_UK, Cancer Research UK - London, CRUK

Funding Body Type Private sector organisation

Funding Body Subtype Other non-profit organizations

Location United Kingdom

Results and Publications

Publication and dissemination plan

Planned publication in a high-impact peer reviewed journal.

Intention to publish date 19/05/2031

Individual participant data (IPD) sharing plan

The current 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?
<u>Protocol file</u>	version v3.0	03/05/2019	16/03/2021	No	No
Interim results article		14/06/2021	13/08/2021	Yes	No
HRA research summary			28/06/2023	No	No
<u>Protocol file</u>	version 4.0	13/01/2021	07/11/2023	No	No