Molecular profiling of post-menopausal women with breast cancer on Neoadjuvant Endocrine Therapy with tamoxifen or exemestane

Submission date	Recruitment status	Prospectively registered
12/12/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
26/01/2007	Completed	Results
Last Edited	Condition category	Individual participant data
27/05/2014	Cancer	Record updated in last year

Plain English summary of protocol

http://www.cancerhelp.org.uk/trials/trials-search/trial-tamoxifen-exemestane-postmenopausal-women-breast-cancer-monet

Contact information

Type(s)

Scientific

Contact name

Dr Helena Earl

Contact details

Lecturer and Honorary Consultant Department of Oncology Box 193, Oncology Canter Addenbrooke's Hospital Hills Road Cambridge United Kingdom CB2 2QQ +44 (0)1223 336800

Additional identifiers

Protocol serial number

2

Study information

Scientific Title

Acronym

MoNET

Study objectives

Neoadjuvant (or primary) endocrine therapy is an ideal platform for predictive or prognostic marker discovery. Although neoadjuvant and adjuvant endocrine therapy are both well-established treatments, their molecular basis remains incompletely understood. There are no predictive or prognostic markers except oestrogen receptor status that can be used to tailor treatment. This study will use neoadjuvant setting as a basis to identify molecular markers of sensitivity and resistance.

On 22/02/2011 the anticipated end date for this trial was updated from 01/01/2010 to 01/05/2011.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Cambridge Local Research Ethics Committee, 21/05/2006

Study design

Randomised phase II open-label translational study

Primary study design

Interventional

Study type(s)

Treatment

Health condition(s) or problem(s) studied

Localised or locally advanced early breast cancer

Interventions

Patients will be given 16 weeks of neoadjuvant endocrine therapy with tamoxifen (20 mg orally [PO]) or exemestane (25 mg PO) and would have tumour biopsies taken pre-treatment, at the midpoint and a sample taken at the end of treatment for molecular marker studies.

Intervention Type

Drug

Phase

Phase II

Drug/device/biological/vaccine name(s)

Tamoxifen, exemestane

Primary outcome(s)

Identify molecular markers that would predict the response or resistance to endocrine therapy with exemestane or tamoxifen.

Key secondary outcome(s))

- 1. Clinical Response Rate (cRR)
- 2. Radiological Response Rate (rRR)
- 3. Changes in Ki67 counts in response to therapy
- 4. Clinical/radiological response among patients over-expressing Epidermal Growth Factor Receptor (EGFR)/Human Epidermal growth factor Receptor 2 (HER-2)
- 5. Serum levels of Vascular Endothelial Growth Factor Receptors (VEGF-R) and Vascular Endothelial Growth Factor (VEGF) before, during and after treatment
- 6. Serum circulatory HER-2 Extracellular Domain (ECD) and Circulating Endothelial Cells (CEC) changes during treatment
- 7. Vascular Endothelial Growth Factor A (VEGFA), Vascular Endothelial Growth Factor Receptor-1 (VEGFR-1) and Vascular Endothelial Growth Factor Receptor-2 (VEGFR-2) expression and correlation with clinical outcomes
- 8. Cadherin-11, transcription factor (Activating Protein1 [AP-1], Ets-2, cyclin D1)
- 9. Gene profiling to identify molecular markers of response or resistance

Completion date

01/05/2011

Eligibility

Key inclusion criteria

- 1. Women with histological diagnosis of primary invasive breast cancer on core biopsy
- 2. Not a candidate for chemotherapy
- 3. Localised or locally advanced breast cancer
- 4. Ultrasound size at least 2 cm:
- a. unifocal tumour:
- i. T2 or T3 tumours (radiological size more than 20 mm)
- ii. T4 tumour of any size with direct extension to either chest wall or skin
- iii. inflammatory carcinoma with tumour of any size

OR

b. other locally advanced disease:

- i. clinical and radiological involvement of axillary lymph node (radiological diameter more than 20 mm) and primary breast tumour of any diameter
- ii. where no primary breast tumour was found, the presence of breast cancer in a Lymph Node (LN) must be histopathologically confirmed by LN biopsy (Tru-cut or whole LN) OR
- c. multifocal tumour:
- i. the sum of the tumour diameters must be more than 20 mm (radiological size more than 20 mm)
- ii. patients with bilateral disease are eligible to enter the trial
- iii. no previous treatment for breast cancer
- 5. Oestrogen Receptor (ER) positive (Allred score more than or equal to four)
- 6. Palpable and measurable disease in the breast or axilla
- 7. Post-menopausal defined by following criteria: cessation of menstrual periods for at least 1 year or bilateral surgical oophorectomy or Follicular Stimulating Hormone (FSH) and oestradiol in the post-menopausal range
- 8. At least 2 weeks since prior hormone replacement therapy or phyto-oestrogens herbal,

alternative, or Over-The Counter (OTC) sex hormone remedies and not on concomitant hormonal therapy with these agents

- 9. Eastern Cooperative Oncology Group (ECOG) performance status zero, one or two
- 10. Randomisation and treatment within 4 weeks of biopsy
- 11. Patient must have adequate bone marrow, hepatic and renal function
- 12. Absence of any psychological, familial, sociological or geographical condition potentially hampering compliance with the study protocol and follow-up schedule; those conditions should be discussed with the patient before registration in the trial
- 13. Written consent for the trial

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Not Specified

Sex

Female

Key exclusion criteria

- 1. Patient unfit to receive endocrine-based therapy
- 2. Previous history of cancer excluding basal cell carcinoma, cervical carcinoma in-situ, or ductal carcinoma in situ of the breast
- 3. Previous deep vein thrombosis or pulmonary embolism

Date of first enrolment

01/01/2007

Date of final enrolment

01/05/2011

Locations

Countries of recruitment

United Kingdom

England

Study participating centre Lecturer and Honorary Consultant

Cambridge United Kingdom CB2 2QQ

Sponsor information

Organisation

Cambridge University Hospitals NHS Trust (UK)

ROR

https://ror.org/04v54gj93

Funder(s)

Funder type

Industry

Funder Name

Cambridge University Hospitals NHS Foundation Trust (UK)

Funder Name

Pfizer Limited (UK)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Not provided at time of registration