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Study of the effectiveness of the addition of Capecitabine to a standard regimen containing Adriamycin®, Cyclophosphamide and Docetaxel as neoadjuvant treatment in large or locally advanced breast cancers

Submission date
03/03/2011

Recruitment status
No longer recruiting

Registration date
20/05/2011

Overall study status
Completed

Last Edited
14/02/2018

Condition category
Cancer

[_] Prospectively registered
[_] Protocol
[_] Statistical analysis plan
[X] Results
[_] Individual participant data

Plain English summary of protocol

Background and study aims
Breast cancer is the most common type of cancer in the UK. Chemotherapy treatment involves using drugs to kill the cancer cells. Chemotherapy can be used before surgery to shrink large tumours or tumours that have spread within the breast region (locally advanced), in order to make the surgery possible or less disfiguring. This is called neo-adjuvant chemotherapy. The aim of this study is to find out whether adding capecitabine to the standard treatment of adriamycin, cyclophosphamide and docetaxel increases the anti-cancer response.

Who can participate?
Women between 18 and 75 years of age with large or locally advanced breast cancer

What does the study involve?
All patients receive adriamycin and cyclophosphamide. Patients who respond well receive further courses and are randomly allocated to receive either docetaxel or a combination of docetaxel with capecitabine. Patients who do not respond well to adriamycin and cyclophosphamide are randomly allocated to receive either docetaxel or a combination of docetaxel with capecitabine. Patients are treated with lenograstim on days 2-6 of each cycle of chemotherapy.

What are the possible benefits and risks of participating?
Possible benefits of the treatment include enhanced anti-cancer response and reduced toxicity (side effects). All patients receiving chemotherapy are at risk of side effects from the drugs used.

When is the study starting and how long is it expected to run for?
November 2008 to December 2011

Who is funding the study?
Roche, Sanofi Aventis and Chugai Pharma (UK)

Who is the main contact?
Prof. Oleg Eremin
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Contact information

Type(s)
Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
2007-003221-25

Protocol serial number
07H0406260

Study information

Scientific Title
A phase II, single-centre, randomised study of the effectiveness of the addition of Capecitabine to a standard regimen containing Adriamycin®, Cyclophosphamide and Docetaxel as neoadjuvant treatment in large or locally advanced breast cancers

Acronym
XINACT

Study objectives
The addition of capecitabine to Adriamycin®, cyclophosphamide and docetaxel in the neoadjuvant setting improves the pathological response rate in patients with large or locally advanced breast cancer

Ethics approval required
Old ethics approval format

Ethics approval(s)
Leicestershire, Northamptonshire & Rutland Ethics Committee, 06/06/2008, ref: NAC071

Study design
Single-centre randomised study

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Large or locally advanced breast cancer

Interventions
1. All patients will receive adriamycin (A, 60 mg/m2, iv three weekly) and cyclophosphamide (C, 600 mg/m2, iv three weekly)
2. Patients who respond to two courses of AC will be randomised to continue to receive two further courses of AC followed by either four courses of docetaxel (100 mg/m2, iv three weekly) [Group A] or will receive a combination of docetaxel (75 mg/m2, iv three weekly) with capecitabine (2,000 mg/m2, orally in two divided doses for two out of three weeks) [Group B]
3. Nonresponders will be randomised to receive either docetaxel (100 mg/m2, iv three weekly) for up to six courses [Group C] or a combination of docetaxel (75 mg/m2, iv three weekly) with capecitabine (2,000 mg/m2, orally in two divided doses for two out of three weeks) [Group D]
4. Lenograstim will be given at 263 µg daily by sc injection on days 2-6 of each cycle of chemotherapy after stratification

Intervention Type
Drug

Phase
Phase II

Drug/device/biological/vaccine name(s)
Adriamycin®, Cyclophosphamide, Docetaxel, Lenograstim

Primary outcome(s)
Pathological response in the breast and axilla, as assessed by the pathologist, following completion of chemotherapy and surgery, using established criteria. The chemotherapy is given over 24 weeks, the surgery is carried out 4 weeks later, and the pathology is available 2 weeks after surgery

Key secondary outcome(s))
1. Firstly, to document the QoL and related morbidity with these novel drug combinations, including the use of granulocyte colonomy stimulating factor (G-CSF) in a primary prophylactic setting
2. The quality of life assessment is carried out during the study, the last questionnaire is filled after the last cycle of chemotherapy
3. The questionnaires data is entered into an SPSS database and will be evaluated at the end of the trial

4. To define, accurately and reliably, the predictive value of response to chemotherapy of specific proteins/genes, previously identified and characterised in an in vitro study
5. To evaluate the host defences in the contribution of these defences to the beneficial effects documented, women with breast cancer undergoing chemotherapy
6. To assess the effectiveness of MRM as a predictor of early clinical response to neoadjuvant chemotherapy (NAC). The magnetic resonance mammography findings are entered into an SPSS database and will be evaluated at the end of the trial
7. The genomic/proteomic and immune parameters are ongoing studies which will continue for an unspecified period after completion of the clinical part of the study

Completion date
30/12/2011

Eligibility

Key inclusion criteria
1. Women with histologically confirmed carcinoma of the breast, with measurable or evaluable large (greater than or equal to 3 cm) or locally advanced (T3, T4, TxN2) disease
2. Women who are over 18 and under 75 years and able to sign the informed consent

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Adult

Lower age limit
18 years

Sex
Female

Key exclusion criteria
1. World Health Organisation (WHO) performance status 2, 3 and 4
2. Prior chemotherapy or radiotherapy unless for basal cell carcinoma
3. Unstable angina and/or evidence of significant cardiac dysfunction
4. Patients who have diabetes requiring insulin
5. Pregnancy or lactation
6. Inadequate organ function, as evidenced by any of the following laboratory values:
6.1. Absolute neutrophil count < 1500/uL
6.2. Platelet count < 100,000/uL
6.3. Total bilirubin > 1.5 mg/dL
6.4. Alkaline phosphatase, AST, and/or ALT > 2x upper limit of normal
6.5. Serum creatinine > 2.0 mg/dL
6.6. Urine protein/creatinine ratio > 1.0 at screening

7. Inability to complete Quality of Life questionnaires
8. Contraindications for modified radical mastectomy (MRM), including contrast media safety, are as for standard magnetic resonance imaging (MRI)

Date of first enrolment
01/11/2008

Date of final enrolment
30/12/2011

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Lincoln County Hospital
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Sponsor information

Organisation
United Lincolnshire Hospitals NHS Trust (UK)

ROR
https://ror.org/0377kyv52

Funder(s)

Funder type
Industry

Funder Name
Roche (UK): Educational grants, drugs supplied

Funder Name

Sanofi Aventis (UK): Educational grants

Funder Name
Chugai Pharma (UK): Drugs supplied

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	02/02/2018		Yes	No
Participant information sheet	Participant information sheet	11/11/2025	11/11/2025	No	Yes