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Adjuvant Cytotoxic chemoTherapy In Older womeN

Submission date 21/11/2005	**Recruitment status** Stopped	[X] Prospectively registered [_] Protocol [_] Statistical analysis plan [X] Results [_] Individual participant data [_] Record updated in last year
Registration date 20/01/2006	**Overall study status** Stopped	
Last Edited 19/03/2020	**Condition category** Cancer	

Plain English summary of protocol
http://cancerhelp.cancerresearchuk.org/trials/a-trial-comparing-adjuvant-chemotherapy-with-standard-treatment-for-older-women-with-early-stage-breast-cancer

Contact information

Type(s)
Scientific

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Additional identifiers

Clinical Trials Information System (CTIS)
2005-005721-55

ClinicalTrials.gov (NCT)
NCT00516425

Protocol serial number
N/A

Study information

Scientific Title
Adjuvant Cytotoxic chemoTherapy In Older womeN

Acronym
ACTION

Study objectives
Please note that as of 22/01/2009 this record was updated to include details of an amendment to the protocol undertaken in June 2008. However, after this update to the protocol, recruitment numbers were still insufficient and the trial was closed on 24/11/2008. All changes to the initial record can be found in the relevant field under the above update date.

Amended as of 22/01/2009:
Point one of the hypothesis has been amended to the below -
1. That adjuvant chemotherapy (either Anthracycline-based chemotherapy (AC) or Epirubicin and Cyclophosphamide-based (EC) will improve disease-free survival in older women with high risk breast cancer

Initial information at time of registration:
1. That adjuvant chemotherapy (either Anthracycline-based chemotherapy (AC) or Epirubicin and Cyclophosphamide-based (EC) will improve disease-free survival in older women with high risk, ER negative/ER weakly positive breast cancer
2. That accelerated therapy with Granulocyte-Colony Stimulating Factor (G-CSF) support will not cause undue toxicity in this patient group, compared to the standard three-weekly and that both chemotherapy regimens will be acceptable and tolerated in this group of patients

Ethics approval required
Old ethics approval format

Ethics approval(s)
East London and The City Research Ethics Committee gave approval prior to the trial starting recruitment (ref: 07/Q0603/1). Protocol version 1 was approved on 14/02/2007. An amendment widening the eligibility criteria to include high risk ER +ve patients (Protocol version 1.4) was approved on 16/06/2008.

Study design
Randomised, phase III open-label clinical trial

Primary study design
Interventional

Study type(s)
Treatment

Health condition(s) or problem(s) studied
Early stage breast cancer

Interventions

1. Doxorubicin 60 mg/m^2 or cyclophosphamide 600 mg/m^2 three-weekly x four cycles
Or Epirubicin 90 mg/m^2 or cyclophosphamide 600 mg/m^2 three-weekly x four cycles

2. Accelerated - with pegylated G-CSF
Doxorubicin 60 mg/m^2 or cyclophosphamide 600 mg/m^2 two- weekly x four cycles
Or Epirubicin 90 mg/m^2 or cyclophosphamide 600 mg/m^2 two-weekly x four cycles

Intervention Type
Drug

Phase
Phase III

Drug/device/biological/vaccine name(s)
Anthracycline (AC), epirubicin and cyclophosphamide

Primary outcome(s)
Relapse free interval

Key secondary outcome(s))
Current information as of 22/01/2009:
1. Disease-free survival (DFS) (for completeness and comparison with other studies)
2. Overall survival (OS)
3. Cause-specific survival
4. Distant disease-free survival (DDFS)
5. Safety and tolerability of chemotherapy (overall and for each schedule)
6. Treatment compliance (overall and for each schedule)
7. Quality of life

Initial information at the time of registration:
1. Quality of life
2. Disease-free survival (for completeness and comparison with other studies)
3. Cause-specific survival
4. Overall survival
5. Health economic measures
6. Toxicities of chemotherapy
7. Compliance/tolerability of Computer Tomography (CT) (overall and for each schedule)

Completion date
01/02/2009

Reason abandoned (if study stopped)
Participant recruitment issues

Eligibility

Key inclusion criteria
Current information as of 22/01/2009:
1. Age 70 years or over of either sex
2. Performance status 0 or 1

3. Histological diagnosis of invasive breast carcinoma
4. Primary operable breast cancer surgically treated by wide local excision or mastectomy with clear margins (greater than 1 mm apart from deep margin if full thickness resection)
5. Axillary staging performed by sentinel node biopsy, axillary sampling or clearance. All node positive patients must have had axillary clearance or radiotherapy to the axilla
6. Early stage disease with no evidence of metastases clinically or on routine staging investigations
7. High risk of relapse (approx 30%). This will include any patient with HER2 positive disease, or ER negative disease. High risk ER positive disease would typically be expected to be grade 3 with 4+ positive nodes. Other ER positive patients may be considered on an individual basis.
8. Fit to receive any of the trial chemotherapy regimens, with adequate bone marrow, hepatic, and renal function, i.e.:
8.1. Haemoglobin (Hb) greater than 9 g/dL; white blood cell count (WBC) greater than 3 × 10^9 /L; platelets greater than 100 x 10^9/L
8.2. Bilirubin within normal range (unless known Gilberts disease)
8.3. Alanine aminotranferase (ALT) and aspartate aminotransferase (AST) less than or equal to 1.5 x upper limit of normal (ULN)
8.4. Albumen within normal range
8.5. Creatinine less than or equal to 1.5 x ULN and calculated creatinine clearance using Cockroft-Gault formula greater than 50 ml/min
9. No active, uncontrolled infection
10. Written informed consent given
11. No previous anthracycline chemotherapy at any time, and no other systemic anti cancer therapy within the last 5 years, unless exposure to treatment is brief, and in the context of a peri-operative trial with biological endpoints
12. No previous mantle radiotherapy
13. Randomisation as soon as reasonably possible after definitive surgery, ideally within 8 weeks
14. Patient available for routine long term hospital follow-up

Initial information at the time of registration:
1. Age 70 years or over
2. Histological diagnosis of invasive breast carcinoma
3. Primary operable breast cancer surgically treated by wide local excision with clear margins (equal to or more than 1 mm) or mastectomy
4. Axillary staging for node negative cases and axillary clearance or radiotherapy for axillary node positive disease
5. ER negative or ER weakly positive e.g. Allred/Quick score less than three or Histo score less than 100
6. Early stage disease with no evidence of metastases clinically or on routine staging investigations
7. Risk factors for relapse suggest risk more than 30% in five years e.g. any of the following:
a. Grade three
b. Node positive
c. More than 2 cm tumours with unknown grade
d. Neuropsychiatric Inventory (NPI) score 4.4 or higher
7. Fit to receive any of the trial chemotherapy regimens, with adequate bone marrow, hepatic and renal function i.e.
a. Hb more than 9 g/dL, White blood cell (WBC) count more than 3 x 10^9/l, platelets more than 100 x 10^9/l
8. Bilirubin within normal range (unless known Gilberts disease)
9. Alanine aminotranferase (ALT) and aspartate aminotransferase (AST) AST/ALT less than or equal to 1.5 x Upper Limit of Normal (ULN)

10. Albumen within normal range
11. Creatinine less than or equal to 1.5 x ULN and calculated creatinine clearance using Cockroft-Gault formula mroe than or equal to 50 ml/min
12. No active, uncontrolled infection
13. Written informed consent given
14. No previous chemotherapy, hormonal therapy or radiotherapy for the treatment of pre-invasive or invasive cancer
15. Previous radiotherapy for basal cell carcinoma is permitted
16. Randomisation no later than eight weeks after definitive surgery)
17. No previous malignancy except Ductal Carcinoma in Situ (DCIS), basal cell carcinoma or cervical carcinoma in situ, unless disease-free for ten years, after surgical treatment only
18. Patients with previous non-invasive breast cancer are eligible provided they have only received surgery
19. No concomitant medical, psychiatric or geographic problems that might prevent completion of treatment or follow-up

Participant type(s)
Patient

Healthy volunteers allowed
No

Age group
Senior

Sex
All

Key exclusion criteria
Current information as of 22/01/2009:
1. Previous invasive breast cancer within the last 5 years
2. Previous ductal carcinoma in situ (DCIS) within the last 5 years if treated systemically
3. Any previous haematological malignancy or melanoma
4. Primary inoperable breast cancer (T4 and/or N3 disease)
5. Patients who have had breast-conserving surgery in whom there is a contra-indication for, or decline of, post-operative radiotherapy
6. Patients with significant cardiac disease as determined by multiple-gated acquisition scan (MUGA) or ECHO (left ventricular ejection fraction [LVEF] less than 55% excluded)
7. Patients not able or willing to give informed consent

Initial information at the time of registration:
1. Previous invasive breast cancer or bilateral breast cancer (DCIS or lobular carcinoma in situ [LCIS]. LCIS is allowed)
2. Locally advanced breast cancer (T4 and/or N3 disease)
3. Patients who have had breast conserving surgery in whom there is a contra-indication for, or refusal of post-operative radiotherapy
4. Patients not able or willing to give informed consent
5. Patients not available for a minimum of five years follow-up
6. Patients with known serious viral infection such as active Hepatitis B, Hepatitis C or Human Immunodeficiency Virus (HIV)
7. Patients with significant cardiac disease, such as impaired left ventricular function or active

angina (requiring regular anti-anginal medication and/or resulting in restricted physical activity)
8. Patients with a history of significant renal impairment or disease

Date of first enrolment
01/02/2006

Date of final enrolment
01/02/2009

Locations

Countries of recruitment
United Kingdom

England

Study participating centre
Charing Cross Hospital
London
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Sponsor information

Organisation
The Institute of Cancer Research and Imperial College Healthcare NHS Trust (UK)

ROR
https://ror.org/056ffv270

Funder(s)

Funder type
Charity

Funder Name
Cancer Research UK (CRUK) (UK) (ref: C4831/A4782)

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

Funding Body Type

Private sector organisation

Funding Body Subtype
Other non-profit organizations

Location
United Kingdom

Funder Name
Amgen

Alternative Name(s)
Amgen Inc., Applied Molecular Genetics Inc.

Funding Body Type
Government organisation

Funding Body Subtype
For-profit companies (industry)

Location
United States of America

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Basic results				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