# Neoadjuvant study of sequential epirubicin /cyclophosphamide and paclitaxel ± gemcitabine in the treatment of high risk early breast cancer with molecular profiling, proteomics and candidate gene analysis

Submission date 25/11/2004	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>
<b>Registration date</b> 20/12/2004	<b>Overall study status</b> Completed	<ul> <li>[] Statistical analysis plan</li> <li>[X] Results</li> </ul>
<b>Last Edited</b> 19/10/2018	<b>Condition category</b> Cancer	Individual participant data

### Plain English summary of protocol

http://cancerhelp.cancerresearchuk.org/trials/a-trial-looking-at-chemotherapy-before-surgery-for-breast-cancer

# **Contact information**

**Type(s)** Scientific

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# Additional identifiers

**EudraCT/CTIS number** 2004-002356-34

### **IRAS number**

ClinicalTrials.gov number NCT00070278

Secondary identifying numbers N0544160589

# Study information

### Scientific Title

Neoadjuvant study of sequential epirubicin/cyclophosphamide and paclitaxel ± gemcitabine in the treatment of high risk early breast cancer with molecular profiling, proteomics and candidate gene analysis

### Acronym

Neo-tAnGo

### Study objectives

Added 12/08/09:

Some women diagnosed with early breast cancer are advised to have chemotherapy before surgery (neoadjuvant chemotherapy). The aim of this neoadjuvant breast cancer study is to determine the benefit of adding gemcitabine (a newer anticancer chemotherapy drug) to epirubicin, cyclophosphamide and paclitaxel (standard chemotherapy treatment) in the neoadjuvant setting.

As of 12/08/09 this record has been extensively updated. All updates can be found in the relevant field with the above update date.

**Ethics approval required** Old ethics approval format

**Ethics approval(s)** Not provided at time of registration

**Study design** Multicentre randomised controlled trial

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Hospital

**Study type(s)** Treatment

### Participant information sheet

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

### Health condition(s) or problem(s) studied

Early breast cancer

### Interventions

Current information as of 12/08/09:

This is a randomised, multicenter study. Patients are stratified according to estrogen-receptor status (negative vs greater than 10% positive cells), HER-2 status (positive vs negative), tumor size (30-50 mm vs greater than 50 mm), and clinical involvement of axillary nodes (yes vs no). Patients are randomized to 1 of 4 treatment arms.

1. Neoadjuvant sequential chemotherapy:

1.1. Arm 1: Patients receive epirubicin IV and cyclophosphamide IV on day 1. Treatment repeats every 21 days for 4 courses. Patients then receive paclitaxel IV over 3 hours on day one. Treatment repeats every 21 days for 4 courses.

1.2. Arm 2: Patients receive paclitaxel as in arm I followed by epirubicin and cyclophosphamide as in arm I.

1.3. Arm 3: Patients receive epirubicin and cyclophosphamide as in arm I followed by paclitaxel as in arm I and gemcitabine IV over 30 minutes on days 1 and 8. Treatment repeats every 21 days for 4 courses.

1.4 Arm 4: Patients receive paclitaxel as in arm I and gemcitabine as in arm III followed by epirubicin and cyclophosphamide as in arm I.

2. Surgery: After completion of neoadjuvant chemotherapy, patients in all arms undergo definitive surgery.

3. Radiotherapy: Radiotherapy will be given as appropriate

4. Tumor tissue is removed from a subset of patients during serial biopsies. Molecular and genetic profiling, mutation analysis, and comparative genomic analysis is performed on the tissue samples.

5. Quality of life is assessed at baseline, after 4 courses of chemotherapy, after the completion of chemotherapy, after surgery, and then every 6 months for 2 years.

6. Patients are followed every 2 months for 2 years and then every 3 months for 3 years.

Initial information at time of registration:

Phase III, multi-centre, prospective, randomised trial of neoadjuvant chemotherapy involving recruitment of 800 patient volunteers. All patients will receive four cycles of Epirubicin (E) (90 mg/m^2, every three weeks) and Cyclophosphamide (C) (600 mg/m^2, every three weeks) and either four cycles of paclitaxel (T) (175 mg/m^2, every two weeks) alone, or four cycles paclitaxel in combination with Gemcitabine (G) (2000 mg/m^2, day one and then every two weeks), according to randomisation. A further sub-randomisation will be conducted to assess the effect of treatment sequence (i.e. EC followed by T ± G versus T ± G followed by EC).

### Intervention Type

Other

Phase III

Primary outcome measure

### Added 12/08/09: Complete pathological response after 4 courses

#### Secondary outcome measures

Added 12/08/09: 1. Overall survival 2. Disease-free survival 3. Effect of prognostic factors

### Overall study start date

01/04/2000

### **Completion date**

31/05/2005

# Eligibility

### Key inclusion criteria

- 1. Women with histological diagnosis of invasive breast cancer
- 2. T2 tumour or above (ultrasound size mroe than 20 mm)
- 3. Any hormone receptor status
- 4. Patient fit to receive any of the trial chemotherapy regimens
- 5. Patient must have adequate bone marrow, hepatic, renal, and cardiac function
- 6. Eastern Cooperative Oncology Group (ECOG) performance status of zero, one, or two
- 7. No previous chemotherapy or radiotherapy

8. No previous malignancy except basal cell carcinoma or cervical carcinoma in situ, unless disease-free for ten years, after surgical treatment only

9. Chemotherapy should start as soon as possible but must commence within four weeks of biopsy

10. Randomisation needs to take place within three weeks of biopsy

11. Non-pregnant and non-lactating

12. No concomitant medical or psychiatric problems that might prevent completion of treatment or follow-up

13. 18 years or older

14. Written informed consent for the study

### Participant type(s)

Patient

### Age group

Adult

**Lower age limit** 18 Years

**Sex** Female

Target number of participants

### Key exclusion criteria

- 1. Previous treatment with irinotecan
- 2. Any condition requiring ongoing ciclosporin treatment

3. Ongoing treatment with cetuximab (NB previous cetuximab is not an exclusion criterion,

provided it has stopped more than three weeks before randomisation)

4. If a female of child-bearing age, a positive pregnancy test, or not using adequate contraception

5. Concurrent or previous other cancer (excluding non-melanomatous skin cancer)

6. Known Central Nervous System (CNS) metastases, carcinomatous meningitis or recent history of seizures

- 7. Major thoracic or abdominal surgery within preceding four weeks
- 8. Chronic enteropathy (e.g. Crohn's disease, ulcerative colitis)

9. Chronic diarrhoea of any cause, whether or not related to the colorectal cancer or surgery

- 10. Unresolved bowel obstruction
- 11. Uncontrolled infection
- 12. Incapable of reliable oral self-medication

13. Any other condition, which, in the investigator's opinion would make the patient unsuitable for participation in the trial

### Date of first enrolment

01/04/2000

Date of final enrolment

31/05/2005

# Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre Department of Oncology** Cambridge United Kingdom CB2 2TT

## Sponsor information

**Organisation** Cambridge University Hospitals NHS Foundation Trust (UK)

Sponsor details

Addenbrooke's NHS Trust R&D Office Addenbrooke's Hospital Cambridge England United Kingdom CB2 2TT

**Sponsor type** Hospital/treatment centre

ROR https://ror.org/04v54gj93

# Funder(s)

**Funder type** Charity

Funder Name Cancer Research UK (CRUK) (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

**Funder Name** Eli Lilly & Company Limited (UK)

**Funder Name** Bristol Myers-Squibb (UK)

Alternative Name(s) Bristol-Myers Squibb Company, BMS

Funding Body Type

Government organisation

### Funding Body Subtype

For-profit companies (industry)

### **Location** United States of America

# **Results and Publications**

**Publication and dissemination plan** Not provided at time of registration

Intention to publish date

### Individual participant data (IPD) sharing plan

### IPD sharing plan summary

Not provided at time of registration

### Study outputs

Output type Plain English results	Details	Date created	Date added	<b>Peer reviewed?</b> No	<b>Patient-facing?</b> Yes
Results article	sub-study results	19/08/2008		Yes	No
Results article	results	01/02/2014		Yes	Νο