# The SBG 2004-1/ABCSG 25/GBG53 study (the Panther study)

Submission date Recruitment status Prospectively registered 19/06/2007 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 14/08/2007 Completed [X] Results Individual participant data **Last Edited** Condition category 02/04/2020 Cancer

## Plain English summary of protocol

Not provided at time of registration

## Study website

http://www.kpeks.se/sbg20041

## Contact information

## Type(s)

Scientific

#### Contact name

Prof Jonas Bergh

#### Contact details

Department of Oncology Karolinska University Hospital Stockholm Sweden SE-171 76

## Additional identifiers

# EudraCT/CTIS number

2007-002061-12

IRAS number

## ClinicalTrials.gov number

NCT00798070

Secondary identifying numbers

# Study information

#### Scientific Title

A randomised phase III study comparing biweekly and tailored epirubicin plus cyclophosphamide followed by biweekly tailored docetaxel (A-arm) versus three weekly epirubicin plus cyclophosphamide, 5-fluorouracil followed by docetaxel (B-arm) in lymph node positive breast cancer patients - a continuation of the feasibility part of the SBG 2004-1 study

## Acronym

The Panther Study

## Study objectives

The aim of the study is to compare breast cancer recurrence-free survival (BCRFS; local, regional, distant breast cancer relapse or death due to breast cancer) in the tailored therapy arm compared with the fixed dose arm.

## Ethics approval required

Old ethics approval format

## Ethics approval(s)

Regional Ethical Board in Stockholm (Regionala etikprövningsnämnden i Stockholm), 15/01/2007, ref: 04-647/1

## Study design

Phase III open prospective 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 contact details to request a participant information sheet

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

Lymph node positive breast cancer patients

#### Interventions

Tailored therapy arm:

Tailored epirubicin (38 - 120 mg/m $^2$ ) and cyclophosphamide (450 - 1200 mg/m $^2$ ) will be given

intravenously for four courses with granulocyte colony stimulating factor (G-CSF) support. Courses should be given with a biweekly interval followed by four courses docetaxel 75 - 100 mg/m^2 with G-CSF support. The first course will start at EC Step 1, epirubicin 90 mg/m^2 and cyclophosphamide 600 mg/m^2. This is followed by four courses docetaxel 75 - 100 mg/m^2 biweekly with G-CSF support. Starting dose of docetaxel Step 0 is 75 mg/m^2.

#### Fixed dose arm:

Three courses of 5-fluorouracil (500 mg/m $^2$ ), epirubicin (100 mg/m $^2$ ) and cyclophosphamide 500 mg/m $^2$ , given with a 3-week interval, will be followed by three courses of docetaxel 100 mg/m $^2$  given with a 3-week interval.

## Intervention Type

Drug

#### **Phase**

Phase III

## Drug/device/biological/vaccine name(s)

Epirubicin, cyclophosphamide, docetaxel, 5-fluorouracil

## Primary outcome measure

Breast cancer relapse-free survival (local, regional or systemic relapse or death due to breast cancer), assessed during follow-up at 4, 8, 12, 16, 20 months and 2 years and then every 6 months until 5 years. From this point, assessment will be carried out annually until 10 years.

## Secondary outcome measures

The following three outcomes will be assessed during follow-up at 4, 8, 12, 16, 20 months and 2 years and then every 6 months until 5 years. From this point, assessment will be carried out annually until 10 years:

- 1. Distant disease-free survival (DDFS)
- 2. Event-free survival
- 3. Overall survival
- 4. Health-related quality of life, assessed at baseline, 6 and 15 weeks during treatment and then at 4, 8 and 12 months during follow up
- 5. Outcome in relation to tumour biological factors and polymorphism patterns

## Overall study start date

01/02/2007

## Completion date

01/08/2011

# **Eligibility**

## Key inclusion criteria

Current inclusion criteria as of 24/01/2011:

1. Histologically proven invasive primary breast cancer, with at least 5 (recommended 10) removed axillary lymph nodes. Interval between definitive surgery that includes axillary lymph node dissection and registration must be less than 60 days. Paraffin block from the primary tumour must be retained (not mandatory for Austrian sites). Frozen tumour tissue is strongly

recommended to be stored.

- 2. Receptor-negative or -positive tumours with 1 or more positive axillary lymph nodes (more than 0.2 mm) OR axillary node negative breast cancers if the primary tumour is larger than 20 mm and receptor negative (Er and Pgr with no receptor content) and being Elston grade III. In Germany high-risk node-negative breast cancer patients are not eligible until labelling for docetaxel includes node-negative disease.
- 3. Macroscopically and microscopically radical surgery, free margins (no cancer cells at borders of resection)
- 4. No proven distant metastases: negative pulmonary X-ray, bone scintigram (when clinical signs of skeletal metastases or elevated alkaline phosphatase [ALP] is observed) supplemented with normal conventional X-ray of hot spots, normal liver function test and haematological function tests. Abnormal values: computed tomography (CT) or ultrasound of the liver (patient can be included if no metastases are demonstrated).
- 5. Female aged 18 65 years
- 6. Ambulant patients (Eastern Cooperative Oncology Group [ECOG] 1 or less)
- 7. No major cardiovascular morbidity: New York Heart Association (NYHA) grade I or II
- 8. Written informed consent according to the local ethics committee requirements
- 9. Patients of childbearing potential should have a negative pregnancy test within seven days of registration (in Austria, pregnancy tests have to be repeated monthly during the treatment phase)

#### Previous inclusion criteria:

- 1. Histologically proven invasive primary breast cancer, with at least 5 (recommended 10) removed axillary lymph nodes. Interval between definitive surgery that includes axillary lymph node dissection and registration must be less than 60 days. Paraffin block from the primary tumour must be retained (not mandatory for Austrian sites). Frozen tumour tissue is strongly recommended to be stored.
- 2. Receptor-negative or -positive tumours with 1 or more positive axillary lymph nodes (greater than 0.2 mm)
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## Participant type(s)

Patient

#### Age group

Adult

## Lower age limit

#### Sex

Female

## Target number of participants

2000

## Key exclusion criteria

Current exclusion criteria as of 24/01/2011:

- 1. Previous neo-adjuvant treatment
- 2. Non-radical surgery (histopathological positive margins)
- 3. A primary breast cancer patient being 35 years or younger considered suitable for adjuvant chemotherapy (may be receptor negative or positive, HER-2/neu negative or positive, with or without axillary lymph node metastases)
- 4. Proven distant metastases
- 5. Pregnancy or lactation
- 6. Other serious medical condition
- 7. Previous or concurrent malignancies at other sites, except basal cell carcinoma and/or squamous cell carcinoma in situ of the skin or cervix. Patients with previous breast cancer (invasive and/or ductal carcinoma in situ) in the other breast without loco-regional (large lung volumes) radiotherapy, without objective findings for relapse, with greater than 5 years since diagnosis can be included.
- 8. Abnormal laboratory values precluding the possibility to safely deliver the cytotoxic agents used in the study
- 9. Hypersensitivity to drugs formulated in polysorbate 80
- 10. Peripheral neuropathy grade greater than or equal to 2

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- 1. Previous neo-adjuvant treatment
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- 8. Hypersensitivity to drugs formulated in polysorbate 80
- 9. Peripheral neuropathy grade greater than or equal to 2

#### Date of first enrolment

01/02/2007

#### Date of final enrolment

01/08/2011

## Locations

## Countries of recruitment

Austria

Germany

Sweden

Study participating centre Karolinska University Hospital Stockholm Sweden SE-171 76

# Sponsor information

## Organisation

Karolinska University Hospital

## Sponsor details

c/o Prof Jonas Bergh Radiumhemmet Department of Oncology Karolinska University Hospital Stockholm Sweden SE-171 76 +46 (0)8 51770000 jonas.bergh@ki.se

## Sponsor type

University/education

#### Website

http://www.karolinska.se/en

#### ROR

https://ror.org/00m8d6786

## Organisation

Paracelsus University

## Sponsor details

c/o Richard Greil, MD, Professor Austrian Breast & Colorectal Cancer Study Group (ABCSG) Department of Internal Medicine III Salzburg Austria A-5020

## Sponsor type

University/education

## Organisation

Städt. Kliniken Frankfurt-Höchst

## Sponsor details

c/o Volker Möbus, MD, Professor German Breast Group (GBG) Frauenklinik Gotenstrasse 6-8 Frankfurt/Höchst Germany D-65929

## Sponsor type

Hospital/treatment centre

# Funder(s)

## Funder type

Industry

#### Funder Name

Swedish Cancer Society (Sweden)

## Alternative Name(s)

**Swedish Cancer Society** 

## **Funding Body Type**

Private sector organisation

## Funding Body Subtype

Trusts, charities, foundations (both public and private)

#### Location

Sweden

#### Funder Name

ALF Foundation, Stockholm County Council (Sweden)

#### Funder Name

Sanofi-Aventis (Sweden)

#### Funder Name

Sanofi-Aventis (Austria)

#### Funder Name

Sanofi-Aventis (Germany)

#### Funder Name

Sanofi-Aventis (Europe)

#### **Funder Name**

Amgen (Sweden)

## 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

#### Funder Name

Amgen (Germany)

## 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

## Funder Name

Amgen (Europe)

## 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**

## 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	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Results article	results	08/11/2016		Yes	No
Results article	results	01/05/2020	02/04/2020	Yes	No