# Study of neo adjuvant chemotherapy in large and/or lymphenode positive breast cancer (stage IIB-III pT2> 3cm). Multicentre - phase II - trial.

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The main goal of neoadjuvant therapy should be a pathological complete response (pCR), because pCR more accurately predicts improved patient outcome and prolonged survival. In the present study, pathological response will be evaluated by The Miller...

**Ethical review** Not approved **Status** Will not start

**Health condition type** Breast neoplasms malignant and unspecified (incl nipple)

**Study type** Observational invasive

# **Summary**

#### ID

NL-OMON30125

#### **Source**

ToetsingOnline

#### **Brief title**

Neoadjuvant chemotherapy in large and/or lymphenode positive breast cancer.

#### **Condition**

• Breast neoplasms malignant and unspecified (incl nipple)

#### Synonym

breastcancer > 3 cm and/or metastatic disease of axilary lymfenodes

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Catharina-ziekenhuis

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**Source(s) of monetary or material Support:** opgenomen in standaard behandeling; geen extra geldstroom, Sanofi-aventis

#### Intervention

**Keyword:** breast cancer, locally advanced, lymphe node positive, Neoadjuvant chemotherapy

#### **Outcome measures**

#### **Primary outcome**

- To evaluate clinical and pathological response to neoadjuvant chemotherapy
- To evaluate the value of dynamic contrast-enhanced breast MRI in monitoring and predicting response to neoadjuvant chemotherapy.
- To evaluate the value of circulating tumour cells in monitoring and predicting reponse to neoadjuvant chemotherapy.
- To define gene expression profiles that can predict treatment response or failure by microarray analysis.

#### **Secondary outcome**

- To determine disease-free and overall survival.
- To evaluate the use of radioactive labeled (125-I) seed as to localize tumour prior to chemotherapy to enable after surgical excision (conservation therapy or mastectomy) pathological evaluation of tumour residue after chemotherapy

# **Study description**

#### **Background summary**

Docetaxel-based neoadjuvant chemotherapy is an effective alternative to surgery followed by adjuvant chemotherapy in both early and locally advanced breast cancer. Findings from randomized studies suggests that the sequential administration of docetaxel and anthracycline-based therapy may provide improved outcome versus the outcome with concomitant administration. Recently, the Dutch multidisciplinary guidelines for treatment of early breast cancer were updated and antracycline-based therapy consisting of FEC was defined as standard treament. Therefore, in the present study, eligible patients will be treated with sequential 4 cycles of docetaxel after 4 cycles of neoadjuvant FEC. In line with the data of Van Pelt and Buzdar, patients with HER-2 positive disease will be treated with 8 cycles of docetaxel in combination with trastuzumab. Trastuzumab and docetaxel will be administered in a 3-weekly schedule based on the data of Leyland-Jones.

#### Study objective

The main goal of neoadjuvant therapy should be a pathological complete response (pCR), because pCR more accurately predicts improved patient outcome and prolonged survival. In the present study, pathological response will be evaluated by The Miller and Payne and RECIST classification system (see appendix I). In addition clinical response to treatment will be evaluated by dynamic contrast-enhanced MRI of the effected breast. Breast MRI images will be correlated to the pathological information to determine whether this technique is able to accurately predict tumour response to neoadjuvant chemotherapy. Moreover, repetitive breast MRI images obtained before, during and after chemotherapy offers the ability to determine the optimal duration of preoperative therapy and to delineate the necessity to change the regimen in chemotherapy-resistant tumours

### Study design

Multi centre, phase II - non randomised - study.

#### Study burden and risks

Neo adjuvant chemotherapy is indicated based on criteria also used for adjuvant chemotherapy. Advantages could be: - monitoring clinical respons and possibility of adjustment of treatment, - possibility of breast saving procedure after (nearly) complete respons of large breast tumours. This treatment is also made possible after placement of 125-I seed.

## **Contacts**

#### **Public**

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

#### Inclusion criteria

- •Women presenting with locally advanced stage IIB-III breast cancer pT2 > 3 cm, and/or clinically proven N+ disease. Exclusion cT4. (TNM classification 2002).
- •No prior surgery other than biopsy and no prior chemotherapy or radiation therapy.
- •Age > 18 years and age < 60 years.
- Karnofsky Performance status index > 80%
- •Estrogen and/or progesterone receptor analysis performed on the primary tumour. Results must be known by the end of chemoptherapy in order to decide whether hormonal therapy is indicated.
- •Her2/neu receptor analysis performed on the primary tumour.
- •Adequate bone marrow (within 14 days prior to registration):WBC >  $3.0 \times 109/I$ , neutrophils >  $1.5 \times 109/I$ , platelets >  $100 \times 109/I$ , hemoglobin > 7 mmol/I.
- •Adequate liver function (within 21 days prior to registration):bilirubin < 1 x upper limit of
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normal (UNL) range, ALAT and/or ASAT < 2.5 x UNL, Alkaline Phosphatase < 5 x UNL.

- •Adequate renal function (within 21 days prior to registration):Creatinine < 120  $\mu$ mol/L; if limit values reached, the calculated creatinine clearance should be > 60 mL/min.
- No sign of metastatic disease on X-thorax, liver ultrasound or nuclear bone scan.
- Cardiac LVEF evaluation by ECHO or MUGA (within normal limits).
- Patients must be accessible for treatment and follow-up.
- •Negative pregnancy test (urine or serum) within 7 days prior to registration for all women of childbearing potential.
- Having signed written informed consent according to the local Ethics Committee requirements.

#### **Exclusion criteria**

- Prior systemic anticancer therapy for any cancer (immunotherapy, hormonaltherapy, genetherapy, chemotherapy).
- Prior anthracycline-based or taxoid-containing therapy (paclitaxel, docetaxel) for any malignancy.
- Prior radiation therapy for breast cancer.
- Patients with advanced pulmonary disease.
- Peripheral neuropathy > grade 2 whatever the cause.
- Clinical evidence of CNS disease.
- •Patients with a history of another malignancy (except basal cell skin carcinoma and carcinoma-in-situ of the uterine cervix) within 5 years of study entry.
- Pregnant or lactating women, or potentially fertile women not using adequate contraception.
- Clinically T4

# Study design

## **Design**

Study phase: 2

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Diagnostic

#### Recruitment

NL

Recruitment status: Will not start

Enrollment: 50

Type: Anticipated

## Medical products/devices used

Product type: Medicine

Brand name: Endoxan

Generic name: Cyclophosphamidum

Registration: Yes - NL intended use

Product type: Medicine

Brand name: Farmorubicin

Generic name: epirubicini hydrocloridum

Registration: Yes - NL intended use

Product type: Medicine

Brand name: Fluorouracil - TEVA

Generic name: fluoroucacilum

Registration: Yes - NL intended use

Product type: Medicine

Brand name: Herceptin

Generic name: trastuzumab

Registration: Yes - NL intended use

Product type: Medicine

Brand name: Taxotere

Generic name: Docetaxelum

Registration: Yes - NL intended use

# **Ethics review**

Approved WMO

Date: 27-07-2006

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

Not approved

Date: 11-07-2007

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

# **Study registrations**

# Followed up by the following (possibly more current) registration

No registrations found.

# Other (possibly less up-to-date) registrations in this register

No registrations found.

# In other registers

Register ID

EudraCT EUCTR2006-001206-89-NL

CCMO NL11339.060.06