# Clinical evaluation of dried blood spots for the determination of tamoxifen and endoxifen levels

Published: 02-11-2012 Last updated: 20-04-2024

Clinical evaluation of dried blood spot (DBS) assay, by determining the ratio between DBS and serum levels of tamoxifen and endoxifen and to investigate if patients can obtain useful

DBS at home.

Ethical review Approved WMO

**Status** Pending

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

**Study type** Observational invasive

# **Summary**

#### ID

NL-OMON40928

#### Source

**ToetsingOnline** 

## **Brief title**

Tamoxifen and endoxifen in DBS

## **Condition**

Breast neoplasms malignant and unspecified (incl nipple)

#### **Synonym**

breast cancer, mamma carcinoma

## Research involving

Human

## **Sponsors and support**

Primary sponsor: Antoni van Leeuwenhoek Ziekenhuis

Source(s) of monetary or material Support: Laboratorium apotheek AvL

#### Intervention

**Keyword:** Dried blood spots, Endoxifen, Tamoxifen, Therapeutic drug monitoring

## **Outcome measures**

#### **Primary outcome**

- Ratio of the DBS and serum concentrations of tamoxifen and endoxifen

## **Secondary outcome**

- Percentage of patients that obtains a DBS by self-sampling at home
- Percentage of patients that provides DBS samples useful for analysis

# **Study description**

## **Background summary**

Tamoxifen, a selective estrogen receptor modulator, is widely used for the treatment and prevention of breast cancer. The steady state concentration of its most active metabolite, endoxifen, is a proposed predictor of tamoxifen efficacy. It is suggested that there is a minimum serum concentration above which endoxifen is effective against the recurrence of breast cancer. Current practice is to analyze tamoxifen and metabolite concentrations in serum, blood samples are collected when patients visit the Antoni van Leeuwenhoekhospital.

### Study objective

Clinical evaluation of dried blood spot (DBS) assay, by determining the ratio between DBS and serum levels of tamoxifen and endoxifen and to investigate if patients can obtain useful DBS at home.

## Study design

Patients treated with tamoxifen who undergo venapuncture are asked if they are willing to obtain a DBS sample at the same time. For the feasiblity part, patients are asked if they are willing to self-obtain a DBS sample through a fingerprick. They will be instructed at the Antoni van Leeuwenhoekhospital.

## Study burden and risks

## **Contacts**

#### **Public**

Antoni van Leeuwenhoek Ziekenhuis

Louwesweg 6 Amsterdam 1066EC NL

## **Scientific**

Antoni van Leeuwenhoek Ziekenhuis

Louwesweg 6 Amsterdam 1066EC NL

## **Trial sites**

## **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

## Age

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

## **Inclusion criteria**

- Treated with tamoxifen
- Age 18 years or older
- Able and willing to give informed consent
- Able and willing to undergo a fingerprick for dried blood spot sampling

## **Exclusion criteria**

# Study design

## **Design**

Study type: Observational invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 24-02-2014

Enrollment: 100

Type: Anticipated

# **Ethics review**

Approved WMO

Date: 02-11-2012

Application type: First submission

Review commission: PTC Stichting het Nederlands Kanker Instituut - Antoni van

Leeuwenhoekziekenhuis (Amsterdam)

Approved WMO

Date: 19-02-2014

Application type: Amendment

Review commission: PTC Stichting het Nederlands Kanker Instituut - Antoni van

Leeuwenhoekziekenhuis (Amsterdam)

# **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

CCMO NL47958.031.14