

# Pilot study: Dystrophic pathways in human hair follicles after chemotherapy

Published: 15-11-2013

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The objective of this study is to explore molecular damage-response pathways such as p53 expression in hair follicles after chemotherapy.

|                              |  |
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| <b>Ethical review</b>        | Approved WMO   |
| <b>Status</b>                | Recruitment stopped                                      |
| <b>Health condition type</b> | Breast neoplasms malignant and unspecified (incl nipple) |
| <b>Study type</b>            | Observational non invasive                               |

## Summary

### ID

NL-OMON40394

### Source

ToetsingOnline

### Brief title

Path-study

## Condition

- Breast neoplasms malignant and unspecified (incl nipple)

### Synonym

alopecia, Hair loss

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Medisch Centrum Alkmaar

**Source(s) of monetary or material Support:** Eigen financiering

## Intervention

**Keyword:** alopecia, chemotherapy, hair follicle, pathway

## Outcome measures

### Primary outcome

Expression of damage-response pathways

### Secondary outcome

NA

## Study description

### Background summary

Alopecia is an almost inevitable side effect of chemotherapy treatment. In cancer patients chemotherapy induced alopecia is experienced as one of the side effects with de most impact. Several factors may contribute to the severity of hair loss including dose, drug schedule, combinations with other cytotoxic agents as well as hair care practices. Research shows scalp cooling is an effective method to prevent chemotherapy induced hair loss. The exact working mechanism is unclear. Therefore we do not know why scalp cooling is effective in one patient but not in another.

### Study objective

The objective of this study is to explore molecular damage-response pathways such as p53 expression in hair follicles after chemotherapy.

### Study design

This is a multi-center observational study. The study will be conducted in the outpatient chemotherapy clinic of the department of internal medicine of the Medical Center Alkmaar. Patients will be asked to participate at the time of their first contact with the oncology nurse to schedule their first chemotherapy. After providing informed consent, hairs will be collected during the first chemotherapy course.

### Study burden and risks

The burden for patients consists of collecting hairs.

## Contacts

### Public

Medisch Centrum Alkmaar

Wilhelminalaan 12

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NL

### Scientific

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## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- Female patients with breast cancer
- Age 18 years or more
- Written informed consent
- Indication for at least one cycle of intravenous administered Docetaxel-Adriamycin-Cyclofosfamide (TAC), Fluorouracil-Epirubicin-Cyclophosphamide (FEC) or Adriamycin-Cyclophosphamide (AC).

### Exclusion criteria

- Use of scalp cooling

## Study design

### Design

**Study type:** Observational non invasive

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-12-2013

Enrollment: 10

Type: Actual

## Ethics review

Approved WMO

Date: 15-11-2013

Application type: First submission

Review commission: METC Noord-Holland (Alkmaar)

Approved WMO

Date: 25-02-2014

Application type: Amendment

Review commission: METC Noord-Holland (Alkmaar)

## Study registrations

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

No registrations found.

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

ID: 22244

Source: Nationaal Trial Register

Title:

## In other registers

| Register | ID             |
|----------|----------------|
| CCMO     | NL45436.094.13 |
| OMON     | NL-OMON22244   |