# Physical Activity during Cancer Treatment study.

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

Health condition type -

**Study type** Interventional

# **Summary**

### ID

NL-OMON26673

**Source** 

NTR

**Brief title** 

**PACT** 

**Health condition** 

physical exercise; cancer; adjuvant treatment; fatigue; cost-effectiveness

### **Sponsors and support**

**Primary sponsor:** Comprehensive Cancer Center Middle Netherlands Comprehensive Cancer Center Limburg University Medical Center Utrecht Maasticht University

Source(s) of monetary or material Support: ZonMw

### Intervention

#### **Outcome measures**

### **Primary outcome**

1. Fatigue;

2. Health service utilization; 3. Sick leave. **Secondary outcome** 1. Health related quality of life; 2. Physical fitness (aerobic peak capacity, muscle strength); 3. Body composition; 4. Self-efficacy. **Study description Background summary** Physical Activity during Cancer Treatment (PACT) Study: a randomised clinical trial of physical exercise during cancer treatment. Rationale for the study: Cancer related fatigue is one of the major problems of cancer patients. Sixty% - 96% of the cancer patients report high levels of fatigue during or after cancer treatment. We hypothesise that early physical exercise will increase physical fitness and thereby diminish complaints of fatigue. This may result in a decrease of healthcare related expenditures by reducing healthcare utilisation and production loss due to sick leave. Research questions: 1. Is an 18-week group wise supervised exercise programme during adjuvant cancer treatment effective in reducing complaints of fatigue and health service utilisation and sick leave (primary outcomes) and in improving health related quality of life, physical fitness, body composition and self efficacy (secondary outcomes)?

Randomised controlled clinical study.

Study design:

### Study population:

A total of 300 newly diagnosed patients with breast or colorectal cancer admitted for adjuvant cancer treatment including chemotherapy.

#### Intervention:

The intervention group will receive an 18 week supervised group exercise programme including principles of Bandura's social cognitive theory (SCT) during cancer treatment. The exercise programme will start earliest one week after surgery and < 6 weeks after definite diagnosis. The control group will receive care as usual (no exercise programme).

#### Outcome:

Exercise is supposed to reduce fatigue and health service utilisation and sick leave. Primary and secondary outcomes will be assessed immediately after ending the intervention (after 18 weeks: short term) and after 9 months (long term).

Primary outcomes: Fatigue (Multidimensional Fatigue Inventory), health service utilisation, sick leave.

Secondary outcomes: Health related quality of life (EORTC QOL C30, EQ5D), physical fitness (aerobic peak capacity, muscle strength), body composition and self efficacy.

### Sample size calculation and data analysis:

A sample size of 150 participants for each cancer type, 300 in total, will be required to detect a significant reduction in complaints of fatigue (p=0.05, 80% power). Data will be longitudinally analysed, using mixed linear regression models.

#### **Economic evaluation:**

The goal of the economic evaluation is to assess the balance between (in)direct costs and (long term) effects of the exercise programme versus no exercise programme during cancer treatment. We will generate incremental cost-effectiveness ratios (ICER) to capture the added value of the exercise programme.

### Study objective

We hypothesize that physical exercise during cancer treatment by reducing complaints of fatigue will lead to a reduction in sick leave and production losses. Altogether we expect that physical exercise during cancer treatment will be cost-effective.

### Study design

Baseline, 18 weeks and 9 months after inclusion.

#### Intervention

The intervention group will receive an 18 week supervised group exercise program based on Bandura's social cognitive theory (SCT) during cancer treatment. The exercise program will start earliest one week after surgery and at least within six weeks (breast cancer) or ten weeks (colon cancer) after definitive cancer diagnosis. The control group will receive care as usual (no exercise program).

### **Contacts**

### **Public**

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# **Eligibility criteria**

### **Inclusion criteria**

Patients diagnosed with breast or colon cancer (M0) who will be treated with chemotherapy.

Inclusion criteria are:

- 1. Histological diagnosis of cancer < 6 weeks ago;
- 2. Adjuvant treatment including chemotherapy;
- 3. Age 25-75 years;
- 4. Able to read and understand the Dutch language;
- 5. Karnofsky Performance Status ¡Ý 60;
  - 4 Physical Activity during Cancer Treatment study. 6-05-2025

6. Able to walk ¡Ý 100 meter.

### **Exclusion criteria**

#### Exclusion criteria are:

- 1. Treatment for cancer during the past five years (except basal skin cancer);
- 2. Contra-indications for physical activity (R-PARQ).

# Study design

### **Design**

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Open (masking not used)

Control: Active

### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-01-2010

Enrollment: 300

Type: Anticipated

# **Ethics review**

Positive opinion

Date: 09-12-2009

Application type: First submission

# **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** NTR-new NL2021

NTR-old NTR2138

Other ZonMw / METC UMC Utrecht : 171002202 / 07/271/0

ISRCTN wordt niet meer aangevraagd.

# **Study results**

### **Summary results**

N/A