# Early rehabilitation of cancer patients An ongoing randomized controlled intervention trial (RCT)

Inger Thormodsena, Cecilia Arvinga, Guri Brekkea, Gerd Kvaled, Sveinung Berntsena, Karin Nordina, L.

- a Cancer Centre for Education and Rehabilitation, Department of Oncology and Medical Physics, Haukeland University Hospital, Bergen, Norway
- <sup>b</sup> Department of Public Health and Caring Sciences, Uppsala University, Uppsala, Sweden
- <sup>c</sup> Department of Public Health and Primary Care, University of Bergen, Norway

d Faculty of Psychology, University of Bergen, Bergen, Norway

e Department of Public Health, Sport and Nutrition, Faculty of Health and Sport Sciences, University of Agder, Kristiansand, Norway

# E-mail. inger.thormodsen@helse-bergen.no

#### Aim

The purpose is to study the effects of an individual stress management intervention with a stepped-care approach and with focus on increased physical activity

#### **Patients**

300 patients (≥ 18 years) scheduled for adjuvant oncology treatment at the Department of Oncology and Medical Physics and with a recent diagnosis of cancer [Table 1, 2].

#### Design

Patients are randomized to an individual stress management intervention (I) in two steps or treatment-as-usual (control group, C) [Fig 1].

The first step is a low intensity stress-management intervention (I-a). They who continue to report stress symptoms after the first step, are thereafter given more intensive treatment (I-b) at the second step in the program.

## Data collection

Variables of interest in the study will be measured during two years by self-report questionnaires.

Physical activity level and sleep duration are recorded objectively with with a physical activity monitor [Fig 1].

# Acknowledgment

This research has been made possible by grants from the Grieg Foundation and the Norwegian Cancer Society.

Table 1: Planned inclusion

Estimated →					
Diagnose į	Total	Intervention (I)	Controll (C)	1 + 1 session	1 + 4-7 sessions
Total	300	150	150	75	75
Breast cancer	120	60	60	30	30
Prostate cancer	120	60	60	30	30
Lymphoma	20	10	10	5	5
Colorectal cancer	20	10	10	5	5
Testicle cancer	20	10	10	5	5

Table 2: Preliminary data regarding the inclusion of patients dated 09.01.12

Included Diagnose	Total	Intervention (I)	Controll (C)	Screening 6 weeks (I)		
				Screened	1+1 session	1+4-7 sessions
Total	163	80	83	56	28	28
Breast cancer	61	30	31	20	12	8
Prostate cancer	82	40	42	30	16	14
Lymphoma	8	4	4	4	0	4
Colorectal cancer	8	4	4	2	0	2
Testicle cancer	4	2	2	0	0	0

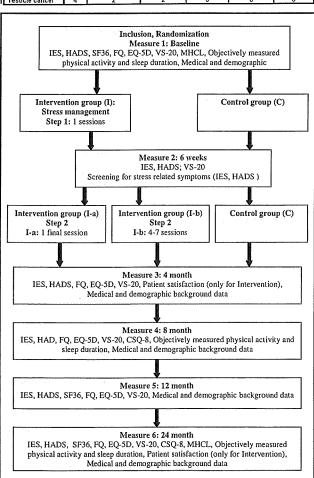


Fig 1 – Study Design

#### Intervention

Methods derived from cognitive behaviour therapy are used in the sessions.

The sessions are given parallel to the oncology treatment and are 45-60 minutes long.

The intervention are planned to be completed within a six month period from the first session.

Patients will receive written material about causes and symptoms of stress. At every session patients will be motivated to use self-care measures such as a daily registration of events and behavior. In order to influence stress reactions scheduled behavioral exercises, short relaxation training and physical activity are emphasised.

## Control

Treatment-as-usual.

## All patients

Both the intervention- and control group, have opportunity to take part in the common rehabilitation program at the department including patients education and resistance and aerobic exercise class several times a week.





