

# Randomized and controlled study of the effects of low intensity monochromatic 'blue light' compared to the standard light treatment of seasonal complaints (winter depression and winterblues)

Published: 18-11-2010

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To investigate the effects of exposure to low intensity monochromatic blue light compared to the effects of standard light trtherapy in the treatment of SAD and winterblues

<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Mood disorders and disturbances NEC
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON34402

### Source

ToetsingOnline

### Brief title

monochromatic blue light vs standard light treatment in seasonal complaints

### Condition

- Mood disorders and disturbances NEC

### Synonym

seasonal affective disorder (winter type), winterblues

### Research involving

Human

## Sponsors and support

**Primary sponsor:** Philips Consumer Lifestyle/ S. Hermans

**Source(s) of monetary or material Support:** Philips Consumer Lifestyle

## Intervention

**Keyword:** light therapy, monochromatic blue light, seasonal affective disorder, winterblues

## Outcome measures

### Primary outcome

Sores on the SIGH-SAD interviews

### Secondary outcome

none

## Study description

### Background summary

Seasonal affective disorder, wintertype, according to DSM-IV is depression with a seasonal pattern in which the complaints exist in fall/winter and remission takes place in spring/summer at an almost yearly basis. Epidemiological research in the Netherlands shows that 3% of the adults suffer from SAD and 8% from winterblues..

It has been shown that light treatment is effective, but the etiology of SAD and the working mechanism of light treatment are still unknown. One of the hypotheses is the phase shift hypothesis, which postulated that some biological processes are shifted compared to the 24 h rhythm of the environment. Exposure to bright light can cause a phase shift. If the biological clock is running in phase, SAD complaint can improve..

Recently novel photoreceptors in the eye are discovered. They have no influence on the visual system, but are sensitive for light, especially for light with a short wavelength (blue light). If blue light with a low intensity can have the same effects compared to standard light therapy with a high intensity, then it is possible to simplify the treatment and to incorporate it in the life style of the

### Study objective

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To investigate the effects of exposure to low intensity monochromatic blue light compared to the effects of standard light trtherapy in the treatment of SAD and winterblues

## **Study design**

A treatment stud in which in the experimental condition teh effects of exposure of low inetnsity blue monochromatic light is compared to the effects of exposure tot standard light treatment in the treatment of SAD and winterblues

## **Intervention**

Experimental treatment is exposure to low intensity blue monochromatic light, compared to standard light treatment

## **Study burden and risks**

The risk that the experimental treatment is less effective compared to standard light treatment. Participants needs 5 minutes a day for filling out small questionnaires an weekly 45-75 minutes for a visit to teh clinic (total 3.5 h) to participate in an intevuew and filling out questionnaires.

## **Contacts**

### **Public**

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### **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

- age between 18-65 yr
- no other treatments for seasonal complaints during the same time
- no traveling to southern counties during study period
- no use of tanning fixtures during study period
- informed consent; 1. seasonal affective disorder (SAD), winter type, according to DSM-IV score of at least 18 on the first 24 items of the SIGH-SAD
- 2. sub-syndromal seasonal affective disorder (sub-SAD, winterblues) according to the Kasper et al. (1988) criteria:
  - SPAQ-GSS score of 8,9 or 10 and at least light seasonal complaints or
  - SPAQ-GSS score of 11
- score of 12-17 on the first 24 items of the SIGH-SAD

### Exclusion criteria

other Axis -I disorders according to DSM-IV  
acute suicidal risk  
use of psychopharmaca or photosensitizing drugs  
eye diseases or complaints except aging  
diabetes  
epilepsy  
night shifts

## Study design

### Design

Study phase: 4

Study type:	Interventional
Intervention model:	Parallel
Allocation:	Randomized controlled trial
Masking:	Single blinded (masking used)
Control:	Active
Primary purpose:	Basic science

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	24-11-2010
Enrollment:	100
Type:	Actual

## Medical products/devices used

Generic name:	EnergyLight and GoLite
Registration:	Yes - CE intended use

## Ethics review

Approved WMO	
Date:	19-06-2013
Application type:	First submission
Review commission:	METC Universitair Medisch Centrum Groningen (Groningen)

## 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: 22649

Source: Nationaal Trial Register

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Title:

## In other registers

Register	ID
CCMO	NL33067.042.10
OMON	NL-OMON22649