

Hypnosis, cognitive trance and meditation on cancer patients: impact on quality of life and neurophysiology

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Sensation and Perception Research Group

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Fondation
contre le Cancer



Cancer



Pain



Fatigue



Sleep difficulties



Distress



Cognitive difficulties



Interest for
complementary
medicine

Mind-body interventions



Lack of long term data
Focus on breast cancer

Mind-body interventions

→ Focus on 3 preliminary studies

Group interventions to reduce emotional distress and fatigue in breast cancer patients: a 9-month follow-up pragmatic trial


Charlotte Grégoire^{*1,7}, Isabelle Bragard^{2,7}, Guy Jerusalem³, Anne-Marie Etienne¹, Philippe Coucke⁴, Gilles Dupuis⁵, Dominique Lanctôt⁵ and Marie-Elisabeth Faymonville⁶

Efficacy of a hypnosis-based intervention to improve well-being during cancer: a comparison between prostate and breast cancer patients

C. Grégoire^{1*}, H. Nicolas², I. Bragard¹, F. Delevallez³, I. Merckaert³, D. Razavi³, D. Waltregny⁴, M-E. Faymonville⁵ and A. Vanhauzenhuyse⁵

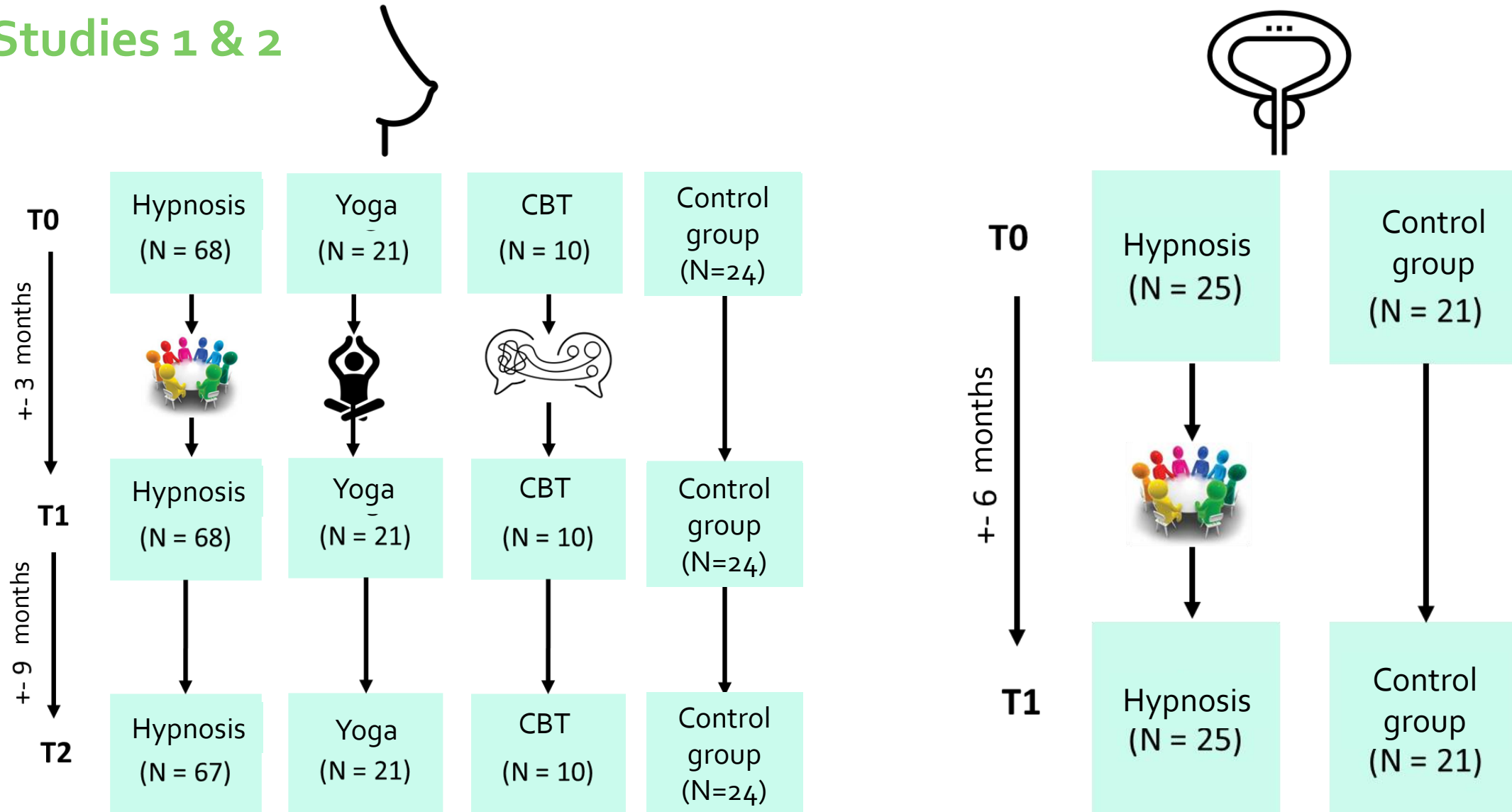


Effects of an intervention combining self-care and self-hypnosis on fatigue and associated symptoms in post-treatment cancer patients: A randomized-controlled trial

Charlotte Grégoire¹  | Marie-Elisabeth Faymonville² | Audrey Vanhauzenhuyse² | Vanessa Charland-Verville³ | Guy Jerusalem⁴ | Sylvie Willems⁵ | Isabelle Bragard⁶



Studies 1 & 2



Studies 1 & 2

Self-hypnosis / Self-care :

- ↓ Anxiety ($p < ,001$; $p < ,001$)
- ↓ Depression ($p = ,004$; $p < ,001$)
- ↓ Fatigue ($p = ,045$; $p = ,002$)

Yoga :

- ↓ Anxiety ($p = ,010$; $p = ,024$)

MIND-BODY

CBT : No significant effect

Control group : No significant effect

Studies 1 & 2



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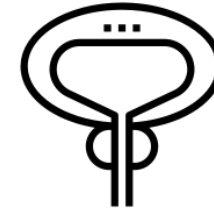
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WHY?

Baseline symptoms: breast > prostate

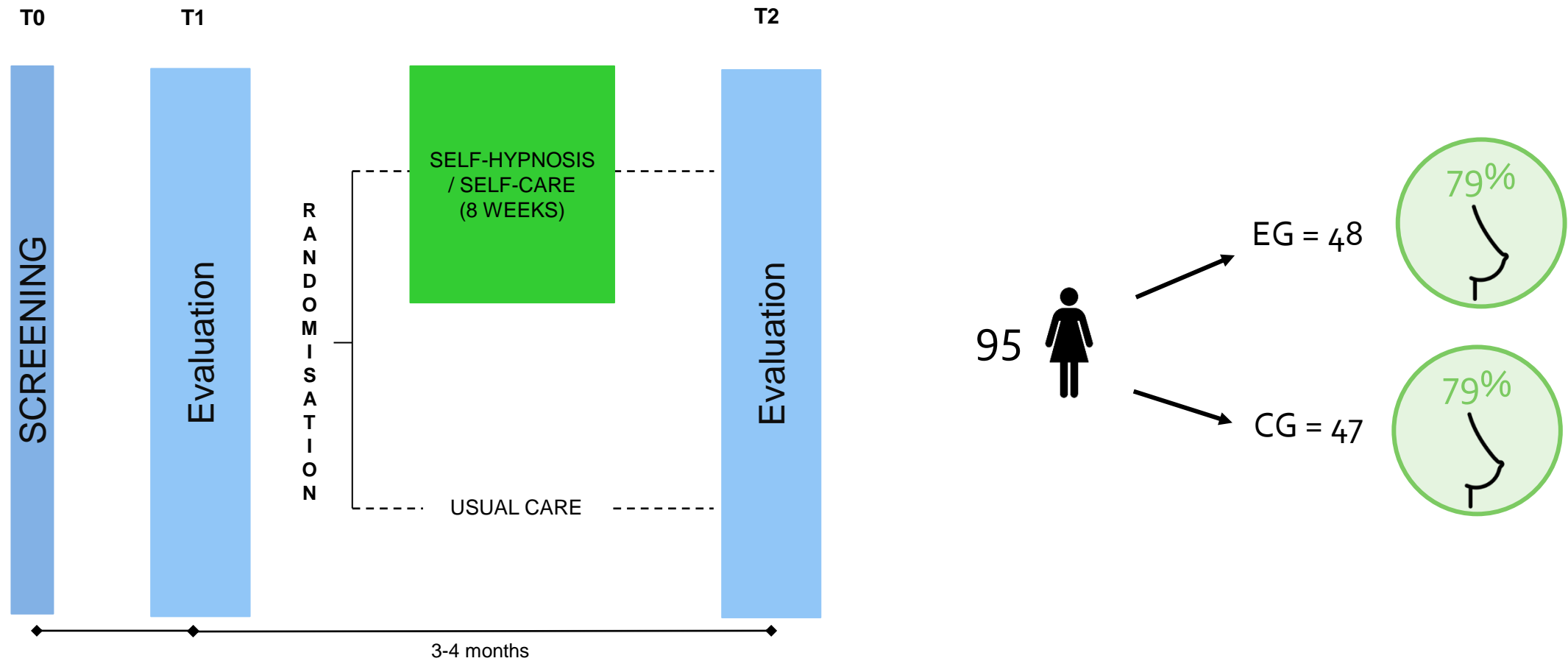
Age: breast < prostate

Employment: Most of the men were retired

Treatments : most of the men had completed their treatment (unique vs multiple)

- Self-hypnosis / Self-care > yoga / CBT / control group
- Importance to investigate the effects of the intervention on other oncological populations
- Importance to screen the participants based on baseline symptoms
- Importance to focus on one period of the treatment journey

Study 3



Study 3 : results



↓ **General fatigue**

($p < .001$; $d = 0,67$)

↓ **Mental fatigue**

($p < .001$; $d = 0,65$)

↓ **Physical fatigue**

($p < .001$; $d = 0,60$)



↓ **Sleep difficulties**

($p < .001$; $d = 0,58$)



↓ **Anxiety**

($p < .001$; $d = 0,67$)

↓ **Depression**

($p < .001$; $d = 0,71$)



↑ **Perceived cognitive abilities**

($p = ,004$; $d = 0,51$)

↓ **Perceived cognitive impairments**

($p = ,020$; $d = 0,43$)

↓ **Impact of these difficulties on QOL**

($p = ,004$; $d = 0,40$)

- Important benefits of self-hypnosis/self-care on fatigue and associated symptoms
- Importance to investigate the effects of the intervention on other oncological populations
- Perspective : Interest to compare the effects of hypnosis to other mind-body interventions

Our current study

Mind-body interventions based on volitional and self-induced modified states of consciousness

Hypnosis

- Absorption (in an imaginative experience)
- Dissociation (from the environment)
- Suggestibility (to the therapist's suggestions)

Cognitive trance

- Less known
- Induction via body movements and/or vocalizations.
- Inherited from shamanic practice.

Meditation

- Relaxed, yet alert and focused state
- Common features : focused, controlled regulation of breathing and control over thoughts and feelings that come to mind.



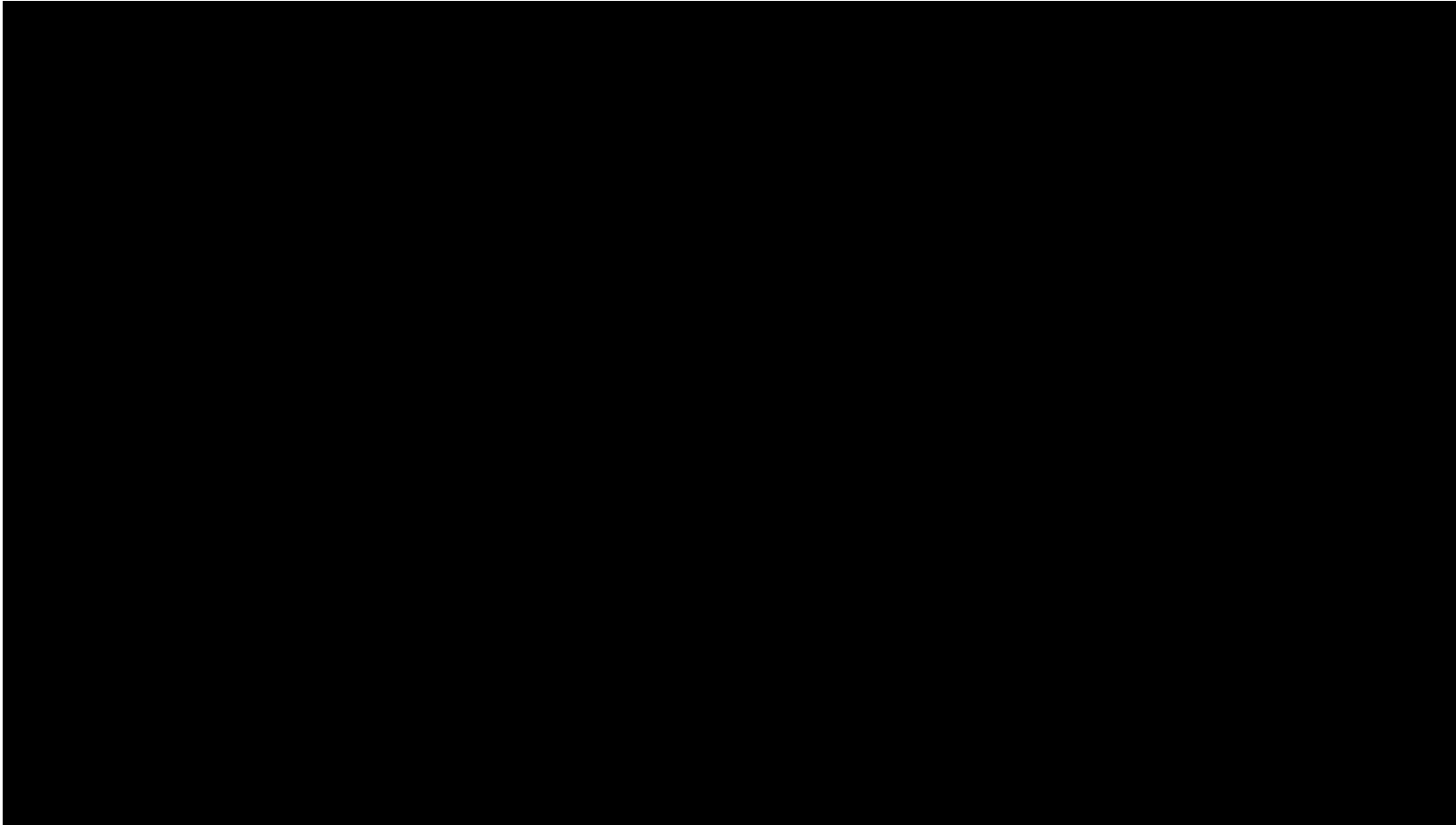
Common features:

- Modification of awareness (self- and external)
- Inner imagery
- Modified somatosensory processing, sense of self, attention and concentration.
- In our study: focussed on self-compassion/self-care

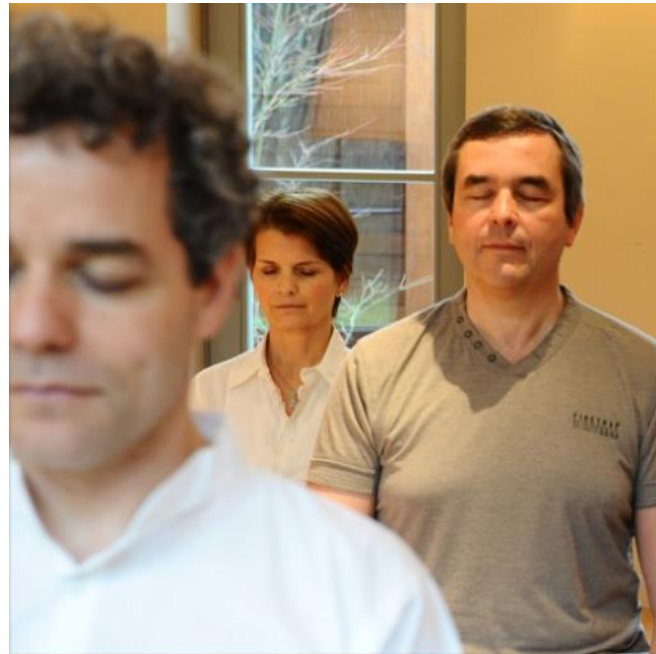
Hypnosis



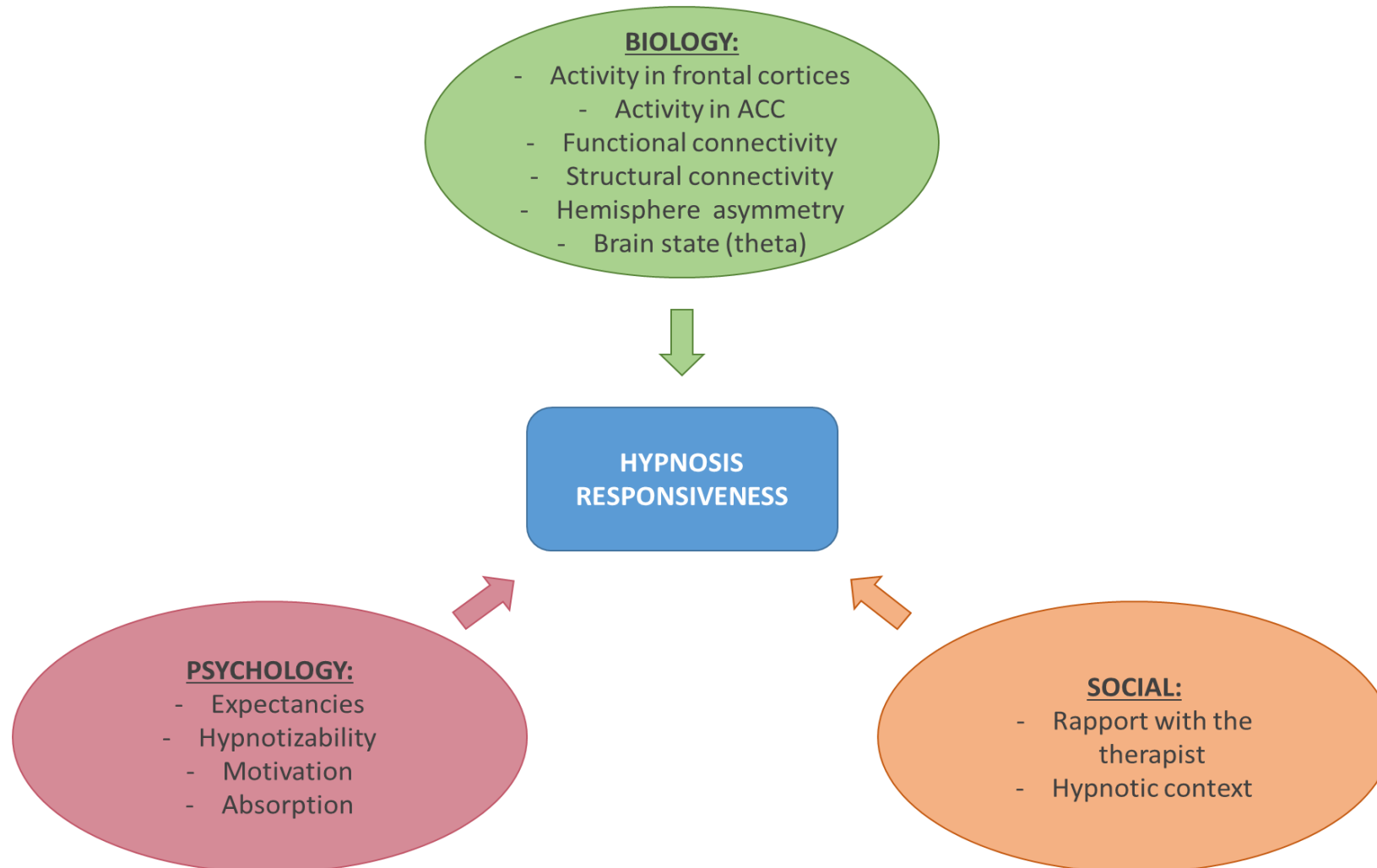
Cognitive trance



Meditation



Biopsychosocial model of hypnosis



Aims

Comparing HYPNOSIS , COGNITIVE TRANCE and MEDITATION

1. Clinical benefits



2A. Phenomenological experience



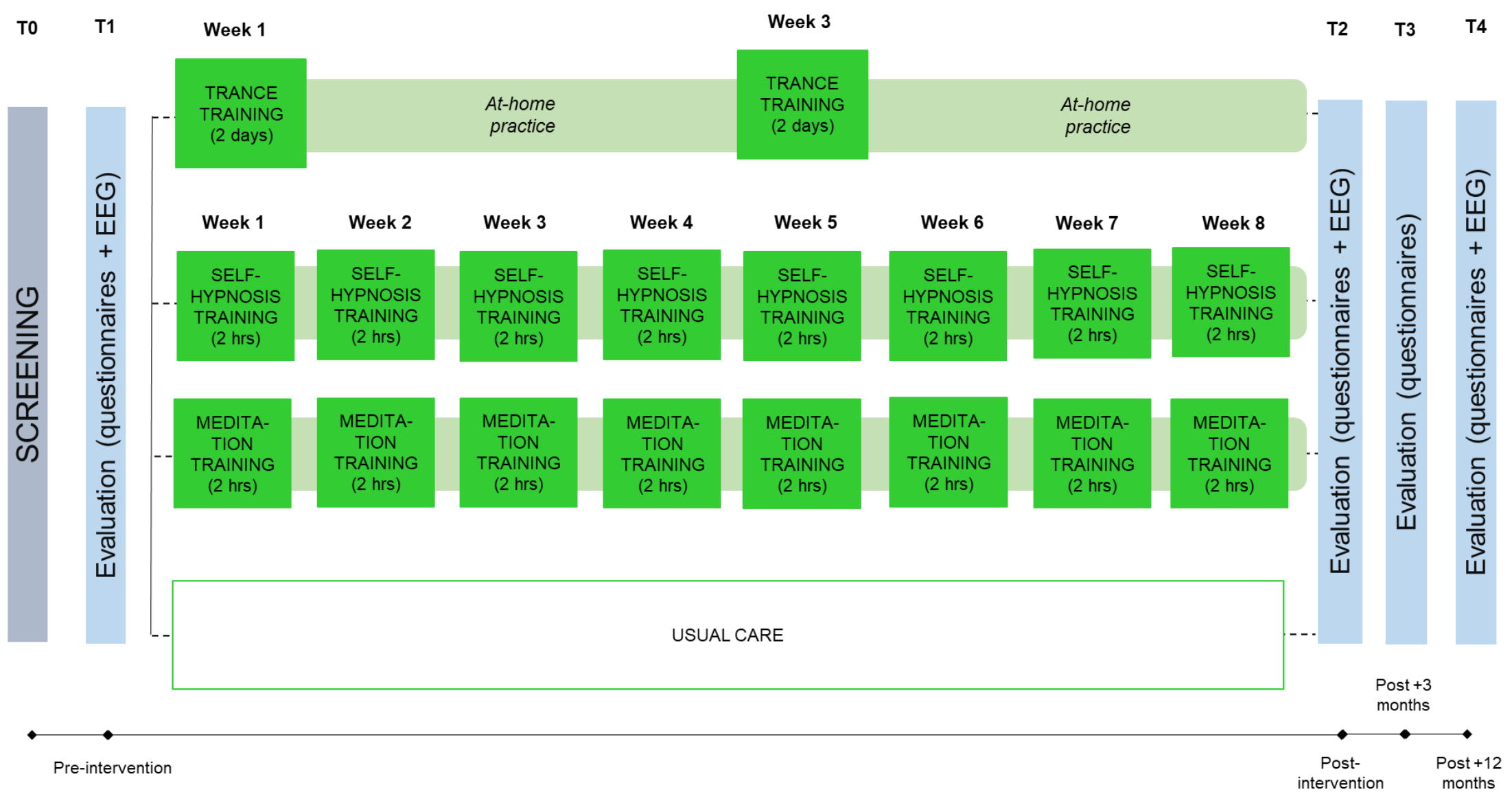
2B. Neurophysiological correlates



3. Responsiveness (biopsychosocial model)



N = 140
Preference-based trial



Screening

- Cancer diagnosis (all localisations except brain)
- Active treatments (surgery, CT, RT) finished for less than 1 year
- No psychiatric history
- No current and regular practice of hypnosis/trance/meditation
- At least 4/10 on one of these symptoms: pain, fatigue, sleep difficulties or emotional distress



Measures

- **Sociodemographic + medical data**
- **Fatigue and sleep** (MFI-20; ISI)
- **Pain** (VAS)
- **Emotional distress** (HADS)
- **Self-reported cognitive functioning** (FACT-Cog)
- **Other psychological variables:** mental adjustment to cancer (MAC); cognitive emotion regulation (CERQ); empowerment (heiQ)
- **Imaginary experience** (perceived personality characteristics and imaginative experiences; VAS (expectation, motivation, arousal, absorption, dissociation and automaticity during the experience); free recall of a hypnosis/trance/meditation episode; Memory Characteristics Questionnaire; mystical experience; presence)
- **Neurophysiological and physical variables** (EEG resting state and during hypnosis, trance or meditation, ECG, EMG, respiration, t°)



Hypotheses

- Positive overall benefits on quality of life, with increased effects over time.
- ≠ in phenomenological experiences (over time, and between interventions)
- ≠ in neurophysiological correlates (over time, and between interventions)
- Confirmation (at least in part) of the biopsychosocial model of hypnosis.
- Investigation of trance and meditation responsiveness mechanisms according to the same model.

Participants

Améliorer son bien-être après un cancer

Vous avez terminé votre traitement contre le cancer
il y a moins d'un an et vous souhaitez améliorer
votre qualité de vie ?

Nous vous proposons de participer à des groupes
d'apprentissage *d'hypnose, de transe cognitive
ou de méditation* (au choix).

Informations pratiques et inscriptions auprès de
Charlotte Grégoire au **04/366.34.92** ou via
ch.gregoire@uliege.be

Participation gratuite si les critères d'inclusion sont remplis.

Comité
Scientifique

Prof. Y. Beguin
Prof. M.E. Faymonville
Dr. O. Gosseries

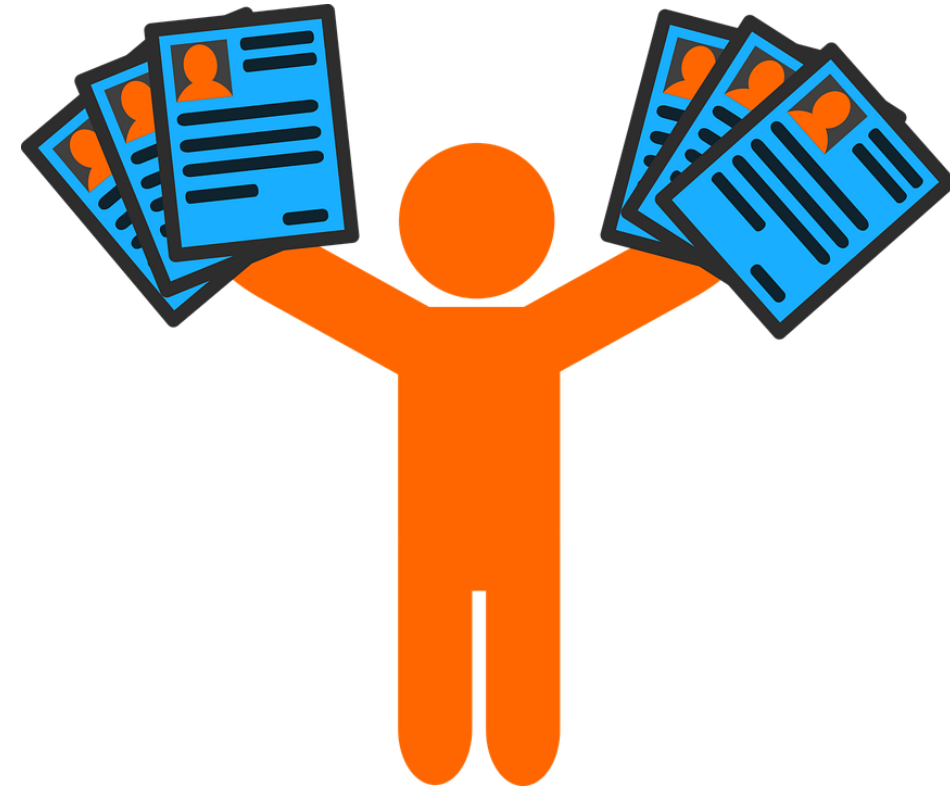
Dr. C. Grégoire
Prof. G. Jerusalem
Dr. I. Kotsou

Prof. S. Laureys
C. Sombrun
Dr. A. Vanhauzenhuyse



New PhD student

We
are
recruiting



The team

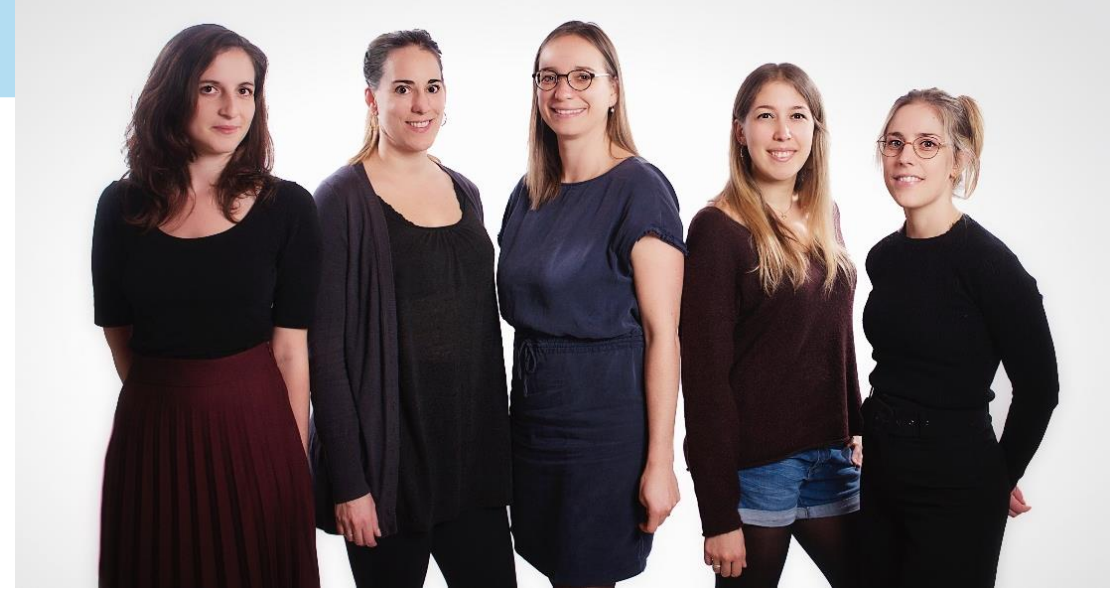
Dr Olivia Gosseries, Dr Audrey

Vanhaudenhuyse, Prof. Guy Jerusalem,

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Steven Laureys, Prof. Yves Beguin





Thank you for listening

Any question?

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