# Searching for an individualized EEG marker for predicting treatment outcome in PTSD

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The objective for this study is to examine alpha suppression in PTSD and evaluate it as a predictor of treatment outcome. We will first examine if there are differences in alpha suppression PTSD patients (prior to treatment) and the typical...

**Ethical review** Approved WMO

**Status** Recruitment stopped

Health condition type Anxiety disorders and symptoms

**Study type** Observational non invasive

# **Summary**

#### ID

NL-OMON41229

#### Source

**ToetsingOnline** 

#### **Brief title**

EEG marker for treatment outcome in PTSD

## **Condition**

Anxiety disorders and symptoms

#### **Synonym**

PTSD en stress disorder

## Research involving

Human

# **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum

Source(s) of monetary or material Support: Ministerie van OC&W

#### Intervention

**Keyword:** alpha suppression, EEG, psychotherapy, PTSD

## **Outcome measures**

## **Primary outcome**

We will first examine differences in the deviant-stimuli induced alpha suppression between PTSD and controls. We will then see how these differences in PTSD individuals relate to their treatment outcome.

## **Secondary outcome**

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# **Study description**

## **Background summary**

The mismatch negativity (MMN) is observed following rare or unique sensory events, and reflects pre-attentional sensory processing of unexpected stimuli. The MMN is altered in several mental illnesses, including post-traumatic stress disorder (PTSD), but did not yield consistent result. The Achilles-heal of the MMN which limits its viability as clinical is that it cannot be reliably identified within all individuals. We propose to test an alternative EEG measure to the MMN, oscillatory alpha suppression, in patients with PTSD. Our previous work in the typical populations has shown alpha suppression to be reliably indentified within individuals, and correlate with variability in attentional performance.

## Study objective

The objective for this study is to examine alpha suppression in PTSD and evaluate it as a predictor of treatment outcome. We will first examine if there are differences in alpha suppression PTSD patients (prior to treatment) and the typical population. We will then see if these differences can be used as individualized predictors of treatment outcome.

## Study design

a case controlled study, with comparison within PTSD patients and versus

2 - Searching for an individualized EEG marker for predicting treatment outcome in P ... 28-05-2025

control-subjects.

## Study burden and risks

There are no risks for standard perceptual tasks, and EEG recordings are completely non-invasive.

# **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

#### Patients:

- Patients with a diagnosis of chronic PTSD with symptom duration > 3 months
- CAPS score of \* 45

- Male and female, aged 18 years and above
- Written informed consent
- Eligible for exposure therapy; Controls:
- Meeting the stressor A criterion of DSM-IV PTSD
- Male and female, aged 18 years and above
- Written informed consent

## **Exclusion criteria**

#### Patienten:

- Suicidal risk
- Presence of any of the following DSM IV diagnoses: psychotic disorder incl. schizophrenia, a bipolar disorder, depression with psychotic features, or excessive substance related disorder.
- Primary diagnosis of severe depressive disorder

# Study design

# **Design**

Study type: Observational non invasive

Intervention model: Other

Allocation: Non-randomized controlled trial

Masking: Open (masking not used)

Primary purpose: Basic science

## Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 01-08-2012

Enrollment: 28

Type: Actual

# **Ethics review**

Approved WMO

Date: 08-05-2012

Application type: First submission

Review commission: METC Amsterdam UMC

# **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

CCMO NL39956.018.12