

# Continuous neuromonitoring in critically ill patients.

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|                             |                                                     |
|-----------------------------|-----------------------------------------------------|
| <b>Ethische beoordeling</b> | Positief advies                                     |
| <b>Status</b>               | Werving nog niet gestart                            |
| <b>Type aandoening</b>      | -                                                   |
| <b>Onderzoekstype</b>       | Observationeel onderzoek, zonder invasieve metingen |

## Samenvatting

### ID

NL-OMON27058

### Bron

Nationaal Trial Register

### Aandoening

Intensive care, EEG, neuromonitoring, coma

### Ondersteuning

**Primaire sponsor:** Maastricht University Medical Centre

**Overige ondersteuning:** Maastricht University Medical Centre

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

The main study endpoint is the sensitivity and specificity of the developed monitoring tool for detection of secondary events (seizures, focal cerebral ischemia) as compared to the gold standard (evaluation of the EEG by a clinical neurophysiologist).

# Toelichting onderzoek

## Achtergrond van het onderzoek

Several neurological disorders are not clinically detectable in critically ill patients. Continuous monitoring of brain function can reveal some of these disorders. Discovery of these events could potentially lead to therapeutic interventions to prevent further damage to the brain and thereby improve outcome. Neither continuous neuromonitoring of this population, nor therapeutic interventions on this basis are however part of contemporary routine practice.

Objective: The primary objective of this study is to develop and implement the use of an EEG-tool to monitor brain function in all adult patients at risk for deterioration of brain function, development of (non)convulsive seizures or cerebral ischemia. The tool should be reliable, easy to use by ICU personnel and allow remote monitoring by the clinical neurophysiologist.

## Doel van het onderzoek

The main study endpoint will be the sensitivity and specificity of the developed monitoring system for detection of secondary events (seizures, focal cerebral ischemia) as compared to the gold standard (evaluation of the EEG by a clinical neurophysiologist).

## Onderzoeksopzet

N/A

## Onderzoeksproduct en/of interventie

N/A

# Contactpersonen

## Publiek

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## Wetenschappelijk

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

1. Age 18 years or older;
2. Glasgow coma scale < 9;
3. Admitted to the ICU;
4. One of the following conditions: Intracerebral hemorrhage; subarachnoid hemorrhage; ischemic stroke; severe traumatic brain injury; (meningo)encephalitis; post-anoxic encephalopathy; intracranial surgery; (non)convulsive status epilepticus; cardiac arrest or ventricular fibrillation with cardiac resuscitation.

### Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

Severe skull injuries making EEG-electrode application impossible.

## Onderzoeksopzet

### Opzet

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Type:            | Observationeel onderzoek, zonder invasieve metingen |
| Onderzoeksmodel: | Parallel                                            |
| Toewijzing:      | N.v.t. / één studie arm                             |
| Blinding:        | Open / niet geblindeerd                             |
| Controle:        | N.v.t. / onbekend                                   |

## Deelname

Nederland  
Status: Werving nog niet gestart  
(Verwachte) startdatum: 01-06-2010  
Aantal proefpersonen: 150  
Type: Verwachte startdatum

## Ethische beoordeling

Positief advies  
Datum: 25-05-2010  
Soort: Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 34917  
Bron: ToetsingOnline  
Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

### In overige registers

| Register | ID                                  |
|----------|-------------------------------------|
| NTR-new  | NL2207                              |
| NTR-old  | NTR2331                             |
| CCMO     | NL30161.068.09                      |
| ISRCTN   | ISRCTN wordt niet meer aangevraagd. |
| OMON     | NL-OMON34917                        |

## Resultaten

## **Samenvatting resultaten**

N/A