# Measuring the electromyographic (EMC) muscle response

No registrations found.

**Ethical review** Positive opinion **Status** Recruiting

Health condition type -

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON23335

**Source** 

NTR

**Brief title** 

**NEAT** 

#### **Health condition**

patients receiving neuromuscular blocking agents required for their clinical care during a surgical procedure

## **Sponsors and support**

**Primary sponsor:** university medical center groningen **Source(s) of monetary or material Support:** no funding

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

The primary objective of this study is to provide EMG performance data of the TetraGraph device on anesthetized subjects. Performance will be assessed post hoc by analyzing objective EMG data and correlating with the responses to annotations made during the surgical procedure (e.g., correlating the EMG responses to the time of NMBA administration).

#### **Secondary outcome**

o Investigating the quality of the applied skin electrodes (clinically available 3M Red Dot electrodes)

o Observing the applicability of the prototype (easy of use, ...)

## **Study description**

#### **Background summary**

Incomplete recovery from neuromuscular blockade after anesthesia and surgery continues to be a common problem in the post-anesthesia care unit. There is an urgent need for an easy-to-use and accurate quantitative neuromuscular monitor in the clinical setting using neurostimulation

#### Study objective

There is an urgent need for an easy-to-use and accurate quantitative neuromuscular monitor in the clinical setting

#### Study design

**During operation** 

#### Intervention

As this is an observational trial, no additional interventions will be done.

## **Contacts**

#### **Public**

Hanzeplein 1 R. Spanjersberg Groningen 9700 RB The Netherlands +31 (0)50 3611158

#### Scientific

Hanzeplein 1

R. Spanjersberg Groningen 9700 RB The Netherlands +31 (0)50 3611158

## **Eligibility criteria**

#### Inclusion criteria

- Age 18 years or older;
- Subject meets the American Society of Anesthesiology (ASA) physical status I-III criteria (Table I);
- Subject has provided written informed consent.

#### **Exclusion criteria**

- Presence of an underlying neuromuscular disease
- Presence of renal or hepatic disease
- Subject has open skin sores at locations needed for electrode application
- Patient taking the following medication:
- anti-seizure medication
- anti-cholinestase medication
- magnesium sulfate

## Study design

### **Design**

Study type: Observational non invasive

Intervention model: Other

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Recruiting
Start date (anticipated): 10-09-2014

Enrollment: 30

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 09-09-2014

Application type: First submission

## **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

NTR-new NL4626 NTR-old NTR4777 Other : 2014/218

## **Study results**