# Nociception Level monitoring in the Intensive Care

No registrations found.

**Ethical review** Not applicable

**Status** Pending

Health condition type -

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON25056

**Source** 

NTR

**Brief title** 

**NEMO** study

#### **Health condition**

Intensive care patients Mechanical ventilation Pain in sedated patients

## **Sponsors and support**

**Primary sponsor:** Leiden University Medical Center **Source(s) of monetary or material Support:** LUMC

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

- NOL index values up to 8 hours

#### **Secondary outcome**

- Blood pressure and heart rate;
- Drug administration;
- Nociceptive events will be collected on the eCRF;
- Patient age, sex and underlying condition.

# **Study description**

#### **Background summary**

Several monitors are available that objectively track nociception in sedated or anesthetized patients. One such monitor is used at LUMC, the Nociception level (NOL) monitor (Medasense Biometrics Ltd). In this exploratory, non-interventional trial we will monitor the nociception level index (an index ranging from 0 = absence of nociception to 100 = intense nociception) in sedated and ventilated ICU patients to get an indication of the behavior of the NOL monitor in this specific patient population. The results of this observational trial will be used to power future studies on NOL-guided opioid and sedative administration.

#### Study objective

This is a hypothesis-free trial but expect similar behavior of the NOL-index in sedated and ventilated ICU patients compared to surgical patients.

#### Study design

Patients in the ICU of the LUMC will be screened for inclusion. Eligible patients will be connected to the NOL device via two electrodes and a finger cuff placed on dig. V. Although no harm has been observed from use of the finger cuff in patients treated so far at the LUMC, we will move the cuff at 4-6h intervals to another finger to ensure no skin damage due to cuff pressure. This is a preventive measure and not based on existing evidence though. Patients will be connected between 08:00 - 09:00 in the morning and will be disconnected after 8 hours of measuring.

## **Contacts**

#### **Public**

Leiden University Medical Center Imeen van der Wal

0623203838

#### Scientific

Leiden University Medical Center

0623203838

# **Eligibility criteria**

## **Inclusion criteria**

- Aged 18 years or older
- Mechanical ventilation for any reason
- Deemed suitable by the investigators

## **Exclusion criteria**

- Aged 17 years or younger
- Not deemed suitable by the investigators

# 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: Pending

Start date (anticipated): 28-12-2020

Enrollment: 20

Type: Anticipated

## **IPD** sharing statement

Plan to share IPD: Undecided

## **Ethics review**

Not applicable

Application type: Not applicable

# **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 NL9159

Other WEC Intensive Care/Anesthesiology LUMC: A020-001

# **Study results**