

# A study on the effect of deep neuromuscular block on perioperative parameters

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Deep neuromuscular block has advantages over a moderate neuromuscular block in term of outcome (pain, respiration) but has otherwise no effects on the patient

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Anders
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

### ID

NL-OMON22375

### Bron

NTR

### Verkorte titel

RetroBLISS

### Aandoening

Surgery for various indication under general anesthesia

### Ondersteuning

**Primaire sponsor:** Leiden University;

**Overige ondersteuning:** Merck & Co. Philadelphia

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

Drug dose, blood pressure, heart rate, bispectral index, postoperative pain, complication

rate, re-admission.

## Toelichting onderzoek

### Achtergrond van het onderzoek

Deep Neuromuscular Block (NMB) is associated with improved ratings of the quality of the surgical field in a number of surgical procedures including urological and gynecological surgeries.<sup>1</sup> Recent data from the BLISS 3 trial additionally suggests that a deep NMB is associated with improved postoperative outcomes in terms of reduced pain in the PACU and on the ward.<sup>2</sup> Consequently, the number of patients that receives a deep NMB has dramatically increased in our hospital. For example, currently all retroperitoneal surgeries in urology (nephrectomies, prostatectomies, lymph node removal), open eye surgeries and intracerebral vascular surgeries (eg., intracranial thrombectomies) are performed under deep NMB according to strict guidelines (ie. TOF zero, PTC 1-5).

Evidence demonstrating the benefit of a deep NMB or the absence of such benefit on outcomes apart from the subjective impressions of the surgeon is lacking. Additionally, there are no real-world data available of the deep NMB as all of the above mentioned benefits are obtained from well-controlled clinical trials. Hence, the current project aims to collect the characteristics of the deep NMB and expand the data collection to the post-anesthesia care unit and the ward. One example of a data gap is that we remain uniformed whether patients following a deep NMB experience less pain. This study aims to address the data gap on deep NMB by retrieval of objective data from LUMC database in patients undergoing elective surgery under deep NMB.

The main objective of the current retrospective analysis is to examine perioperative parameters in deep NMB. Historical control data of non-deep NMB cases will be examined for comparison.

### Doel van het onderzoek

Deep neuromuscular block has advantages over a moderate neuromuscular block in term of outcome (pain, respiration) but has otherwise no effects on the patient

### Onderzoeksopzet

Retrospective data retrieval, no time points specified.

### Onderzoeksproduct en/of interventie

Observational retrospective data retrieval from the patient data monitoring system.

# Contactpersonen

## Publiek

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## Wetenschappelijk

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## Deelname eisen

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

- Patients that received a deep neuromuscular block in the period July 2015-december 2016
  - urological, surgical, ophthalmologic and neurosurgical procedures.
  - age 18 years or older
- Patients matched for sex and procedure that received general anesthesia under moderate block (historical cohort)

### Belangrijkste redenen om niet deel te kunnen nemen

## **(Exclusiecriteria)**

- Age < 18 years.
- Procedures other than urology, surgery, ophthalmology or neurosurgery.

## **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:	Anders
(Verwachte) startdatum:	01-01-2017
Aantal proefpersonen:	230
Type:	Onbekend

## **Ethische beoordeling**

Positief advies	
Datum:	27-12-2016
Soort:	Eerste indiening

## **Registraties**

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

Geen registraties gevonden.

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

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL6034
NTR-old	NTR6165
Ander register	METC LUMC : G16.041

## Resultaten