

# The Integrated Pulmonary Index (IPI) for assessment of the postoperative respiratory condition

No registrations found.

|                              |                            |
|------------------------------|----------------------------|
| <b>Ethical review</b>        | Positive opinion           |
| <b>Status</b>                | Pending                    |
| <b>Health condition type</b> | -                          |
| <b>Study type</b>            | Observational non invasive |

## Summary

### ID

NL-OMON28414

### Source

Nationaal Trial Register

### Brief title

IPI study

### Health condition

Postoperative condition  
Respiration  
Monitoring

Postoperatieve conditie  
Ademhaling  
Monitoring

## Sponsors and support

**Primary sponsor:** LUMC

**Source(s) of monetary or material Support:** Covidien

## Intervention

## Outcome measures

### Primary outcome

The function of the IPI monitor and the number of IPI-events during the first day and night after anesthesia and the use of opioids (ie. number of IPI events, IPI AUC) are the main end-points.

### Secondary outcome

The secondary end-point is to get information to start another IPI-study in which the difference between the current protocol will be compared to treatment of respiratory problems using the IPI.

Additional data that is collected and may serve as covariate in the data analysis includes:

„PfnPatient related parameters:

Sex; Weight; Age; BMI; Underlying disease; Comorbidity; Medication; OSAS (STOP bang criteria).

„PfnAnesthesia related parameters:

Anesthesia type (inhalational versus intravenous); use of NMB agent; use of reversal agent (neostigmine or sugammadex); ketamine use during anesthesia; use of epidural, spinal or local block; opioid type and dose.

„PfnPain treatment (incl. dose):

Epidural or local anesthesia/analgesia; PCA morphine; Ketamine use; Oral opioids (oxycodone); SC opioid use (morphine).

„PfnSurgery related parameters:

Surgery type; Duration of surgery; Blood loss.

„PfnPost-op location:

Ward-recovery-PACU-ICU

## Study description

## **Background summary**

In 40 patients following elective surgery under general anesthesia that require opioid pain relief the IPI will be measured at the PACU (post anesthesia care unit) during the first postoperative night (end of study 8 AM 1st postoperative day). In these 40 patients the IPI will be measured but no action will be undertaken based on the IPI. Local protocol will be followed in which nurses base their decision to intervene (ie. stimulate the patient, call for help) on sedation level and respiratory rate. The study will generate data on the incidence of respiratory events in the study population to be potential used in a next IPI-study where the focus is on interventions as a result of the IPI.

## **Study objective**

The main goal of the study is to assess the incidence of respiratory events using the IPI device.

## **Study design**

The observation will start from the arrival of the patient on the PACU until 8 am on the first postoperative day

## **Intervention**

Postoperative respiratory condition

## **Contacts**

### **Public**

Leiden University Medical Center (LUMC),  
Department of Anesthesiology,  
P.O. Box 9600  
Albert Dahan  
Albinusdreef 2  
Leiden 2300 RC  
The Netherlands  
+31 (0)71 5262301

### **Scientific**

Leiden University Medical Center (LUMC),  
Department of Anesthesiology,  
P.O. Box 9600  
Albert Dahan  
Albinusdreef 2  
Leiden 2300 RC  
The Netherlands

## Eligibility criteria

### Inclusion criteria

Adult (> 17 years) ASA 1-3 patients that underwent elective surgery under general anesthesia who require opioid pain relief and are able to wear or retain the IPI device post-operatively.

### Exclusion criteria

Patients having ENT, facial or neurological/ brain (head) surgery or are not able to give informed consent.

## 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): | 01-09-2015  |
| Enrollment:               | 40          |
| Type:                     | Anticipated |

## Ethics review

Positive opinion

Date: 07-09-2015

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  | NL5231              |
| NTR-old  | NTR5455             |
| Other    | METC LUMC : P15.170 |

## Study results