

# Predictors for efficient ICU use after pulmonary surgery: a retrospective multicenter study

Gepubliceerd: 14-05-2018 Laatste bijgewerkt: 13-12-2022

Routine admission to the ICU after pulmonary surgery may not necessarily be required for each patient. The aim of this study is to identify which patients may benefit from admission to the ICU after pulmonary surgery and to develop a clinical...

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

## Samenvatting

### ID

NL-OMON21274

### Bron

NTR

### Verkorte titel

PEFIPACS

### Aandoening

Pulmonary surgery, intensive care, effective intensive care use, adverse events

### Ondersteuning

**Primaire sponsor:** Amphia Hospital

**Overige ondersteuning:** Amphia Hospital

### Onderzoeksproduct en/of interventie

### Uitkomstmaten

### Primaire uitkomstmaten

- invasive mechanical ventilation (initiated on the ICU or continued from the operating theatre for at least 3 hours) <br>
- non-invasive mechanical ventilation (use of continuous positive airway pressure)<br>
- reintubation<br>
- use of high-flow nasal oxygen therapy Optiflow)<br>
- pneumothorax requiring (new) chest tube insertion or repositioning chest tube<br>
- need for bronchoscopy<br>
- bleeding requiring intervention (requiring surgery or transfusion of blood (clotting) products)<br>
- reoperation<br>
- supraventricular arrhythmia (new-onset atrial fibrillation or atrial flutter) with hemodynamic impairment<br>
- congestive heart failure (pleural effusion or pulmonary edema requiring diuretic therapy)<br>
- myocardial infarction (elevated hs-cTn in combination with clinical symptoms or electrocardiography changes)<br>
- hemodynamic instability requiring the use of vasopressors or inotropes

## Toelichting onderzoek

### Achtergrond van het onderzoek

Rationale: It is unclear whether admission to an Intensive Care Unit (ICU) to prevent adverse events after pulmonary surgery is necessary.

Objective: To identify which patients may benefit from admission to the ICU after pulmonary surgery and to develop a clinical prediction model for future effective ICU use.

Study design: Multicenter retrospective cohort study.

Study population: Patients that underwent elective pulmonary surgery (pneumonectomy, (bi)(sleeve)lobectomy, segmentectomy), with a postoperative admission to the ICU.

Intervention: Not applicable.

Main study parameters/endpoints: Factors that pose an immediate threat to life.

Nature and extent of the burden and risks associated with participation, benefit and group relatedness: Not applicable.

### Doel van het onderzoek

Routine admission to the ICU after pulmonary surgery may not necessarily be required for each patient. The aim of this study is to identify which patients may benefit from admission

to the ICU after pulmonary surgery and to develop a clinical prediction model for future effective ICU use.

### **Onderzoeksopzet**

primary endpoints are scored before 08.00 on the first postoperative morning and secondary endpoints are scored within 30 days of surgery

### **Onderzoeksproduct en/of interventie**

not applicable

## **Contactpersonen**

### **Publiek**

Amphia Hospital  
Thijs Rettig  
Breda  
The Netherlands  
0765955637

### **Wetenschappelijk**

Amphia Hospital  
Thijs Rettig  
Breda  
The Netherlands  
0765955637

## **Deelname eisen**

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

Patients that underwent elective pulmonary surgery (pneumonectomy, (bi)(sleeve)lobectomy, segmentectomy), with a postoperative admission to the ICU are included.

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

Intraoperative death.

## Onderzoeksopzet

### Opzet

|                  |                                                     |
|------------------|-----------------------------------------------------|
| Type:            | Observationeel onderzoek, zonder invasieve metingen |
| Onderzoeksmodel: | Anders                                              |
| Blinding:        | Open / niet geblindeerd                             |
| Controle:        | N.v.t. / onbekend                                   |

### Deelname

|                         |                      |
|-------------------------|----------------------|
| Nederland               |                      |
| Status:                 | Werving gestart      |
| (Verwachte) startdatum: | 01-05-2018           |
| Aantal proefpersonen:   | 500                  |
| Type:                   | Verwachte startdatum |

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

**Wordt de data na het onderzoek gedeeld:** Nog niet bepaald

## Ethische beoordeling

|                 |                  |
|-----------------|------------------|
| Positief advies |                  |
| Datum:          | 14-05-2018       |
| 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  | NL7013        |
| NTR-old  | NTR7211       |
| CCMO     | NL2018.24.1.1 |

## Resultaten