

# Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) for the treatment of trauma patients in distress from torso hemorrhage; a prospective follow-up study in a Dutch level I trauma center

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REBOA is expected to be successful in raising the central systolic blood pressure in trauma patients suffering from major truncal or junctional hemorrhage.

<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-OMON25387

### Bron

Nationaal Trial Register

### Verkorte titel

REBOA-ProFo

### Aandoening

Trauma patients who are treated using REBOA for presumed traumatic life-threatening hemorrhage or traumatic cardiac arrest.

## Ondersteuning

**Primaire sponsor:** Erasmus MC, University Medical Center Rotterdam, Trauma Research Unit Department of Surgery

**Overige ondersteuning:** Ministry of Defense, SZVK

# Onderzoeksproduct en/of interventie

## Uitkomstmaten

### Primaire uitkomstmaten

Whether REBOA was successful

## Toelichting onderzoek

### Achtergrond van het onderzoek

#### BACKGROUND

Controlling non-compressible torso hemorrhage (NCTH) is one of the biggest challenges trauma surgeons face today. Over the last years the use of Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA) in the management of traumatic NCTH is rising. However, it is not yet widely adopted in Dutch trauma centers. REBOA is an endovascular technique to temporarily obstruct blood flow to the distal circulation using a compliant balloon catheter in trauma patients suffering from major truncal or junctional bleeding. REBOA is considered as a less invasive alternative to open aortic cross clamping for certain indications. It has recently been introduced in Erasmus MC Rotterdam as adjunct in the management of hemorrhagic trauma patients.

#### AIM

The primary aim of this study is to evaluate the success rate of REBOA cases in a Dutch level I trauma center.

The secondary aims are:

- 1) To evaluate the time needed to obtain hemorrhage control with REBOA;
- 2) To evaluate the complications related to the use of REBOA;
- 3) To evaluate the survival rate in the trauma patients treated using REBOA;
- 4) To make a careful evaluation of every step in the REBOA procedure, the circumstances under which it is performed and its effect; and
- 5) To increase the knowledge of the patient demographics, injury characteristics, clinical parameters, the deployed resources and interventions, and hospital course of trauma patients treated using REBOA.

#### STUDY DESIGN

Prospective observational study

#### POPULATION

Trauma patients who are treated using REBOA.

#### INTERVENTION

No interventions will be used.

#### ENDPOINTS

The primary outcome measure is whether REBOA was successful. The secondary outcome measures are time needed to obtain hemorrhage control with REBOA, complications, survival, REBOA procedure data, patient demographics, injury characteristics, field data, admission data, and hospital course of patients treated using REBOA.

#### RECRUITING COUNTRIES

The Netherlands.

#### **Doel van het onderzoek**

REBOA is expected to be successful in raising the central systolic blood pressure in trauma patients suffering from major truncal or junctional hemorrhage.

#### **Onderzoeksopzet**

During hospital admission and 30 days after trauma or until hospital discharge if hospital stay exceeds the 30-day follow-up period.

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

Not applicable

## Contactpersonen

### **Publiek**

Erasmus MC, University Medical Center Rotterdam  
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### **Wetenschappelijk**

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## Deelname eisen

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

1. Presented to Erasmus MC because of a physical trauma
2. Treatment attempted using REBOA (whether or not successful) for presumed traumatic life-threatening hemorrhage or traumatic cardiac arrest.
3. Provision of deferred informed consent (IC) by patient or proxy

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

No exclusion criteria apply.

## Onderzoeksopzet

### Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	08-07-2020
Aantal proefpersonen:	30
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: 13-07-2020

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	NL8776
Ander register	METC Erasmus MC : MEC- 2020-0517

## Resultaten