

# CIP Pulsecath iVAC2L in High-Risk PCI patients

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<b>Ethical review</b>	Approved WMO
<b>Status</b>	Recruitment stopped
<b>Health condition type</b>	Coronary artery disorders
<b>Study type</b>	Interventional

## Summary

### ID

NL-OMON39763

### Source

ToetsingOnline

### Brief title

Pulsecath iVAC2L

### Condition

- Coronary artery disorders
- Vascular therapeutic procedures
- Vascular hypertensive disorders

### Synonym

coronair sclerose

### Research involving

Human

### Sponsors and support

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam

**Source(s) of monetary or material Support:** Leverancier van Pulsecath cath stelt deze cath gratis ter beschikking

## Intervention

**Keyword:** Cardiac assist Device, high risk PCI patient

## Outcome measures

### Primary outcome

The application of the device is considered safe when:

- 1) MACE < 20%
- 2) the degree of hemolysis was manageable

The efficacy of the device is considered established when:

- 1) the surgical introduction, positioning, fixation and removal of the iVAC2L

has been

performed without any injury of valvular or vascular structures, and the device

has not

caused perfusion disorders of the peripheral arteries

- 2) the hemodynamic parameters could be maintained according to the following

limits:

Cardiac Index > 2.5 L/min/m<sup>2</sup>; Mean Arterial Pressure > 60 mmHg, during the whole

duration of support by the iVAC2L

Clinical success is achieved when the patient has successfully been weaned from

the

device.

### Secondary outcome

N.A.

# Study description

## Background summary

The PulsCath iVAC2L-heart pump is a newer version of an existing heart pump, which is already on the market. Before the newer version can be registered, investigation with patients should be done. This study is designed to demonstrate that the pump is safe in use, and can assist to maintain sufficient circulation.

## Study objective

The primary objective is to evaluate the safety and efficacy of the PulseCath iVAC2L in highrisk PCI patients who require left ventricular assistance. Safety will be assessed by the incidence of Cerebrovascular Accidents (CVA\*s), thrombo-embolic events and the amount of blood cell damage (hemolysis). Efficacy will be assessed in terms of technical success and hemodynamic performance of the device.

## Study design

The study is a prospective single-centre, single-arm feasibility study. The study will be performed in the hospital of the principal investigator. Twent (20) patients will be included in the study and followed up to 1 day after weaning of the iVAC2L, or, when earlier, to discharge. The study will run for a period of maximal 12 months.

## Intervention

prior to or during the treatment, the pulscath iVAC2L heart pump will be inserted according to standard hospital prescription

## Study burden and risks

Risks are valued as "high"  
During use of the iVAC2L pump, the following measurements will be done:  
invasive hemodynamics  
blood tests to monitor anticoagulant, liver and kidney functions.

## Contacts

### Public

Erasmus MC, Universitair Medisch Centrum Rotterdam

Orlyplein 85  
Amsterdam 1043 DS  
NL

### Scientific

Erasmus MC, Universitair Medisch Centrum Rotterdam

Orlyplein 85  
Amsterdam 1043 DS  
NL

## Trial sites

### Listed location countries

Netherlands

## Eligibility criteria

### Age

Adults (18-64 years)

Elderly (65 years and older)

### Inclusion criteria

- \* Indicated for High-Risk PCI, according to hospital standard procedure
- \* Indicated to have an IABP during the PCI, according to hospital standard procedure
- \* Expected duration of iVAC2L support: maximum 24 hours
- \* Patient older than 18 years
- \* Patient has signed the Informed Consent

### Exclusion criteria

- \* Aortic disease: ascending aortic aneurism, severe calcified aorta
- \* Aortic valvular disease: severe aortic valve stenosis, severe aortic valve insufficiency
- \* Aortic mechanical valve prosthesis

- \* Thrombus in left ventricle
- \* Intra ventricular septum defect
- \* Severe peripheral vascular disease
- \* No functioning right ventricle
- \* History of coagulation disorders
- \* Participation in another clinical study that may interfere with this study

## Study design

### Design

**Study type:** Interventional

Masking: Open (masking not used)

Control: Uncontrolled

Primary purpose: Treatment

### Recruitment

NL

Recruitment status: Recruitment stopped

Start date (anticipated): 18-11-2013

Enrollment: 20

Type: Actual

### Medical products/devices used

Generic name: Catheterpump

Registration: No

## Ethics review

Approved WMO

Date: 22-07-2013

Application type: First submission

Review commission: METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

Approved WMO

Date: 09-01-2015

Application type:	Amendment
Review commission:	METC Erasmus MC, Universitair Medisch Centrum Rotterdam (Rotterdam)

## 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
CCMO	NL41304.078.13