# platelet activation in lung transplantation

Published: 02-12-2008 Last updated: 07-05-2024

To establish platelet function and primary hemostasis during lung transplantation

Ethical review	Approved WMO	
Status	Recruitment stopped	
Health condition type	Respiratory disorders NEC	
Study type	Observational invasive	

# **Summary**

## ID

NL-OMON31994

**Source** ToetsingOnline

**Brief title** platelet activation in lung transplantation

## Condition

- Respiratory disorders NEC
- Respiratory tract therapeutic procedures

**Synonym** emphysema, lung failure

**Research involving** Human

## **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Groningen **Source(s) of monetary or material Support:** Jan Kornelis de Cock fonds

## Intervention

Keyword: lung transplantation, off-pump cardiac surgery, platelets

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## **Outcome measures**

#### **Primary outcome**

The development of functional properties of primary hemostasis (especially of

platelets and vWF) during lung transplantation. The appearance of (partly)

activated circulating platelets during lung transplantation, especially after

reperfusion of the graft.

#### Secondary outcome

none

# **Study description**

#### **Background summary**

Blood platelets play a pivotal role in primary hemostasis, but other potentially harmful effects of platelets have also been described. We are studying the effect of platelets and platelet-graft interaction in liver transplantation but like to extend this study to lung transplantation recipients for two reasons. First, the development of the hemostatic system during lung transplantation and potentially occurring hemostatic changes which can contribute to bleeding complications during the procedure is incompletely known. In contrast to liver transplant recipients, lung transplant patients have a relatively normal hemostatic system at the start of surgery, and therefore a comparison between these two patient groups is of interest. Second, we aim to investigate whether the platelet-graft interaction after reperfusion is not restricted to liver transplantation but also occurs in pulmonary transplant procedures, and whether a similar mechanism is responsible.

#### **Study objective**

To establish platelet function and primary hemostasis during lung transplantation

#### Study design

Clinical observational mono-center study.

#### Study burden and risks

During and after lungtransplantatie or cardiac surgery at different timepoint, different bloodsamples will be withdrawn. After surgery at two different days, postoperative day 1 and 5, some extra bloodsamples will be taken next to the regulary blood samples taken. No extra outpatient visit are needed for this project. After 5 days the research will end. The risks for the patient when participating in this study will be neglectable.

# Contacts

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# **Trial sites**

## **Listed location countries**

Netherlands

# **Eligibility criteria**

#### Age Adults (18-64 years) Elderly (65 years and older)

#### **Inclusion criteria**

Age >= 18 years

First bilateral lungtransplantation (study population), planned off-pump. Off-pump coronary artery bypass grafting (control group) Non-inflammatory disease Informed consent

## **Exclusion criteria**

Combined organ transplantations Use of pre-operative antiplatelet medication Peroperative use of CPB Peroperative transfusion of platelet concentrates Inflammatory diseases (e.g. cystic fibrosis)

# Study design

## Design

Study type:	Observational invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)
Control:	Active
Primary purpose:	Diagnostic

## Recruitment

NL	
Recruitment status:	Recruitment stopped
Start date (anticipated):	01-06-2008
Enrollment:	20
Туре:	Anticipated

# **Ethics review**

Approved WMO 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

 CCMO
 NL21717.042.08