

# Prothrombin Complex Concentrate in the reduction of blood loss during orthotopic liver transplantation.

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Intravenous administration of cofact pre-operatively, will reduce the amount of bloodloss and the transfusion requirements in cirrhotic patients undergoing liver transplantation.

**Ethische beoordeling** Niet van toepassing

**Status** Werving gestart

**Type aandoening** -

**Onderzoekstype** Interventie onderzoek

## Samenvatting

### ID

NL-OMON28249

### Bron

Nationaal Trial Register

### Verkorte titel

PROTON-studie

### Aandoening

cirrhosis

bleeding

hemorrhage

complications

hemostasis

coagulation

### Ondersteuning

**Primaire sponsor:** Sanquin Plasma Products

**Overige ondersteuning:** Sanquin Plasma Products.

### Onderzoeksproduct en/of interventie

## **Uitkomstmaten**

### **Primaire uitkomstmaten**

Transfusion requirements per-operative To study the hemostatic efficacy of preoperative PCC administration in patients with cirrhosis undergoing liver transplantation. The hemostatic efficacy will be primarily monitored by recording the need for RBC transfusion.

## **Toelichting onderzoek**

### **Achtergrond van het onderzoek**

In the past decade, perioperative blood loss and transfusion requirements for cirrhotic patients undergoing liver transplantation have decreased significantly. This is mostly due to restrictive transfusion policy and refinement of surgical and anesthesiological procedures. Major bleeding complications can still occur however. Where cirrhotic patients were used to be considered auto-anticoagulated in the past, due to prolonged conventional coagulation test, it's clear in the present that these coagulation tests do not present us with accurate information about the hemostatic ability and don't predict transfusion requirements. Correction of the prolonged coagulation test does not lead to less bleeding.

### **Doele van het onderzoek**

Intravenous administration of Cofact pre-operatively, will reduce the amount of blood loss and the transfusion requirements in cirrhotic patients undergoing liver transplantation.

### **Onderzoeksopzet**

Januari/februari: First inclusion.

2 years to include 140 patients.

Follow-up of patients: Day 1 till 7 postoperative, day 9, day 11, day 30.

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

The intervention is the intravenous administration of the study products. Depending on which group the patient is randomized, he or she will receive either the placebo (NaCl) or Cofact/Prothrombin Complex Concentrate. The intervention will take place 30 minutes before start of surgery. The study product will be administered at a rate of 2 ml/min, depending on the amount this will take up to 15 minutes. After this the surgical procedure, orthotopic liver

transplantation, will be initiated. We will monitor the amount of blood loss and amount and type of infusion products administered during the surgical procedures. This includes transfusion of Red Blood Cell's, Fresh Frozen Plasma and also other transfusions such as hemostatic products. After 140 patients are included, we will collect all data to determine what the mean blood loss was in the placebo group versus the studygroup. At the moment, the mean transfused units of Red Blood Cell in participating centra is 8 with a standard deviation of 4 units. We will perform statistical analysis to determine whether the patients that received Prothrombin Complex Concentrate have a significant decrease in blood loss and transfusion requirements compared to the placebo group. Hereby we can determine whether Prothrombin Complex Concentrate decreases or even prevents blood loss in patient with liver cirrhosis who are undergoing orthotopic liver transplantation.

## Contactpersonen

### Publiek

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### Wetenschappelijk

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## Deelname eisen

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

1. 18y;

2. Cirrhosis, scored as Child-Turcotte- Pugh class B or C or > 13 or as model of end-stage liver disease (MELD) score of > 20;
3. INR>1.5;
4. Signed informed consent.

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

1. Previous liver transplantation;
2. Split liver transplantation;
3. Heterotopic liver transplantation;
4. Scheduled multiorgan transplantation;
5. Scheduled living related-donor transplantation;
6. Renal insufficiency requiring dialysis;
7. Documented congenital coagulation disorders;
8. Documented history or presence of portal vein thrombosis;
9. Treatment with warfarin;
10. TIPS (transjugular intrahepatic portosystemic shunt);
11. Fulminant hepatitis;
12. Coronary artery disease;
13. History of thrombophilia (e.g. FVLeiden mutation).

## **Onderzoeksopzet**

### **Opzet**

Type: Interventie onderzoek

Onderzoeksmodel:	Parallel
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Placebo

## Deelname

Nederland	
Status:	Werving gestart
(Verwachte) startdatum:	20-01-2012
Aantal proefpersonen:	140
Type:	Verwachte startdatum

## Ethische beoordeling

Niet van toepassing	
Soort:	Niet van toepassing

## 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	NL3026
NTR-old	NTR3174
Ander register	METC-UMCG : MD2011.01
ISRCTN	ISRCTN wordt niet meer aangevraagd.

# Resultaten

## Samenvatting resultaten

N/A