# Premature Umbilical Cord Blood (PUCB)

Submission date 20/12/2005	<b>Recruitment status</b> No longer recruiting	<ul><li>Prospectively registered</li><li>Protocol</li></ul>
<b>Registration date</b> 20/12/2005	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>Results</li> </ul>
Last Edited 14/11/2008	<b>Condition category</b> Pregnancy and Childbirth	<ul> <li>Individual participant data</li> <li>Record updated in last year</li> </ul>

#### Plain English summary of protocol

Not provided at time of registration

## **Contact information**

**Type(s)** Scientific

**Contact name** Prof A. Brand

#### **Contact details**

Leiden University Medical Centre (LUMC) P.O. Box 2184 Leiden Netherlands 2301 CD +31 (0)71 568 5053 Anneke.Brand@bloodrtd.nl

## Additional identifiers

EudraCT/CTIS number

**IRAS number** 

ClinicalTrials.gov number

**Secondary identifying numbers** NTR256

# Study information

Scientific Title

The use of autologous cord blood for anaemia of prematurity

**Acronym** PUCB

#### **Study objectives**

Can allogeneic red cell transfusions for preterm/very low birth weight newborns be reduced and is this associated with favourable outcome of usual neonatal complications (infections, cerebral bleeding, duration of assisted ventilation and death) resulting in shortening of the need of vital support necessitating Neonatal Intensive Care Unit (NICU) care.

**Ethics approval required** Old ethics approval format

**Ethics approval(s)** Received from the local medical ethics committee

**Study design** Multicentre, randomised, double-blind, active controlled, parallel group trial

**Primary study design** Interventional

**Secondary study design** Randomised controlled trial

**Study setting(s)** Hospital

**Study type(s)** Treatment

Participant information sheet

Health condition(s) or problem(s) studied Anaemia of prematurity

#### Interventions

Transfusion of autologous red cord blood cell concentrate versus transfusion of stored allogeneic red blood cell concentrates.

**Intervention Type** Other

Phase Not Specified

Primary outcome measure

1. Proportion of patients who received allogeneic transfusions and the total volume of administered allogeneic red cells

2. Days of support of vital functions in the NICU

#### Secondary outcome measures

- 1. Days of assisted ventilation support
- 2. Cumulative complication incidence (infections, cerebral events)
- 3. Length of hospital stay
- 4. Mortality
- 5. Feasibility of erythrocyte collection from cord blood
- 6. Costs of transfusions
- 7. Costs of care
- 8. Two-year and five-year neurodevelopmental follow-up

# **Overall study start date** 01/12/2004

#### **Completion date**

01/12/2007

## Eligibility

#### Key inclusion criteria

1. Pregnant women

2. Premature (gestational age of less than 36 weeks) who require a red blood cell transfusion

#### Participant type(s)

Patient

#### Age group

Adult

Sex

Female

# **Target number of participants** 600

#### Key exclusion criteria

- 1. Haemolytic disease of the newborn
- 2. Maternal infections such as human immunodeficiency virus (HIV)/hepatitis C virus (HCV) /hepatitis B virus (HBV)/cytomegalovirus (CMV)/Toxoplasma/Treponema pallidum or maternal septicaemia
- 3. Ruptured membranes greater than 24 hours and body temp greater than 38°C
- 4. Placenta praevia, version, solutio placentae
- 5. Antibiotics/fungostatica less than 48 hours prior to partus

#### Date of first enrolment

01/12/2004

Date of final enrolment 01/12/2007

### Locations

**Countries of recruitment** Netherlands

**Study participating centre Leiden University Medical Centre (LUMC)** Leiden Netherlands 2301 CD

### Sponsor information

**Organisation** The Netherlands Organisation for Health Research and Development (ZonMw) (Netherlands)

#### Sponsor details

P.O. Box 93245 Den Haag Netherlands 2509 AE +31 (0)70 349 5111 info@zonmw.nl

**Sponsor type** Research organisation

Website http://www.zonmw.nl

ROR https://ror.org/01yaj9a77

### Funder(s)

**Funder type** Research organisation

**Funder Name** 

The Netherlands Organisation for Health Research and Development (ZonMw) (The Netherlands)

Funder Name

Sanquin Bloodbank Amsterdam (The Netherlands)

### **Results and Publications**

**Publication and dissemination plan** Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

**IPD sharing plan summary** Not provided at time of registration