

# 'Early selective treatment of RDS with Curosurf guided by lamellar body counts

<b>Submission date</b> 28/03/2006	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 08/05/2006	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 28/06/2011	<b>Condition category</b> Respiratory	<input type="checkbox"/> Individual participant data <input type="checkbox"/> Record updated in last year

**Plain English summary of protocol**  
Not provided at time of registration

## Contact information

**Type(s)**  
Scientific

**Contact name**  
Dr Henrik Verder

**Contact details**  
Department of Pediatrics  
Holbaek University Hospital  
Holbaek  
Denmark  
4300

## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**  
Prot-Cur 3

## Study information

**Scientific Title**

Early selective treatment with Curosurf. Treatment of respiratory distress syndrome with Curosurf guided by lamellar body counts on gastric aspirate compared to treatment at arterial to alveolar oxygen tension ratio (a/APO<sub>2</sub>) <0.36. A Danish-Swedish randomised controlled study in infants at 24-29 weeks of gestation.

### **Study objectives**

Early treatment with surfactant betters the outcome of respiratory distress syndrome (RDS). However, only about half of preterm infants less than 30 week-gestation need surfactant when supported by early nasal continuous positive airway pressure (CPAP) or mechanical ventilation. Therefore, there is a need for a rapid and easily accessible method to predict RDS. Lamellar body counts (LBC) on gastric aspirate using automatic blood cell counters have been shown to fulfil this condition.

### **Ethics approval required**

Old ethics approval format

### **Ethics approval(s)**

Research Ethics Committee of the Videnskabsetiske Committee for Bornhoms Regionskommune and Frederiksborg, Roskilde, Storstroms and Vestsjaelands Amter on 31/01/2006, (ref: Ø-2006-2-02G). All suction procedures for gastric aspirate were secure and tested. There were no serious adverse effects of Curosurf. All infants with RDS will receive Curosurf later as in our classical regiment and we have had very good results with this regiment.

### **Study design**

Phase IV international multicenter randomised controlled study

### **Primary study design**

Interventional

### **Secondary study design**

Randomised controlled trial

### **Study setting(s)**

Hospital

### **Study type(s)**

Treatment

### **Participant information sheet**

Please use the contact details below to request a patient information sheet

### **Health condition(s) or problem(s) studied**

Respiratory distress syndrome (RDS) and gestational age less than 30 weeks

### **Interventions**

Randomisation to:

1. Selective treatment with Curosurf 200 mg/kg (intubation and extubation) 1-2 h after birth, guided by LBC
2. Classical Scandinavian regimen i.e. treatment with Curosurf 200 mg/kg (intubation and extubation) 5-6 h after birth when a/APO<sub>2</sub> decreases below 0.36

Trial start and end dates were amended on 24/09/09 (used to be 01/09/06 to 01/03/08).  
As of 28/06/2011 the end date has again been extended from 31/12/2010 to 01/08/2011.

**Intervention Type**

Drug

**Phase**

Phase IV

**Drug/device/biological/vaccine name(s)**

Curosurf

**Primary outcome measure**

Mechanical ventilation or death within the first 5 days of life

**Secondary outcome measures**

1. Mortality before discharge
2. a/APO2 after 6 days
3. Mechanical ventilation before discharge
4. Pneumothorax
5. Lung haemorrhage
6. Diastolic arterial pressure (DAP)
7. Necrotising enterocolitis (NEC)
8. Chronic lung disease (CLD) or bronchopulmonary dysplasia (BPD)
9. Intraventricular hemorrhage (IVH)
10. Periventricular leukomalacia (PVL)
11. Retinopathy of prematurity (ROP)
12. Duration of oxygen treatment (days)
13. Duration of nasal CPAP (days)
14. Duration of mechanical ventilation (days)

**Overall study start date**

22/03/2007

**Completion date**

01/08/2011

**Eligibility****Key inclusion criteria**

1. Gastric aspirate (GA) 24 + 0 to 29 + 9 weeks
2. Early nasal CPAP
3. Gastric aspirate obtained not later than 45 min after birth
4. Informed consent before birth or latest 1 h after birth

**Participant type(s)**

Patient

**Age group**

Neonate

**Sex**

Both

**Target number of participants**

Prior to 24/09/09: 260. Interim calculation after 130 patients Amended 24/09/09: 380. Interim calculation after 190 patients Last Patient included on 26/04/2011

**Key exclusion criteria**

1. Prolonged rupture of the membranes >3 weeks
2. Therapeutic infusions in the amniotic cave
3. Lethal malformations
4. Intubation in the delivery room or before randomisation
5. Meconium or pus contamination of the gastric aspirate
6. The neonatal ward too busy with other patients
7. No gastric aspirate

**Date of first enrolment**

22/03/2007

**Date of final enrolment**

01/08/2011

**Locations****Countries of recruitment**

Denmark

Sweden

**Study participating centre**

Department of Pediatrics

Holbaek

Denmark

4300

**Sponsor information****Organisation**

Individual Sponsor (Denmark)

**Sponsor details**

Henrik Verder MD, PhD

Head of the Neonatal Ward

Department of Pediatrics

Holbaek University Hospital

Smedelundsgade 60  
Holbaek  
Denmark  
4300

**Sponsor type**

University/education

## **Funder(s)**

**Funder type**

Industry

**Funder Name**

Danish Medical Research Foundation for Region 3 (Denmark)

**Funder Name**

Cheisi Farmaceutici (Italy)

**Funder Name**

Nycomed (Denmark)

## **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