Safety and Efficacy of Propranolol in Newborns With Retinopathy of Prematurity (PROP-ROP)

Submission date Recruitment status [] Prospectively registered 06/06/2010 No longer recruiting [X] Protocol [] Statistical analysis plan Registration date Overall study status 12/07/2010 Completed [X] Results Individual participant data **Last Edited** Condition category 29/01/2014 Neonatal Diseases

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

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Contact details

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Additional identifiers

EudraCT/CTIS number

2010-018737-21

IRAS number

ClinicalTrials.gov number

NCT01079715

Secondary identifying numbers

EudraCT Number 2010-018737-21

Study information

Scientific Title

Evaluating the safety and efficacy of propranolol administration in preterm newborns suffering from a precocious phase of retinopathy of prematurity (ROP): A randomised controlled trial

Acronym

PROP-ROP

Study objectives

To evaluate the safety of propranolol administration in preterm newborns suffering from a precocious phase of retinopathy of prematurity (ROP) and its efficacy to reduce the disease progression, the incidence retinal detachment and of blindness, by suppressing the neovascular phase of ROP compared to a control group receiving conventional treatment.

Ethics approval required

Old ethics approval format

Ethics approval(s)

The Centre Research Ethics Board (Comitato Etico Sperimentazione dei Medicinali [CESM]) of A. Meyer University Children's Hospital, Florence and of the Institute of Pediatrics and Neonatology, Fondazione IRCCS Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena, University of Milan approved on the 14th of January 2010 (ref: 277/2010).

Study design

Interventional randomised 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

Not available in web format, please use contact details below to request a patient information sheet

Health condition(s) or problem(s) studied

Retinopathy of prematurity (ROP), the leading cause of blindness in children

Interventions

Parents of newborns who meet the inclusion criteria will be approached by the study investigator/nurse, informed of the study. Signed written informed consent will be obtained.

Patients will be randomised to receive:

1. Intervention: Administration of propranolol. Dosage of 0.5mg/Kg orally, every 6 hours in the treated arm. This treatment will be continued until vascularization of retina will be complete.

2. Control: Treatment as usual. Standard laser therapy.

Intervention Type

Other

Phase

Phase II

Primary outcome measure

To evaluate the safety of propranolol administration in preterm newborns suffering from a precocious phase of ROP.

In order to evaluate the safety of this treatment, heart frequency, blood pressure, oxygen saturation, respiratory support, will be continuously monitored.

Blood samplings to check renal, liver and metabolic balance will be performed weekly for the first 4 weeks of treatment.

Secondary outcome measures

To evaluate the safety of propranolol administration in preterm newborns suffering from a precocious phase of ROP.

In order to evaluate the efficacy of this treatment, serial ophthalmologic evaluations will be planned at different intervals according to the severity of ROP. The efficacy will be evaluated comparing the different incidence of the progression of ROP to stages 3 or to retinal detachment, the different incidence of laser treatment, the different incidence of vitrectomy, between the two groups.

The follow-up planned at 1, 4 and half, 6, 12, 18 and 24 months, will allow to evaluate the functional outcome.

Visual acuity will be evaluate at 1, 4 and half, and 12 months of corrected age.

Overall study start date

01/01/2010

Completion date

31/12/2011

Eligibility

Key inclusion criteria

The studied population consists of preterm infants delivered at less than 32 weeks gestational age admitted to the Neonatal Intensive Care Unit at the A. Meyer University Children's Hospital, Florence and at the Institute of Pediatrics and Neonatology, Fondazione IRCCS Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena, University of Milan.

- 1. Infants who have been screened for ROP (≥32 weeks gestation) who developed zone II-III, stage 2 ROP without plus.
- 2. Informed Consent from a parent

Participant type(s)

Patient

Age group

Neonate

Sex

Both

Target number of participants

44 newborns

Key exclusion criteria

- 1. Newborns with congenital cardiovascular anomalies, renal failure, cerebral haemorrhage, which contraindicate the use of beta-blockers
- 2. Newborns with ROP stages more advances than zone II-III, stage 2 ROP without plus
- 3. Informed Consent from a parent refused. This will mean that an infant automatically will receive standard laser therapy. No data will be used from an infant without Informed Consent.

Date of first enrolment

01/01/2010

Date of final enrolment

31/12/2011

Locations

Countries of recruitment

Italy

Study participating centre Neonatal Intensive Care Unit

Florence Italy I-50139

Sponsor information

Organisation

A. Meyer University Children's Hospital (Italy)

Sponsor details

Viale Pieraccini 24 Florence Italy I-50139 +39 (0)55 5662434 diraz@meyer.it

Sponsor type

Hospital/treatment centre

Website

http://www.meyer.it

ROR

https://ror.org/01n2xwm51

Funder(s)

Funder type

Hospital/treatment centre

Funder Name

A. Meyer University Children's Hospital (Italy)

Funder Name

Fondazione Istituto Di Ricovero e Cura a Carattere Scientifico (IRCCS) Ospedale Maggiore Policlinico, Mangiagalli e Regina Elena (Italy)

Funder Name

University of Milan (Italy)

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

Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
Protocol article	protocol	18/11/2010		Yes	No

Results article results 01/12/2013 Yes No