Kidz First Neonatal Research

Links

- Parking and Room Bookings
- Clinical Data Research Hub, University of Auckland
- ON TRACK Network

Clinical Data Research Hub (CDRH)

Neonatal Unit Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Contacts</th>
<th>GA/BW Criteria</th>
<th>Eligibility</th>
<th>Consent</th>
<th>Links</th>
</tr>
</thead>
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| Daytime: Lisa Mravicich 02189798 2 or Chris McKinlay 02747250 99  |
| Daytime: Elizabeth Nevill 021300877  |
| Daytime: Tanith Alexander 02102466 276  |
| <28 weeks  |
| <24 hours of age  |
| >12 hours ago  |
| Receiving mechanical ventilation via an endotracheal tube **OR** receiving non-invasive respiratory support including CPAP, nasal IPPV or nasal high flow **AND** a clinical decision to treat with exogenous surfactant  |
| Previous steroids for prevention of lung disease  |
| Infant considered non-viable/not going to be admitted to NNU or likely to transfer to nonparticipating NNU within 24 hours of birth  |
| Major congenital anomaly  |
| Written informed consent prior to randomisation.  |
| Written informed consent prior to randomisation.  |
| Written informed consent prior to randomisation.  |

**Inclusion:**

- <28 weeks
- Surfactant if given, <12 hours ago
- Receiving mechanical ventilation via an endotracheal tube **OR** receiving non-invasive respiratory support including CPAP, nasal IPPV or nasal high flow **AND** a clinical decision to treat with exogenous surfactant

**Exclusion:**

- Previous steroids for prevention of lung disease
- Infant considered non-viable/not going to be admitted to NNU or likely to transfer to nonparticipating NNU within 24 hours of birth
- Major congenital anomaly

**Inclusion:**

- <31 weeks
- Twin to twin transfusion
- Placental abruption
- Congenital abnormality
- Severe antenatal IUGR
- En caul delivery
- Short umbilical cord

**Exclusion:**

- If unable to obtain consent antenatally, randomise based on deferred consent with informed, written consent obtained within 24 hours.

- Written informed consent prior to randomisation.

**Inclusion:**

- 32+0 weeks to 35+6 weeks
- Mother intends to breastfeed
- Insertion of intravenous lines based on clinical need
- Domicile in Auckland

**Exclusion:**

- A particular mode of nutrition is clinically indicated
- Congenital abnormality likely to affect growth, body composition or neurodevelopmental outcome

**Written informed consent prior to randomisation.**
<table>
<thead>
<tr>
<th>Daytime: David Hou 02141488 or Lisa Mravicich 021897982</th>
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<tbody>
<tr>
<td>After hours: duty consultant</td>
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- **Inclusion:**
  - <23 hours
  - One or more of the following: Apgar 5 at 10 mins after birth; OR receiving ongoing resuscitation at 10 mins after birth; OR on cord blood or arterial/venous blood obtained at < 60 mins after birth, pH less than 7.00 OR base deficit 12.0 mmol/L.
  - Moderate to severe encephalopathy, defined between one and six hrs after birth by: 3 out of 6 modified Sarnat criteria indicating moderate/severe encephalopathy
  - Hypothermia treatment initiated by 6 hrs of age; Study treatment planned to start within 24 hrs after birth
  - At least one parent 18 yrs old
  - Anticipated ability to collect primary endpoint at 2 yrs

<table>
<thead>
<tr>
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<tbody>
<tr>
<td>- Severe IUGR (birth weight &lt;1800 g)</td>
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<tr>
<td>- Suspected major chromosomal or congenital anomalies</td>
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<tr>
<td>- HC &lt;3rd centile below mean for GA &amp; gender</td>
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<td>- Imminent withdrawal of care is being planned</td>
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Written informed consent prior to randomisation. Where this cannot be obtained in time to allow randomisation by 23 hours of age, telephone parental consent is acceptable, with signed consent obtained as soon as feasible.

<table>
<thead>
<tr>
<th>Daytime: Lisa Mravicich 021897982 or Chris McKinlay 0274725099</th>
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<tr>
<td>After hours: Chris McKinlay 0274725099</td>
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- **Inclusion:**
  - <8 weeks old

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<tr>
<td>- Previous exposure to paracetamol or ibuprofen</td>
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<td>- Chronic disease associated with limited life expectancy (&lt;6 years)</td>
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<td>- Likely to leave NZ in first 6 years</td>
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Written informed consent prior to randomisation.
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<th>Written informed consent prior to randomisation.</th>
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<tbody>
<tr>
<td>• &lt;72 hours old</td>
<td>Ran dom isati on</td>
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<tr>
<td>• Major congenital abnormality</td>
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<tr>
<td>• Minor congenital abnormality likely to affect respiration, growth or development</td>
<td>Con sent Form</td>
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<tr>
<td>• Previous caffeine treatment</td>
<td>Prot ocol</td>
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<tr>
<td>• Renal or hepatic impairment</td>
<td>Stan dard Ope ratin g Proc edur es</td>
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<td>• Tachyarrhythmia</td>
<td>Stud y Han dbo ok (Inp atie nt)</td>
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<tr>
<td>• Seizures</td>
<td>Par ent Broc hure</td>
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<tr>
<td>• Hypoxic ischaemic encephalopathy</td>
<td>Heal th Prof essi onal Broc hure</td>
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<tr>
<td>• Residing outside of the Auckland DHB regions</td>
<td>Dat e calc ulat or</td>
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**Inclusion:**
- <8 days old
- Admitted to Neonatal Care due to recurrent or severe episode (s)\(^*\) of hypoglycaemia:
  - 3 episodes <2.6 mmol/L in 48 hours
  - Persisting episode of 1.2 to <2.0 mmol/L despite 2 doses of dextrose gel and feeding
  - Any episode <1.2 mmol/L
- Receiving ongoing management for hypoglycaemia at the time of randomisation, e.g., IV dextrose, carbohydrate supplements, continuous or frequent feeding (2 hourly), or inability to wean off formula due to hypoglycaemia.

\(^*\)An episode is defined as consecutive blood glucose concentrations <2.6 mmol/L and ends when blood glucose is 2.6 mmol/L.

**Exclusion:**
- Confirmed major congenital malformation or chromosomal disorder
- Suspected genetic syndrome associated with hypoglycaemia, e.g., Beckwith Wiedemann Syndrome
- Gastrointestinal disorder likely to affect feed tolerance
- Planned or likely neonatal surgery
- Confirmed sepsis (culture of pathogenic organism from blood, CSF or urine)
- Hypoxic ischaemic encephalopathy
- Family history of congenital hyperinsulinism
- Suspected inborn error of metabolism
- Triplets (Twins not excluded)

**Daytime: Lisa Mravicich 02189798 2 or Don Laing 02113694 18**

**After hours: Chris McKinlay 02747250 99**

**Written informed consent prior to randomisation.**

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**DOXAPREM**

**Oral Doxapram for Apnoea of Pretermature**

**Daytime:**
- Lisa Mravicich 02189798 2
- Don Laing 02113694 18

**After hours:**
- Chris McKinlay 02747250 99

**<32 weeks Inclusion:**
- > 72 hours old
- CPAP 8 cm cml\(_2\)
- Caffeine 20 mg/kg/d
- Ongoing ABD events (4 apnoeas or HR<100 or Sp02<90% for 10 s over 6 hours) or PC02 8 kPa or Sp02 <90% for 30% of time (over 6 hours)

**Written informed consent prior to randomisation.**

**COMING IN 2020!!**

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**Publications**

**2020**

2019


2018


2017

2017


2016


2015


2014


2013

- Meyer M, Manzoni P. Lactobacillus GG as probiotic for prevention of necrotizing enterocolitis or late onset sepsis in preterm infants: an updated meta-analysis. Early Hum Dev 2013;89s1:S84.

2012