

The ON TRACK Network

January 2018



Edition 17



Welcome to the January edition of the ON TRACK Network newsletter

ON TRACK News

- ❖ Welcome back to ON TRACK for 2018, all the best for a great year
- ❖ **MAGENTA** is nearly there..... only 6 more babies to reach their target of 1676!
- ❖ ON TRACK Trial Development Workshop only 3 weeks away – see over for details
- ❖ PSANZ in Auckland in March – the biggest perinatal meeting in NZ for 8 years – see over for details

Update your Practice

Immediate Delivery Compared With Expectant Management in Late Preterm Prelabor Rupture of Membranes

An Individual Participant Data Meta-analysis

Quist-Nelson et al *Obstet Gynecol* 2018; 131:269–79; DOI: 10.1097/AOG.0000000000002447

Until recently the matter of when to plan delivery for women with late PPROM (34–37 weeks) remained controversial. *Deliver straight away and avoid chorioamnionitis or manage expectantly and avoid the complications of prematurity?*

The results of the Australian led PPROMT trial published in the *Lancet* (2016;387:444–52) went a long way to help answer our questions. The authors of the PPROMT trial and other collaborators have now reported an individual patient data meta-analysis including an additional two trials from the Netherlands (PROMEXIL and PROMEXIL-2) and reported outcomes in 2,563 mothers and 2,572 neonates.

The findings support the results of the individual trials and should confirm to us that expectant management is best until there is a clear indication for delivery or the pregnancy has reached 37 weeks.

Individual patient data (IPD) meta-analyses compares data from each individual in each trial rather than the traditional meta-analyses where results are pooled at the trial level. IPD meta-analysis is more timely and expensive but produces higher quality and more reliable data. It is particularly helpful for subgroup analysis where populations can be more clearly defined.

In this study almost 6000 titles and abstracts were screened to find eight trials eligible for inclusion i.e. all RCTs reporting on women with confirmed PPROM in the late preterm period (34⁺⁰ and 36⁺⁶ weeks gestation) who were randomised to either immediate delivery or expectant management. Authors of trials that included a wider gestational age range were contacted and asked to provide data specific to cases at 34⁺⁰ and 36⁺⁶ weeks. Only three trials were able to provide these data. **The pre-specified primary outcome was a composite of adverse neonatal outcomes: probable or definitive neonatal sepsis, necrotising enterocolitis, respiratory distress syndrome (RDS), stillbirth, or neonatal death.**

Results: There was no difference in the incidence of the composite adverse neonatal outcome 9.6% in the immediate delivery group and 8.3% in the expectant management group (RR 1.20, 95% CI 0.94–1.55), see figure, and there was no difference in the rates of neonatal sepsis 2.6% and 3.5%, respectively (RR 0.74, 95% CI 0.47–1.15).

However immediate delivery did:

- **Increase RDS**
RR 1.47, 95% CI 1.10–1.97
- **Increase NICU admission**
RR 1.17, 95% CI 1.11–1.23
- **Increase caesarean delivery**
RR 1.26, 95% CI 1.08–1.47
- **Decrease APH**
RR 0.57, 95% CI 0.34–0.95
- **Decrease chorioamnionitis**
RR 0.21, 95% CI 0.13–0.35

Study (Year)	Immediate Delivery n/N (%)	Expectant Management n/N (%)	Risk Ratio	Risk Ratio	p value
			[95%-CI]	[95%-CI]	
PPROMT (2016)	91/923 (10%)	70/912 (8%)	1.29 [0.96, 1.73]		0.09
PPROMEXIL (2012)	25/267 (9%)	26/270 (10%)	0.96 [0.57, 1.62]		0.88
PPROMEXIL-2 (2012)	8/101 (8%)	10/99 (10%)	0.86 [0.34, 2.13]		0.74
PPROMM (2017)	124/1291 (10%)	106/1281 (8%)	1.20 [0.94, 1.55]		0.15

Immediate delivery vs expectant management; composite of adverse neonatal outcomes



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The ProVIDe Study

Extremely preterm babies (500-1000g) often experience poor growth in the weeks immediately after birth followed by a period of accelerated growth, a pattern associated with long-lasting metabolic & neurodevelopmental effects. A key to improving the long term health of these vulnerable babies may be to avoid this pattern of growth by improving early nutritional intake. Previous research suggests increasing the protein intake of these babies is likely to be particularly important in achieving this.

The ProVIDe study is underway in neonatal units around New Zealand. ProVIDe aims to identify how increasing protein intake in extremely low birthweight babies affects their growth, metabolic & neurodevelopmental outcomes.

Inclusion criteria: Babies born <1000g at birth in whom a clinical decision to place an umbilical arterial catheter (UAC) has been made & whose parents have given informed consent.

Exclusion criteria: Admission to NICU more than 24 hours after birth, known chromosomal or genetic abnormality, congenital disorder affecting growth, inborn error of metabolism or danger of imminent death.

This randomised control trial compares whether an extra 1 gram of protein per day for the first 5 days after birth is beneficial in improving survival free of neurodisability at 2 years of age, improving body composition & preventing faltering growth at hospital discharge compared to standard nutrition.

All participating babies will receive neonatal intensive care and IV nutrition in accordance with established NICU guidelines in each centre. The control group will receive a 0.45% saline solution via the UAC according to current clinical practice. The intervention group will receive a UAC amino acid solution providing ~1g-2g/Kg.d protein.

Recruiting sites in New Zealand: Auckland City, Middlemore, Waikato, Wellington, Christchurch and Dunedin

If shown to be successful, implementing this simple intervention into our neonatal units could improve the lifelong health of babies throughout the country. **To find out more about ProVIDe, contact Barbara Cormack at bcormack@adhb.govt.nz**

Multicentre Trials

currently recruiting in NZ

GEMS

hPOD

HINT2

MAGENTA

MAGNUM

MBM

OBLIGE

PROVIDE

PAEAN

Upcoming Events in 2018 **very soon!!**

ON TRACK Trial Development Workshop Monday 19 & Tuesday 20th February, Liggins Institute, Auckland.

A team of facilitators (including clinical experts, biostatisticians, consumers, health economists, trial specialists, Māori health research advisors and funding advisors) will guide investigator groups through the process of trial development. This is a great chance to experience and contribute to the development of research ideas; learn about the research process and network with clinical trial researchers from around New Zealand. For further details contact ontracknetwork@auckland.ac.nz

FREE registration at <https://uoaevents.eventsair.com/ont18/on-track>

PSANZ 2018 Whenua ki Whānau 24-28th March 2018, ANZ Viaduct Events Centre

The annual PSANZ Congress is coming to New Zealand for the first time in eight years. The very best of NZ maternal and perinatal health research will be showcased alongside leading international and Australasian experts providing the most up-to-date evidence to guide best practice care.

For more details about this meeting and registration: <http://psanz2018.com.au/>

Come and meet the ON TRACK team at **ON TRACK events within the Congress**

- ON TRACK/IMPACT Meeting 'Embedding Research into Clinical Practice' 24-25th March
- ON TRACK Update Session – Monday 26th March lunchtime
- On TRACK Networking lounge (exhibition hall) – Tuesday 27th March



Become a member of Perinatal Society of New Zealand & receive a discount on registration fees <http://www.perinatal.org.nz/>

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