

e-PINO: early Prediction of Infant Neurodevelopmental Outcomes using novel biomarkers

ACTRN12623000672651

Status	RECRUITING
Sponsor	University of Queensland
Enrollment	660 participants

Plain Language Summary

Cerebral palsy (CP) is a condition that affects movement and development, and it typically begins from brain injury around the time of birth. At the moment, it is very difficult to predict early on which babies will develop CP or how severe it will be. This study — called e-PINO — is using a combination of advanced brain imaging, genetic analysis, and blood-based markers (called liquid biopsy) to see if doctors can predict and better understand CP much earlier than currently possible, and to develop precision treatments.

By combining these different measures using machine learning, the research team hopes to build a system that identifies the nature and extent of brain injury early, predicts outcomes with greater accuracy, and ultimately guides more targeted, personalised treatment for affected babies.

The study recruits newborns admitted to neonatal intensive care units at three major Australian hospitals. Eligible infants include those born very preterm, moderately preterm, small for gestational age, or full-term with brain injury from reduced oxygen. Babies with known chromosomal abnormalities are not eligible. Families must live within 200 km of the hospital and speak English.

Key Eligibility Criteria

Inclusion (4)

- (ii) Moderate to Late Preterm MLPT (Born 32-37 weeks)
- (iii) near-term small for gestational age (SGA) (BW less than 10th percentile) or with Fetal Growth Restriction (FGR);
- (iv) Term born with Hypoxic ischemic encephalopathy (HIE) and/or stroke;
- (v) Healthy Term (HT); (2) no known chromosomal abnormalities; (3) inborn at Royal Brisbane/Monash/Westmead Hospitals; (4) live within 200 km; (5) English spoken.

Exclusion (1)

- Have a congenital or chromosomal abnormality that would impact their development

Locations (4 total)

Royal Brisbane & Womens Hospital - Herston, NSW,QLD,VIC, Australia
Monash Children's Hospital - Clayton, NSW,QLD,VIC, Australia
The Children's Hospital at Westmead - Westmead, NSW,QLD,VIC, Australia
... and 1 more locations

<https://www.anzctr.org.au/Trial/Registration/TrialReview.aspx?ACTRN=ACTRN12623000672651>

DISCLAIMER: This document is for informational purposes only and does not constitute medical advice. Always consult your healthcare provider before enrolling in any clinical trial. Information may not be up to date — verify details at anzctr.org.au. Generated by ClinicalTrialsFinder.org.