

Spend a minute to save a lifetime: Australian Transfusion Study (APTS)

For every 20 very preterm infants whose cord is clamped at 60 seconds rather than by 10 seconds after birth, there will be one more survivor without disability.

EXPERTISE

The largest ever randomised controlled trial of placental transfusion in very preterm babies. CTC contributed methodological expertise: composite outcomes, incorporation of correlation between multiple births, measure of effect as a Relative Risk rather than an Odds Ratio (increasing interpretability) k to add text.

Trial snapshot

Start date: 2009

End date: 2020



1,600

infants <30 weeks
gestation
25 hospitals
7 countries

Collaborators:

IMPACT Clinical Trials Network of the Perinatal Society of ANZ and the ANZ Neonatal Network

BACKGROUND

Worldwide, about 1 million babies are born before 30 weeks' gestation annually. In high-income countries, about 25% die or face increased risks of impairment and disability in childhood; the burden of mortality and impairment is greater in low-income and middle-income countries. Focused improvements in perinatal and newborn care could substantially improve under-5 mortality rates.

Delaying clamping of the umbilical cord in very preterm infants is a simple, universally affordable procedure that might improve hospital mortality rates and neuro development in early childhood, but more evidence is needed. Recommended durations of delayed clamping vary from between 30-60 s to 3 min.

STUDY OVERVIEW

APTS aimed to find out whether immediate cord clamping (clamping within 10 seconds of delivery) or delayed cord clamping (waiting at least 60 seconds before clamping) was better for premature babies in the short term and the long term.

The APTS Childhood Follow Up Study, the largest world-wide two-year follow up of pre-term cord clamping, assessed whether delayed clamping of the umbilical cord reduced mortality or major disability in over 1,500 children.

KEY FINDINGS

Clamping the umbilical cord at least 60 seconds after birth reduced the risk of death or major disability at 2 years by 17%, reflecting a 30% reduction in relative mortality with no difference in major disability.