Media Release

WA Child Research Fund boosts WIRF research for premmies

Monday, 18 October 2021

The outlook for Western Australian babies at risk of being born preterm, and experiencing lifelong health challenges, is set to receive a major boost following the announcement of critical new funding by the WA Department of Health.

Health Minister, Roger Cook, today announced a total of $2 million in funding for a number of research projects as part of the WA Child Research Fund including critical support for the development of a pioneering antenatal steroid (ANS) dosing regimen for WA mothers at risk of preterm delivery.

In Australia today, preterm birth - being born before 37 weeks - is the leading cause of childhood death and disability. In WA, 8.4% of all babies are born preterm; in our Indigenous communities, that rate nearly doubles.

The current treatment for babies at risk of preterm delivery is two maternal injections of a combined preparation of betamethasone acetate and betamethasone phosphate.

The BALANCING Study will enable clinical translation of world-first data into a streamlined antenatal steroid regimen for preterm babies using betamethasone acetate alone.

Coordinating Principal Investigator and WIRF Deputy Director, Professor Matt Kemp, explained that the study team had used a fetal sheep model to determine the optimum dose of ANS therapy for those at risk of preterm birth.

“Using pregnant sheep, we have demonstrated that the phosphate component of this treatment conveys no benefit to preterm babies over the use of acetate by itself,” he said.

“Moreover, our most recent data shows that, relative to use of betamethasone acetate alone, the inclusion of betamethasone phosphate increases the risk of fetal growth restriction and significantly reduces the overall treatment efficacy.

“We have shown that the sole use of betamethasone acetate is not only safer, but also more effective than the current combined treatment.”

Currently, there is no betamethasone acetate-only preparation available for clinical use, and all preparations contain betamethasone phosphate.

Professor Kemp said that incorporating the views and lived experiences of mothers that have had a preterm birth and antenatal steroid journey was a particular strength of the funding proposal.

“For many years both Amber Bates and Theresa Miloseski have been active in working with WIRF to support families impacted by preterm birth and are enthusiastic in their efforts to raise awareness of the profound impact that preterm birth has on our community,” he said.

If the project is as successful as the team expects, the pharmacological product and data generated has the potential to significantly improve the safety and effectiveness of a front-line treatment administered to tens of thousands of women in Australia every year and millions of women around the world.

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“This grant is a great example of how the generosity of our community, through Telethon, can partner with the State Government to fund essential science for the most vulnerable in our community,” Professor Kemp said.

ENDS

Media opportunity:

Professor Matt Kemp is available for interview and follow-up media comment.

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Background:

The Women and Infants Research Foundation

The Women & Infants Research Foundation is one of Australia’s leading medical research institutes dedicated to improving the health of women and infants. We focus our research and programs across four principal areas: the prevention of preterm birth, gynaecological cancers, women’s mental health, and the development of an Artificial Womb. Our research and programs have directly contributed to a number of improved clinical practices and health outcomes.