

Preventing brain damage in preterm babies

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Hudson Institute researchers have conducted the first attempts to collect umbilical cord blood cells, with a view to using them to prevent brain damage in preterm babies.

The trial led by Dr. Lindsay Zhou, under the supervision of Monash



Children's Hospital neonatologist Professor Atul Malhotra, was published recently in the journal *Cytotherapy*.

Cord blood is the blood left in the <u>umbilical cord</u> and placenta of newborn babies after birth. It is rich in <u>stem cells</u> which can be used to help protect, repair and grow <u>cells</u> in the body, and according to Dr. Zhou these cells have shown strong promise as a treatment for neonatal brain injury in pre-clinical models and early-phase clinical trials.

Life-giving cells: New preterm treatment

"While it has been tested in <u>infants</u> born at term, these life-giving cells have not been tested in preterm babies, who arguably have the greatest need for new treatments because their risk of brain injury and disability later in life is so much greater," he said.

The researchers took cord blood from 38 infants born before 28 weeks gestation. Babies born extremely preterm (

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