

## Special Issue

# Brain Injury in the Newborn: The Present Status and Challenges in the Future

### Message from the Guest Editor

Hypoxic–ischemic brain injury remains a leading cause of neonatal mortality and long-term neurodevelopmental disabilities, primarily affecting the term-born population, although preterm infants may also be at risk. Despite remarkable advances in perinatal care, the diagnosis and therapy of neonatal brain injury remain a challenge, and therapies are largely supportive. The only established clinical intervention for hypoxic–ischemic brain injury is therapeutic hypothermia demonstrating reductions in risk of death or impairment. However, half of treated infants still suffer from major neurological problems such as cerebral palsy or epilepsy. Furthermore, in preterm infants, therapeutic hypothermia cannot be applied due to its side effects and insufficiency. This Special Issue critically examines challenges in optimizing treatment and timing, improving access to care in low-resource settings, and addressing long-term outcomes. Additionally, the Issue highlights future directions, including precision medicine approaches, artificial intelligence in early diagnosis, and innovative rehabilitation methods.

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### Guest Editor

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## About the Journal

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You are invited to contribute a research article or comprehensive review for consideration and publication in *Children* (ISSN 2227-9067). *Children* is an open access journal—research articles, reviews, and other content are published online immediately after acceptance. The scientific community and the general public have unlimited free access to the content as soon as it is published. The journal focuses on sharing clinical, epidemiological, and translational science relevant to children's health. We would be pleased to welcome you as one of our authors.

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### Editor-in-Chief

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