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Full-length Article

Systemic inflammation combined with neonatal cerebellar haemorrhage aggravates long-term structural and functional outcomes in a mouse model

Sophie Tremblay, Alex Pai, Lindsay Richter, Rod Vafaei, Praneetha Potluri, Jacob Ellegood, Jason P. Lerch, Daniel Goldowitz

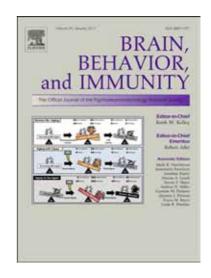
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## **ACCEPTED MANUSCRIPT**

Systemic inflammation combined with neonatal cerebellar haemorrhage aggravates long-term structural and functional outcomes in a mouse model

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#### **Highlights**

- Novel translational animal model mimicking extreme preterm cerebellar injury leading to cerebellar pathologies.
- A combined insult of haemorrhage and inflammation is required to induce cerebellar white matter alterations and long-lasting reduced cerebellar white matter volume that is preceded by cerebellar gliosis.
- A combined perinatal insult, cerebellar haemorrhage and inflammation, leads to long-term memory deficits.

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