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#### Research report

Serum concentrations of the axonal injury marker neurofilament light protein are not influenced by blood-brain barrier permeability

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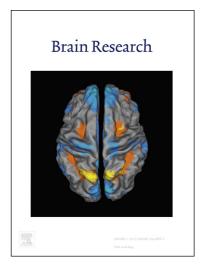
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### ACCEPTED MANUSCRIPT

# Serum concentrations of the axonal injury marker neurofilament light protein are not influenced by bloodbrain barrier permeability

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#### Highlights

- There is an acute increase of serum neurofilament light protein (NFL) following both cranial irradiation and anesthesia in mice.
- The levels of serum NFL do not correlate with an acute opening of the blood-brain barrier in a mouse model of cranial irradiation.
- Human data show that the levels of NFL in serum mirror the levels in cerebrospinal fluid independently of the degree of blood-brain barrier integrity.

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