

Brain hypoxia and metabolic crisis are common in patients with acute brain injury despite a normal intracranial pressure: supplemental material

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SUPPLEMENTARY FIGURE S1:

HISTOGRAMS OF NEUROMONITORING PARAMETERS

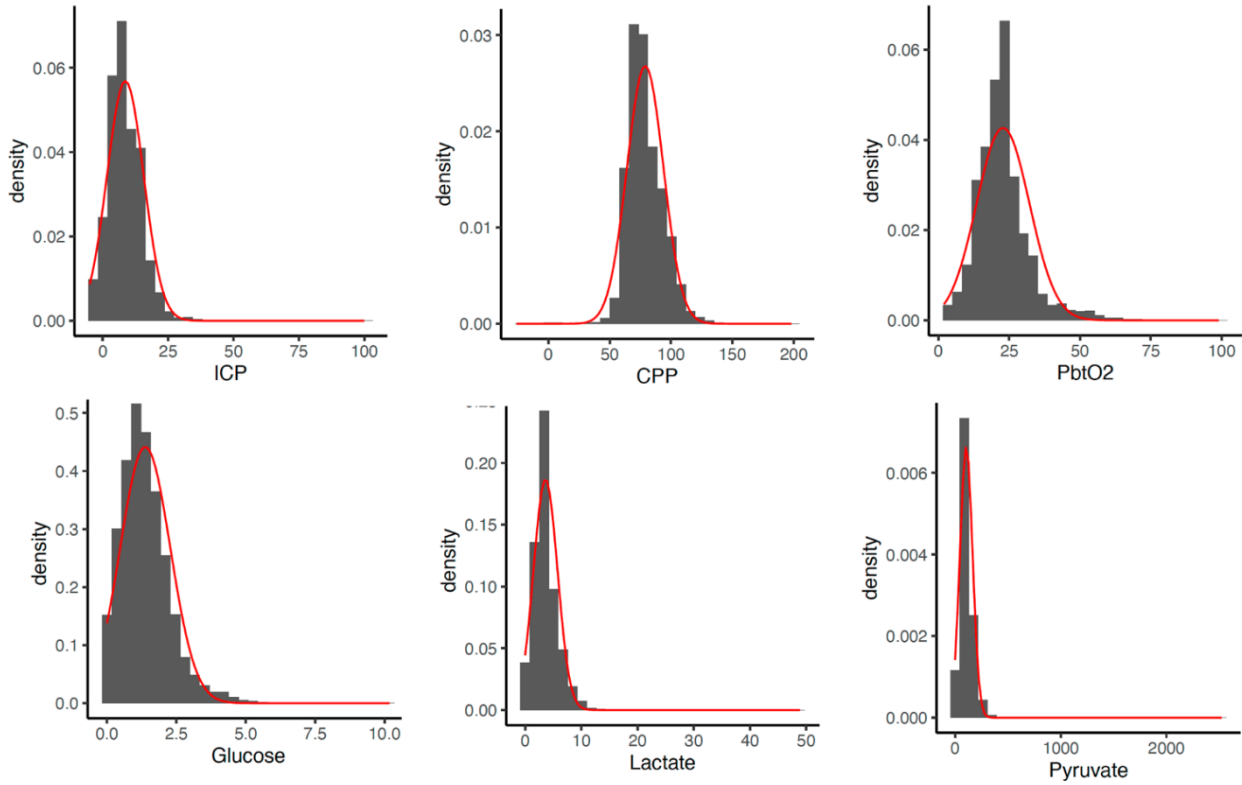
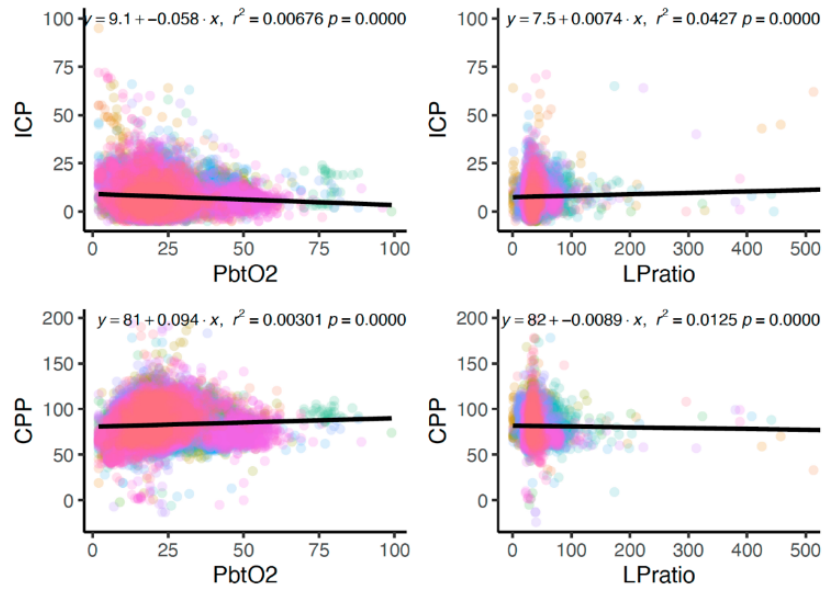


Figure legend: Histograms of the raw data distribution of each neuromonitoring parameter in the total patient population. Abbreviations: CPP = Cerebral Perfusion Pressure; ICP = Intracranial Pressure; PbtO₂ = Brain Tissue Oxygen Tension.

SUPPLEMENTARY FIGURE S2: CORRELATIONS BETWEEN NEUROMONITORING PARAMETERS

Patients with SAH (n=52):



Patients with TBI (n=42):

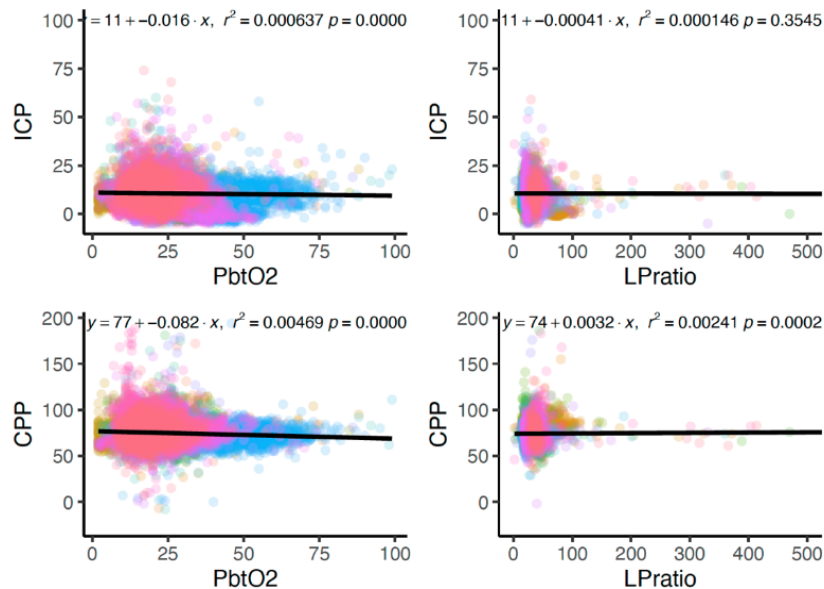


Figure legend: Linear regression lines and Pearsons correlation coefficients of the association between neuromonitoring parameters. Abbreviations: CPP = Cerebral Perfusion Pressure; ICP = Intracranial Pressure; LP-ratio = Lactate/Pyruvate Ratio; PbtO₂ = Brain Tissue Oxygen Tension; SAH = Subarachnoid Haemorrhage; TBI = Traumatic Brain Injury.

SUPPLEMENTARY FIGURE S3: SUMMARY OF MAIN RESULTS

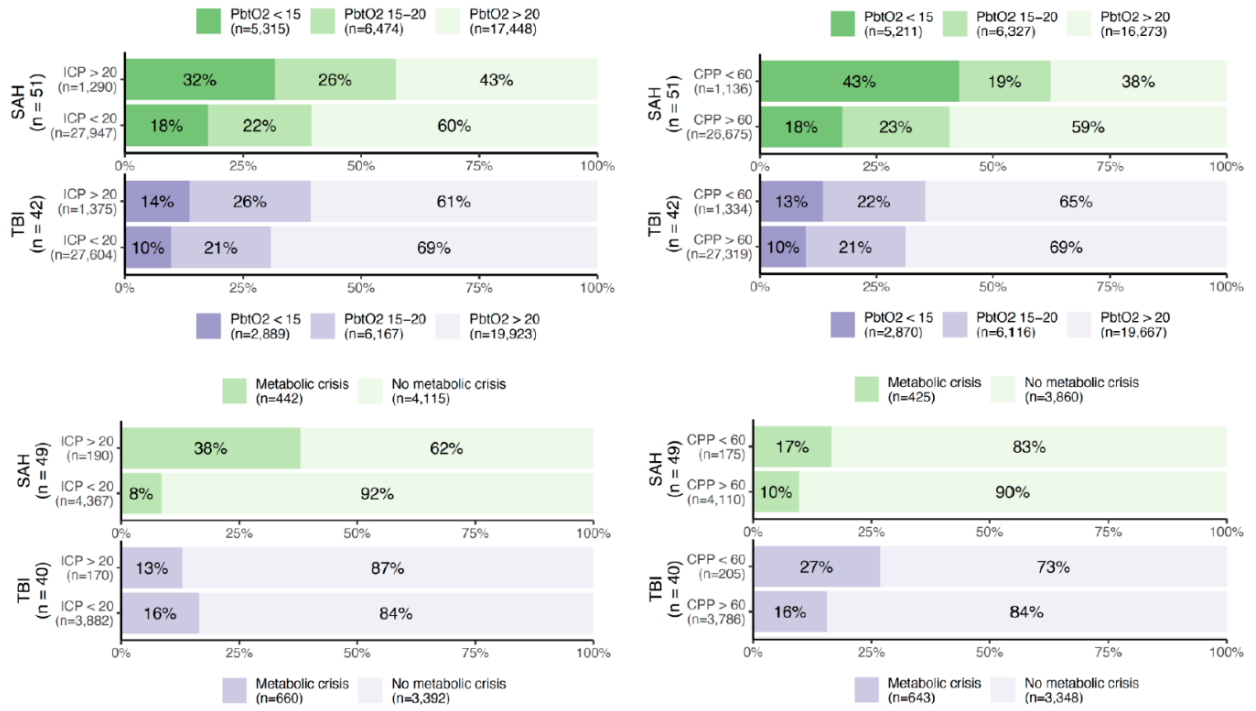


Figure legend: Relationships between ICP, CPP, PbtO₂ and brain metabolism. Figures are stratified by diagnosis (SAH or TBI), and the numbers and percentages displayed are "events" (i.e., concurrent measurements of the two neuromonitoring parameters). Elevated ICP was defined as >20 mmHg, and an abnormal CPP as <60 mmHg. Brain hypoxia was subdivided into mild (PbtO₂ 15-20 mmHg) and severe (PbtO₂ <15 mmHg). Metabolic crisis was defined as a lactate/pyruvate ratio >40 with a glucose level <0.2 mmol/L in cerebral microdialysate. **Abbreviations:** CPP = Cerebral Perfusion Pressure; ICP = Intracranial Pressure; PbtO₂ = Brain Tissue Oxygen Tension; SAH = Subarachnoid Haemorrhage; TBI = Traumatic Brain Injury.