	Median (IQR) or Raw Number	
Number of patients	43	
Age (years)	46 (31–65)	
Sex		
Male	35	
Female	8	
Duration of high frequency physiological recording (h)	137.4 (89.2–174.5)	
Admission GCS (total)	6 (3–11)	
Admission GCS Motor	3 (1-5)	
Number with hypoxia episode	8	
Number with Hypotension Episode	3	
Admission pupil response		
Bilaterally reactive	32	
Unilateral unreactive	4	
Bilaterally unreactive	7	
Marshall CT grade	3 (2-6)	
Rotterdam CT grade	3 (3–5)	
Number with traumatic SAH	32	
Number with epidural hematoma	13	
ICP (mm Hg)	12.5 (9.6–16.6)	
% time with ICP >20 mm Hg	5.8 (1.2–23.2)	
PbtO <sub>2</sub> (mm Hg)	26.8 (22.4–31.4)	
% time with PbtO <sub>2</sub> < 20 mm Hg	19.0 (3.9–34.6)	
PRx (a.u.)	0.098 (-0.054–0.199)	
% time with PRx >0	60.9 (42.9–70.2)	
% time with PRx > $+0.25$	34.6 (20.7–47.6)	
% time with PRx > $+0.35$	23.8 (15.7–39.2)	
	23.0 (15.1 37.2)	
Abnormal PRx and abnormal PbtO <sub>2</sub>	7 2 (2 2 2 2) ()	
% time with PRx >0 and PbtO <sub>2</sub> < 20 mm Hg	7.2 (2.2–22.6)	
% time with PRx > +0.25 and PbtO <sub>2</sub> < 20 mm Hg	3.1 (0.9-14.2)	
% time with PRx > +0.35 and PbtO <sub>2</sub> < 20 mm Hg	2.4 (0.6–10.3)	
Abnormal PRx and normal $PbtO_2$		
% time with PRx >0 and PbtO <sub>2</sub> > 20 mm Hg	36.2 (16.9–49.7)	
% time with $PRx > +0.25$ and $PbtO_2 > 20 \text{ mm Hg}$	20.0 (6.2–28.3)	
% time with $PRx > +0.35$ and $PbtO_2 > 20 \text{ mm Hg}$	12.1 (4.1–21.5)	
Normal PRx and abnormal $PbtO_2$		
% time with PRx <0 and PbtO <sub>2</sub> $\stackrel{?}{<}$ 20 mm Hg	3.0 (0.8-8.0)	
% time with PRx < +0.25 and $PbtO_2$ < 20 mm Hg	7.0 (2.4–15.4)	
% time with PRx $< +0.35$ and PbtO <sub>2</sub> $< 20$ mm Hg	9.8 (2.9–18.3)	
<i>Global outcomes</i>		
6 month GOSE	3 (1 – 5)	
Total dead	5(1-5)	
Total unfavorable outcome	24	
	27	

Unfavorable outcome defined as GOSE of ≤4 at 6 months.

a.u., arbitrary units; CT, computed tomography; GCS, Glasgow Coma Score, GOSE, Glasgow Outcome Score Extended; ICP, intracranial pressure; IQR, interquartile range; MAP, mean arterial pressure; PbtO<sub>2</sub>, brain tissue oxygen, PRx, pressure reactivity index (correlation between slow-waves of ICP and MAP); SAH, subarachnoid haemorrhage.

Supplementary Table S2. Univariate Logistical Regression A/D and F/U Outcome for Physiological Variables: Significant Results Only

Variable	A/D AUC (95% CI)	p value	F/U AUC (95% CI)	p value
% time with ICP >20 mm Hg	0.648 (0.422-0.842)	0.006	0.560 (0.391-0.732)	0.432
% time with PRx >0	0.734 (0.570-0.868)	0.003	0.661 (0.478-0.821)	0.063
% time with $PRx > +0.25$	0.747 (0.581-0.893)	0.002	0.679 (0.500-0.830)	0.034
% time with $PRx > +0.35$	0.745 (0.559-0.890)	0.002	0.690 (0.522-0.837)	0.030
% time with PbtO <sub>2</sub> < 20 mm Hg	0.571 (0.337-0.798)	0.142	0.682 (0.516-0.829)	0.030
% time with PRx $>0$ and PbtO <sub>2</sub> < 20 mm Hg	0.618 (0.387-0.820)	0.121	0.661 (0.497-0.819)	0.041

Bolded p values are those reaching significance (i.e., p < 0.05).

A/D, alive/dead, AUC, area under the receiver operating curve; CI, confidence interval, F/U, favorable/unfavorable outcome (i.e., favorable, Glasgow Outcome Scale of 5–8; unfavourable, Glasgow Outcome Scale of 1–4); ICP, intra-cranial pressure; MAP, mean arterial blood pressure, PbtO<sub>2</sub>, brain tissue oxygen; PRx, pressure reactivity index (correlation between ICP and MAP).