

SUPPLEMENTARY APPENDIX C. MULTI-VARIABLE LOGISTIC REGRESSION ANALYSIS: IMPACT CORE + CT MODEL PLUS
CEREBROVASCULAR REACTIVITY INDICES

<i>Model</i>	<i>AUC A/D (95% CI)</i>	<i>AIC</i>	<i>p value</i>	<i>AUC F/U (95% CI)</i>	<i>AIC</i>	<i>p value</i>
CORE + CT	0.673 (0.567–0.773)	157.9	0.015	0.652 (0.570–0.732)	199.6	0.001
CORE + CT + mean ICP	0.774 (0.689–0.857)	138.0	<0.0001	0.666 (0.587–0.746)	199.7	0.001
CORE + CT + % time ICP >20 mm Hg	0.821 (0.736–0.896)	137.5	<0.0001	0.661 (0.580–0.742)	198.3	0.001
CORE + CT + % time ICP >22 mm Hg	0.818 (0.729–0.897)	138.3	0.007	0.664 (0.584–0.742)	198.5	0.001
% time above PRx thresholds						
CORE + CT + % time PRx >0	0.754 (0.659–0.842)	148.3	0.001	0.654 (0.568–0.737)	200.8	0.004
CORE + CT + % time PRx >+0.25	0.784 (0.691–0.872)	142.8	0.001	0.666 (0.584–0.746)	199.6	0.004
CORE + CT + % time PRx >+0.35	0.793 (0.701–0.875)	140.7	0.001	0.673 (0.585–0.754)	199.1	0.004
Mean ICP + % time above PRx thresholds						
CORE + CT + mean ICP + % time PRx >0	0.792 (0.699–0.876)	137.6	0.003	0.660 (0.580–0.740)	201.5	0.003
CORE + CT + mean ICP + % time PRx >+0.25	0.810 (0.720–0.889)	135.8	0.004	0.666 (0.579–0.749)	200.9	0.003
CORE + CT + mean ICP + % time PRx >+0.35	0.815 (0.720–0.895)	135.1	0.005	0.669 (0.590–0.751)	200.6	0.003
% time ICP >20 mm Hg + % time above PRx thresholds						
CORE + CT + % time ICP >20 mm Hg + % time PRx >0	0.807 (0.720–0.890)	136.6	0.002	0.650 (0.567–0.733)	200.2	0.001
CORE + CT + % time ICP >20 mm Hg + % time PRx >+0.25	0.813 (0.728–0.893)	134.9	0.002	0.654 (0.570–0.739)	199.8	0.003
CORE + CT + % time ICP >20 mm Hg + % time PRx >+0.35	0.819 (0.730–0.902)	134.2	0.004	0.656 (0.574–0.741)	199.6	0.003
% time ICP >22 mm Hg + % time above PRx thresholds						
CORE + CT + % time ICP >22 mm Hg + % time PRx >0	0.801 (0.705–0.887)	138.1	0.001	0.652 (0.564–0.732)	200.4	0.002
CORE + CT + % time ICP >22 mm Hg + % time PRx >+0.25	0.808 (0.713–0.888)	136.4	0.005	0.652 (0.568–0.732)	200.0	0.003
CORE + CT + % time ICP >22 mm Hg + % time PRx >+0.35	0.813 (0.720–0.894)	135.7	0.003	0.654 (0.570–0.735)	199.8	0.003

CORE model consisted of age, admission Glasgow Coma Scale motor score, and pupil response (normal bilaterally, unilateral unreactive, or bilaterally unreactive). Bolded values are those maintaining significance when accounting for multiple comparisons.

A/D, alive/dead; AMP, pulse amplitude of ICP; AUC, area under the receiver operating curve; CPP, cerebral perfusion pressure; CI, confidence interval; F/U, favorable/unfavorable outcome (i.e., favorable=Glasgow Outcome Scale of 5–8; unfavorable=Glasgow Outcome Scale of 1–4); ICP, intracranial pressure; IMPACT, International Mission for Prognosis and Analysis of Clinical Trials; MAP, mean arterial pressure; PRx, pressure reactivity index (correlation between ICP and MAP).