

## SUPPLEMENTAL DATA

**Supplemental Table S1.** Univariate analysis of relevant factors associated with increased relative perihematoma edema (rPHE), defined as rPHE  $\geq 1.4$  at 96 hours, after intracerebral hemorrhage in patients with haptoglobin 2-1.

Variables	rPHE < 1.4 (n = 36)	rPHE $\geq 1.4$ (n = 15)	p-value
Clinical variables			
Male	22 (61.1%)	7 (46.7%)	0.343
Age, years	67.0 (49.0-75.5)	62.0 (50.5-74.5)	0.804
Hypertension	25 (69.4%)	9 (16.0%)	0.514
Diabetes mellitus	5 (13.9%)	5 (33.3%)	0.111
Coronary artery disease	3 (8.3%)	2 (13.3%)	0.584
Hyperlipidemia	2 (5.6%)	2 (13.3%)	0.958
Chronic kidney disease	2 (5.6%)	2 (13.3%)	0.347
Smoking	7 (19.4%)	5 (33.3%)	0.964
Antiplatelet or anticoagulation	6 (16.7%)	5 (33.3%)	0.776
Laboratory variables			
Albumin (g/L)	4.3 (4.1-4.7)	4.3 (4.2-4.6)	0.640
Hemoglobin (g/dl)	13.9 (12.5-14.9)	12.6 (10.6-14.1)	0.061
Platelet ( $\times 10^9/L$ )	242 (198-267)	234 (200-296)	0.649
Radiologic variables			
Deep ICH	33 (91.7%)	14 (93.3%)	0.840
Hematoma volume at admission (cc)	13.0 (8.4-22.2)	20.0 (11.3-25.5)	0.085
Burr-hole trephination or craniotomy	5 (13.9%)	5 (33.3%)	0.585
Haptoglobin			0.025
Relative $\alpha 1$ /albumin intensity	0.325 (0.225-0.435)	0.210 (0.130-0.255)	

**Supplemental Table S2. Multivariate logistic regression analysis of increased relative perihematoma edema (rPHE), defined as rPHE  $\geq$  1.4 at 96 hours, after intracerebral hemorrhage in patients with haptoglobin 2-1.**

	Odds ratio	95% Confidence interval	p-value
Diabetes mellitus	3.136	0.589-16.705	0.181
Hemoglobin	0.768	0.544-1.085	0.134
Hematoma volume at admission (cc)	1.050	0.993-1.110	0.088
Relative $\alpha$ 1 /albumin intensity	0.002	0.001-0.358	0.020

**Supplemental Table S3.** Univariate analysis of relevant factors associated with poor outcomes after intracerebral hemorrhage in patients with haptoglobin 2-1.

Variables	Good outcome (n = 29)	Poor outcome (n = 22)	p-value
Clinical variables			
Male	15 (51.7%)	14 (63.6%)	0.395
Age, years	71.0 (51.3-76.7)	54.0 (49.0-70.0)	0.142
Hypertension	22 (75.9%)	12 (54.5%)	0.110
Diabetes mellitus	8 (27.6%)	2 (9.1%)	0.099
Coronary artery disease	4 (13.8%)	1 (4.5%)	0.271
Hyperlipidemia	5 (17.2%)	2 (9.1%)	0.402
Chronic kidney disease	2 (6.9%)	2 (9.1%)	0.773
Smoking	6 (20.7%)	4 (18.2%)	0.823
Antiplatelet or anticoagulation	5 (17.2%)	4 (18.2%)	0.930
Laboratory variables			
Albumin (g/L)	4.3 (4.1-4.6)	4.3 (4.2-4.6)	0.468
Hemoglobin (g/dl)	13.0 (12.1-14.9)	13.9 (12.9-14.6)	0.499
Platelet ( $\times 10^9/L$ )	239 (196-274)	252 (200-300)	0.549
Radiologic variables			
Deep ICH	26 (89.7%)	21 (95.4%)	0.445
Hematoma volume at admission (cc)	13.0 (10.0-21.0)	16.0 (10.0-24.0)	0.401
rPHE $\geq 1.4$ at 96 hours	8 (27.6%)	7 (31.8%)	0.743
Burr-hole trephination or craniotomy	2 (6.9%)	6 (27.3%)	0.048
Haptoglobin			0.856
Relative $\alpha 1$ /albumin intensity	0.310 (0.193-0.403)	0.285 (0.210-0.440)	

rPHE indicates relative perihematoma edema

**Supplemental Table S4.** Multivariate logistic regression analysis of poor outcomes after intracerebral hemorrhage in patients with haptoglobin 2-1.

	Odds ratio	95% Confidence interval	p-value
Hypertension	0.316	0.089-1.115	0.073
Age, years	0.983	0.944-1.023	0.397
Diabetes mellitus	0.394	0.063-2.454	0.318
Burr-hole trephination or craniotomy	6.239	1.054-36.928	0.044