

| | | Baseline | Shock | Treatment | pRBC | End |
|---------------------------------|---------|-------------|-------------|-------------|-------------|-------------|
| pH | Control | 7.46 (0.04) | 7.41 (0.08) | 7.32 (0.03) | 7.37 | |
| | IV | 7.41 (0.06) | 7.46 (0.02) | 7.30 (0.18) | 7.39 (0.05) | 7.44 (0.07) |
| | IO | 7.46 (0.06) | 7.48 (0.03) | 7.37 (0.04) | 7.39 (0.05) | 7.41 (0.05) |
| Hgb (g/dL) | Control | 9.8 (0.9) | 10.3 (0.8) | 10.4 (0.8) | 6.8 | |
| | IV | 9.3 (0.9) | 11.4 (1.0) | 9.9 (1.9) | 8.7 (0.9) | 13.3 (0.9) |
| | IO | 10.2 (1.0) | 10.7 (2.5) | 10.0 (0.8) | 9.0 (1.5) | 14.3 (1.4) |
| K (mM) | Control | 3.7 (0.1) | 4.7 (1.3) | 4.6 (1.7) | 5.2 | |
| | IV | 3.9 (0.2) | 4.6 (0.5) | 4.6 (0.4) | 5.1 (0.7) | 5.2 (0.1) |
| | IO | 3.8 (0.2) | 4.3 (0.1) | 4.3 (0.2) | 4.9 (0.1) | 4.6 (1.4) |
| Na (mM) | Control | 138 (0.6) | 138 (2.1) | 137 (2.6) | 137 | |
| | IV | 139 (1.0) | 135 (3.2) | 138 (4.6) | 140 (1.7) | 139 (1.0) |
| | IO | 142 (1.2) | 139 (0.6) | 140 (1.7) | 143 (1.2) | 143 (1.2) |
| HCO₃ (mM) | Control | 26.4 (1.5) | 18.5 (5.9) | 13.7 (1.8) | 15.2 | |
| | IV | 27.2 (1.8) | 22.2 (2.0) | 17.5 (3.2) | 18.7 (4.0) | 22.9 (1.0) |
| | IO | 27.5 (2.0) | 27.4 (0.6) | 22.9 (2.6) | 22.4 (2.1) | 24.3 (2.6) |
| Lactate (mmol/L) | Control | 2.0 (0.3) | 5.5 (1.9) | 11.5 (2.1) | 7.8 | |
| | IV | 1.5 (0.5) | 3.6 (1.9) | 9.1 (1.2) | 8.0 (2.7) | 4.1 (1.6) |
| | IO | 1.6 (0.9) | 2.8 (0.2) | 8.1 (1.5) | 6.0 (2.7) | 3.5 (0.8) |

Table S1: Arterial blood gas data. Data presented as group means with standard deviation shown in parentheses. Hgb = hemoglobin; K = potassium; Na = sodium; HCO₃ = bicarbonate; Shock = end of hemorrhage/start of shock; Treatment = end of shock/start of normal saline resuscitation ± VPA treatment; pRBC = start of blood transfusion; End = end of experiment; Control = control group; IV = VPA IV treatment group; IO = VPA IO treatment group.