

## **Cerebral hemodynamic and ventilatory responses to hypoxia, hypercapnia, and hypocapnia during 5 days at 4,350 m.**

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## LEGENDS TO FIGURES IN ONLINE DATA SUPPLEMENT

**Figure 1 online supplement.** Hypoxic responses: Ventilatory ( $V_E$ , panel A), TCD (TCD CVR, panel B) and NIRS (oxyhemoglobin  $HbO_2$ , panel C; tissue oxygenation index TOI, panel D; deoxyhemoglobin HHb, panel E; total hemoglobin  $HbTot$ , panel F) responses to isocapnic hypoxia at sea level (SL), at day 1 (D1) and 5 (D5) at altitude. Changes in  $V_E$ , TCD CVR and NIRS variables are expressed per % of change in arterial  $O_2$  saturation. \* significantly different from SL; + significantly different from D1.

**Figure 2 online supplement.** Individual hypoxic responses: Ventilatory ( $V_E$ , panel A), TCD (TCD CVR, panel B) and NIRS (oxyhemoglobin  $HbO_2$ , panel C; tissue oxygenation index TOI, panel D; deoxyhemoglobin HHb, panel E; total hemoglobin  $HbTot$ , panel F) responses to isocapnic hypoxia at sea level (SL), at day 1 (D1) and 5 (D5) at altitude. Changes in  $V_E$ , TCD CVR and NIRS variables are expressed per mmHg of change in end-tidal  $O_2$  partial pressure. Whiskers under and above the mean values (large horizontal lines) represent the 95% confident interval. \* significantly different from SL; + significantly different from D1.

**Figure 3 online supplement.** Individual hypercapnic responses: Ventilatory ( $V_E$ , panel A), TCD (TCD CVR, panel B) and NIRS (oxyhemoglobin  $HbO_2$ , panel C; tissue oxygenation index TOI, panel D; deoxyhemoglobin HHb, panel E; total hemoglobin  $HbTot$ , panel F) responses to hypercapnia (expressed per mmHg of change in end-tidal  $CO_2$  partial pressure) at sea level (SL), at day 1 (D1) and 5 (D5) at altitude. Whiskers under and above the mean values (large horizontal lines) represent the 95% confident interval. \* significantly different from SL; + significantly different from D1.

**Figure 4 online supplement.** Individual hypocapnic responses: TCD (TCD CVR, panel A) and NIRS (oxyhemoglobin HbO<sub>2</sub>, panel B; tissue oxygenation index TOI; panel C; deoxyhemoglobin HHb, panel D; total hemoglobin HbTot, panel E) responses to hypocapnia (expressed per mmHg of change in end-tidal CO<sub>2</sub> partial pressure) at sea level (SL), at day 1 (D1) and 5 (D5) at altitude. Whiskers under and above the mean values (large horizontal lines) represent the 95% confident interval.







