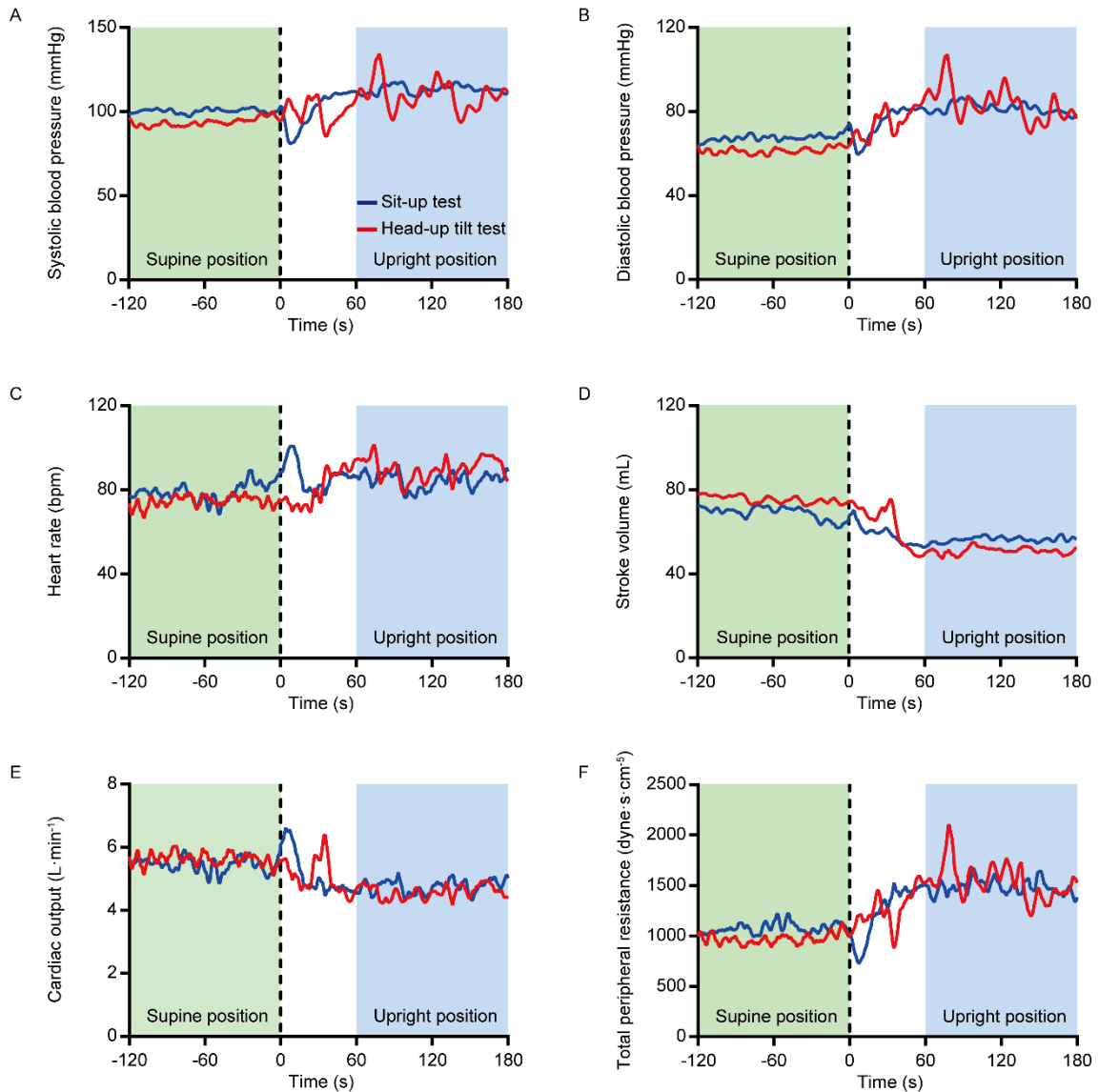


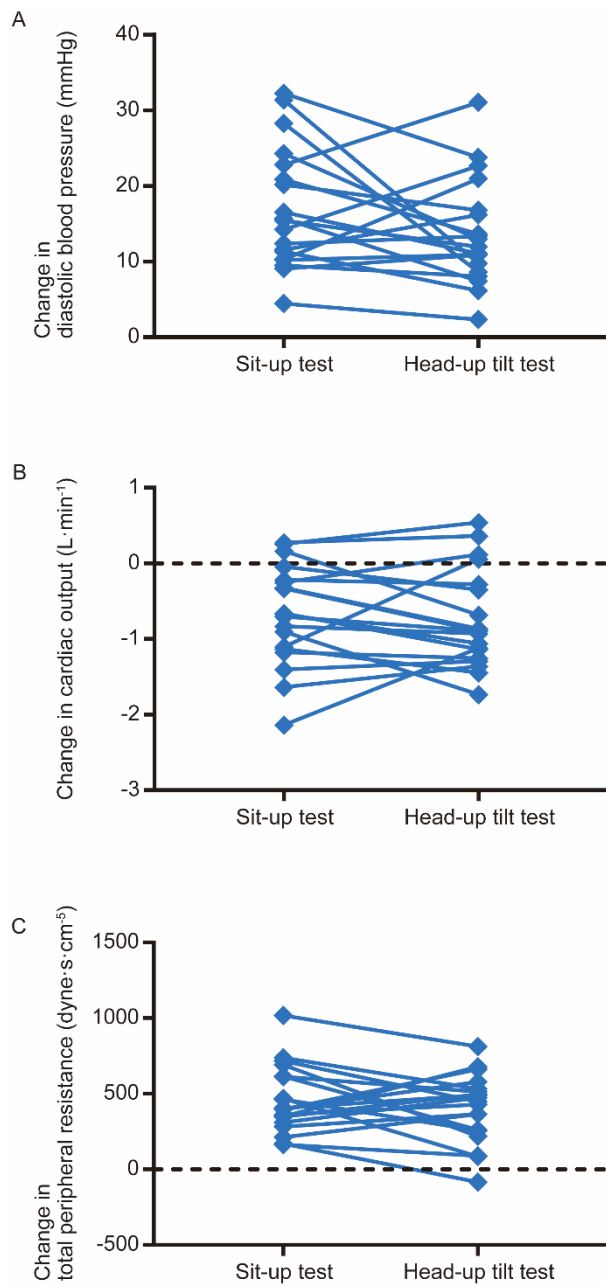
Supplemental Digital Content



Supplementary Fig. 1. Spectrum of blood pressure and hemodynamic responses to sit-up and head-up tilt tests

Representative responses of (A) systolic blood pressure, (B) diastolic blood pressure, (C) heart rate, (D) stroke volume, (E) cardiac output, and (F) total peripheral resistance to the sit-up (blue) and head-up tilt tests (red). The vertical dashed line indicates the start of the

postural change. The average values of blood pressure and hemodynamic variables during the supine and upright periods were calculated from data collected during the final 2 min of each period. The green shaded area indicates the final 2 min of the supine position period, while the blue shaded area indicates the final 2 min of the upright position period. Data were filtered by a ± 5 s moving average filter to remove signal noise.



Supplementary Fig. 2. Comparisons of changes in (A) diastolic blood pressure, (B) cardiac output, and (C) total peripheral resistance between the sit-up and head-up tilt tests

(A) Mean \pm standard deviation of the change in diastolic blood pressure was 17 ± 8 mmHg for the sit-up test and 14 ± 7 mmHg for the head-up tilt test. (B) Mean \pm

standard deviation of the change in cardiac output was $-0.68 \pm 0.66 \text{ L}\cdot\text{min}^{-1}$ for the sit-up test and $-0.75 \pm 0.65 \text{ L}\cdot\text{min}^{-1}$ for the head-up tilt test. (C) Mean \pm standard deviation of the change in total peripheral resistance was $459 \pm 222 \text{ dyne}\cdot\text{s}\cdot\text{cm}^{-5}$ for the sit-up test and $404 \pm 225 \text{ dyne}\cdot\text{s}\cdot\text{cm}^{-5}$ for the head-up tilt test. The changes in these variables did not differ significantly between the tests ($p > 0.05$).