**Table, SDC 3,** **Additional cerebrovascular flow and function measures of wave 2.0 and 3.0 before (T1) and after (T2) the 16-week reduced sitting intervention.** N=15 for vascular measurements, n=14 for cerebrovascular measurements. P-values represent the acute impact of 3-hour sitting (A), whether SIT *versus* BREAKS modifies this effect (A\*B), the impact of the 16-weeks reduced sitting intervention (I) and whether the acute impact of sedentary behavior and/or breaks changed after the reduced sitting intervention (A\*B\*I). Data are reported as mean±SEM.

| **Intervention (I)** | **Pre-intervention** | **Post-intervention** |  | **P-values** |  |
| --- | --- | --- | --- | --- | --- |
| **Breaks (B)** | SIT | BREAKS | SIT | BREAKS |   |  |   |
| **Acute (A)** | 0h | 3h | 0h | 3h | 0h | 3h | 0h | 3h | **A** | **A\*B** | **I** | **A\*B\*I** |
| Cerebrovascular flow and function |
| Hypocapnia |
|   | MAP (mmHg) | 85±2 | 86±2 | 89±2 | 86±2 | 87±2 | 89±2 | 86±2 | 88±2 | 0.66 | 0.54 | 0.47 | 0.25 |
|   | CBFv (cm/s) | 35.7±2.2 | 34.4±2.1 | 31.9±2.1 | 32.6±2.1 | 35.5±2.2 | 36.1±2.1 | 35.5±2.1 | 34.7±2.1 | 0.82 | 0.87 | **0.04** | 0.34 |
|   | CVCi (cm/s/mmHg) | 0.40±0.02 | 0.40±0.02 | 0.36±0.02 | 0.38±0.02 | 0.41±0.02 | 0.40±0.02 | 0.41±0.02 | 0.39±0.02 | 0.87 | 0.84 | 0.84 | 0.39 |
| Hypercapnia |
|   | MAP (mmHg) | 116±3 | 115±3 | 118±3 | 116±3 | 112±3 | 114±3 | 113±3 | 118±3 | 0.48 | 0.76 | 0.19 | 0.79 |
|   | CBFv (cm/s) | 65.5±5.2 | 67.5±5.2 | 59.1±5.1 | 60.3±5.1 | 66.7±5.2 | 67.2±5.1 | 65.3±5.0 | 66.0±5.0 | 0.54 | 0.93 | 0.10 | 0.89 |
|   | CVCi (cm/s/mmHg) | 0.57±0.04 | 0.60±0.04 | 0.51±0.04 | 0.52±0.04 | 0.59±0.04 | 0.58±0.04 | 0.58±0.04 | 0.56±0.04 | 0.82 | 0.70 | 0.17 | 0.99 |
| Slow sit-stands |
|   | MAP (mmHg) | 100±2 | 105±2 | 100±2 | 102±2 | 101±2 | 104±2 | 102±2 | 104±2 | **<0.01** | 0.18 | 0.12 | 0.58 |
|   | CBFv (cm/s) | 45.5±2.9 | 46.1±2.9 | 42.9±2.8 | 44.2±3.0 | 47.3±2.8 | 47.4±2.9 | 45.9±2.7 | 47.8±2.8 | 0.43 | 0.62 | 0.05 | 0.82 |
|  | CVCi (cm/s/mmHg) | 0.46±0.03 | 0.44±0.03 | 0.43±0.03 | 0.44±0.03 | 0.47±0.03 | 0.46±0.03 | 0.45±0.03 | 0.46±0.03 | 0.79 | 0.42 | 0.16 | 0.94 |
|  | Gain (cm/s/mmHg) | 0.38±0.04 | 0.40±0.04 | 0.34±0.04 | 0.36±0.04 | 0.44±0.04 | 0.45±0.04 | 0.39±0.04 | 0.42±0.04 | 0.35 | 0.75 | **<0.01** | 0.83 |
|  | nGain (%/mmHg) | 0.85±0.10 | 0.87±0.10 | 0.82±0.10 | 0.83±0.11 | 0.99±0.10 | 0.99±0.10 | 0.87±0.10 | 0.89±0.1 | 0.79 | 0.91 | **0.03** | 0.86 |
|  | Phase (degrees) | 52±6 | 49±6 | 49±6 | 42±6 | 41±6 | 46±6 | 44±6 | 50±6 | 0.97 | 0.84 | 0.49 | 0.72 |
|   | Coherence (unit) | 0.62±0.04 | 0.58±0.04 | 0.54±0.04 | 0.6±0.05 | 0.66±0.04 | 0.64±0.04 | 0.55±0.04 | 0.63±0.04 | 0.40 | 0.05 | 0.14 | 0.98 |
|  | Gain BRS (ms/mmHg) | 3.2±0.5 | 3.6±0.5 | 3.3±0.4 | 2.7±0.5 | 3.2±0.5 | 3.4±0.4 | 3.3±0.4 | 3.8±0.4 | 0.63 | 0.45 | 0.30 | 0.18 |