

**Online Table 1A. Blood variables at rest and during ACh infusion**

| Blood variable           | Young    |           |          |          |          |          |
|--------------------------|----------|-----------|----------|----------|----------|----------|
|                          | Rest     |           | ACh 1    |          | ACh 2    |          |
|                          | CON      | SILD      | CON      | SILD     | CON      | SILD     |
| PO2 (mmHg)               |          |           |          |          |          |          |
| a                        | 105±3    | 108±3     | 104±2    | 106±2    | 104±2    | 106±2    |
| v                        | 39±1     | 45±2*     | 66±4     | 67±3     | 74±2     | 74±3     |
| Hemoglobin (g dl-1)      |          |           |          |          |          |          |
| a                        | 13.8±0.2 | 13.8±0.2  | 13.9±0.2 | 13.8±0.2 | 13.9±0.2 | 13.8±0.2 |
| v                        | 13.8±0.2 | 13.4±0.2  | 13.7±0.2 | 13.6±0.2 | 13.6±0.2 | 13.6±0.2 |
| O2 saturation (%)        |          |           |          |          |          |          |
| a                        | 98.2±0.2 | 98.3±0.1  | 98.1±0.1 | 98.2±0.1 | 98.1±0.1 | 98.2±0.1 |
| v                        | 71.8±1.9 | 80.4±2.1* | 91.8±1.7 | 93.0±1.2 | 94.9±0.4 | 94.8±0.5 |
| O2 content (ml l-1)      |          |           |          |          |          |          |
| a                        | 184±3    | 184±3     | 186±2    | 185±3    | 186±2    | 185±3    |
| v                        | 134±5    | 146±5*    | 170±5    | 171±3    | 176±3    | 175±3    |
| Leg VO2 (ml min-1)       |          |           |          |          |          |          |
|                          | 15±2     | 20±3      | 22±4     | 29±8     | 24±5     | 29±5     |
| Heart rate (beats min-1) |          |           |          |          |          |          |
|                          | 63±3     | 63±3      | 69±3     | 70±2     | 74±3     | 72±3     |
| FVP (mmHg)               |          |           |          |          |          |          |
|                          | 4.3±0.8  | 2.4±0.5*  | 4.5±0.8  | 3.1±0.8* | 4.7±0.7  | 3.5±0.7  |

a: femoral arterial; v. femoral venous. Significant difference from CON within same condition: \*P < 0.05.

**Online Table 1B. Blood variables at rest and during ACh infusion**

| Blood variable           | Older     |            |           |            |           |            |
|--------------------------|-----------|------------|-----------|------------|-----------|------------|
|                          | Rest      |            | ACh 1     |            | ACh 2     |            |
|                          | CON       | SILD       | CON       | SILD       | CON       | SILD       |
| PO2 (mmHg)               |           |            |           |            |           |            |
| a                        | 85±6#     | 77±5#      | 82±4#     | 79±6#      | 83±4#     | 79±6#      |
| v                        | 40±2      | 42±2       | 55±3#     | 53±4#      | 65±4      | 60±3#      |
| Hemoglobin (g dl-1)      |           |            |           |            |           |            |
| a                        | 12.9±0.3# | 12.3±0.4*# | 12.8±0.4# | 12.4±0.4*# | 12.8±0.4# | 12.4±0.4*# |
| v                        | 12.7±0.3# | 12.3±0.4*# | 12.8±0.4# | 12.2±0.3*# | 12.7±0.4# | 12.4±0.4#  |
| O2 saturation (%)        |           |            |           |            |           |            |
| a                        | 95.6±0.7# | 94.5±0.8*# | 95.8±0.5# | 94.3±1.0*# | 95.8±0.5# | 94.3±1.0*# |
| v                        | 73.0±2.8  | 75.4±2.9   | 85.7±2.3  | 84.2±3.7#  | 90.1±0.9# | 89.4±1.7#  |
| O2 content (ml l-1)      |           |            |           |            |           |            |
| a                        | 167±4#    | 159±5*#    | 167±5#    | 159±5*#    | 167±5#    | 159±5*#    |
| v                        | 124±4     | 125±6#     | 148±4#    | 139±6#     | 156±5#    | 151±4*#    |
| Leg VO2 (ml min-1)       |           |            |           |            |           |            |
|                          | 13±3      | 19±5       | 17±3      | 16±4       | 23±4      | 19±6       |
| Heart rate (beats min-1) |           |            |           |            |           |            |
|                          | 62±3      | 64±5       | 64±3      | 66±4       | 68±3      | 68±4       |
| FVP (mmHg)               |           |            |           |            |           |            |
|                          | 3.9±0.6   | 3.7±0.7    | 4.5±0.6   | 4.2±0.7    | 4.7±0.7   | 4.4±0.6    |

a: femoral arterial; v. femoral venous. Significant difference from CON within same condition: \*P < 0.05.

significant difference from young within same condition: #P < 0.05.

**Online Table 2A. Blood variables at rest and during SNP infusion**

| Blood variable                        | Young    |          |          |          |
|---------------------------------------|----------|----------|----------|----------|
|                                       | Rest     |          | SNP      |          |
|                                       | CON      | SILD     | CON      | SILD     |
| PO2 (mmHg)                            |          |          |          |          |
| a                                     | 106±3    | 109±4    | 108±2    | 102±2*   |
| v                                     | 40±2     | 43±2     | 70±6     | 68±1     |
| Hemoglobin (g dl <sup>-1</sup> )      |          |          |          |          |
| a                                     | 13.9±0.3 | 13.7±0.2 | 14.1±0.3 | 13.8±0.2 |
| v                                     | 13.5±0.3 | 13.2±0.2 | 14.1±0.4 | 13.4±0.2 |
| O2 saturation (%)                     |          |          |          |          |
| a                                     | 98.2±0.1 | 98.3±0.2 | 98.3±0.1 | 98.1±0.1 |
| v                                     | 73.4±1.8 | 75.4±3.0 | 92.8±0.7 | 93.6±0.4 |
| O2 content (ml l <sup>-1</sup> )      |          |          |          |          |
| a                                     | 185±4    | 184±3    | 188±4    | 183±3    |
| v                                     | 134±5    | 135±6    | 178±5    | 170±3    |
| Leg VO2 (ml min <sup>-1</sup> )       |          |          |          |          |
|                                       | 14±2     | 18±2     | 13±3     | 20±3     |
| Heart rate (beats min <sup>-1</sup> ) |          |          |          |          |
|                                       | 64±3     | 60±3     | 70±3     | 71±3     |
| FVP (mmHg)                            |          |          |          |          |
|                                       | 3.5±0.7  | 2.8±0.8* | 3.2±0.7  | 2.7±0.7* |

a: femoral arterial; v. femoral venous. Significant difference from CON within same condition:

\*P < 0.05.

**Online Table 2B. Blood variables at rest and during SNP infusion**

| Blood variable           | Older     |            |           |            |
|--------------------------|-----------|------------|-----------|------------|
|                          | Rest      |            | SNP       |            |
|                          | CON       | SILD       | CON       | SILD       |
| PO2 (mmHg)               |           |            |           |            |
| a                        | 85±4      | 76±5*#     | 84±4      | 78±5*      |
| v                        | 38±1      | 41±2       | 59±2      | 57±3       |
| Hemoglobin (g dl-1)      |           |            |           |            |
| a                        | 12.8±0.4# | 12.3±0.4#  | 12.7±0.3# | 12.2±0.3#  |
| v                        | 12.5±0.3# | 12.2±0.3#  | 12.7±0.4# | 12.2±0.3#  |
| O2 saturation (%)        |           |            |           |            |
| a                        | 96.1±0.5# | 94.4±1.0*# | 96.2±0.6# | 94.8±0.7*# |
| v                        | 70.1±1.2# | 73.4±3.1#  | 88.8±1.4# | 87.8±2.2#  |
| O2 content (ml l-1)      |           |            |           |            |
| a                        | 167±5#    | 157±4*#    | 167±4#    | 157±4*#    |
| v                        | 119±3#    | 121±6      | 153±4#    | 146±4#     |
| Leg VO2 (ml min-1)       |           |            |           |            |
|                          | 16±4      | 16±4       | 18±4      | 19±4       |
| Heart rate (beats min-1) |           |            |           |            |
|                          | 61±3      | 60±4       | 68±3      | 69±4       |
| FVP (ml min-1 mmHg-1)    |           |            |           |            |
|                          | 4.1±0.5   | 3.9±0.7*   | 3.7±0.6   | 4.3±0.9    |

a: femoral arterial; v. femoral venous. Significant difference from CON within same condition:

\*P < 0.05; significant difference from young within same condition: #P < 0.05.