**SDC 3, Table 2 – Arterial blood gases and mean arterial pressure**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | Groups | BASELINE | FINAL | Time effect | Group effect | Interaction |
| **PaO2/FiO2** |  |  |  | p=0.019 | p=0.434 | p=0.654 |
|  | Control | 216 ± 52 | 284 ± 65 |  |  |  |
|  | Abrupt increase of RR for 1 h | 278 ± 35 | 293 ± 25 |  |  |  |
|  | Abrupt increase of RR for 2 h | 274 ± 86 | 349 ± 57 |  |  |  |
|  | Shorter RR adaptation | 272 ± 44 | 288 ± 86 |  |  |  |
|  | Longer RR adaptation | 280 ± 43 | 320 ± 54 |  |  |  |
| **PaCO2 (mmHg)** |  |  |  | p=0.668 | p=0.952 | p=0.225 |
|  | Control | 35 ± 7 | 38 ± 7 |  |  |  |
|  | Abrupt increase of RR for 1 h | 38 ± 6 | 34 ± 7 |  |  |  |
|  | Abrupt increase of RR for 2 h | 35 ± 11 | 35 ± 5 |  |  |  |
|  | Shorter RR adaptation | 35 ± 3 | 39 ± 7 |  |  |  |
|  | Longer RR adaptation | 39 ± 8 | 32 ± 7 |  |  |  |
| **pHa** |  |  |  | p=0.313 | p=0.015 | p=0.232 |
|  | Control | 7.32 ± 0.04 | 7.35 ± 0.05 |  |  |  |
|  | Abrupt increase of RR for 1 h | 7.30 ± 0.05 | 7.36 ± 0.04 |  |  |  |
|  | Abrupt increase of RR for 2 h | 7.42 ± 0.06\* | 7.38 ± 0.05 |  |  |  |
|  | Shorter RR adaptation | 7.35 ± 0.06 | 7.35 ± 0.06 |  |  |  |
|  | Longer RR adaptation | 7.34 ± 0.08 | 7.35 ± 0.04 |  |  |  |
| **HCO3 (mmol/L)** |  |  |  | p=0.589 | p=0.271 | p=0.720 |
|  | Control | 20 ± 4 | 21 ± 2 |  |  |  |
|  | Abrupt increase of RR for 1 h | 19 ± 3 | 20 ± 3 |  |  |  |
|  | Abrupt increase of RR for 2 h | 23 ± 3 | 22 ± 3 |  |  |  |
|  | Shorter RR adaptation | 20 ± 3 | 20 ± 3 |  |  |  |
|  | Longer RR adaptation | 21 ± 5 | 19 ± 5 |  |  |  |
| **MAP (mmHg)** |  |  |  | p=0.208 | p=0.079 | p=0.794 |
|  | Control | 116 ± 2 | 117± 3 |  |  |  |
|  | Abrupt increase of RR for 1 h | 114 ± 5 | 110 ± 4 |  |  |  |
|  | Abrupt increase of RR for 2 h | 114 ± 4 | 111 ± 4 |  |  |  |
|  | Shorter RR adaptation | 114 ± 5 | 113 ± 4 |  |  |  |
|  | Longer RR adaptation | 111 ± 7 | 110 ± 9 |  |  |  |

Blood gas variables after collected an arterial blood sample and mean arterial pressure (MAP) using arterial invasive line obtained at BASELINE and FINAL. Arterial oxygen partial pressure (PaO2), inspired fraction of oxygen (FiO2), arterial carbon dioxide partial pressure (PaCO2), arterial pH (pHa) and bicarbonate levels (HCO3-). To compare functional parameters over time, a mixed linear model based on random intercept was used for each animal, followed by the Holm-Sidak test (p<0.05). \*Significantly different from Control group.