Supplemental Table 1: Mitochondrial respiration measures determined using OroBors high resolution respirometry Protocol 1. Since all OroBoros measurements originate from the same muscle biopsy sample, these are presented as technical replicates (with the exception of State 4o). All outcomes have units of (pmol O2/sec/mg tissue).

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | PreBR | PostBR | Post-Rehab | *p-values* |
|  | **CON** | **LEU** | **CON** | **LEU** | **CON** | **LEU** | Time | Treatment | Time x Trt |
| State 2 | 16.2 ± 3.11 | 13.8 ± 2.61 | 11.8 ± 2.06 | 14.7 ± 2.50 | 11.6 ± 3.34 | 14.9 ± 3.38 | 0.40 | 0.70 | 0.13 |
| State 3 | 23.1 ± 4.24 | 19.6 ± 4.95 | 17.4 ± 2.95 | 21.4 ± 4.73 | 18.5 ± 2.95 | 25.6 ± 4.56 | 0.69 | 0.61 | 0.15 |
| Oxidative Phosphorylation | 35.3 ± 5.57 | 27.9 ± 5.69 | 29.2 ± 3.78 | 34.9 ± 5.71 | 28.4 ± 5.81 | 39.4 ± 4.12 | 0.86 | 0.57 | 0.087 |
| State 4o | 14.0 ± 2.35 | 13.5 ± 3.00 | 11.9 ±1.59 | 14.0 ±2.03 | 11.3 ± 2.01 | 16.4 ± 3.19 | 0.76 | 0.47 | 0.071 |