**Supplementary table 4. Mean values for dynamic endocrine function tests**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **FSH concentration (figure 3A)** | | | | | | | | | | | | | | | | | | | | | | | |
|  | | | | Baseline | | | | 20 min | | | | 30 min | | | | | 40 min | | | | 60 min | | |
| Pre-Ex | | | | 5.83 (2.66) | | | | 6.91 (2.38) | | | | 7.28 (2.49) | | | | | 7.25 (2.33) | | | | 7.05 (2.1) | | |
| Ex + 5 days | | | | 5.3 (3.33) | | | | 6.31 (3.65) | | | | 6.55 (3.77) | | | | | 6.71 (3.79) | | | | 6.27 (3.42) | | |
| Ex + 16 days | | | | 3.5 (1.18) | | | | 4.67 (1.65) | | | | 4.91 (1.73) | | | | | 5.03 (1.8) | | | | 4.86 (1.68) | | |
| **FSH concentration relative to baseline (figure 3B)** | | | | | | | | | | | | | | | | | | | | | | | |
| Pre-Ex | | | |  | | | | 1.24 (0.25) | | | | 1.32 (0.28) | | | | | 1.31 (0.26) | | | | 1.29 (0.28) | | |
| Ex + 5 days | | | |  | | | | 1.29 (0.26) | | | | 1.37 (0.36) | | | | | 1.43 (0.44) | | | | 1.34 (0.4) | | |
| Ex + 16 days | | | |  | | | | 1.33 (0.18) | | | | 1.40 (0.20) | | | | | 1.43 (0.18) | | | | 1.39 (0.19) | | |
| **LH concentration (figure 3C)** | | | | | | | | | | | | | | | | | | | | | | | |
| Pre-Ex | | | | 5.36 (2.04) | | | | 13.59 (4.35) | | | | 13.73 (4.03) | | | | | 12.90 (4.03) | | | | 10.89 (3.68) | | |
| Ex + 5 days | | | | 5.13 (3.70) | | | | 10.49 (7.10) | | | | 10.84 (7.63) | | | | | 9.92 (7.12) | | | | 8.25 (5.95) | | |
| Ex + 5 days | | | | 3.42 (1.43) | | | | 12.67 (4.42) | | | | 13.03 (4.18) | | | | | 12.12 (4.15) | | | | 10.04 (3.08) | | |
| **LH concentration relative to baseline (figure 3D)** | | | | | | | | | | | | | | | | | | | | | | | |
| Pre-Ex | | | |  | | | | 2.68 (0.82) | | | | 2.74 (0.91) | | | | | 2.57 (0.86) | | | | 2.14 (0.63) | | |
| Ex + 5 days | | | |  | | | | 2.24 (0.64) | | | | 2.40 (0.87) | | | | | 2.12 (0.72) | | | | 1.82 (0.65) | | |
| Ex + 5 days | | | |  | | | | 4.10 (1.86) | | | | 4.19 (1.75) | | | | | 3.86 (1.49) | | | | 3.24 (1.31) | | |
| **Cortisol concentration (figure 4A)** | | | | | | | | | | | | | | | | | | | | | | | |
| Pre-Ex | | | | 73.25 (45.23) | | | | 127.54 (39.77) | | | | 128.14 (33.82) | | | | | 110.53 (28.95) | | | | 100.60 (19.9) | | |
| Ex + 5 days | | | | 61.66 (33.11) | | | | 130.53 (14.62) | | | | 140.09 (23.50) | | | | | 131.77 (19.47) | | | | 110.16 (21.39) | | |
| Ex + 5 days | | | | 54.43 (28.60) | | | | 122.21 (21.50) | | | | 125.79 (8.02) | | | | | 137.61 (26.91) | | | | 113.19 (12.03) | | |
| **Hair cortisol by month (figure 4B)** | | | | | | | | | | | | | | | | | | | | | | | |
| Month\* | | Apr | May | | | Jun | | | Jul | | Aug | | | Sep | Oct | | | Nov | | Dec | | Jan | |
|  | | 8.36 (2.89) | 11.40 (1.78) | | | 10.83 (3.43) | | | 11.96 (4.89) | | 11.58 (4.68) | | | 9.50 (4.94) | 35.22 (29.31) | | | 38.86 (36.2) | | 41.48 (48.56) | | 54.79 (75.41) | |
| **Diurnal Hair cortisol post-Ex (figure 4C)** | | | | | | | | | | | | | | | | | | | | | | | |
| Ex+1 day PM | | | | Ex+2 days AM | | | | Ex+4 days PM | | | | Ex+5 days AM | | | | | Ex+10 days PM | | | | Ex+11 days AM | | |
| 6.38 (4.24) | | | | 6.89 (7.74) | | | | 3.47 (2.45) | | | | 4.86 (3.73) | | | | | 1.37 (0.55) | | | | 10.29 (4.15) | | |
| **Hair cortisol day curve (figure 4D)** | | | | | | | | | | | | | | | | | | | | | | | |
| Time | 07:10 | | | | 08:30 | | 09:00 | | | 09:30 | | | 12:15 | | | 13:30 | | | 17:20 | | | | 21:50 |
| Pre-Ex | 13.68 (6.16) | | | | 7.03 (5.37) | | 6.48 (4.76) | | | 3.97 (1.43) | | | 3.36 (1.79) | | | 4.6 (2.39) | | | 3.26 (2.42) | | | | 2.68 (2.75) |
| Post-Ex | 10.31 (5.63) | | | | 6.39 (3.2) | | 3.82 (1.39) | | | 3.47 (1.52) | | | 2.2 (0.85) | | | 3.17 (1.79) | | | 2.18 (0.97) | | | | 0.86 (0.50) |

Baseline: immediately prior to dynamic function test, LH: luteinizing hormone, FSH: follicle stimulating hormone, Ex: expedition