**Supplementary Table 2.** Comparisons of carbohydrate and lipid biomarkers in normal cycling women, and normoandrogenemic and hyperandrogenemic women with polycystic ovary syndrome.\*

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Variable\*\*** | **Controls** | |  | **NA-PCOS** | |  | **HA-PCOS** | |  | **All PCOS** | |  |
| **Median** | **IQR** |  | **Median** | **IQR** |  | **Median** | **IQR** |  | **Median** | **IQR** |  |
| Insulin (pmol/l) | 47.8 | (30-2-69.2) |  | 70.8 | (42.6-100.0) |  | 85.1 | (52.5-128.8) |  | 81.2 | (47.8-123.0)a,b,e,i\*\*\* |  |
| CA | 46.7 | (29.5-67.5) |  | 63.8 | (82.6-92.9) |  | 82.6 | (49.2-123.0) |  | 75.8 | (46.7-114.8) |  |
| AD | 40.9 | (29.8-56.2) |  | 100.4 | (82.6-127.6) |  | 102.6 | (56.5-159.5) |  | 97.7 | (58.8-151.3) |  |
| OT | 71.4 | (68.7-91.4) | p= 0.110\*\*\*\* | 80.2 | (46.5-104.8) | p= 0.044 | 95.6 | (60.0-149.8) | p= 0.197 | 91.2 | (57.5-141.2) | p= 0.027 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Glucose (nmol/l) | 4.7 | (4.4-5.0) |  | 4.8 | (4.6-5.0) |  | 4.9 | (4.5-5.2) |  | 4.7 | (4.5-5.1)b,e |  |
| CA | 4.7 | (4.4-5.0) |  | 4.7 | (4.5-5.0) |  | 4.9 | (4.4-5.1) |  | 4.8 | (4.5-5.1) |  |
| AD | 4.6 | (4.4-4.9) |  | 4.9 | (4.8-5.2) |  | 4.8 | (4.6-5.3) |  | 4.9 | (4.8-5.4) |  |
| OT | 4.7 | (4.5-5.0) | p= 0.503 | 4.7 | (4.5-4.9) | p= 0.103 | 4.9 | (4.6-5.2) | p= 0.146 | 4.8 | (4.6-5.2) | p= 0.010 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gluc/Ins (ratio) | 12.6 | (8.5-19.5) |  | 8.3 | (5.8-13.5) |  | 6.9 | (4.7-11.2) |  | 7.2 | (5.0-12.0)a,b,e |  |
| CA | 12.8 | (8.7-20.5) |  | 9.5 | (6.3-13.8) |  | 7.4 | (5.0-12.3) |  | 7.8 | (5.3-12.7) |  |
| AD | 13.0 | (9.0-19.2) |  | 6.0 | (4.7-7.7) |  | 6.1 | (3.9-9.5) |  | 6.4 | (4.1-9.6) |  |
| OT | 7.7 | (7.3-8.7) | p= 0.010 | 7.2 | (5.4-14.1) | p= 0.044 | 6.7 | (4.2-10.4) | p= 0.118 | 6.7 | (4.4-10.5) | p= 0.030 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| HbA1C (%) | 5.0 | (4.8-5.1) |  | 5.2 | (4.9-5.5) |  | 5.2 | (4.9-5.8) |  | 5.6 | (5.0-5.7)a,b,e |  |
| CA | 4.9 | (4.7-5.1) |  | 5.2 | (4.8-5.5) |  | 5.3 | (5.0-5.7) |  | 5.2 | (5.0-5.6) |  |
| AD | 5.0 | (4.8-5.3) |  | 6.3 | (5.8-7.4) |  | 5.7 | (5.2-7.2) |  | 5.8 | (5.2-7.3) |  |
| OT | 4.9 | (4.8-5.3) | p= 0.803 | 5.3 | (5.1-5.7) | p= 0.009 | 5.3 | (5.0-6.3) | p= 0.007 | 5.3 | (5.0-6.0) | p <0.001 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| HOMA-IR | 0.9 | (0.5-1.3) |  | 1.2 | (0.9-1.9) |  | 1.5 | (1.0-2.3) |  | 1.4 | (0.9-2.9)a,b,e,j |  |
| CA | 0.8 | (0.4-1.1) |  | 1.3 | (0.8-1.7) |  | 1.4 | (0.8-2.3) |  | 1.4 | (0.8-2.2) |  |
| AD | 0.7 | (0.4-1.1) |  | 1.8 | (1.5-2.2) |  | 1.8 | (1.0-3.0) |  | 1.8 | (1.0-2.7) |  |
| OT | 1.2 | (1.1-1.6) | p= 0.011 | 1.5 | (0.8-1.9) | p= 0.057 | 1.8 | (1.0-2.7) | p= 0.062 | 1.7 | (1.0-2.6) | p= 0.023 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| HOMA% B | 97.7 | (74.1-125.9) |  | 126.7 | (90.0-158.5) |  | 134.9 | (93.3-177.8) |  | 131.8 | (93.3-169.8)a,b,e |  |
| CA | 98.0 | (74.1-120.1) |  | 123.0 | (89.1-151.3) |  | 128.8 | (93.3-173.7) |  | 125.9 | (79.4-165.9) |  |
| AD | 87.6 | (74.3-117.0) |  | 154.8 | (123.0-169.8) |  | 151.3 | (102.3-177.8) |  | 147.9 | (102.3-173.7) |  |
| OT | 126.3 | (120.3-154.2) | p= 0.022 | 138.0 | (75.8-186.2) | p= 0.296 | 138.0 | (104.7-181.9) | p= 0.330 | 138.0 | (102.5-186.2) | p= 0.200 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| HDL-C | 1.3 | (1.1-1.5) |  | 1.2 | (1.0-1.4) |  | 1.1 | (1.0-1.3) |  | 1.1 | (1.0-1.3)a,b,e |  |
| CA | 1.9 | (1.4-2.4) |  | 1.2 | (1.1-1.4) |  | 1.1 | (1.0-1.3) |  | 1.2 | (1.0-1.4) |  |
| AD | 1.4 | (1.1-2.0) |  | 1.0 | (0.7-1.1) |  | 1.1 | (0.9-1.2) |  | 1.1 | (0.9-1.2) |  |
| OT | 1.1 | (0.8-2.1) | p= 0.045 | 0.9 | (0.8-1.2) | p= 0.004 | 1.0 | (0.8-1.3) | p= 0.049 | 1.0 | (0.8-1.3) | p= 0.001 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| LDL-C | 2.4 | (2.0-2.9) |  | 2.7 | (2.3-3.2) |  | 2.8 | (2.3-3.5) |  | 2.8 | (2.3-3.4)a,b,e |  |
| CA | 2.4 | (2.0-2.9) |  | 2.7 | (2.2-3.1) |  | 2.8 | (2.3-3.5) |  | 2.8 | (2.3-3.4) |  |
| AD | 2.4 | (2.1-2.9) |  | 2.8 | (2.6-3.4) |  | 2.8 | (2.2-3.4) |  | 2.8 | (2.3-3.3) |  |
| OT | 2.6 | (1.9-3.0) | p= 0.927 | 3.1 | (2.7-4.2) | p= 0.100 | 2.9 | (2.2-3.4) | p= 0.531 | 2.9 | (2.3-3.4) | p= 0.854 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| TG | 0.9 | (0.6-1.1) |  | 0.9 | (0.7-1.3) |  | 1.2 | (0.8-1.8) |  | 1.2 | (0.8-1.6)b,e,h,i |  |
| CA | 0.9 | (1.4-2.5) |  | 0.9 | (0.7-1.3) |  | 1.2 | (0.8-1.7) |  | 1.1 | (0.8-1.6) |  |
| AD | 1.9 | (1.5-2.6) |  | 1.0 | (0.7-2.7) |  | 1.2 | (0.8-1.6) |  | 1.0 | (0.8-1.6) |  |
| OT | 2.2 | (1.5-2.7) | p= 0.858 | 1.2 | (0.6-2.0) | p= 0.683 | 1.2 | (0.7-2.3) | p= 0.620 | 1.2 | (0.7-2.3) | p= 0.758 |

\*Results are given in median and interquatile range (IQR); CA= Caucasian, AD= African descendent, OT= Other races; \*\*All abbreviations were given along the text; \*\*\*Kruskal-Wallis H test followed by Dunn-Bonferroni post hoc test

a= controls vs NA-PCOS, p <0.01; b= controls vs PCOS, p <0.01; c= controls vs NA-PCOS, p <0.05; d= controls vs PCOS, p <0.05; e= controls vs HA-PCOS, p <0.01; f= controls vs HA-PCOS, p <0.05; g= NA-PCOS vs PCOS, p <0.01; h= NA-PCOS vs PCOS, p <0.05; i= NA-PCOS vs HA-PCOS, p <0.01; j= NA-PCOS vs HA-PCOS, p <0.05

\*\*\*\*p-value compares the influence of ethnicities within each variable