|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2.** Relationships between twin, diamniotic, dichorionic pregnancy (vs. singleton pregnancy) and relevant parameters (with significant variable importance, p<0.05) in serum from umbilical vein at labour as evaluated by OPLS and ordinary multiple regression (OMR) models (for details see Statistical analysis) | | | | | | | | | | | | |
|  |  | **OPLS, predictive component** | | | | | | |  | **Multiple regression** | | |
|  | **Variable** | Variable importance | t-statistics | | Component loading | t-statistics | R*a* | |  | Regression coefficient | t-statistics | |
| EXPLAINING VARIABLES | Gestational age | 1.149 | 4.13 | \*\* | -0.173 | -3.82 | -0.507 | \*\* |  | -0.062 | -3.41 | \*\* |
| Pregnenolone, C | 1.032 | 4.03 | \*\* | -0.235 | -6.58 | -0.686 | \*\* |  | -0.056 | -3.60 | \*\* |
| 17-Hydroxypregnenolone, C | 0.465 | 3.46 | \*\* | -0.149 | -3.32 | -0.441 | \*\* |  | -0.025 | -3.64 | \*\* |
| 16α-Hydroxypregnenolone | 0.924 | 5.93 | \*\* | 0.156 | 3.28 | 0.456 | \*\* |  | 0.050 | 6.06 | \*\* |
| 20α-Dihydropregnenolone, C | 0.748 | 4.18 | \*\* | -0.207 | -5.40 | -0.607 | \*\* |  | -0.041 | -4.21 | \*\* |
| Dehydroepiandrosterone, C | 1.061 | 3.65 | \*\* | -0.220 | -3.81 | -0.643 | \*\* |  | -0.058 | -3.34 | \*\* |
| 5-Androstene-3β,16α,17β-triol, C | 0.811 | 3.99 | \*\* | -0.229 | -4.52 | -0.669 | \*\* |  | -0.044 | -4.94 | \*\* |
| 20α-Dihydroprogesterone | 0.855 | 3.41 | \*\* | 0.208 | 4.66 | 0.608 | \*\* |  | 0.046 | 3.14 | \*\* |
| Epitestosterone, C | 0.67 | 3.60 | \*\* | -0.157 | -3.82 | -0.459 | \*\* |  | -0.036 | -4.41 | \*\* |
| 5α-Dihydroprogesterone | 1.446 | 8.30 | \*\* | 0.283 | 7.78 | 0.829 | \*\* |  | 0.079 | 6.01 | \*\* |
| Allopregnanolone | 1.163 | 7.63 | \*\* | 0.277 | 14.49 | 0.811 | \*\* |  | 0.063 | 7.65 | \*\* |
| Isopregnanolone | 1.464 | 10.67 | \*\* | 0.293 | 15.74 | 0.858 | \*\* |  | 0.080 | 7.50 | \*\* |
| Epipregnanolone | 0.713 | 2.86 | \* | 0.137 | 3.65 | 0.399 | \*\* |  | 0.039 | 2.82 | \* |
| 5α,20α-Tetrahydroprogesterone | 1.275 | 19.49 | \*\* | 0.275 | 12.21 | 0.804 | \*\* |  | 0.069 | 9.69 | \*\* |
| 5α-Pregnane-3α,20α-diol | 1.101 | 6.52 | \*\* | 0.261 | 18.31 | 0.765 | \*\* |  | 0.060 | 7.03 | \*\* |
| 5α-Pregnane-3β,20α-diol | 1.328 | 10.23 | \*\* | 0.278 | 19.85 | 0.815 | \*\* |  | 0.072 | 8.05 | \*\* |
| 5β,20α-Tetrahydroprogesterone | 0.664 | 3.09 | \*\* | 0.112 | 3.05 | 0.326 | \*\* |  | 0.036 | 2.55 | \* |
| 5β-Pregnane-3β,20α-diol | 0.552 | 4.37 | \*\* | 0.114 | 5.48 | 0.332 | \*\* |  | 0.030 | 4.06 | \*\* |
| 17-Hydroxyallopregnanolone | 0.711 | 3.10 | \*\* | 0.187 | 8.99 | 0.546 | \*\* |  | 0.039 | 3.66 | \*\* |
| Epiandrosterone, C | 0.923 | 3.46 | \*\* | -0.174 | -3.63 | -0.509 | \*\* |  | -0.050 | -3.14 | \*\* |
| 11-Deoxycorticosterone | 0.811 | 9.37 | \*\* | 0.119 | 3.36 | 0.350 | \*\* |  | 0.044 | 7.04 | \*\* |
| 3α,5β-Tetrahydrocorticosterone | 1.426 | 11.13 | \*\* | 0.242 | 7.01 | 0.700 | \*\* |  | 0.078 | 6.30 | \*\* |
| 11β-Hydroxyepiandrosterone | 0.729 | 3.65 | \*\* | 0.203 | 7.56 | 0.595 | \*\* |  | 0.040 | 3.78 | \*\* |
|  | Twins (diamniotic dichorionic) |  |  |  | 1.000 | 19.20 | 0.764 | \*\* |  |  | | |
| Explained variability = 58.3% (55.3% after cross-validation), Sensitivity = 0.943(0.866-1), Specificity = 0.8(0.598-1) | | | | | | | | | | | | |
| *aR…Component loading expressed as a correlation coefficient with predictive component, \*p<0.05, \*\*p<0.01, LLR…logarithm of likelihood ratio (the ratio of the probability that the phenomenon occurs - twin pregnancy) to the probability that the phenomenon does not occur - singleton pregnancy), C…conjugated steroid* | | | | | | | | | | | | |