**Suppl. Table 1**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| AHR agonistic activity (%) | | | | | |
| sex | female | | male | |  |
|  | Median | Q1; Q3 | Median | Q1; Q3 |
| *cohorts* |  |  |  |  |
| *controls* | 96.22 | 86.83; 106.65 | 96.45 | 91.53; 102.82 |
| *CIS* | 91.06 | 85.83; 101.85 | 92.73 | 89.49; 103.16 |
| *RRMS relapse* | 94.90 | 84.17; 102.88 | 92.95 | 90.36; 102.71 |
| *RRMS remission* | 81.43 | 72.88; 87.65 | 77.63 | 73.12; 85.17 |
| *SPMS* | 83.21 | 75.11; 92.52 | 87.62 | 83.70; 94.12 |
| *PPMS* | 86.17 | 76.75; 94.93 | 86.32 | 80.43¸101.37 |
|  |  |  |  |  |  |
| ANOVA table | SS (Type III) | DF | MS | F (DFn. DFd) | *P* value |
| Interaction AHR | 522.6 | 5 | 104.5 | F (5. 283) = 0.6134 | *P*=0.6897 |
| cohort (MS type) | 11086 | 5 | 2217 | F (5. 283) = 13.01 | *P*<0.0001 |
| sex | 52.69 | 1 | 52.69 | F (1. 283) = 0.3092 | *P*=0.5786 |
|  |  |  |  |  |  |
| TGF-/VEGF-B ratio | | | | | |
| sex | female | | male | |  |
|  | Median | Q1; Q3 | Median | Q1; Q3 |  |
| *cohorts* |  |  |  |  |
| *controls* | 0.05 | 0.04; 0.12 | 0.05 | 0.03; 0.07 |
| *CIS* | 0.08 | 0.02; 0.13 | 0.02 | 0.00; 0.05 |
| *RRMS relapse* | 0.04 | 0.02; 0.11 | 0.01 | 0.00; 0.05 |
| *RRMS remission* | 0.01 | 0.00; 0.05 | 0.01 | 0.00; 0.03 |
| *SPMS* | 0.02 | 0.00; 0.05 | 0.02 | 0.01; 0.03 |
| *PPMS* | 0.05 | 0.03; 0.08 | 0.04 | 0.02; 0.08 |
|  |  |  |  |  |  |
| ANOVA table | SS (Type III) | DF | MS | F (DFn. DFd) | *P* value |
| Interaction | 0.02769 | 5 | 0.005538 | F (5. 283) = 1.030 | *P*=0.4000 |
| cohort (MS type) | 0.08263 | 5 | 0.01653 | F (5. 283) = 3.074 | *P*=0.0102 |
| sex | 0.04830 | 1 | 0.04830 | F (1. 283) = 8.984 | *P*=0.0030 |

**Suppl. Table 2**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Beta** | **S.E.** | **Wald** | ***p*-value** | **OR** | **95% C.I. for OR** | |
| **Lower** | **Upper** |
| **gender** | -0.102 | .430 | .057 | .812 | .903 | .389 | 2.096 |
| **age** | .038 | .018 | 4.623 | .032 | 1.039 | 1.003 | 1.075 |
| **VEGF-B** | .006 | .002 | 5.847 | .016 | 1.006 | 1.001 | 1.010 |
| **TGF-α** | -.091 | .028 | 10.650 | .001 | .913 | .865 | .964 |
| **AHR** | -.063 | .015 | 16.866 | <0.001 | .939 | .911 | .968 |
| **constant** | 5.290 | 1.612 | 10.767 | .001 | 198.324 |  |  |

**Suppl. Table 3**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **MS typea** |  | **Beta** | **S.E.** | **Wald** | ***p*-value** | **OR** | **95% C.I. for OR** | |
| **Lower** | **Upper** |
| **PPMS** | Intercept | -11.584 | 2.477 | 21.864 | <0.001 |  |  |  |
| age | .134 | .029 | 21.094 | <0.001 | 1.144 | 1.080 | 1.211 |
| VEGF-B | -.002 | .002 | .952 | .329 | .998 | .994 | 1.002 |
| AHR | .063 | .020 | 9.635 | .002 | 1.065 | 1.024 | 1.109 |
| TGF-α | .128 | .038 | 11.225 | .001 | 1.136 | 1.054 | 1.224 |
| [gender=f] | -1.300 | .509 | 6.524 | .011 | .272 | .100 | .739 |
| **SPMS** | Intercept | -15.571 | 2.814 | 30.622 | <0.001 |  |  |  |
| age | .208 | .033 | 38.870 | <0.001 | 1.232 | 1.154 | 1.315 |
| VEGF-B | .002 | .002 | .668 | .414 | 1.002 | .998 | 1.005 |
| AHR | .064 | .021 | 9.078 | .003 | 1.066 | 1.023 | 1.111 |
| TGF-α | .018 | .047 | .151 | .698 | 1.019 | .928 | 1.118 |
| [gender=f] | -.493 | .521 | .897 | .344 | .611 | .220 | 1.695 |

1. The reference category was RRMS.