**S4 Table.** **Multiple regression FDR adjusted p-values for top 10 proteins in Discovery and Replicate Cohort**. Top 10 plasma biomarker candidates (ranked by Stability Selection) that differentiated Parkinson’s Disease (PD) patients *versus* neurologically normal (NC) subjects in the Discovery Cohort; 4 replicate associations in the Replication Cohort. Here we report p-values from multiple linear regression model differentiating PD *vs*. NC status, adjusted for age at plasma sampling, sex and LEDD in Discovery Cohort. In the Replication Cohort the effect of treatment group (PD *vs*. NC) was adjusted for age at plasma sampling, sex, clinical site, and batch effect. Adjustment for the False Discovery Rate (FDR) was performed using the Benjamini-Hochberg method.

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | | Discovery Cohort | | | Replication Cohort | |
| *Protein Name* | *Entrez Symbol* | *Nominal*  *p-value* | *FDR p-value*  *968 tests* | *Nominal*  *p-value* | | *FDR p-value*  *10 tests* |
| Aminoacylase-1 | ACY1 | 1.11E-04 | 1.86E-03 | 8.70E-03 | | 2.18E-02 |
| BDNF | BDNF | 7.22E-04 | 7.81E-03 | 2.98E-01 | | 4.26E-01 |
| BSP | IBSP | 3.88E-03 | 2.82E-02 | 2.06E-05 | | 1.03E-04 |
| C1r | C1R | 6.30E-07 | 6.10E-05 | 1.99E-01 | | 3.98E-01 |
| Growth hormone receptor | GHR | 1.01E-05 | 3.49E-04 | 8.92E-04 | | 2.97E-03 |
| IFN-g R1 | IFNGR1 | 4.64E-03 | 3.23E-02 | 3.69E-01 | | 4.61E-01 |
| OMD | OMD | 2.58E-03 | 2.14E-02 | 9.14E-06 | | 9.14E-05 |
| RAN | RAN | 5.30E-08 | 1.28E-05 | 8.78E-01 | | 8.78E-01 |
| SRCN1 | SRC | 3.31E-06 | 2.00E-04 | 2.79E-01 | | 4.65E-01 |
| tau | MAPT | 4.57E-04 | 5.26E-03 | 4.32E-01 | | 4.79E-01 |