

**Supplementary Fig. 1.** Spearman's rank correlation between plasma biomarkers in each group. **a** Spearman's rank correlation between plasma biomarkers in the HC group. Spearman's rank correlation test was used to determine significant correlations. PD, Parkinson's disease; HC, healthy control; GFAP, glial fibrillary acidic protein; NfL, neurofilament light chain; p-tau, phosphorylated tau; A $\beta$ , amyloid beta. \* p < 0.05; \*\* p < 0.01; \*\*\* p < 0.001.