## **Supplementary Material**

Nigral Iron Deposition Influences Disease Severity by Modulating the Effect of Parkinson's Disease on Brain Networks

**Supplementary Table 1.** The PD status\*SN iron (continuous) interaction effect and main effect on brain networks.

F (p value)	IVN interaction effect cluster1	IVN interaction effect cluster2	mVN interaction effect cluster	BGN interaction effect cluster1	BGN interaction effect cluster2
PD status * SN iron (continuous)	13.22 (<0.001*)	11.91 <b>(0.001*)</b>	9.14 <b>(0.003*)</b>	10.12 <b>(0.002*)</b>	3.21 (0.075)
PD status	10.59 <b>(0.001*)</b>	10.73 <b>(0.001*)</b>	10.75 <b>(0.001*)</b>	11.19 <b>(0.001*)</b>	5.46 <b>(0.02*)</b>
SN iron (continuous)	0.88 (0.35)	2.25 (0.14)	0.65 (0.42)	2.00 (0.16)	3.40 (0.07)

The values were shown as F (p value). \*p<0.05

BGN, basal ganglia network; IVN, lateral visual network; mVN, medial visual network; PD, Parkinson's disease; SN, substantia nigra.