The Interactions of Dopamine and Oxidative Damage in the Striatum of Neurodegenerative Diseases Patients

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Running Title**:** Dopamine and Oxidative Damage in the Striatum

Keywords: Oxidative damage, Dopamine, Striatum, Alzheimer's disease, Lewy body diseases

Supplementary materials

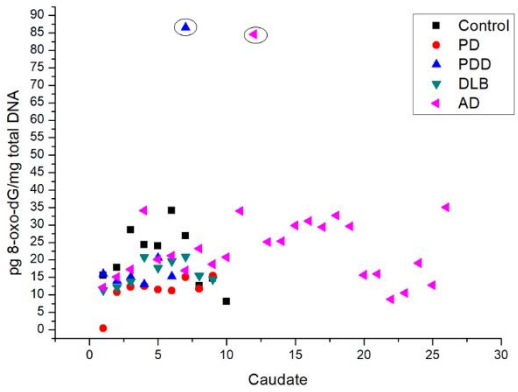

Figure S1. 8-oxo-dG levels in the caudate from patients with diseases and controls (Dot-plot).

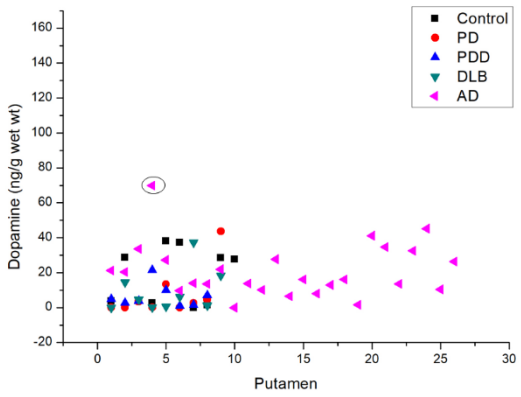

Figure S2. Concentration of dopamine in the putamen from patients with diseases and age-matched controls (Dot-plot).

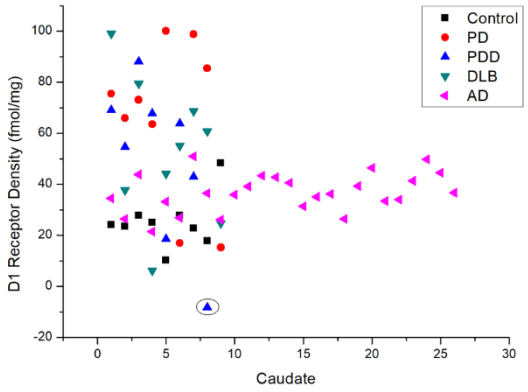

Figure S3. Quantitative autoradiographic analysis of D1R density in the caudate from patients with diseases and age-matched controls (Dot-plot).

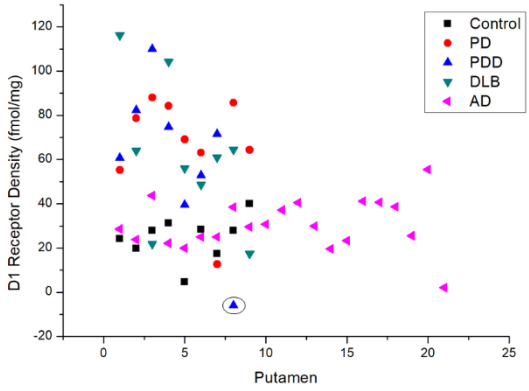

Figure S4. Quantitative autoradiographic analysis of D1R density in the putamen from patients with diseases and age-matched controls (Dot-plot).

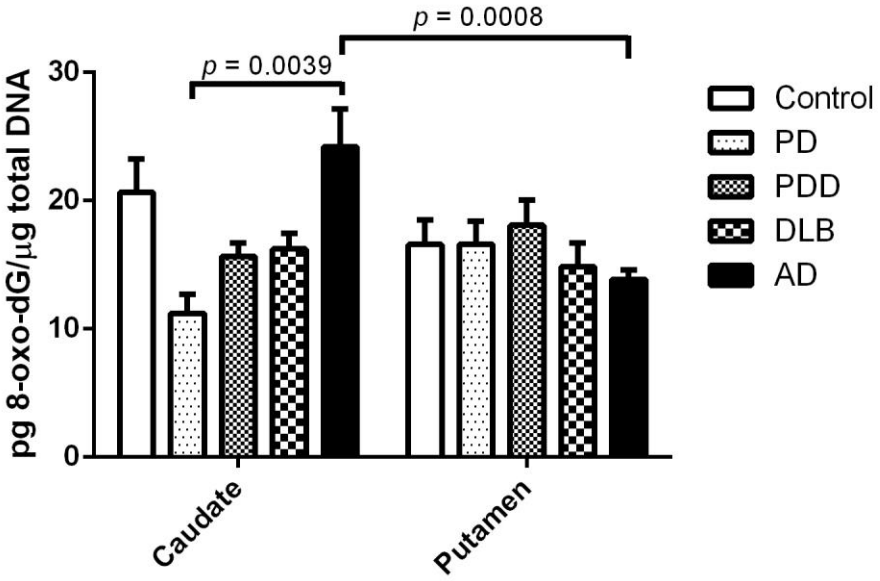

Figure S5. Two-way ANOVA analysis of 8-oxo-dG levels in the caudate and putamen from patients with diseases (PD: n=10, PDD: n=8, DLB: n=10, AD: n=27) and age-matched controls (n=10). Value shown are means ± SEM as the concentration of 8-oxo-dG (pg) per total DNA (μg). A p value of <0.05 was considered significant. The statistical significance between the PD vs AD (p = 0.0039) and caudate vs putamen (p = 0.0008) are demonstrated with the bracket.

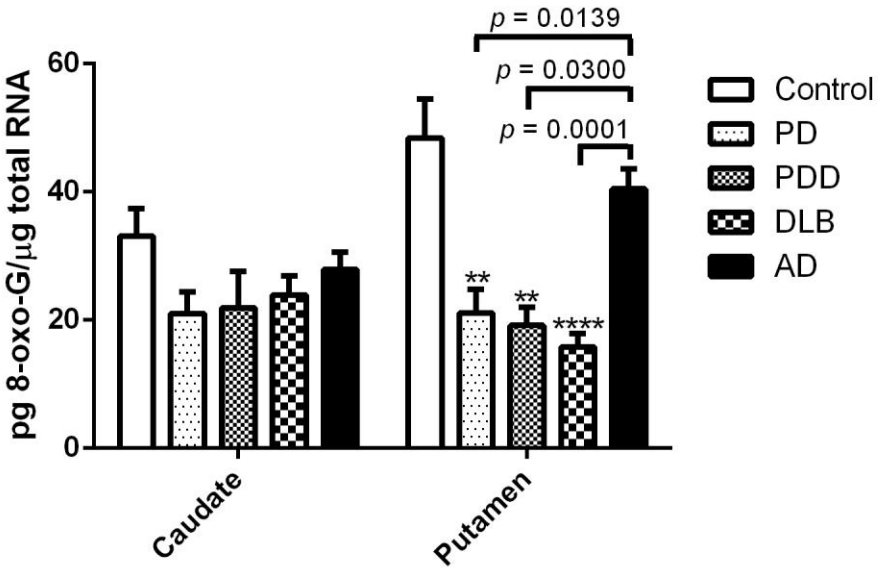

Figure S6. Two-way ANOVA analysis of 8-oxo-G levels in the caudate and putamen from patients with diseases (PD: n=10, PDD: n=8, DLB: n=10, AD: n=27) and age-matched controls (n=10). Value shown are means ± SEM as the concentration of 8-oxo-G (pg) per total RNA (μg). A p value of <0.05 was considered significant. ** indicates $p < 0.01$, *** indicates $p < 0.001$, **** indicates $p < 0.0001$ compared with the controls. Significant differences between two non-control groups are indicated with brackets and corresponding p-values [Putamen: PD vs AD (p = 0.0086), PDD vs AD (p = 0.0162), DLB vs AD (p = 0.002)].

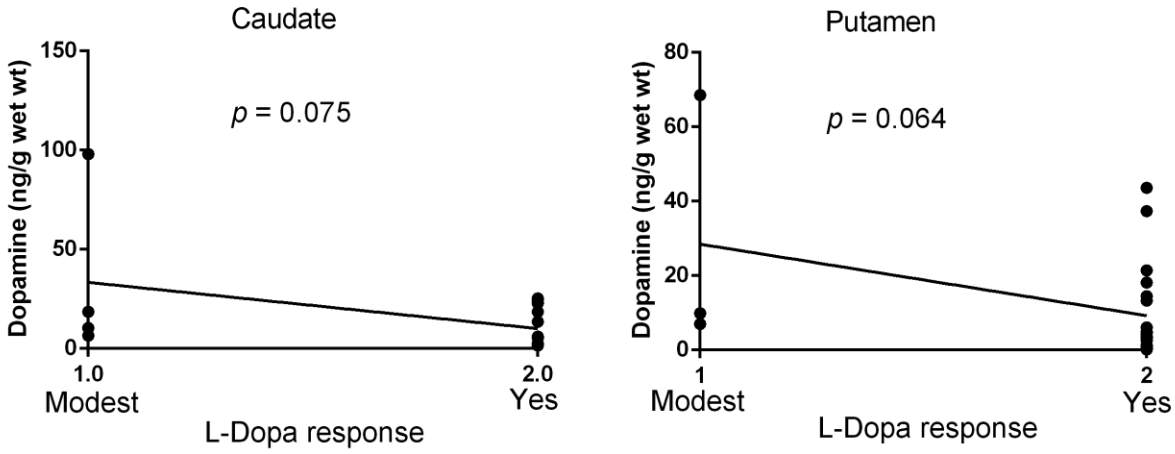

Figure S7. Kendall's tau_b analysis of correlation between dopamine concentration and L-Dopa response in the caudate and putamen of LBD patients