

# Supplementary Material

## Symmetric and Profound Monoaminergic Degeneration in Parkinson's Disease with Premotor REM Sleep Behavior Disorder

**Supplementary Table 1.** Demographics and <sup>18</sup>F-FP-CIT PET findings in patients with de novo PD, with or without preceding history of probable RBD and further stratified based on the duration of preceding probable RBD.

	PD <sup>RBD-</sup>	PD <sup>RBD+&lt;10Y</sup>	PD <sup>RBD+≥10Y</sup>	<i>p</i>
Sex	24/28	29/26	27/16	0.271
Age at PD onset, y	66.50 (5.338)	67.00 (5.699)	67.19 (5.770)	0.822
Age at PET imaging, y	67.67 (5.272)	68.02 (5.701)	68.30 (5.743)	0.859
<b><sup>18</sup>F-FP-CIT SUR</b>				
Pons	2.165 (0.470)	1.856 (0.570)	1.822 (0.576)	<b>0.003<sup>a,b</sup></b>
Caudate, mean	3.537 (0.662)	3.324 (0.516)	3.299 (0.567)	0.084
Putamen, mean	3.539 (0.567)	3.256 (0.541)	3.299 (0.490)	<b>0.017<sup>a</sup></b>
Striatum	3.536 (0.599)	3.288 (0.513)	3.297 (0.513)	0.035
Ventral striatum, mean	1.699 (0.303)	1.580 (0.288)	1.596 (0.237)	0.067
<b><sup>18</sup>F-FP-CIT SUR AI's</b>				
AI, caudate	7.221 (4.788)	4.786 (3.889)	5.949 (5.540)	<b>0.031<sup>a</sup></b>
AI, putamen	16.042 (8.523)	9.649 (9.227)	11.185 (9.297)	<b>0.001<sup>a,b</sup></b>
AI, ventral striatum	26.196 (9.591)	23.978 (7.831)	26.103 (8.805)	0.343
<b><sup>18</sup>F-FP-CIT SUR striatum-to-pons ratios</b>				
Caudate/Pons	1.723 (0.560)	1.990 (0.759)	2.011 (0.725)	0.074
Putamen/Pons	1.730 (0.563)	1.932 (0.691)	2.008 (0.725)	0.101
Striatum/Pons	1.726 (0.556)	1.960 (0.719)	2.008 (0.743)	0.086
Ventral striatum/Pons	0.832 (0.286)	0.947 (0.374)	0.973 (0.370)	0.098

p-values that remained < 0.05 after correction for multiple comparisons are highlighted in bold.

<sup>a</sup> Significant differences between PD<sup>RBD-</sup> and PD<sup>RBD+<10Y</sup>

<sup>b</sup> Significant differences between PD<sup>RBD-</sup> and PD<sup>RBD+≥10Y</sup>