

**Supplementary Table 2.** Age adjusted video-oculographic difference of PSP-RS, PSP-P, and PD (n=154)

	PSP-RS (n=65)	PSP-P (n=39)	PD (n=50)	Age adjusted p value <sup>‡</sup>	
				PSP-RS vs. PSP-P	PSP-P vs. PD
Horizontal velocity of right eye	204.9 (182.9–226.9)	250.3 (222.4–278.2)	288.2 (262.6–313.7)	0.036*	0.156
Horizontal velocity of left eye	211.6 (190.2–232.9)	245.9 (218.8–273.1)	304.3 (279.5–329.2)	0.150	0.007 <sup>†</sup>
Average horizontal velocity	208.2 (187.2–229.3)	248.1 (221.3–274.9)	296.3 (271.8–320.8)	0.064	0.031*
Vertical velocity of right eye	137.1 (122.5–151.6)	160.1 (141.7–178.6)	246.1 (229.2–263.0)	0.159	<0.001 <sup>†</sup>
Vertical velocity of left eye	134.9 (120.5–149.4)	166.5 (148.1–184.9)	242.9 (226.1–259.7)	0.024*	<0.001 <sup>†</sup>
Average vertical velocity	136.0 (122.1–149.9)	163.3 (145.7–180.9)	244.5 (228.4–260.6)	0.050	<0.001 <sup>†</sup>
Horizontal latency of right eye	304.0 (281.4–326.6)	267.6 (238.9–296.3)	250.9 (224.6–277.2)	0.149	0.999
Horizontal latency of left eye	303.8 (281.7–325.9)	268.5 (240.4–296.6)	255.2 (229.5–280.9)	0.155	0.999
Average horizontal latency	303.9 (282.0–325.9)	268.1 (240.2–296.0)	253.0 (227.5–278.6)	0.140	0.999
Vertical latency of right eye	353.3 (324.8–381.8)	327.1 (290.9–363.4)	267.9 (234.8–301.1)	0.782	0.059
Vertical latency of left eye	368.4 (338.8–398.0)	325.1 (287.4–362.7)	267.3 (232.9–301.7)	0.222	0.084
Average vertical latency	360.8 (333.0–388.7)	326.1 (290.7–361.4)	267.6 (235.3–299.9)	0.380	0.054

Values are presented as estimated marginal mean (95% CI). Saccadic velocity unit degree/s. Saccadic latency unit ms.

\*significant at the 0.05 level (2-tailed); <sup>†</sup>significant at the 0.01 level (2-tailed); <sup>‡</sup>ANCOVA—age at presentation as covariate, pairwise comparison.

PSP-RS, PSP-Richardson's syndrome; PSP-P, PSP with predominant parkinsonism; PD, Parkinson's disease; CI, confidence interval; ANCOVA, analysis of covariance; PSP, progressive supranuclear palsy.