

Supplementary table: Patient characteristics in the main studies referenced in Tables 2 and 3

Study	Groups	n	Gender (M/F)	Mean age $\pm$ SD	Mean disease duration $\pm$ SD
<b>Morphometry, Volumetry</b>					
Righini et al. 2004	PD	27	NA	67.6 $\pm$ 3.7	5.3 $\pm$ 3.4
	PSP	25		68.9 $\pm$ 6.5	5.3 $\pm$ 2.8
Quattrone et al. 2008	HC	50	25/25	65.8 $\pm$ 9.0	5.5 $\pm$ 4.3
	PD	108	62/46	66.6 $\pm$ 6.5	3.0 $\pm$ 1.6
	PSP	33	23/10	69.3 $\pm$ 6.1	4.6 $\pm$ 3.1
	MSA-P	19	5/14	64.0 $\pm$ 5.3	NA
Messina et al. 2011	HC	46	20/26	66.78 $\pm$ 6.7	6.19 $\pm$ 4.5
	PD	72	40/32	63.78 $\pm$ 9.0	3.53 $\pm$ 3.5
	PSP	32	21/11	70.63 $\pm$ 5.3	3.07 $\pm$ 2.2
	MSA-P	15	5/10	64.27 $\pm$ 4.3	NA
Huppertz et al. 2016	HC	73	37/36	NA	NA
	PD	204	136/68	56.9 $\pm$ 0.9	6.5 $\pm$ 0.4
	PSP-RS	106	60/46	66.1 $\pm$ 0.6	3.2 $\pm$ 0.2
	MSA-P	60	38/22	59.2 $\pm$ 1.1	3.6 $\pm$ 0.3
	MSA-C	21	11/10	59.5 $\pm$ 1.8	3.8 $\pm$ 0.5
Scherfler et al. 2016 <sup>1</sup>	PD	40	6/8	61.7 $\pm$ 7.3	3.3 $\pm$ 2.2
	PSP	30	4/6	65.2 $\pm$ 4.9	2.7 $\pm$ 1.9
	MSA	40	11/3	62.7 $\pm$ 7.8	2.9 $\pm$ 1.5
Moller et al. 2017	HC	73	37/36	63.3 $\pm$ 0.9	6.5 $\pm$ 0.4
	PD	204	136/68	64.0 $\pm$ 0.8	3.2 $\pm$ 0.2
	PSP	106	60/46	69.0 $\pm$ 0.6	3.6 $\pm$ 0.3
	MSA-P	21	13/8	63.3 $\pm$ 1.0	3.8 $\pm$ 0.5
	MSA-C	60	30/30	63.1 $\pm$ 1.6	NA
Mangesius et al. 2018 <sup>1</sup>	PD	194	36/19	64.3 $\pm$ 9.2	1.7 $\pm$ 0.6
	PSP	55	10/7	66.8 $\pm$ 9.6	2.1 $\pm$ 0.6
	MSA	63	7/5	65.5 $\pm$ 7.3	NA
Quattrone et al. 2018	HC	53	36/17	71.5 $\pm$ 5.2	6.8 $\pm$ 3.3
	PD	53	39/14	70.3 $\pm$ 5.2	3.9 $\pm$ 1.7
	PSP-RS	46	25/21	70.5 $\pm$ 5.2	7.3 $\pm$ 3.7
	PSP-P	32	27/7	72.0 $\pm$ 5.7	NA
Mueller et al. 2018	HC	79	42/37	67.2 $\pm$ 4.7	6.4 $\pm$ 6.2
	PD	289	183/106	66.2 $\pm$ 8.9	2.8 $\pm$ 1.9
	PSP	85	50/35	68.6 $\pm$ 9.4	3.3 $\pm$ 2.4
	MSA	97	47/50	63.4 $\pm$ 8.2	NA
<b>DWI, DTI</b>					
Seppi et al. 2003	PD	13	7/6	62 $\pm$ 10.6	3.0 $\pm$ 1.2
	PSP	10	5/5	63 $\pm$ 6.6	2.9 $\pm$ 1.1
	MSA-P	12	3/9	68 $\pm$ 6.9	2.7 $\pm$ 1.1
Schocke et al. 2004	HC	10	5/5	60 $\pm$ 5.8	3.7 $\pm$ 1.8
	PD	17	9/8	62 $\pm$ 8.0	3.9 $\pm$ 1.9
	MSA-P	11	3/8	64 $\pm$ 5.8	NA

Nicoletti et al. 2006	HC	15	5/10	67.5 ±6.0	NA
	PD	16	9/7	61.0 ±7.7	7.5 ±5.8
	PSP	16	13/3	70.7 ±7.8	3.3 ±2.5
	MSA-P	16	4/12	64.7 ±5.1	4.9 ±4.0
Seppi et al. 2006	HC	11		60 ±5.8	
	PD	20	NA	62 ±8.3	3.9 ±5.8
	MSA-P	15		64 ±5.5	3.5 ±2.1
Seppi et al. 2006	PD	10	NA	64 ±5.5	4 ±2.3
	MSA-P	10		66 ±10.9	5 ±2.2
Nicoletti et al. 2008	HC	16	4/12	66.6 ±5.9	
	PD	15	9/6	65.2 ±7.8	8.6 ±3.6
	PSP	28	16/12	64.5 ±5.6	3.2 ±1.7
	MSA-P	15	6/9	64.7 ±5.2	5.1 ±4.0
Pellecchia et al. 2009	HC	11	7/4	58.5 ±12.9	
	MSA-P	9	6/3	69.3 ±7.3	4.1 ±1.4
	MSA-C	12	7/4	58.2 ±5.3	4.1 ±2.2
Pellecchia et al. 2011	MSA	11	5/6	63.6 ±10.1	3.4 ±1.1
Tsukamoto et al. 2012	HC	18		66.3 ±9.9	
	PD	17	NA	71.1 ±6.3	6.0 ±3.0
	PSP	20		74.6 ±5.7	4.0 ±3.0
	MSA	25		64.7 ±8.2	3.4 ±2.6
Nicoletti et al. 2013	HC	10	5/5	62.2 ±2.8	8.3 ±2.5
	PD	10	6/4	64.1 ±3.1	5.9 ±1.8
	PSP-RS	17	9/8	64.2 ±3.3	4.4 ±1.2
	MSA-P	9	4/5	61.3 ±3.2	5.4 ±1.1
	MSA-C	7	3/4	62.5 ±2.8	
Surova et al. 2015 <sup>1</sup>	HC	21	12/9	69	
	PD	10	6/4	68	4
	PSP	27	14/13	68	3
	MSA-P	11	4/7	64	3
Barbagallo et al. 2016	PD	26	12/14	63.8 ±6.3	7.4 ±4.5
	MSA-P	16	7/9	66.1 ±7.8	5.4 ±2.2
	MSA-C	13	6/7	61.5 ±6.5	6.1 ±2.5
Bajaj et al. 2017 <sup>2</sup>	HC	60			
	PD	262	NA	NA	NA
	MSA-P	127			
<b>Relaxometry, QSM</b>					
Lee et al. 2013	HC	21	12/9	60.0 ±6.1	NA
	PD	29	17/12	59.1 ±7.6	2.5 ±1.9
	PSP	13	8/5	57.9 ±8.5	1.9 ±0.7
	MSA-P	15	4/11	62.0 ±5.2	2.3 ±1.3
Sjöstrom et al. 2017	HC	14	9/5	63.5 ± 5.3	NA
	PD	62	43/19	65.2 ±10.5	4.7 ±4.4
	PSP	15	12/3	69.1 ± 6.0	2.8 ±1.0
	MSA	11	6/5	68.9 ±13.1	3.6 ±2.7
<b>Other</b>					
Kataoka et al. 2019	PSP	51	35/16	72.2 ±6.2	3.5 ±2.0

<sup>1</sup> Patient characteristics in the test cohort

<sup>2</sup> Metanalysis

Abbreviations: DWI, diffusion-weighted imaging; DTI, diffusion tensor imaging; HC, healthy controls; MSA, multiple system atrophy; MSA-C, cerebellar variant of MSA; MSA-P, parkinsonian variant of MSA; PD, Parkinson's disease; PSP, progressive supranuclear palsy