1st Author, year (reference)	Country	Study type*	Syndrome	Patient source(s)	Sample size (MSA, PSP)	Diagnostic criteria	Pathological confirmation (%)	Follow-up duration (years)	Loss to follow-up (%)	Deceased at end of follow-up (% MSA, PSP)
Ben-Shlomo, 1997 [21]	Not specified	Meta-analysis	MSA	Published case studies; Wenning, 1994	433	Variable	100	retro	NA	100
Bensimon 2009/Payan, 2011 [9, 14]	Multicentre Europe	3	MSA, PSP	NNIPPS study centres	398, 362	NNIPPS	14	mdn 3	19	47, 43
Birdi, 2002 [26]	Canada	4	PSP	Movement disorders clinic	16	Variable	100	retro	NA	100
Bower, 1997 [3]	US	2	MSA, PSP	Rochester Epidemiology Project	9, 16	Consensus, Colins, 1995	0	retro	NA	100
Chiu, 2010 [27]	Netherlands	4	PSP	Kaat, 2007	197	NINDS-SPSP	12	NA	NA	68
Coon, 2015 [18]	US	2	MSA	Mayo clinic	685	Consensus	5	NA	NA	79
Dell'Aquila, 2013 [12]	Italy	2	PSP	Movement disorders clinic and dementia unit	43	NINDS-SPSP	0	mean 3.7 (range 0.1-11.3)	NA	61
Figueroa, 2014 [35]	US	2	MSA	Mayo clinic	49	Autopsy	100	retro	6	100
Golbe, 2007 [28]	US	4	PSP	Movement disorders centre	162	NINDS-SPSP	3	max 11	15	61
Goldstein, 2015 [36]	Israel	4	MSA	NIH clinical centre	72	Consensus	8	retro	0	100
Hellwig, 2015 [13]	Germany	4	MSA, PSP	Department of Neurology	13, 31	Consensus, PET scan	0	mdn 4.8 (max 5)	0	46, 68

1st Author, year (reference)	Country	Study type*	Syndrome	Patient source(s)	Sample size (MSA, PSP)	Diagnostic criteria	Pathological confirmation (%)	Follow-up duration (years)	Loss to follow-up (%)	Deceased at end of follow-up (% MSA, PSP)
Jecmenica-Lukic, 2014 [52]	Serbia	4	MSA, PSP	Movement disorders centre	49, 72	NINDS-SPSP, Consensus	0	mean 5.1 (range 1-14)	NA	22, 44
Kaat, 2007 [29]	Netherlands	2	PSP	Postal survey to neurologists and physicians	152	NINDS-SPSP	10	mean 6.6	3	43
Kim, 2011 [37, 50]	Korea	2	MSA	Movement disorders clinic	455	Quinn, 1989	0	mean 4.7 (range 0-18)	NA	24
Klockgether, 1998 [38]	Germany	4	MSA	University hospitals	67	Quinn, 1989	0	NA	NA	43
Krim, 2007 [39]	France	4	MSA	Referrals from neurologists in Aquitaine	86	Consensus	0	mdn 2.4	2	40
Lalich, 2013 [40]	US	2	MSA	Mayo clinic	38	None	0	range 0 – 12.7	NA	47
Litvan, 1996 [10]	Multicentre Europe, US	2	PSP	Typical patients from neuropathological files	24	NINDS-SPSP	100	retro	NA	100
Litvan, 2001 [31]	US	4	PSP	Mayo clinic	63	NINDS-SPSP	0	NA	NA	52
Low, 2015 [15]	US	4	MSA	Referrals from movement and autonomic disorders centres	175	Consensus	9	range 0 - 5	37	58
Maher, 1986 [32]	UK	2	PSP	Hospital for nervous diseases	52	None	0	NA	10	64

1st Author, year (reference)	Country	Study type*	Syndrome	Patient source(s)	Sample size (MSA, PSP)	Diagnostic criteria	Pathological confirmation (%)	Follow-up duration (years)	Loss to follow-up (%)	Deceased at end of follow-up (% MSA, PSP)
Nath, 2003 [33]	UK	2	PSP	Prevalence study by Nath, 2001 [4]	187	NINDS-SPSP	NA	mean 6.4	NA	40
O'Sullivan, 2008 [20]	UK	2	MSA, PSP	Queen Square Brain Bank	83, 110	NINDS-SPSS	100	retro	NA	100
Respondek, 2014 [19]	Multicentre Europe	2	PSP	Randomly selected cases from several brain banks	100	NINDS-SPSP and NNIPPS	100	retro	NA	100
Roncevic, 2014 [41]	US	2	MSA	Dysautonomia centre	100	Consensus	4	NA	10	50
Saito, 1994 [42]	Japan	2	MSA	University hospital	59	RCADJ	0	mean 6 (range 1 – 13)	17	71
Sakushima, 2015 [43]	Japan	1	MSA	National patient registry	839	RCADJ	0	2 - 7	21	32
Santacruz, 1998 [34]	US	1	PSP	Postal survey to patients registered at SPSP	437	None	2	NA	NA	27
Schulz, 1994 [44]	Germany	2 and 4	MSA	Department of Neurology	32	Quinn, 1989	6	NA	56	NA
Silber, 2000 [45]	US	2	MSA	Mayo sleep disorders centre	42	Consensus	0	NA	29	50
Tada, 2007 [46]	Japan	2	MSA	Brain research institute	49	Consensus	100	retro	NA	100
Testa, 1996 [47]	Italy	Unclear	MSA	As in Testa 2001	59	As in Testa 2001				

1st Author, year (reference)	Country	Study type*	Syndrome	Patient source(s)	Sample size (MSA, PSP)	Diagnostic criteria	Pathological confirmation (%)	Follow-up duration (years)	Loss to follow-up (%)	Deceased at end of follow-up (% MSA, PSP)
Testa, 2001 [53]	Italy	Unclear	MSA, PSP	Hospital and outpatient department	74, 39	NINDS-SPSP; Quinn, 1994	0	mean 2.3 (range 0.5 – 6.8)	NA	58, 51
Watanabe, 2002 [17]	Japan	1	MSA	University hospitals	230	Consensus	10	mean 4 (range 1 – 17)	NA	34
Wenning, 1994 [48] Schrag, 2008 [51]	UK	4	MSA	Movement disorder unit	100	Quinn, 1994	22	max 14.8	8	85
Wenning, 2013 [16]	Multicentre Europe	4	MSA	Referrals from EMSA-SG study centres	141	Consensus	1	max 2	41	43
Yamaguchi, 2003 [49]	Japan	Unclear	MSA	University hospital	104	Consensus	0	NA	20	69

Supplementary Table 2. Characteristics of included studies. EMSA-SG = European multiple system atrophy study group; Max =maximum follow- up period; Mdn = median; NA = not available; NIH = National Institute of Health; NINDS-SPSP = National Institute of Neurological Disorders and Stroke Society for Progressive Supranuclear Palsy; NNIPPS = Neuroprotection and Natural History in Parkinson Plus Syndromes; PET = positron emission tomography; RCADJ = Research committee ataxic diseases Japan; Retro = retrospective. All percentages were rounded to two significant figures. *Type 1 studies are observational, cross sectional, neither fully retrospective or prospective studies e.g. clinic populations or case series; type 2 studies are retrospective case series; type 3 studies are prospective but selected samples e.g. trial cohorts; type 4 are true prospective population-based samples