

Supplementary Table 1

Supplementary Table 1: NPE Harmonization across Data Sources						
Endophenotype	Level	NACC variable coding	ROSMAP variable coding	ACT variable coding	ADNI variable coding	Notes
CERAD score for neuritic plaques	0 – None	NACCNEUR = 0	ceradsc = 4	cerad = 0	NPNEUR = 0	
	1 – Mild	NACCNEUR = 1	ceradsc = 3	cerad = 1	NPNEUR = 1	
	2 – Moderate	NACCNEUR = 2	ceradsc = 2	cerad = 2	NPNEUR = 2	
	3 – Severe	NACCNEUR = 3	ceradsc = 1	cerad = 3	NPNEUR = 3	
	0	NACC BRAA = 0	braaksc = 0	braak = 0	NPBRAAK = 0	
	1	NACC BRAA = 1	braaksc = 1	braak = 1	NPBRAAK = 1	
	2	NACC BRAA = 2	braaksc = 2	braak = 2	NPBRAAK = 2	
	3	NACC BRAA = 3	braaksc = 3	braak = 3	NPBRAAK = 3	
	4	NACC BRAA = 4	braaksc = 4	braak = 4	NPBRAAK = 4	
	5	NACC BRAA = 5	braaksc = 5	braak = 5	NPBRAAK = 5	
Braak NFT stage	6	NACC BRAA = 6	braaksc = 6	braak = 6	NPBRAAK = 6	
	0 – None	NACCDIFF = 0	plaq_d = 0	thal_a = 0	NPDIFF = 0	
	1 – Mild	NACCDIFF = 1	plaq_d > 0 & plaq_d <= 0.5	thal_a = 1	NPDIFF = 1	
	2 – Moderate	NACCDIFF = 2	plaq_d > 0.5 & plaq_d <= 1	thal_a = 2	NPDIFF = 2	
	3 – Severe	NACCDIFF = 3	plaq_d > 1	thal_a = 3	NPDIFF = 3	
	0 – None	*NPTDPA = 0 or NPTDPB = 0 or NPTDPC = 0 or NPTDPD = 0 or NPTDPE = 0	tdp_st4 = 0	**NA	*NPTDPA = 0 or NPTDPB = 0 or NPTDPC = 0 or *In NACC and ADNI, five separate variables are used to record anatomical distribution of TDP-43 pathology. Assignment of the LATE-NC variable used for analysis started with 0 if at least one of these variables had a value of 0. Then values were sequentially reassigned to 1, 2, and then 3 if the corresponding variable for that	
	1 – Mild	NACCDIFF = 1				
	2 – Moderate	NACCDIFF = 2				
	3 – Severe	NACCDIFF = 3				
	0 – None	NPTDPA = 0 or NPTDPB = 0 or NPTDPC = 0 or NPTDPD = 0 or NPTDPE = 0				
LATE-NC						
Arteriolosclerosis	1 – Amygdala	NPTDPB = 1	tdp_st4 = 1	NA	NPTDPB = 1	
	2 – Hippocampus	NPTDPC = 1 or NPTDPD = 1	tdp_st4 = 2	NA	NPTDPC = 1 or NPTDPD = 1	
	3 – Neocortex	NPTDPE = 1	tdp_st4 = 3	NA	NPTDPE = 1	
	0 – None	NACCARTE = 0	arteriol_scler = 0	micro_arteriolosclerosis_id = 1	NPARTER = 0	
	1 – Mild	NACCARTE = 1	arteriol_scler = 1	micro_arteriolosclerosis_id = 2	NPARTER = 1	
	2 – Moderate	NACCARTE = 2	arteriol_scler = 2	micro_arteriolosclerosis_id = 3	NPARTER = 2	
	3 – Severe	NACCARTE = 3	arteriol_scler = 3	micro_arteriolosclerosis_id = 4	NPARTER = 3	
	0 – None	NACCAVAS = 0	cvda_4gp2 = 0	ge_atherosclerosis_id = 0	NPAVAS = 0	
	1 – Mild	NACCAVAS = 1	cvda_4gp2 = 1	ge_atherosclerosis_id = 1	NPAVAS = 1	
	2 – Moderate	NACCAVAS = 2	cvda_4gp2 = 2	ge_atherosclerosis_id = 2	NPAVAS = 2	
Atherosclerosis	3 – Severe	NACCAVAS = 3	cvda_4gp2 = 3	ge_atherosclerosis_id = 3	NPAVAS = 3	
	0 – None	NACCLEWY = 0 or NPLBOD = 5	ldbdx = 0	Ibsubsnigra = 0 & Ibllocuscer = 0 & Ibamygdala = 0	NPLBOD = 0	
	1 – Substantia nigra/brainstem	NACCLEWY = 1	ldbdx = 1	Ibsubsnigra = 1 or Ibllocuscer = 1 & Ibamygdala = 0 & Iblfrontcor = 0	NPLBOD = 1	
	2 – Limbic	NACCLEWY = 2	ldbdx = 2	Ibamygdala = 1 & Iblfrontcor = 0	NPLBOD = 2 or 4	
	3 – Neocortex	NACCLEWY = 3	ldbdx = 3	Iblfrontcor = 1	NPLBOD = 3	
	0 – None	NACCAMY = 0	caa_4gp = 0	micro_amyloidangiopathyoccipital = 1	NPAMY = 0	
	1 – Mild	NACCAMY = 1	caa_4gp = 1	micro_amyloidangiopathyoccipital = 2	NPAMY = 1	
	2 – Moderate	NACCAMY = 2	caa_4gp = 2	micro_amyloidangiopathyoccipital = 3	NPAMY = 2	
	3 – Severe	NACCAMY = 3	caa_4gp = 3	micro_amyloidangiopathyoccipital = 4	NPAMY = 3	
	0 – Absent	NHIPSCL = 0 or NPSCL = 0	hspath_typ = 0	any_hs = 0	NPHIPSCL = 0	
Hippocampal sclerosis	1 – Present	NHIPSCL = 1 or 2 or 3 or NPSCL = 1	hspath_typ = 1	any_hs = 1	NPHIPSCL = 1 or 2 or 3	
	0 – Absent	NACCMICR = 0	ci_num2_mct = 0	any_mvl = 0	NPOLD = 0	
	1 – Present	NACCMICR = 1	ci_num2_mct = 1	any_mvl = 1	NPOLD = 1	
	0 – Absent	NACCINF = 0	ci_num2_gct = 0	any_macro = 0	NPINF = 0	
	1 – Present	NACCINF = 1	ci_num2_gct = 1	any_macro = 1	NPINF = 1	
Microinfarcts	0 – Absent	NACCMICR = 0				
	1 – Present	NACCMICR = 1				
	0 – Absent	NACCINF = 0				
	1 – Present	NACCINF = 1				
	0 – Absent	NACCINF = 0				
	1 – Present	NACCINF = 1				
	0 – Absent	NACCINF = 0				
	1 – Present	NACCINF = 1				
	0 – Absent	NACCINF = 0				
	1 – Present	NACCINF = 1				
Gross infarcts						