

Supplementary Table 1. Number of mutation carriers (1A) and pathological diagnosis (1B) for each clinical diagnosis group.

1A

		Genetic Diagnosis					Total
		<i>C9orf72</i>	<i>GRN</i>	<i>MAPT</i>	<i>GRN+C9orf72</i>	<i>C9orf72+SQSTM1</i>	
Clinical Diagnosis	FTD-MND	2	0	0	1	1	4
	bvFTD	20	9	23	0	0	52
	PNFA	2	4	1	0	0	7
	PPA-NOS	0	2	0	0	0	2
	SD	0	0	0	0	0	0
	Total	24	15	24	1	1	65

1B

		Pathological Diagnosis			
		TDP-43	tau	FUS	Total
Clinical Diagnosis	FTD-MND	4	0	0	4
	bvFTD	31	31	3	65
	PNFA	8	7	0	15
	PPA-NOS	2	0	0	2
	SD	16	2	0	18
	Total	61	40	3	104

Supplementary Table 2. Volumetric comparisons between the different clinical subgroups in the sporadic cohort for the right, left and total thalamic volume. Volumetric comparisons are adjusted for age, gender and scanner type, and also for disease duration when comparing between FTD groups. Bold represents a significant difference between groups after correcting for multiple comparisons.

Clinical Diagnosis (sporadic only)		Controls		bvFTD		PNFA		PPA-NOS		SD	
		ANCOVA		ANCOVA		ANCOVA		ANCOVA		ANCOVA	
		% difference	p-value	% difference	p-value	% difference	p-value	% difference	p-value	% difference	p-value
FTD-MND	Right Thalamic Volume (as % of TIV)	10%	<0.0005	4%	0.030	5%	<0.0005	8%	0.199	10%	<0.0005
	Left Thalamic Volume (as % of TIV)	17%	<0.0005	10%	0.005	8%	0.016	5%	0.522	8%	0.003
	Thalamic Volume (as % of TIV)	14%	<0.0005	7%	0.005	7%	<0.0005	7%	0.326	9%	<0.0005
bvFTD	Right Thalamic Volume (as % of TIV)	7%	<0.0005	--		2%	<0.0005	4%	0.005	7%	<0.0005
	Left Thalamic Volume (as % of TIV)	8%	<0.0005			-2%	<0.0005	-5%	0.003	-2%	<0.0005
	Thalamic Volume (as % of TIV)	7%	<0.0005			0%	<0.0005	0%	0.006	3%	<0.0005
PNFA	Right Thalamic Volume (as % of TIV)	5%	<0.0005	--		--		3%	<0.0005	5%	<0.0005
	Left Thalamic Volume (as % of TIV)	10%	<0.0005					-3%	0.020	0%	<0.0005
	Thalamic Volume (as % of TIV)	8%	<0.0005					0%	0.001	3%	<0.0005
PPA-NOS	Right Thalamic Volume (as % of TIV)	3%	<0.0005	--		--		--		3%	<0.0005
	Left Thalamic Volume (as % of TIV)	12%	<0.0005							3%	0.003
	Thalamic Volume (as % of TIV)	8%	<0.0005							3%	0.001
SD	Right Thalamic Volume (as % of TIV)	0%	<0.0005	--		--		--		--	
	Left Thalamic Volume (as % of TIV)	9%	<0.0005								
	Thalamic Volume (as % of TIV)	5%	<0.0005								