

Supplementary Table 1

Author	Mutation	Pathology	Age of Onset	Sex	Hallucinations	Delusions	Behaviour	Cognition	Motor	Clinical Diagnosis	Initial Diagnosis
Waddington et al	x	Pick's disease	51	F	Auditory	Yes	Disinhibition	Aphasia	No	Pick's disease	Schizophrenia
Le Ber et al	GRN	x	56	x	Visual	No	Apathy	Aphasia	Parkinsonism	bvFTD	x
Le Ber et al	GRN	x	56	x	Visual	No	Apathy	Aphasia, apraxia, acalculia	No	bvFTD	x
Le Ber et al	GRN	x	61	x	Visual	No	Apathy/Disinhibition	x	Parkinsonism	bvFTD	x
Le Ber et al	GRN	x	61	x	Visual	No	Apathy/Disinhibition	x	No	bvFTD	x
Le Ber et al	GRN	x	62	x	Visual	No	Disinhibition/Perseverative	Aphasia, apraxia	Parkinsonism	bvFTD	x
Le Ber et al	GRN	x	70	x	Visual	No	Disinhibition/Perseverative	Aphasia	Parkinsonism	bvFTD	x
Le Ber et al	GRN	x	72	x	Visual, Auditory	Yes	Disinhibition	Prosopagnosia	No	bvFTD	x
Le Ber et al	GRN	x	58	x	Visual	Yes	Apathy/Disinhibition	Aphasia	Parkinsonism	bvFTD	x
Claassen et al	x	FTLD-TDP	84	F	Visual	No	Apathy/Disinhibition	Aphasia	Parkinsonism	bvFTD	x
Claassen et al	x	FTLD-TDP	59	M	Visual	No	Apathy/Disinhibition	Aphasia	Parkinsonism	bvFTD	x
Tartaglia et al	x	FTLD-TDP	65	F	Visual	Yes	Apathy/Disinhibition	Executive, memory	No	bvFTD	x
Moreno et al	GRN	x	57	F	Visual	No	Apathy/Impulsivity/Hyperorality	x	x	bvFTD	x
Velakoulis et al	x	FTLD-TDP	28	M	x	x	x	x	x	Schizophrenia	Schizophrenia
Velakoulis et al	x	FTLD-U	34	M	x	x	x	x	x		Bipolar disorder
Velakoulis et al	x	FTLD-TDP	35	M	x	x	x	x	x	Schizophrenia	Schizophrenia
Velakoulis et al	x	FTLD-TDP	38	M	x	x	x	x	x	Schizophrenia	Schizophrenia
Velakoulis et al	x	FTLD-TDP	43	M	x	x	x	x	x	Schizophrenia	Schizophrenia
Urwin et al	x	FTLD-FUS	x	F	No	Yes	Apathy	x	No	bvFTD	
Urwin et al	x	FTLD-FUS	x	M	No	Yes	Apathy/Disinhibition	x	No	bvFTD	
Urwin et al	x	FTLD-FUS	x	F	Yes	No	Apathy/Disinhibition	x		bvFTD	
Urwin et al	x	FTLD-FUS	x	M	Yes	No	Apathy/Disinhibition	x		bvFTD	
Urwin et al	x	FTLD-FUS	x	F	No	Yes	Apathy/Perseverative	x	No	bvFTD	
Urwin et al	x	FTLD-FUS	x	M	No	Yes		x	No	bvFTD	
Urwin et al	x	FTLD-FUS	x	M	Yes	No	Disinhibition/Perseverative	x	No	bvFTD	
Urwin et al	x	FTLD-FUS	x	M	Yes	No	Disinhibition/Perseverative	x	No	bvFTD	
Kremen et al	x	Pick's disease	53	F	No	Yes	Apathy/Disinhibition	Executive	Myoclonus	bvFTD	
Momeni et al	GRN		23	M	Auditory	Yes	Disinhibition	Normal	No	Schizophrenia	Schizophrenia
Loy et al	x	FTLD-TDP	48	F	Auditory	Yes	Apathy/Perseverative	Executive	No	bvFTD	
Pearson et al	C9orf72	FTLD-TDP	45	F	No	Yes	Agitation	Executive	Parkinsonism	bvFTD	
Pearson et al	C9orf72		40	F	Auditory	Yes	Perseverative	Executive, memory	Parkinsonism	bvFTD	
Rohrer et al	x	FTLD-FUS	47	x	Visual, Auditory	No	Apathy	Aphasia	No	bvFTD	
Dobson Stone et al	C9orf72		53	F				Impaired	No	FTD	
Dobson Stone et al	C9orf72		62	F				Impaired	No	FTD	
Dobson Stone et al	C9orf72		65	M				Impaired	ALS	FTD-ALS	
Dobson Stone et al	C9orf72		48	M				Impaired	No	FTD	
Dobson Stone et al	C9orf72		47	F				Impaired	ALS	FTD-ALS	
Floris et al	C9orf72		64	M	No	Yes	Apathy	Executive, memory	Parkinsonism	FTD	
Hsiung et al	C9orf72		49	F	No	Yes	Disinhibition	Impaired	No	FTD	Psychosis
Khan et al	MAPT		35	F	No	Yes	Disinhibition	Anomia	Parkinsonism	FTD	Schizophrenia
Mahoney et al	C9orf72		60	x	No	Yes	Disinhibition	Executive	No	FTD	
Mahoney et al	C9orf72		64	x	No	Yes	Disinhibition	Executive	ALS	FTD-ALS	
Sha et al	C9orf72				No	Yes				FTD	
Sha et al	C9orf72				No	Yes				FTD	
Sha et al	C9orf72				No	Yes				FTD	
Sha et al	C9orf72				No	Yes				FTD-ALS	
Sha et al	C9orf72				No	Yes				FTD-ALS	
Simon-Sanchez	C9orf72				Yes	No				FTD	
Simon-Sanchez	C9orf72				Yes	No				FTD	
Snowden et al	C9orf72		57	M	No	Yes	Disinhibition	Impaired	ALS	FTD-ALS	
Snowden et al	C9orf72		68	F	No	Yes	Apathy	Impaired	ALS	FTD-ALS	
Snowden et al	C9orf72		49	M	No	Yes	Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		55	M	No	Yes	Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		64	M	Auditory	No	Disinhibition	Impaired	Parkinsonism	FTD	
Snowden et al	C9orf72		65	M	No	Yes	Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		52	F	Visual	Yes	Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		62	F	No	Yes	Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		46	M	No	Yes	Apathy	Impaired	No	FTD	
Snowden et al	C9orf72		59	M	No	Yes	Apathy/Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		55	M	Yes	Yes	Apathy/Disinhibition	Impaired	No	FTD	
Snowden et al	C9orf72		56	M	Auditory	Yes	Apathy	Impaired	No	FTD	
Arosio et al	GRN		74	F	Visual	Yes	Apathy	Visuospatial	Parkinsonism	FTD	DLB
Galimberti et al	C9orf72		57	F	No	Yes	Disinhibition	Aphasia	No	FTD	
Galimberti et al	C9orf72		70	F	No	Yes	Perseverative	Impaired	No	FTD	
Galimberti et al	C9orf72		60	F	Yes	No	x	x	x	FTD	
Galimberti et al	C9orf72		75	M	No	Yes	Apathy/Disinhibition	Impaired	ALS	FTD-ALS	
Galimberti et al	C9orf72		48	M	No	Yes	Perseverative	Aphasia	Parkinsonism/MND	FTD-ALS	
Galimberti et al	C9orf72		70	M	Visual	No	x	Impaired	No	FTD	
Galimberti et al	C9orf72		60	F	Yes	No	x	x	x	FTD	
Galimberti et al	C9orf72		64	M	Visual	No	Apathy/Disinhibition	Impaired	Parkinsonism	FTD	
Galimberti et al	C9orf72		58	M	No	Yes	x	Aphasia	ALS	FTD-ALS	
Kertesz et al	C9orf72		57	M	Visual	Yes	Apathy	Anomia	No	FTD	
Kertesz et al	C9orf72		56	M	Auditory	No	Apathy/Perseverative	Anomia	ALS	FTD-ALS	
Kertesz et al	C9orf72		53	F	No	Yes	Apathy/Disinhibition	x	No	FTD	
Kertesz et al	C9orf72		52	M	Auditory/Visual	No	Apathy/Disinhibition	Aphasia	No	FTD-ALS	
Kertesz et al	C9orf72		47	F	Auditory/Visual	No	Disinhibition/Perseverative	Aphasia	No	FTD	
Landqvist et al	C9orf72		57	F	No	Yes	Disinhibition	Aphasia	Parkinsonism	FTD	
Landqvist et al	C9orf72		64	F	Tactile	No	Agitation	Aphasia	Parkinsonism	FTD	
Landqvist et al	C9orf72		55	F	Auditory	No	Agitation	Aphasia	MND	FTD-ALS	
Landqvist et al	C9orf72		68	F	Visual	Yes	Agitation	Aphasia	MND	FTD-ALS	
Landqvist et al	C9orf72		50	F	Visual/Auditory	Yes	Apathy	Aphasia	No	FTD	
Landqvist et al	C9orf72		46	M	No	Yes	Disinhibition/Perseverative	Aphasia	Parkinsonism	FTD	
Landqvist et al	C9orf72		52	F	No	Yes	Agitation	Aphasia	Parkinsonism	FTD	
Landqvist et al	C9orf72		43	M	Visual/Tactile	No	Apathy/Disinhibition	Aphasia	No	FTD	
Larner et al	C9orf72		42	F	No	Yes	x	x	ALS	FTD-ALS	
Gramaglia et al	C9orf72		57	F	No	Yes	Perseverative	Executive	No	FTD	
Sommerlad et al	C9orf72		50	M	Auditory	Yes	Perseverative	Executive	No	FTD	
Shinagawa et al	C9orf72		56	M	No	Yes	Apathy/Disinhibition	Impaired	Parkinsonism	FTD	
Shinagawa et al	C9orf72		62	M	No	Yes	Apathy	Aphasia	MND	FTD-ALS	
Shinagawa et al	C9orf72		46	M	No	Yes	Apathy/Perseverative	Executive	Parkinsonism	FTD	
Shinagawa et al	C9orf72		39	M	Yes	Yes	Apathy	Executive		FTD	
Irwin et al		Pick's disease	55	M	Auditory	No	Perseverative	Impaired	Parkinsonism	FTD	
Irwin et al		Pick's disease	71	M	No	Yes	x	Aphasia	Parkinsonism	FTD	
Giannocarro et al	C9orf72		56	F	x	Yes	x	Executive	No	FTD	
Giannocarro et al	C9orf72		40	F	Yes	Yes	x	x	Parkinsonism/MND	FTD-ALS	Schizophrenia
Payman et al	C9orf72		65	M	No	Yes	Disinhibition	Executive	MND	FTD-ALS	
Ferenczi et al	MAPT		x	F	x	x	x	x	x	x	
Raggi et al	UBQL2		64	F	No	Yes	Disinhibition	Executive	No	FTD	
Burhan et al	C9orf72		60	F	Yes	Yes	Disinhibition	Memory	No	FTD	Schizophrenia

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