

**SUPPLEMENTAL TABLE 1. Demographic characteristics of patients with functional neurological disorders (FND).**

<b>Subject</b>	<b>Age</b>	<b>Gender</b>	<b>Educ. (years)</b>	<b>FND Subtype</b>	<b>Current Psychiatric Diagnoses</b>	<b>Past Psychiatric Diagnoses</b>	<b>Psychotropic Medications At Baseline</b>
1	60	M	18	PNES, FW	Anxiety NOS	MDD, LSD and Opiate Abuse	GBP, MIR
2	55	F	12	FMD, FW*	MDD, PD_Ag+	MDD, Alcohol and Cocaine Abuse	SERT, TZD
3	55	F	16	FMD*	GAD, Undiff Somatoform	-	ZLP, ECP, GBP
4	36	F	12	FMD, FW	Dysthymia, PD_Ag-, GAD, Undiff Somatoform	MDD	DLX, TZD
5	42	F	18	FW*	MDD, PD_Ag-, GAD, Somatoform Pain	Opiate Abuse	CLP, DVX
6	44	F	18	FMD	-	Eating Disorder NOS	DLX
7	31	F	15	FW <sup>†</sup>	PTSD, OCD, Ag	MDD	-
8	51	F	14	FMD*	-	MDD	-
9	49	F	14	FMD, FW*	MDD, Undiff Somatoform	PTSD	DOX
10	26	F	16	FMD, PNES*	MDD, PD_Ag+, GAD, Undiff Somatoform	-	CLP, VEN
11	30	F	14	FW <sup>†</sup>	MDD, PD_Ag+, PTSD, GAD, Somatization Disorder	MDD	APZ, CLP, PGN, FLX, DZP
12	27	F	18	PNES	PD_Ag+	MDD	CLN
13	45	M	14	FMD*	MDD	PD_Ag-	THP, VPA, BUP, TZD, ROP, LTG
14	42	F	18	FMD	Somatoform Pain Disorder	MDD	SERT, DZP, GBP

15	50	F	14	FMD, PNES	MDD, PD_Ag+, PTSD, GAD, Eating Disorder NOS	Alcohol, Cocaine, Opiate and Stimulants Abuse	FLX, ZLP, LRZ
16	31	M	14	PNES	PD_Ag-, PTSD	MDD, Alcohol Abuse	DLX, NRT, PZN
17	39	F	16	FW* <sup>†</sup>	PTSD, GAD, Somatization Disorder	MDD	CLN
18	58	F	18	PNES	Ag	MDD, Alcohol Abuse	TZD, GBP, CTP, TPM
19	53	F	16	FMD	MDD, Dysthymia, GAD, Somatoform Pain Disorder	Eating Disorder NOS	GBP, TZD, DLX
20	28	F	16	PNES, FW <sup>†</sup>	Dysthymia, PDwoAG, Undiff Somatoform	PTSD, Depression NOS	GBP
21	29	F	18	PNES <sup>†</sup>	GAD, Specific Phobia	Eating Disorder NOS	TPM
22	37	F	18	PNES, FMD	PDwoAG, Undiff Somatoform	PTSD, Social Phobia	-

<sup>†</sup>Indicates that these patients had splitting of the midline functional numbness. \*Indicates that these patients also had functional voice symptoms. Abbreviations: M, male; F, female; PNES, Psychogenic Nonepileptic Seizures; FW, Functional Weakness; FMD, Functional Movement Disorders; NOS, not otherwise specified; MDD, Major Depressive Disorder; PDwAg, Panic Disorder with Agoraphobia; PDwoAg, Panic Disorder without Agoraphobia; GAD, Generalized Anxiety Disorder; Undiff Somatoform, Undifferentiated Somatoform Disorder; PTSD, Post-Traumatic Stress Disorder; OCD, Obsessive Compulsive Disorder; Ag, Agoraphobia without Panic Disorder; LOC, Loss of Consciousness; APZ, Aripiprazole; BUP, Bupropion; CLN, Clonidine; CLP, Clonazepam; CTP, Citalopram; DLX, Duloxetine; DOX, Doxepin;

DVX, Desvenlafaxine; DZP, Diazepam; ECP, Escitalopram; FLX, Fluoxetine; GBP, Gabapentin; LTG, Lamotrigine; LRZ, Lorazepam; LSD, Lysergic Acid Diethylamide; MIR, Mirtazapine; NRT, Nortriptyline; PGN, Pregabalin; PZN, Prazosin; ROP, Ropinirole; SERT, Sertraline; THP, Trihexyphenidyl; TPM, Topiramate; TZD, Trazodone; VPA, Valproic Acid; VEN, Venlafaxine; ZLP, Zolpidem.

**SUPPLEMENTAL TABLE 2. Psychometric scores for 22 patients with functional neurological disorders and 27 healthy controls.**

	<b>FND Cohort Baseline</b>	<b>FND Cohort 6-Month Follow-up</b>	<b>Healthy Subject Cohort</b>
	N=22	N=22	N=27
	Mean (SD)	Mean (SD)	Mean (SD)
Age	41.7 (11.0)	-	40.5 (10.8)
Gender	19 F; 3 M	-	22 F; 5 M
Education (years)	15.4 (1.9)	-	17.3 (2.3)
SF-36: mental health composite score	37.7 (21.9)	43.9 (21.4)	83.6 (8.4)
SF-36: physical health composite score	37.2 (21.0)	46.8 (22.8)	93.2 (9.7)
Spielberger trait anxiety inventory	47.7 (11.5)	45.9 (13.5)	30.7 (7.1)
Beck depression inventory-II	21.8 (12.8)	20.5 (12.7)	1.6 (3.3)
Childhood trauma questionnaire	47.0 (18.9)	-	31.7 (7.27)
LEC-5: "happened to me" score	4.1 (2.2)	-	1.1 (1.3)

FND indicates functional neurological disorder; SD, standard deviation; F, Female; M, Male; SF-36, Short Form

Health Survey-36; LEC-5, Life Events Checklist-5.

**SUPPLEMENTAL TABLE 3. Psychometric scores and treatments for the most and least improved patients with functional neurological disorders based on 6-month mental health outcome.**

<b>Baseline Characteristics</b>	<b>Most Improved Mental Health FNDs</b>	<b>Least Improved Mental Health FNDs</b>
	N=11	N=11
	Mean (SD)	Mean (SD)
Age	41.2 (11.6)	42.1 (11.1)
Gender	10 F; 1 M	9 F; 2 M
Education (years)	14.9 (1.9)	15.8 (1.9)
SF-36: mental health composite score	31.3 (22.9)	44.1 (19.9)
SF-36: physical health composite score	43.4 (21.1)	31.0 (19.9)
Spielberger trait anxiety inventory	53.1 (12.6)	43.6 (9.6)
Beck depression inventory-II	26.1 (14.4)	20.0 (10.7)
Childhood trauma questionnaire	46.3 (19.8)	47.7 (18.9)
LEC-5: "happened to me" score	3.6 (1.4)	4.55 (2.7)
In physical therapy at baseline	4	5
Newly referred to physical therapy	3	4
In psychotherapy at baseline	7	8
Newly referred to psychotherapy	4	4
On SSRI/SNRI at baseline	9	3
Newly started on a SSRI/SNRI	1	5

FND indicates functional neurological disorder; SD, standard deviation; F, Female; M, Male; SF-36, Short Form

Health Survey-36; LEC-5, Life Events Checklist-5; SSRI, selective serotonin reuptake inhibitor; SNRI, serotonin-norepinephrine reuptake inhibitors.

**SUPPLEMENTAL TABLE 4. Uncorrected within-group findings at a  $p \leq 0.001$ , cluster extent threshold of  $50\text{mm}^3$ .**

Measures of Interest	Cerebral Regions (Brodmann Area)	Peak Coordinates in MNI Space (mm)			Peak Voxel Z-Score	P Value (SVC if applicable)	Cluster Extent ( $\text{mm}^3$ )
		x	y	z			
$\Delta$ SF-36 Mental Health Positive Associations	R supplementary motor area (6)	10	-16	75	4.18	<0.001	162
	R superior frontal gyrus (6)	18	-7	72	3.27	0.001	
	R middle cingulate gyrus (24)	3	12	43	3.85	<0.001	72
	L anterior hippocampus	-34	-16	-15	3.76	<0.001 (0.027)	149
	L middle frontal gyrus (46)	-33	26	40	3.61	<0.001	88
$\Delta$ SF-36 Mental Health Negative Associations	-	-	-	-	-	-	-
$\Delta$ SF-36 Physical Health Positive Associations	R frontopolar cortex (10)	10	62	4	3.90	<0.001	83
$\Delta$ SF-36 Physical Health Negative Associations	R superior/middle frontal gyrus (9)	22	24	37	4.40	<0.001	160
	L superior occipital gyrus (19)	-10	-82	45	3.80	<0.001	154
	L superior occipital gyrus (19)	-18	-78	42	3.70	<0.001	

SVC, small volume corrected; MNI, Montreal Neurological Institute; L, left; R, right; SF-36, Short Form Health Survey-36.

**SUPPLEMENTAL TABLE 5. Uncorrected between-group findings at a  $p \leq 0.001$ , cluster extent threshold of  $50\text{mm}^3$ .**

Between-Group Contrast	Cerebral Regions (Brodmann Area)	Peak Coordinates in MNI Space (mm)			Peak Voxel Z-Score	P Value (SVC if applicable)	Cluster Extent ( $\text{mm}^3$ )
		x	y	z			
SF-36: Mental Health 11 FND Most Improved > 27 HCs	R cerebellum crus 1	38	-55	-35	4.28	<0.001	1092
	R cerebellum 6	28	-72	-24	3.51	<0.001	
	R cerebellum crus 1	50	-62	-33	3.30	<0.001	
	L paracentral lobule (4)	-8	-24	63	3.91	<0.001	89
	L supplementary motor area (6)	0	-18	58	3.22	0.001	
	L superior occipital gyrus (23)	-20	-61	25	3.63	<0.001	75
	L cerebellum crus 1	-42	-58	-29	3.50	<0.001	105
SF-36: Mental Health 11 FND Most Improved < 27 HCs	-	-	-	-	-	-	
SF-36: Mental Health 11 FND Least Improved > 27 HCs	-	-	-	-	-	-	
SF-36: Mental Health 11 FND Least Improved < 27 HCs	R anterior hippocampus	39	-13	-17	3.97	<0.001 (0.011)	69
	L parahippocampus (30)	-21	-21	-24	3.68	<0.001	281
	L parahippocampus/fusiform gyrus/anterior hippocampus (20)	-30	-18	-24	3.54	<0.001	

	L inferior temporal/fusiform gyrus (20)	-36	-28	-15	3.20	0.001	
	L inferior frontal gyrus (48)	-50	18	0	3.61	<0.001	66
	L anterior insula (48)	-42	15	-3	3.34	<0.001	
	L middle temporal gyrus (22)	-60	-37	4	3.54	<0.001	63

SVC, small volume corrected; MNI, Montreal Neurological Institute; L, left; R, right; HC, healthy controls; FND, functional neurological disorder; SF-36, Short Form Health Survey-36.