

**Supplementary Table 2.** Comparison of Participants With Mild and Moderate Amounts of Total %TF During the Provoking Protocol OFF Medication and During the Unsupervised Daily-Living Activities Measured With the DeFOG System

	Variable	Provoking protocol OFF medication			Unsupervised home-monitoring		
		Participants with mild FOG (<25%TF)* (n=14)	Participants with moderate FOG (>25% TF)* (n=14)	p-value	Participants with mild FOG (<1%TF)* (n=14)	Participants with moderate FOG (>1%TF)* (n=14)	p-value
Participant characteristics and disease severity	Age (years)	71.00 (65.00-72.75)	69.50 (64.50-76.25)	0.63	70.00 (62.00-75.25)	71.00 (66.75-72.75)	0.71
	Gender (% female)	28.6	28.6	1.00	14.29	14.29	1.00
	Disease duration (years)	12.50 (7.75-16.50)	12.50 (7.00-18.75)	0.59	9.50 (3.50-21.25)	13.50 (9.50-16.00)	0.93
	MDS-UPDRS part III OFF	45.00 (35.00-51.50)	48.50 (35.25-52.25)	0.64	47.00 (35.00-52.00)	44.00 (34.00-53.00)	0.68
	MDS-UPDRS part III ON	2.00 (0.00-2.00)	2.00 (0.00-3.00)	0.14	36.00 (30.75-38.00)	32.00 (21.75-44.75)	0.68
	MDS-UPDRS III OFF item 3.11. FOG	31.50 (24.75-37.25)	37.00 (31.00-47.00)	0.38	<b>1.00 (0.00-2.00)</b>	<b>2.00 (1.00-3.00)</b>	<b>0.01</b>
	MDS-UPDRS III ON item 3.11 FOG	0.00 (0.00-2.00)	1.50 (0.75-2.00)	0.06	1.50 (0.00-2.00)	1.00 (0.00-2.00)	0.55
	Gait speed during 4-meter walk (m/sec)	1.04 (0.87-1.18)	1.06 (0.86-1.18)	0.63	1.00 (0.81-1.14)	1.15 (0.91-1.21)	0.38
	LEDD (mg/day)	832.50 (553.00-1076.50)	787.50 (299.75-1498.13)	0.96	<b>546.00 (288.00-1035.00)</b>	<b>887.00 (801.00-1235.00)</b>	<b>0.02</b>
Unsupervised home monitoring	% TF during monitoring	1.2 (0.5-3.7)	0.83 (0.6-2.8)	0.93	<b>0.6 (0.5-0.7)</b>	<b>2.8 (1.8-3.7)</b>	<b>≤0.001**</b>
	Number of FOG episodes	528.00 (448.25-918.50)	442.50 (179.75-1035.50)	0.41	<b>380.50 (101.00-522.25)</b>	<b>853.50 (614.25-1491.25)</b>	<b>≤0.001**</b>
	Number of FOG episodes per hour	20.01 (8.76-54.90)	14.81 (10.52-38.02)	0.85	<b>10.15 (8.56-12.81)</b>	<b>38.44 (27.45-54.90)</b>	<b>≤0.001**</b>
	Daily usage home monitoring device (min)	202.20 (186.25-354.94)	303.67 (174.51-353.26)	0.84	333.09 (180.73-368.21)	212.73 (183.75-295.44)	0.41
Amount of FOG during supervised FOG-provoking tests (%TF)	4-meter walk OFF	0.0 (0.0-4.0)	0.00 (0.0-6.7)	0.66	<b>0.0 (0.0-0.0)</b>	<b>1.9 (0.0-20.6)</b>	<b>0.05</b>
	TUG single task OFF	6.8 (0.0-11.3)	0.8 (0.0-8.6)	0.83	0.0 (0.0-3.9)	5.1 (0.0-20.8)	0.07
	TUG with dual-task OFF	0.0 (0.0-18.5)	1.6 (0.0-6.4)	0.59	<b>0.0 (0.0-1.1)</b>	<b>7.0 (0.0-41.9)</b>	<b>0.01</b>
	Turning task single task OFF	<b>5.1 (0.0-16.8)</b>	<b>58.2 (31.2-79.4)</b>	<b>≤0.001**</b>	21.9 (4.4-62.7)	21.2 (5.3-60.6)	0.95
	Turning task with dual-task OFF	<b>5.4 (0.0-18.9)</b>	<b>69.2 (42.9-83.6)</b>	<b>≤0.001**</b>	25.1 (0.0-58.9)	27.3 (3.4-80.6)	0.61
	Hotspot narrow space OFF	0.9 (0.0-21.5)	11.4 (0.0-32.7)	0.38	<b>0.0 (0.0-10.2)</b>	<b>21.6 (1.3-34.8)</b>	<b>0.01</b>

	Personal Hotspot OFF	<b>5.6 (0.0-11.3)</b>	<b>28.3 (17.6-41.0)</b>	<b>0.02**</b>	7.1 (0.0-21.7)	28.0 (8.7-39.5)	0.11
	%TF total provoking protocol OFF	<b>8.8 (3.5-14.4)</b>	<b>40.3 (32.9-48.9)</b>	<b>≤0.001**</b>	29.0 (5.5-40.1)	21.6 (11.0-47.6)	0.63
	Number of FOG episodes per hour OFF	<b>127.57 (66.01-182.97)</b>	<b>221.99 (161.36-307.75)</b>	<b>0.04**</b>	159.58 (88.39-222.07)	195.93 (128.00-320.13)	0.06
Amount of FOG during supervised FOG-provoking tests (%TF) ON medication	4-meter walk ON	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.32	0.0 (0.0-0.0)	0.0 (0.0-0.0)	0.32
	TUG single task ON	<b>0.0 (0.0-0.0)</b>	<b>0.0 (0.0-6.1)</b>	<b>0.04</b>	0.0 (0.0-1.5)	0.0 (0.0-0.0)	0.31
	TUG with dual task ON	0.0 (0.0-0.0)	0.0 (0.0-1.0)	0.19	0.0 (0.0-0.0)	0.0 (0.0-0.6)	0.63
	Turning task single task ON	<b>0.0 (0.0-7.7)</b>	<b>35.1 (0.0-66.2)</b>	<b>0.02**</b>	9.9 (0.0-60.2)	0.0 (0.0-39.8)	0.21
	Turning task with dual task ON	<b>0.0 (0.0-7.4)</b>	<b>46.9 (6.6-60.8)</b>	<b>≤0.001**</b>	9.3 (0.0-57.5)	4.4 (0.0-41.0)	0.32
	Hotspot narrow space ON	0.0 (0.0-1.2)	0.0 (0.0-0.1)	0.87	0.0 (0.0-1.5)	0.0 (0.0-0.0)	0.44
	Personal hotspot ON	0.0 (0.0-5.8)	1.3 (0.0-5.5)	0.52	1.3 (0.0-7.4)	0.0 (0.0-4.3)	0.40
	%TF total provoking protocol ON	<b>0.6 (0.0-4.6)</b>	<b>22.2 (3.0-38.4)</b>	<b>0.01**</b>	9.4 (0.0-38.4)	1.7 (0.0-10.0)	0.12
	Number of FOG episodes per hour ON	<b>25.69 (0.0-118.3)</b>	<b>197.24 (56.32-265.99)</b>	<b>0.02</b>	157.86 (0.00-226.03)	54.67 (0.00-238.71)	0.60
Self-report Questionnaires	New Freezing of Gait Questionnaire	20.00 (19.00-23.25)	24.00 (20.75-25.25)	0.09	21.00 (19.00-24.25)	30.00 (22.25-37.75)	0.51
	New Freezing of Gait Questionnaire sub-score 2	<b>14.00 (12.75-15.25)</b>	<b>17.00 (15.75-18.00)</b>	<b>0.02</b>	15 (13.75-17.00)	16 (13.75-17.25)	0.75
	Characterising Freezing of Gait Questionnaire	25.50 (16.50-36.25)	23.50 (17.50-32.25)	0.57	19.50 (15.00-27.70)	23.00 (19.70-25.30)	0.51

%TF: % time frozen; MDS-UPDRS: Movement Disorders Society-Unified Parkinson's Disease Rating Scale; TUG: Timed Up and Go; OFF: off medication state; ON: on medication state; LEDD: levodopa equivalent daily dose.

\*Table entries are median (25%-75% percentiles). Unadjusted p-values are shown. Those that are still statistically significant after adjusting for multiple comparisons are indicated by \*\*.