

Motoric Subtypes of Delirium and Long-Term Functional and Mental Health Outcomes in Adults after Critical Illness

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ST 1: Interaction Between Hypoactive and Hyperactive Delirium

	P-value for Interaction	
	3-Month Follow Up	12-Month Follow Up
ADL	0.26	0.99
FAQ	0.43	0.40
BDI-II	0.42	0.91
PCL	0.51	0.93

ST 2: Missingness of Primary Outcomes

	3-month follow-up		12-month follow-up	
	Patients with Missing Assessments	% of Main Cohort	Patients with Missing Assessments	% of Main Cohort
ADL	24	4%	11	2%
FAQ	33	6%	14	3%
BDI-II	55	10%	45	9%
PCL	41	7%	25	5%

ST 3: Baseline and Enrollment Characteristics of Patients with Complete vs. Partial Outcomes

Characteristic	N	Complete 3-Month Evaluation (n=494)	Incomplete 3-Month Evaluation (n= 62)	p-value
Age (years)	556	61 (52-70)	67 (59-74)	0.002
Sex (%)				
Male	556	61	53	0.24
Female		39	47	
Race (%)				
Caucasian	556	90	87	0.43
African American		10	11	
Education (years)	552	12 (12-14)	12 (12-14)	0.25
Charlson score	556	2 (1-4)	3 (2-4)	0.001
Katz ADL at enrollment				
Score = 0	551	0 (0-1)	0 (0-1)	0.029
Score > 0		74%	61%	
Score > 0		26%	39%	
FAQ Score (IADL) at enrollment				
FAQ 0-1	551	0 (0-2)	0 (0-3)	0.37
FAQ > 1		62%	56%	
FAQ > 1		38%	44%	
History of depression (%)	540	37%	35%	0.73
History of PTSD (%)	543	6%	7%	0.89
IQCODE-SF at enrollment	553	3 (3.0-3.12)	3 (3-3.19)	0.2
Mean Modified SOFA in the ICU	552	4.7 (3.5-6.5)	4.8 (3.3-6.2)	0.58
Length of mechanical ventilation (days)	488	2.2 (0.9-5.8)	2 (1-9.4)	0.59
Days severely septic in the ICU	552	2 (0-5)	3 (1-7.8)	0.013
Mean 24hr dose of benzodiazepines in the ICU ^b	552	0.6 (0-6.6)	0.5 (0-5.8)	0.68
Mean 24hr dose of opiates in the ICU ^c	552	268.3 (1.5-985.3)	261.5 (1.1-861.4)	0.73
Mean 24hr dose of propofol in the ICU	552	0 (0-579)	38 (0-560)	0.32
Mean 24hr dose of haloperidol in the ICU	552	0 (0-0)	0 (0-0.24)	0.34
Mean 24hr dose of dexmedetomidine in the ICU	552	0 (0-0)	0 (0-0)	0.79

Abbreviations: ADL, Activities of Daily Living; IADL, Instrumental Activities of Daily Living; ICU, intensive care unit; IQCODE-SF, Informant Questionnaire on Cognitive Decline in the Elderly Short Form; PTSD, post-traumatic stress disorder; SOFA, Sequential Organ Failure Assessment.

^a Median (25th -75th percentile) unless otherwise noted

^b Measured in midazolam equivalents

^c Measured in fentanyl equivalents

ST4: ICU vs Non-ICU Delirium

	Hypoactive	Hyperactive	Both	Neither
Prevalence in ICU	364 (65%)	84 (15%)	49 (9%)	498 (90%)
Duration in ICU	3 (1-6)	1 (1-2)	1 (1-2)	3 (2-6)
Prevalence on the Floor	122 (22%)	16 (3%)	2 (0.4%)	534 (96%)
Duration on the Floor	2 (1-3)	1 (1-2)	1, 2	25 (20-27)

The prevalence of delirium includes all participants with at least one day of each delirium state (hypoactive, hyperactive, or both) or at least one day without delirium (neither). Duration of delirium state is presented in days as median (interquartile range) within the 28-day study period.

ST 5: Length of Stay in ICU and Hospital by Delirium Subtype

	ICU Length of Stay ^a	Hospital Length of Stay ^a
Total Cohort (n=556)	5 (3-10)	10 (6-17)
Hypoactive Delirium (n=390)	6 (3-12)	12 (7-21)
Hyperactive Delirium (n=95)	8 (4-16)	17 (10-24)

^aLength of stay is reported in days as median (interquartile range).

ST 6: Employment Status

Employment Status	N = 554
Employed at Enrollment	137 (24%)
<ul style="list-style-type: none"> • Full Time • Part Time 	<ul style="list-style-type: none"> • 120 (87%) • 18 (13%)
Employed at 12 Months	69 (12%)
<ul style="list-style-type: none"> • Full Time • Part Time 	<ul style="list-style-type: none"> • 51 (76%) • 16 (24%)
Reasons for Not Being Employed at 12 Months	
<ul style="list-style-type: none"> • Retired • Not physically able to work • Not emotionally able to work • Unable to find work • Elected not to work • Not cognitively able to work • Attending school • Do not know 	<ul style="list-style-type: none"> • 186 (41%) • 245 (53%) • 7 (2%) • 0 (0%) • 15 (3%) • 0 (0%) • 1 (0%) • 3 (1%)