Supplementary Materials

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Characterization of Cognitive Symptoms in Post COVID-19 Patients

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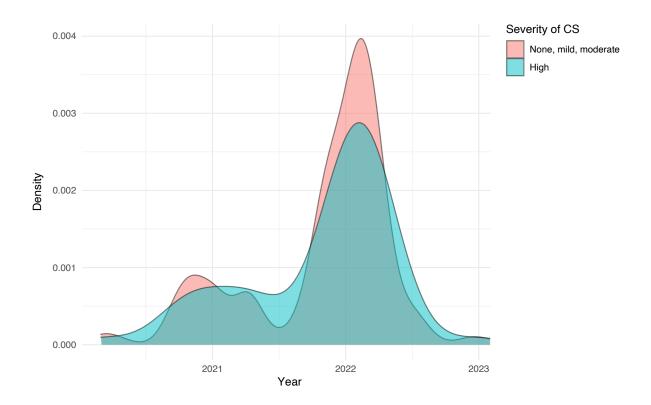
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Supplementary Figure 1. Density distribution of acute SARS-CoV-2 infections across time and by CS severity

Supplementary Table 1. Neurocognitive assessments, respective abbreviations and cognitive domains assessed

Neurocognitive assessment	Abbreviation	Cognitive domain assessed	
Vocabulary test	VT	Premorbid intelligence quotient (IQ)	
Trail Making Test – part A	TMT-A	Visuomotoric speed	
Trail Making Test – part B	TMT-B	Visuomotoric speed, cognitive flexibility & working memory	
Letter-Number-Span	LNS	Working memory	
d2-R Test of Attention	d2R	Concentration, attention	
Concentration capacity	- CC		
Speed of operation	- Sp		
Accuracy	- Acc		
The Repeatable Battery for the Assessment of Neuropsychological Status	RBANS		
List Learning ¹	- LL	Immediate memory	
Memorized Words in the 4 th Round ²	- MW4		
Story Memory ³	- SM		
List Recall ⁴	- LR	Delayed memory	
List Recognition ⁵	- LRg		
Story Recall ⁶	- SR		
Figure Recall ⁷	- FR		
Figure Copy ⁸	- FC	Visuospatial function / construction	
Line Orientation ⁹	- LO		
Digit Span ¹⁰	- DS	Attention	
Coding / Symbol-Number-Test ¹¹	- SNT		
Semantic Fluency ¹²	- SF	Language	
Picture Naming ¹³	- PN		

¹Learning new words from a list of 10 words
²Memorized words in the fourth round
³Memorized details from a given story with 12 details
⁴Recalled words from a list of 10 after delay
⁵Number of words the patient can refer to from a previous list of words (n = 20) correctly
⁶Number of details the patient can remember from a story (with 12 details) after delay
⁷Memorizing a complex geometric image
⁸Patient is asked to draw a complex geometric image presented in front of them
⁹Patient is asked to recognize a certain angle out of multiple lines
¹⁰Patient is asked to name numbers related to symbols in a number-symbol-matrix
¹²Patient is asked to name as many names as possible of vegetables and fruit in 1 minute
¹³Patient is asked to name the items on ten pictures

NCT subtest	Number of patients below -1SD (n _{total} = 78)		
ТМТ-А	23 (29.5%)		
ТМТ-В	20 (25.6%)		
LNS	25 (32.9%)		
d2-R - CC	34 (45.3%)		
d2-R - Sp	8 (10.5%)		
d2-R - Acc	14 (20.9%)		
RBANS - LL	4 (5.1%)		
RBANS - MW4	2 (2.6%)		
RBANS - SM	12 (15.4%)		
RBANS - LR	1 (1.3%)		
RBANS - LRg	22 (28.2%)		
RBANS – SR	12 (15.4%)		
RBANS - FR	9 (11.5%)		
RBANS - FC	27 (34.6%)		
RBANS - LO	4 (5.1%)		
RBANS - DS	37 (47.4%)		
RBANS - SNT	34 (43.6%)		
RBANS - SF	20 (25.6%)		
RBANS - PN	12 (15.4%)		

Supplementary Table 3. RBANS results of patients who reported hiCS vs mild to moderate CS

Reported intensity of	High	Mild or moderate	p value
cognitive symptoms	(n = 26)	(n = 52)	
RBANS - LL	110 [96.5;125]	113 [106;123]	0.478
RBANS - MW4	106 [95.0;108]	108 [104;108]	0.192
RBANS - SM	97.5 [89.2;112]	100 [89.8;107]	0.986
RBANS - LR	107 [101;112]	110 [102;122]	0.477
RBANS - LRg	85.0 [75.2;91.5]	89.0 [85.0;95.0]	0.192
RBANS – SR	93.0 [87.2;105]	100 [92.8;104]	0.598
RBANS - FR	103 [94.5;111]	104 [94.0;114]	0.598
RBANS - FC	87.0 [80.5;98.0]	91.0 [82.0;107]	0.478
RBANS - LO	104 [92.5;120]	108 [99.8;122]	0.590
RBANS - DS	80.5 [72.2;89.8]	92.0 [78.8;102]	0.192
RBANS - SNT	84.0 [68.2;98.5]	93.0 [82.0;108]	0.192
RBANS - SF	98.0 [88.2;103]	98.0 [81.8;114]	0.985
RBANS - PN	106 [81.0;107]	106 [106;106]	0.986

All results are depicted as age normalized standardized values (ASV) with a norm value of 100.