Supplementary material:

SARS-CoV-2 and auto-antibodies in the cerebrospinal fluid of COVID-19 patients: prospective multicenter cohort study

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Supplementary table 1. Overview of available data of study outcomes	
Outcome	**No. of cases with available data / total study population**
Routine analysis	
CSF leukocytes, x 10^6/L	38 / 38
CSF protein, g/L	38 / 38
CSF albumin, mg/L	38 / 38
CSF glucose,	38 / 38
CSF IgG, mg/L	21 / 38
Microbiological analysis	
SARS-CoV-2 RNA via PCR	
CSF	30 / 38
Serum	30 / 38
SARS-CoV-2 IgG Ab against spike protein WANTAI	
CSF	31 / 38
Serum	31 / 38
SARS-CoV-2 IgG Ab against spike protein EUROIMMUN	
CSF	34 / 38
Serum	32 / 38
HSV, VZV and EV DNA/RNA PCR	
CSF	30 / 38
Serum	30 / 38
Autoimmune analysis	
CBA commercial	
CSF	38 / 38
Serum	34 / 38
TBA commercial	
CSF	38 / 38
Serum	34 / 38

Abbreviations: CSF, cerebrospinal fluid; PCR, polymerase chain reaction; Ab, antibody; HSV, herpes simplex virus; VZV, varicella-zoster virus; EV, enterovirus; CBA, cell-based assay; TBA, tissue-based assay.

Supplementary table 2. Clinical and laboratory characteristics of COVID-19 patients with detected anti-neuronal antibodies in serum with commercial cell-based assays

Case	Clinical Phenotype	CSF findings		Commercial CBA		Commercial TBA		EEG	Brain CT / MRI
		Leuko. (E6/L)	Protein (g/L)	Serum	CSF	Serum	CSF		
#1	Peripheral facial palsy 17 days after pos. PCR	3	0.30	**CASPR2^{+}**	Neg.	Neg.	Neg.	NA	NA
#2	Prolonged fatigue and cognitive deficits	2	0.22	**LGI1^{+}**	Neg.	Neg.	Neg.	NA	Normal MRI
#3	Encephalopathy, followed by coma and death	2	0.50	**CASPR2^{+}**	Neg.	Neg.	Neg.	Encephalopathic slowing	Pontine and mesencephalic hypodensity on CT
#4	Encephalopathy, followed by coma and death	4	0.27	**NMDAR^{+}**	Neg.	Neg.	Neg.	Encephalopathic slowing	Normal CT

All positive serum findings were weakly positive.

Abbreviations: CBA, cell-based assay; CSF, cerebrospinal fluid; CT, computerized tomography; CASPR2, contactin-associated protein-like 2; LGI1, leucine-rich glioma inactivated 1; Leuko, leukocytes; MRI, magnetic resonance imaging; EEG, electroencephalogram; NMDAR, N-methyl-D-aspartate receptor; NA, not applicable; PCR, polymerase-chain-reaction for SARS-CoV-2; TBA, tissue-based assay.