

Table S1. Plasma NfL levels on hospital admission, comorbidities and maximal ventilation needed during hospitalization in COVID-19 patients.

Patient	Comorbidity	Ventilation	Plasma NfL (pg/mL)	CSF NfL (pg/mL)	CSF MMP-2 (OD/mm ²)	CSF MMP-9 (OD/mm ²)
1	none	VMK	29.9	330	50.4	11.0
2	diabetes	NIV	83.9	889	96.0	19.1
3	arterial hypertension, cancer	AA	27.2	622	87.1	19.9
4	none	VMK	-	1591	79.0	15.2
5	arterial hypertension, diabetes	NIV	-	7961	126.3	11.5
6	chronic pulmonary disease	AA	19.8	318	-	-
7	cancer	IOT	90.3	4998	80.3	114.4
8	none	NIV	103.0	18,555	92.4	21.9
9	arterial hypertension, chronic pulmonary disease, renal	VMK	-	6661	84.3	10.2
10	arterial hypertension, diabetes	NIV	59.5	8497	84.5	67.1
11	arterial hypertension, diabetes	IOT	96.7	1720	88.5	15.7
12	cancer	VMK	-	266	72.4	15.6
13	none	AA	14.4			
14	none	NIV	21.8			
15	arterial hypertension	NIV	14.2			
16	cancer	VMK	14.4			
17	none	AA	11.2			
18	none	IOT	28.6			
19	arterial hypertension	AA	34.0			
20	none	NIV	27.1			
21	arterial hypertension	NIV	41.4			
22	arterial hypertension, cardiovascular	NIV	22.3			
23	none	AA	27.6			
24	cardiovascular, cancer	IOT	123			
25	chronic pulmonary disease	NIV	29.4			
26	none	VMK	26.7			
27	none	VMK	8.88			
28	none	VMK	20.9			
29	none	IOT	39.0			
30	none	AA	13.9			
31	arterial hypertension, cardiovascular	AA	29.0			
32	none	IOT	42.6			
33	cancer	NIV	76.4			
34	arterial hypertension	NIV	10.3			
35	none	AA	10.2			
36	arterial hypertension	NIV	10.9			
37	arterial hypertension	AA	17.8			
38	none	AA	4.43			
39	none	IOT	16.8			
40	arterial hypertension	NIV	86.3			
41	arterial hypertension, cancer	NIV	42.2			
42	arterial hypertension	AA	4.96			
43	arterial hypertension	NIV	59.0			
44	cardiovascular, diabetes	IOT	31.1			
45	none	VMK	32.5			
46	diabetes	NIV	11.7			

47	none	NIV	14.9
48	arterial hypertension	IOT	15.3
49	arterial hypertension, chronic pulmonary disease	NIV	28.1
50	none	AA	0.221
51	none	NIV	36.4
52	none	AA	19.9
53	none	AA	15.1
54	none	AA	4.56
55	none	VMK	39.3

NfL: neurofilament light chain, CSF: cerebrospinal fluid, MMP-2: matrix metalloprotease-2, MMP-9: matrix metalloprotease-9, OD: optical density, AA: ambient air, VMK: Venturi oxygen mask, NIV: noninvasive ventilation, IOT: invasive mechanical ventilation through orotracheal intubation.

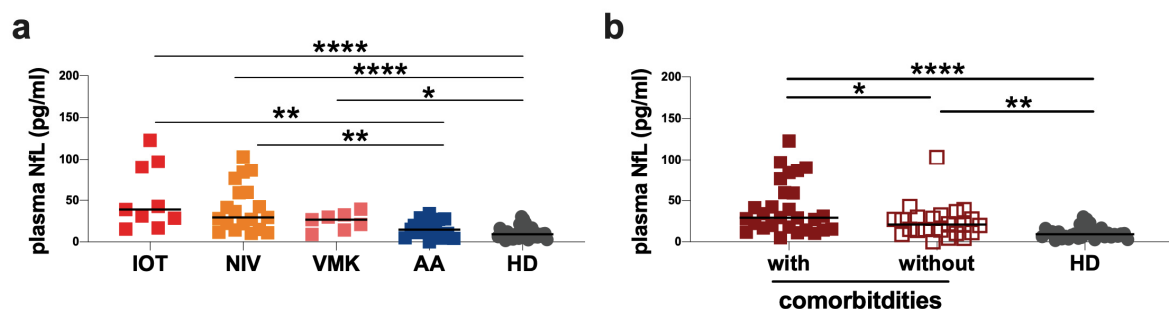


Figure S1. Evaluation of plasma NfL levels on hospital admission in COVID-19 patients stratified according to the presence of comorbidities and maximal ventilation needed during hospitalization. NfL: neurofilament light chain, AA: ambient air, VMK: Venturi oxygen mask, NIV: noninvasive ventilation, IOT: invasive mechanical ventilation through orotracheal intubation. ****: $p < 0.0001$; **: $0.001 < p < 0.01$; *: $0.01 < p < 0.05$.