

Supplemental Material

Figure S1. Trend of serum concentrations of NfL measured in stroke patients for which all the longitudinal time points were available (n = 19). As methodological control, serum NfL was also measured in a group of healthy subjects (HC, n = 20). Each box represents the area between the 25th and 75th percentiles [interquartile range, IQR]. Lines inside the boxes represent the median values. White dots represent the mean value for each class. Whiskers extend to the lowest and highest values within 1.5 times the IQR from the box. Statistical analysis by unpaired Mann Withney test.

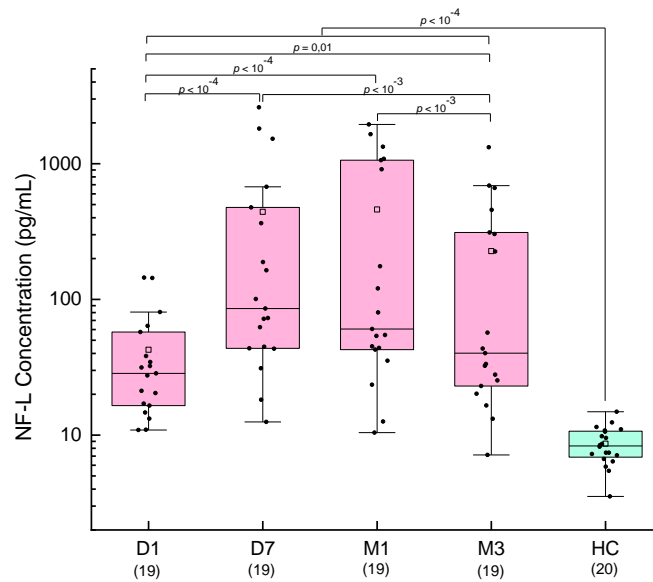


Figure S2. Trend of serum concentrations of sGFAP measured in stroke patients for which all the longitudinal time points were available (n = 19). As methodological control, serum NfL was also measured in a group of healthy subjects (HC, n = 20). Each box represents the area between the 25th and 75th percentiles [interquartile range, IQR]. Lines inside the boxes represent the median values. White dots

represent the mean value for each class. Whiskers extend to the lowest and highest values within 3 times the IQR from the box. Statistical analysis is performed by unpaired Mann Withney test.

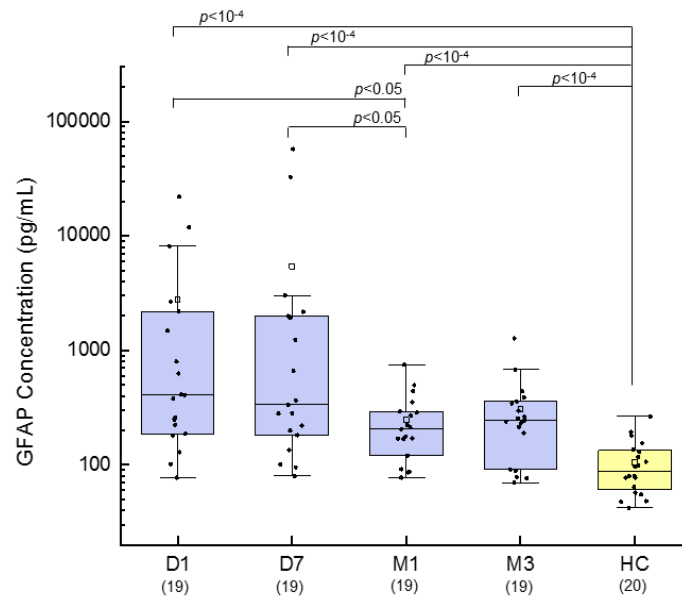


Table S1. Correlation analysis of sNfL and sGFAP levels with patients' age, NIHSS score, pre-stroke mRS score and chronic cerebrovascular burden (assessed by Fazekas scale adapted to CT imaging obtained at hospital admission) in stroke patients (n=36).

Variable	sNfL		sGFAP	
	Spearman's rho	p-value	Spearman's rho	p-value
Age	0.50	0.003	0.36	0.04
NIHSS baseline	0.35	0.04	0.66	<0.0001
Pre-stroke mRS	0.51	0.002	0.36	0.03
CCVB	0.19	0.27	0.14	0.41

CCVB, chronic cerebrovascular burden; mRS, modified Rankin Scale; NIHSS, National Institute of Health Stroke Scale; sGFAP, serum Glial Fibrillary Acidic Protein; sNfL, serum Neurofilament Light chain

Table S2. Baseline characteristics of healthy control subjects.

Variable	Healthy Controls (n = 20)
Gender	
Female, n (%)	11 (55.0 %)
Male, n (%)	9 (45.0 %)
Age (years), mean \pm s.d.	48.15 \pm 9.57
Smoking habit, n (%)	8 (40.0 %)
sNfL (pg/mL), median [IQR]	8.3 [3.8]
sGFAP (pg/mL), median [IQR]	87.9 [72.9]

Table S3. Multivariate analysis of serum peak biomarkers (sNFL-D7 and sGFAP-D1) considered separately (row A, B) or coupled in the same model (row C) and clinical characteristics in relation to NIHSS, mRS, TCT, FAC, total FIM, motor FIM, cognitive FIM assessed at M1 in patients with ischemic stroke.

		NIHSS		mRS		TCT		FAC		Total FIM		Motor FIM		Cognitive FIM	
		β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value	β coeff.	<i>p</i> -value
A	Age	0.01	0.80	-0.009	0.71	-0.38	0.40	-0.007	0.88	-0.34	0.61	-0.12	0.85	-0.43	0.26
	Pre-mRS	0.90	0.14	0.51	0.08	8.03	0.12	0.44	0.38	3.41	0.64	4.33	0.52	-0.66	0.87
	CCVB	1.43	0.01	0.78	0.006	-11.78	0.01	-0.70	0.13	-10.14	0.13	-7.15	0.24	-4.44	0.23
	sNFL D7	0.003	0.0001	0.0002	0.53	-0.02	0.0007	-0.002	0.02	-0.02	0.03	-0.02	0.05	-0.004	0.48
B	Age	0.003	0.96	-0.01	0.61	-0.29	0.50	-0.006	0.88	1.43	0.00	-0.02	0.97	-0.32	0.33
	Pre-mRS	-0.38	0.50	0.71	0.01	2.04	0.67	0.30	0.48	-1.02	0.06	4.03	0.43	-1.51	0.68
	CCVB	1.12	0.04	0.77	0.004	-8.01	0.08	-0.55	0.15	0.0003	0.03	-5.42	0.24	-3.67	0.27
	sGFAP D1	0.0005	<0.0001	0.00003	0.45	-0.003	0.0003	0.0002	0.002	0.002	0.05	-0.003	0.0004	-0.0005	0.40
C	CCVB	1.43	0.003	0.72	0.004	-12.18	0.005	-0.61	0.13	-9.17	0.07	-5.66	0.24	-6.15	0.09
	Pre-mRS	-1.02	0.06	0.55	0.06	6.71	0.17	0.42	0.38	3.28	0.59	4.40	0.46	-1.51	0.73
	sGFAP D1	0.0003	0.03	< 0.0005	0.39	-0.001	0.34	-0.0001	0.17	-0.004	0.007	-0.003	0.03	-0.0003	0.73
	sNFL D7	0.002	0.05	0.0005	0.33	-0.02	0.03	-0.0006	0.45	-0.002	0.79	-0.001	0.91	-0.003	0.69

CCVB, chronic cerebrovascular burden; mRS, modified Rankin Scale; NIHSS, National Institute of Health Stroke Scale; FAC, Functional Ambulation Classification; FIM, Functional Independence Measure; sGFAP, serum Glial Fibrillary Acidic Protein; sNfL, serum Neurofilament Light chain; TCT, Trunk Control Test

Table S4. Modified Rankin scale (mRS) scores of stroke patients at D7, M1, M3 dichotomized between those having a positive (mRS range: 0-2) and negative (mRS range: 3-6) outcome.

Time point	Positive outcome (mRS 0-2)	Negative outcome (mRS 3-6)
D7	20	8
M1	19	8
M3	19	3