

Table e-2. Summary of logistic regression analysis for each plasma marker.

Table e-2A	<u>ALS vs Controls</u>: OR and relative 95% CI of <i>individual</i> plasma markers, with and without further adjustment for clinical variables.			
	Basic model^a		Multivariate model^b	
Markers	OR (95%CI)	p-value	OR (95%CI)	p-value
CK	2.41 (1.54, 3.78)	<0.001	3.03 (1.80, 5.10)	<0.001
Ferritin	2.10 (1.37, 3.23)	0.001	2.17 (1.35, 3.47)	0.001
CRP	1.26 (0.79, 2.01)	0.33	N/A	N/A
IL-6	1.34 (0.89, 2.02)	0.16	1.28 (0.80, 2.04)	0.31
TNFα	8.00 (4.33, 14.76)	<0.001	7.24 (3.81, 13.77)	<0.001
IL-1β	7.41 (4.01, 13.69)	<0.001	6.60 (3.51, 12.39)	<0.001
IL-8	3.31 (2.08, 5.26)	<0.001	3.42 (2.03, 5.74)	<0.001
IFNγ	0.20 (0.12, 0.34)	<0.001	0.21 (0.12, 0.37)	<0.001
IL-2	15.49 (7.12, 33.68)	<0.001	14.22 (6.32, 32.01)	<0.001
IL-12p70	12.51 (7.12, 33.68)	<0.001	11.41 (5.32, 24.48)	<0.001
IL-4	9.74 (5.02, 18.90)	<0.001	10.96 (5.19, 23.18)	<0.001
IL-5	3.49 (2.17, 5.61)	<0.001	3.59 (2.14, 6.03)	<0.001
IL-13	11.38 (5.52, 23.46)	<0.001	11.05 (5.15, 23.69)	<0.001
IL-10	10.67 (5.27, 21.59)	<0.001	10.19 (4.84, 21.48)	<0.001
Table e-2B	<u>ALS vs Controls</u> OR and relative 95% CI of <i>mutually-adjusted</i> plasma markers in a basic and a multivariate model.			

	Basic model ^a		Multivariate model ^b	
Markers	OR (95% CI)	p-value	OR (95% CI)	p-value
Age at sampling, y	1.05 (0.99, 1.12)	0.11	0.92 (0.80, 1.06)	0.26
Gender ^c	0.17 (0.03, 0.86)	0.03	0.29 (0.02, 4.39)	0.37
CK	1.36 (0.54, 3.43)	0.51	0.88 (0.23, 3.33)	0.85
Ferritin	1.74 (0.70, 4.33)	0.23	0.61 (0.13, 2.81)	0.53
CRP	0.54 (0.14, 2.13)	0.38	0.34 (0.05, 2.15)	0.25
IL-6	5.53 (1.31, 23.30)	0.02	18.55 (1.37, 251.95)	0.03
TNF α	5.05 (0.93, 27.59)	0.06	35.78 (1.86, 689.20)	0.02
IL-1 β	1.37 (0.24, 7.78)	0.72	0.79 (0.06, 10.11)	0.86
IL-8	0.63 (0.28, 1.73)	0.37	0.34 (0.07, 1.78)	0.20
IFN γ	0.14 (0.04, 0.55)	0.005	0.09 (0.01, 0.62)	0.02
IL-2	1.96 (0.16, 24.74)	0.61	0.23 (0.01, 8.41)	0.43
IL-12p70	0.60 (0.04, 10.22)	0.72	0.06 (0.001, 2.79)	0.15
IL-4	2.05 (0.40, 10.52)	0.39	90.90 (1.25, 6603.62)	0.04
IL-5	1.27 (0.33, 4.84)	0.73	1.64 (0.31, 8.73)	0.57
IL-13	4.88 (0.52, 45.99)	0.17	20.69 (0.65, 656.10)	0.086
IL-10	1.001 (0.99, 1.02)	0.86	1.005 (0.98, 1.03)	0.74
Arthritis ^d	N/A		190.63 (0.27, 133073.73)	0.12

Autoimmune pathology^d		7.61 (0.02, 2561.16)	0.49
Hypertension^d		0.03 (0.001, 0.97)	0.048
Diabetes^d		12.18 (0.04, 3510.54)	0.39
Hyperlipidaemia^d		8.65 (0.24, 314.33)	0.24
Statin Usage^d		0.24 (0.005, 10.76)	0.46
CVD Risk		68.82 (1.94, 2444.97)	0.02



Table e-2C	HR and relative 95% CI of <i>individual</i> plasma markers with and without further adjustment for clinical variables to evaluate survival <u>among ALS patients.</u>			
	Basic model^a		Multivariate model^b	
Markers	HR (95% CI)	p-value	HR (95% CI)	p-value
CK	0.95 (0.70, 1.29)	0.74	0.92 (0.67, 1.26)	0.59
Ferritin	1.74 (1.26, 2.41)	0.001	1.71 (1.20, 2.44)	0.003
CRP	1.19 (0.88, 1.61)	0.26	N/A	N/A
IL-6	1.04 (0.77, 1.40)	0.82	1.02 (0.73, 1.42)	0.92
TNFα	1.26 (0.94, 1.71)	0.13	1.31 (0.94, 1.81)	0.11
IL-1β	0.81 (0.60, 1.11)	0.18	0.70 (0.48, 1.03)	0.07
IL-8	1.07 (0.80, 1.45)	0.65	1.18 (0.84, 1.66)	0.35
IFNγ	1.05 (0.78, 1.42)	0.74	1.01 (0.73, 1.39)	0.97

IL-2	1.29 (0.96, 1.74)	0.09	1.43 (1.04, 1.98)	0.03
IL-12p70	1.07 (0.80, 1.42)	0.66	1.09 (0.80, 1.48)	0.60
IL-4	0.94 (0.69, 1.27)	0.68	0.98 (0.68, 1.40)	0.90
IL-5	0.95 (0.72, 1.25)	0.71	0.89 (0.65, 1.22)	0.47
IL-13	1.01 (0.75, 1.36)	0.96	1.00 (0.72, 1.38)	0.99
IL-10	1.06 (0.80, 1.41)	0.69	1.05 (0.77, 1.43)	0.77
Table e-2D	HR and relative 95% CI of <i>mutually-adjusted</i> plasma markers in a basic and a multivariate model to evaluate survival <i>among ALS patients</i>.			
	Basic model^a		Multivariate model^b	
Markers	HR (95% CI)	p-value	HR (95% CI)	p-value
Age at sampling, y	1.05 (1.02, 1.08)	0.002	1.03 (0.97, 1.08)	0.37
Gender^c	1.77 (1.01, 3.12)	0.047	2.42 (1.12, 4.88)	0.02
Ferritin	1.46 (1.04, 2.04)	0.03	1.38 (0.95, 1.99)	0.09
IL2	1.61 (1.05, 2.47)	0.03	1.77 (1.10, 2.84)	0.02
IL1β	0.55 (0.35, 0.85)	0.01	0.52 (0.32, 0.85)	0.009
TNFα	1.18 (0.77, 1.81)	0.45	1.20 (0.77, 1.87)	0.42
Hypertension^d	N/A		1.47 (0.80, 2.70)	0.21
Diabetes^d			0.09 (0.02, 0.49)	0.005
Hyperlipidaemia^d			1.89 (0.64, 5.55)	0.25
Statin usage^d			1.83 (0.76, 4.43)	0.18

CVD risk		1.27 (0.61, 2.66)	0.52
CRP		1.13 (0.79, 1.60)	0.51
Arthritis^d		0.40 (0.13, 1.22)	0.11
Autoimmune pathology^d		2.13 (0.76, 6.03)	0.15

Abbreviations: OR, odds ratios; CI, confidence intervals; HR, hazard ratios; N/A, not applicable. ^a, Basic model: adjusted for gender and age at sampling; ^b, Multivariate model: adjusted for gender, age at sampling, CRP, hypertension, diabetes, hyperlipidaemia, statin usage, CVD risk, arthritis and autoimmune pathology; ^c, reference group: male; ^d, reference group: without the disease/treatment.