Hazard ratio

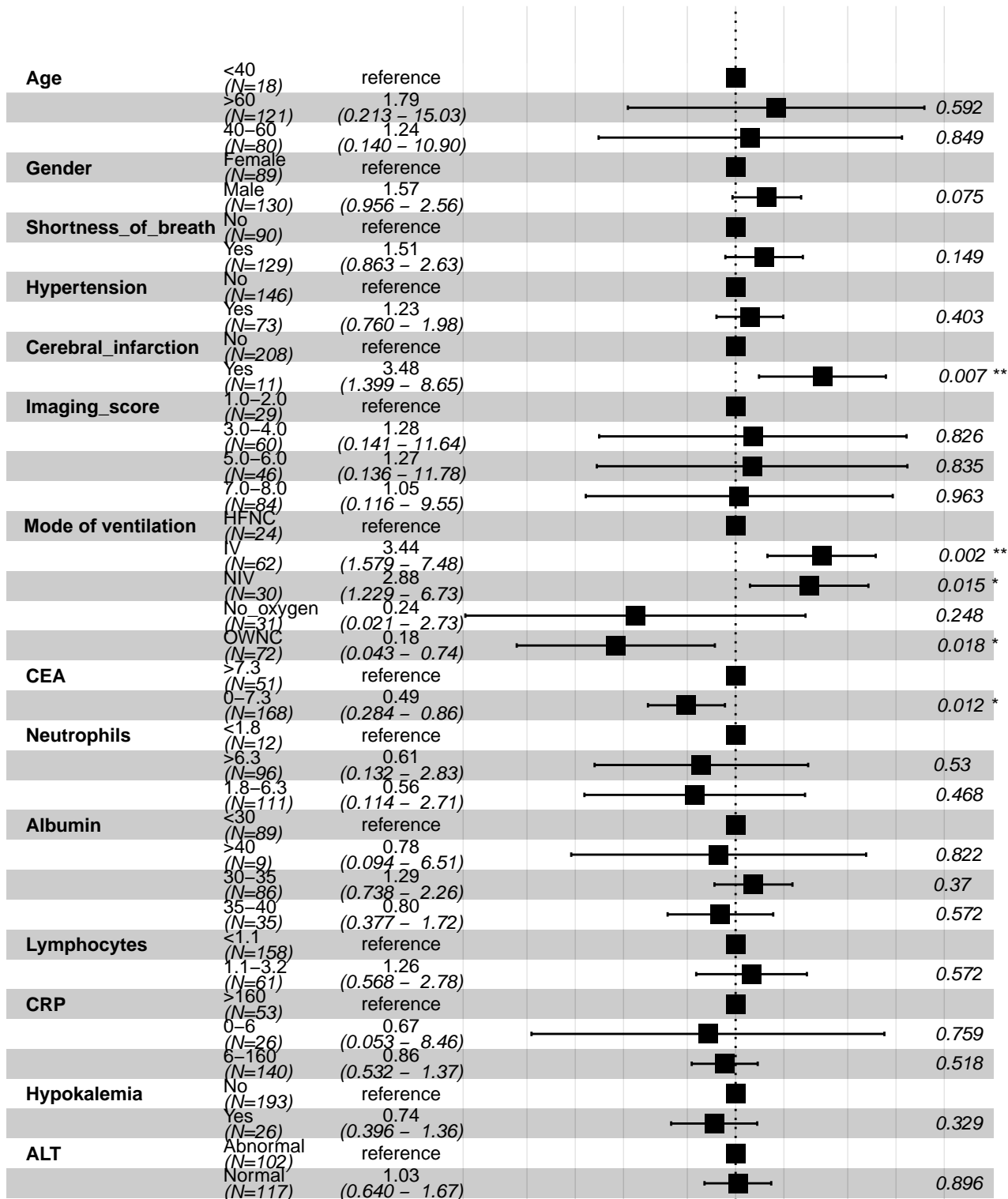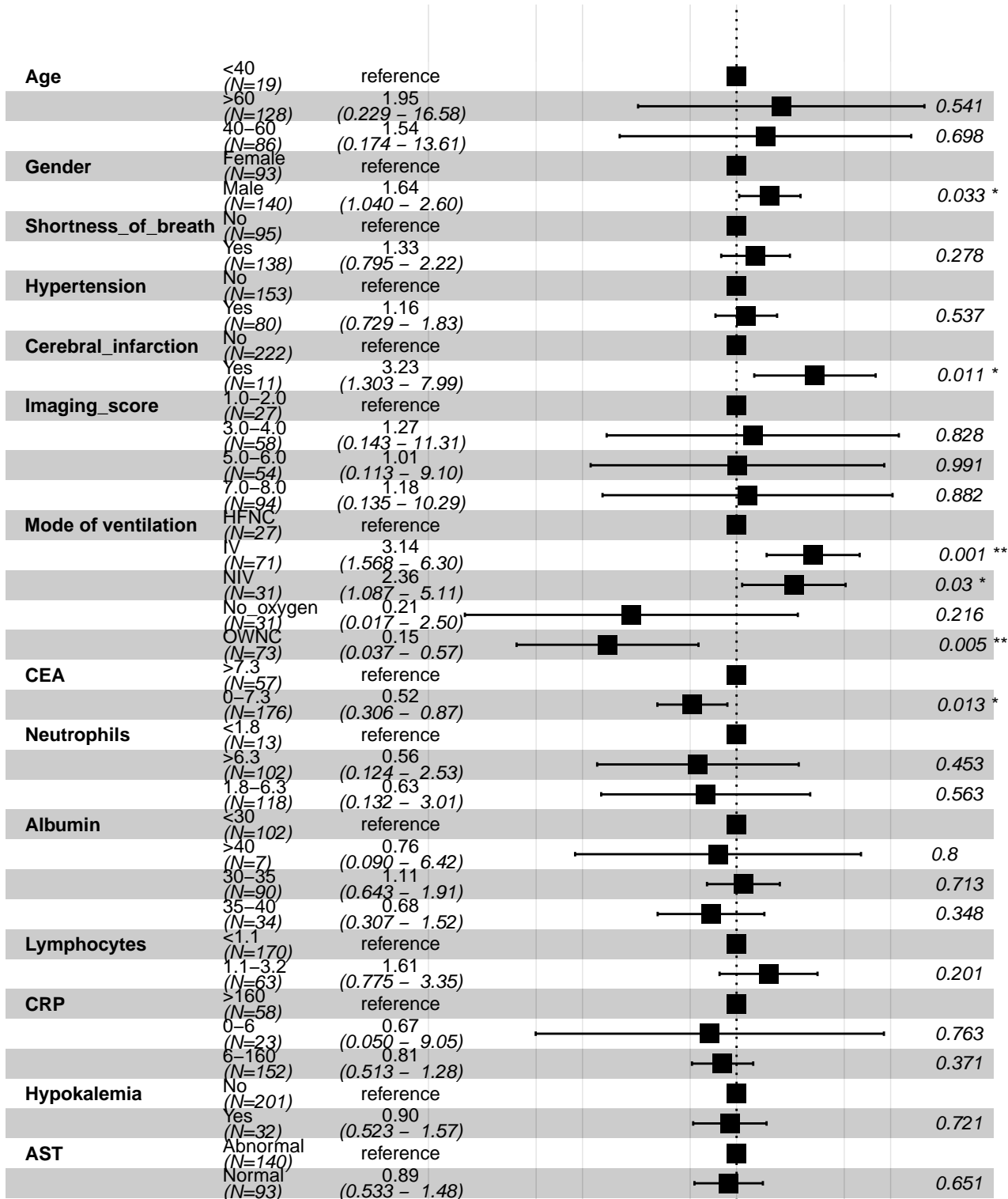| Variable	Category	HR (95% CI)	p-value
Age	<40 (N=18)	reference	
	>60 (N=121)	1.79 (0.213 – 15.03)	0.592
	40–60 (N=80)	1.24 (0.140 – 10.90)	0.849
Gender	Female (N=89)	reference	
	Male (N=130)	1.57 (0.956 – 2.56)	0.075
Shortness_of_breath	No (N=90)	reference	
	Yes (N=129)	1.51 (0.863 – 2.63)	0.149
Hypertension	No (N=146)	reference	
	Yes (N=73)	1.23 (0.760 – 1.98)	0.403
Cerebral_infarction	No (N=208)	reference	
	Yes (N=11)	3.48 (1.399 – 8.65)	0.007 **
Imaging_score	1.0–2.0 (N=29)	reference	
	3.0–4.0 (N=60)	1.28 (0.141 – 11.64)	0.826
	5.0–6.0 (N=46)	1.27 (0.136 – 11.78)	0.835
	7.0–8.0 (N=84)	1.05 (0.116 – 9.55)	0.963
Mode of ventilation	HFNC (N=24)	reference	
	IV (N=62)	3.44 (1.579 – 7.48)	0.002 **
	NIV (N=30)	2.88 (1.229 – 6.73)	0.015 *
	No_oxygen (N=31)	0.24 (0.021 – 2.73)	0.248
	OWNC (N=72)	0.18 (0.043 – 0.74)	0.018 *
CEA	>7.3 (N=51)	reference	
	0–7.3 (N=168)	0.49 (0.284 – 0.86)	0.012 *
Neutrophils	<1.8 (N=12)	reference	
	>6.3 (N=96)	0.61 (0.132 – 2.83)	0.53
	1.8–6.3 (N=111)	0.56 (0.114 – 2.71)	0.468
Albumin	<30 (N=89)	reference	
	>40 (N=9)	0.78 (0.094 – 6.51)	0.822
	30–35 (N=86)	1.29 (0.738 – 2.26)	0.37
	35–40 (N=35)	0.80 (0.377 – 1.72)	0.572
Lymphocytes	<1.1 (N=158)	reference	
	1.1–3.2 (N=61)	1.26 (0.568 – 2.78)	0.572
CRP	>160 (N=53)	reference	
	0–6 (N=26)	0.67 (0.053 – 8.46)	0.759
	6–160 (N=140)	0.86 (0.532 – 1.37)	0.518
Hypokalemia	No (N=193)	reference	
	Yes (N=26)	0.74 (0.396 – 1.36)	0.329
ALT	Abnormal (N=102)	reference	
	Normal (N=117)	1.03 (0.640 – 1.67)	0.896

Events: 96; Global p-value (Log-Rank): 5.066e-15

AIC: 801.4; Concordance Index: 0.8
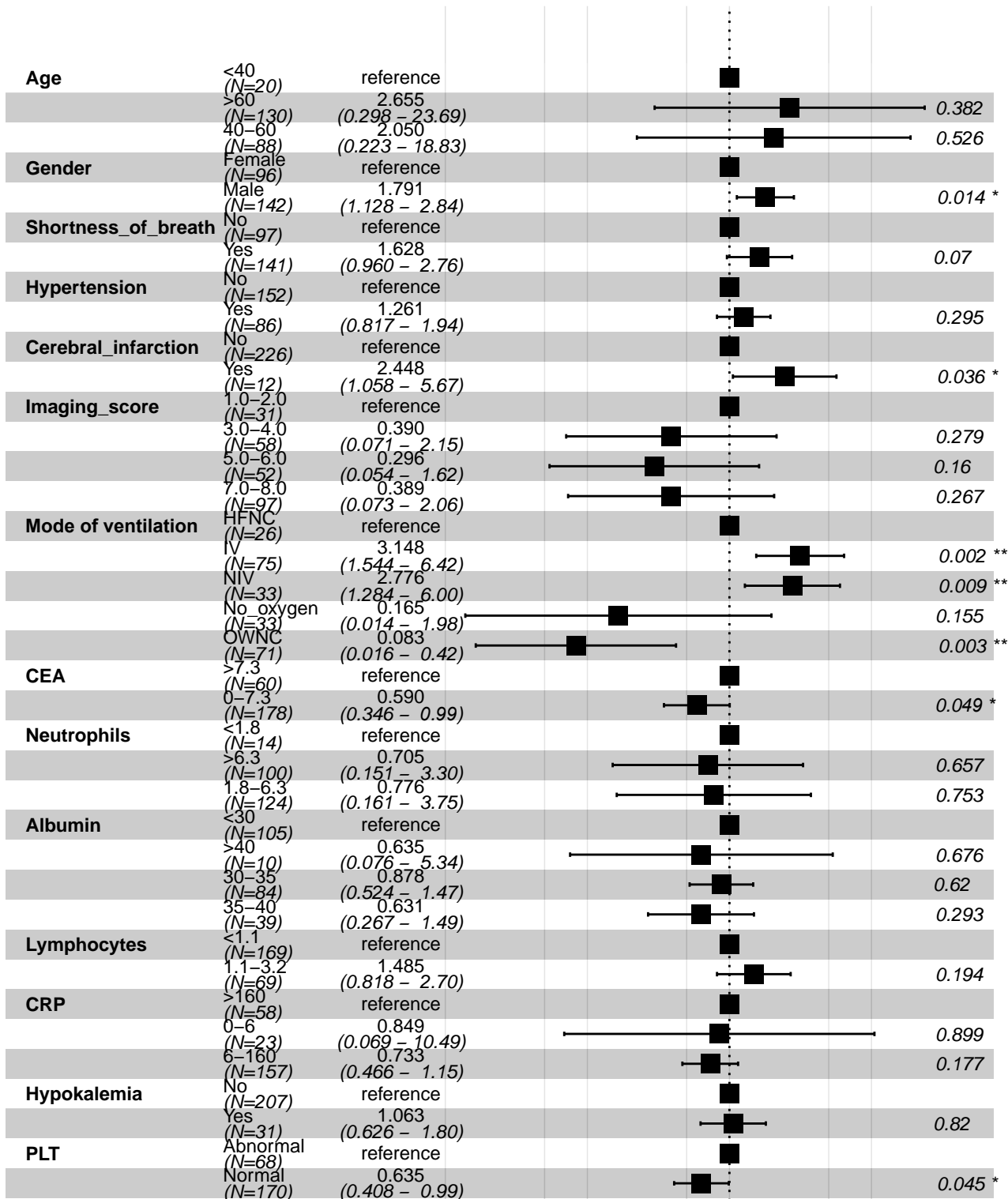
0.02 0.05 0.1 0.2 0.5 1 2 5 10 20

Hazard ratio

Age	<40 (N=19)	reference		
	>60 (N=128)	1.95 (0.229 – 16.58)		0.541
	40–60 (N=86)	1.54 (0.174 – 13.61)		0.698
Gender	Female (N=93)	reference		
	Male (N=140)	1.64 (1.040 – 2.60)		0.033 *
Shortness_of_breath	No (N=95)	reference		
	Yes (N=138)	1.33 (0.795 – 2.22)		0.278
Hypertension	No (N=153)	reference		
	Yes (N=80)	1.16 (0.729 – 1.83)		0.537
Cerebral_infarction	No (N=222)	reference		
	Yes (N=11)	3.23 (1.303 – 7.99)		0.011 *
Imaging_score	1.0–2.0 (N=27)	reference		
	3.0–4.0 (N=58)	1.27 (0.143 – 11.31)		0.828
	5.0–6.0 (N=54)	1.01 (0.113 – 9.10)		0.991
	7.0–8.0 (N=94)	1.18 (0.135 – 10.29)		0.882
Mode of ventilation	HFNC (N=27)	reference		
	IV (N=71)	3.14 (1.568 – 6.30)		0.001 **
	NIV (N=31)	2.36 (1.087 – 5.11)		0.03 *
	No_oxygen (N=31)	0.21 (0.017 – 2.50)		0.216
	OWNC (N=73)	0.15 (0.037 – 0.57)		0.005 **
CEA	>7.3 (N=57)	reference		
	0–7.3 (N=176)	0.52 (0.306 – 0.87)		0.013 *
Neutrophils	<1.8 (N=13)	reference		
	>6.3 (N=102)	0.56 (0.124 – 2.53)		0.453
	1.8–6.3 (N=118)	0.63 (0.132 – 3.01)		0.563
Albumin	<30 (N=102)	reference		
	>40 (N=7)	0.76 (0.090 – 6.42)		0.8
	30–35 (N=90)	1.11 (0.643 – 1.91)		0.713
	35–40 (N=34)	0.68 (0.307 – 1.52)		0.348
Lymphocytes	<1.1 (N=170)	reference		
	1.1–3.2 (N=63)	1.61 (0.775 – 3.35)		0.201
CRP	>160 (N=58)	reference		
	0–6 (N=23)	0.67 (0.050 – 9.05)		0.763
	6–160 (N=152)	0.81 (0.513 – 1.28)		0.371
Hypokalemia	No (N=201)	reference		
	Yes (N=32)	0.90 (0.523 – 1.57)		0.721
AST	Abnormal (N=140)	reference		
	Normal (N=93)	0.89 (0.533 – 1.48)		0.651

 # Events: 107; Global p–value (Log–Rank): 8.1088e–16

AIC: 907.37; Concordance Index: 0.79

0.01   0.05 0.1   0.5 1   5   10

Hazard ratio

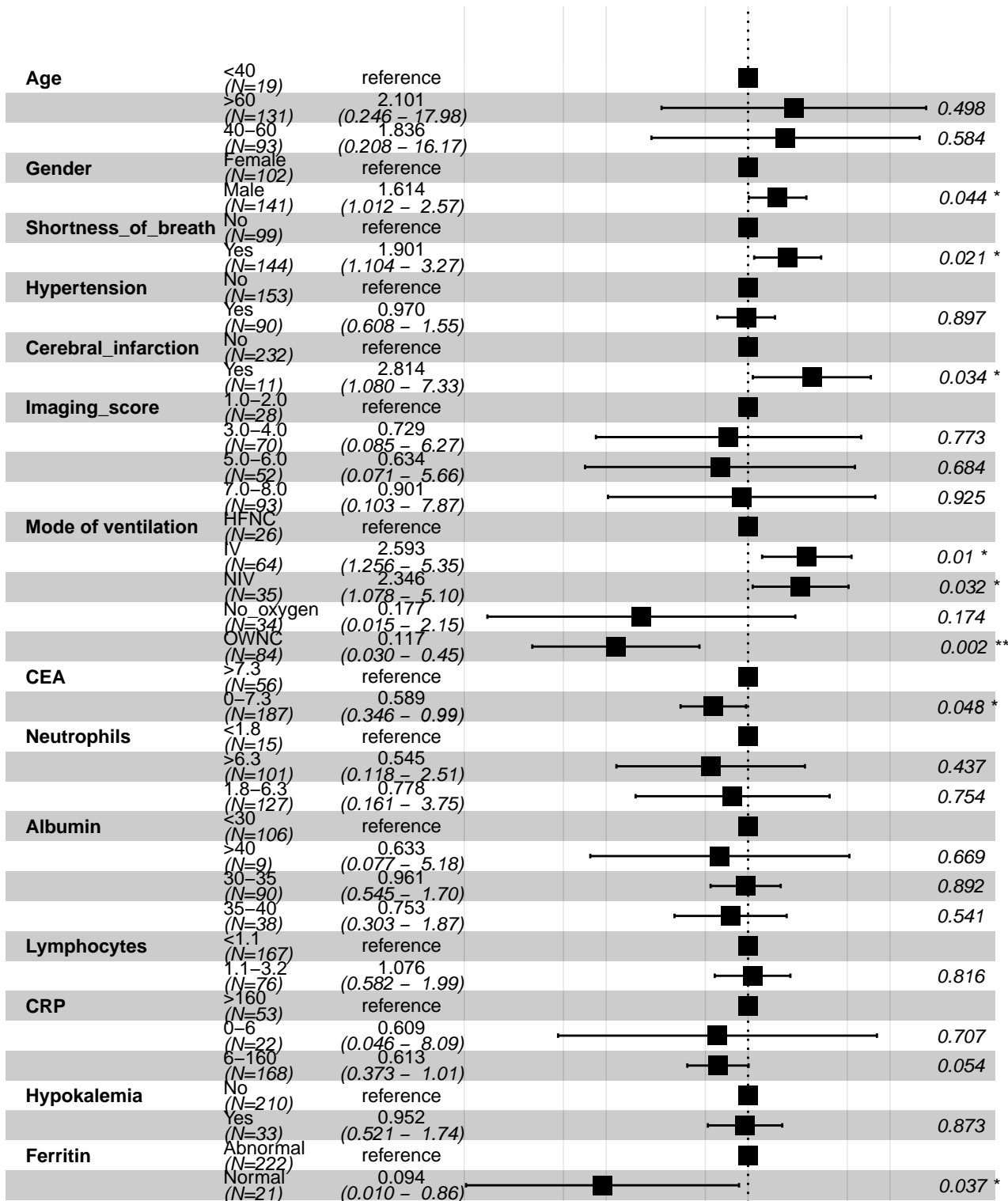| Variable	Category	HR (95% CI)	p-value
Age	<40 (N=20)	reference	
	>60 (N=130)	2.655 (0.298 – 23.69)	0.382
	40–60 (N=88)	2.050 (0.223 – 18.83)	0.526
Gender	Female (N=96)	reference	
	Male (N=142)	1.791 (1.128 – 2.84)	0.014 *
Shortness_of_breath	No (N=97)	reference	
	Yes (N=141)	1.628 (0.960 – 2.76)	0.07
Hypertension	No (N=152)	reference	
	Yes (N=86)	1.261 (0.817 – 1.94)	0.295
Cerebral_infarction	No (N=226)	reference	
	Yes (N=12)	2.448 (1.058 – 5.67)	0.036 *
Imaging_score	1.0–2.0 (N=31)	reference	
	3.0–4.0 (N=58)	0.390 (0.071 – 2.15)	0.279
	5.0–6.0 (N=52)	0.296 (0.054 – 1.62)	0.16
	7.0–8.0 (N=97)	0.389 (0.073 – 2.06)	0.267
Mode of ventilation	HFNC (N=26)	reference	
	IV (N=75)	3.148 (1.544 – 6.42)	0.002 **
	NIV (N=33)	2.776 (1.284 – 6.00)	0.009 **
	No_oxygen (N=33)	0.165 (0.014 – 1.98)	0.155
	OWNC (N=71)	0.083 (0.016 – 0.42)	0.003 **
CEA	>7.3 (N=60)	reference	
	0–7.3 (N=178)	0.590 (0.346 – 0.99)	0.049 *
Neutrophils	<1.8 (N=14)	reference	
	>6.3 (N=100)	0.705 (0.151 – 3.30)	0.657
	1.8–6.3 (N=124)	0.776 (0.161 – 3.75)	0.753
Albumin	<30 (N=105)	reference	
	>40 (N=10)	0.635 (0.076 – 5.34)	0.676
	30–35 (N=84)	0.878 (0.524 – 1.47)	0.62
	35–40 (N=39)	0.631 (0.267 – 1.49)	0.293
Lymphocytes	<1.1 (N=169)	reference	
	1.1–3.2 (N=69)	1.485 (0.818 – 2.70)	0.194
CRP	>160 (N=58)	reference	
	0–6 (N=23)	0.849 (0.069 – 10.49)	0.899
	6–160 (N=157)	0.733 (0.466 – 1.15)	0.177
Hypokalemia	No (N=207)	reference	
	Yes (N=31)	1.063 (0.626 – 1.80)	0.82
PLT	Abnormal (N=68)	reference	
	Normal (N=170)	0.635 (0.408 – 0.99)	0.045 *

 # Events: 111; Global p–value (Log–Rank): 1.3514e–19

AIC: 926.07; Concordance Index: 0.81

0.01   0.05 0.1   0.5   1   5   10

Hazard ratio

Variable	Category	HR (95% CI)	p-value
Age	<40 (N=19)	reference	
	>60 (N=131)	2.101 (0.246 – 17.98)	0.498
	40–60 (N=93)	1.836 (0.208 – 16.17)	0.584
Gender	Female (N=102)	reference	
	Male (N=141)	1.614 (1.012 – 2.57)	0.044 *
Shortness_of_breath	No (N=99)	reference	
	Yes (N=144)	1.901 (1.104 – 3.27)	0.021 *
Hypertension	No (N=153)	reference	
	Yes (N=90)	0.970 (0.608 – 1.55)	0.897
Cerebral_infarction	No (N=232)	reference	
	Yes (N=11)	2.814 (1.080 – 7.33)	0.034 *
Imaging_score	1.0–2.0 (N=28)	reference	
	3.0–4.0 (N=70)	0.729 (0.085 – 6.27)	0.773
	5.0–6.0 (N=52)	0.634 (0.071 – 5.66)	0.684
	7.0–8.0 (N=93)	0.901 (0.103 – 7.87)	0.925
Mode of ventilation	HFNC (N=26)	reference	
	IV (N=64)	2.593 (1.256 – 5.35)	0.01 *
	NIV (N=35)	2.346 (1.078 – 5.10)	0.032 *
	No_oxygen (N=34)	0.177 (0.015 – 2.15)	0.174
	OWNC (N=84)	0.117 (0.030 – 0.45)	0.002 **
CEA	>7.3 (N=56)	reference	
	0–7.3 (N=187)	0.589 (0.346 – 0.99)	0.048 *
Neutrophils	<1.8 (N=15)	reference	
	>6.3 (N=101)	0.545 (0.118 – 2.51)	0.437
	1.8–6.3 (N=127)	0.778 (0.161 – 3.75)	0.754
Albumin	<30 (N=106)	reference	
	>40 (N=9)	0.633 (0.077 – 5.18)	0.669
	30–35 (N=90)	0.961 (0.545 – 1.70)	0.892
	35–40 (N=38)	0.753 (0.303 – 1.87)	0.541
Lymphocytes	<1.1 (N=167)	reference	
	1.1–3.2 (N=76)	1.076 (0.582 – 1.99)	0.816
CRP	>160 (N=53)	reference	
	0–6 (N=22)	0.609 (0.046 – 8.09)	0.707
	6–160 (N=168)	0.613 (0.373 – 1.01)	0.054
Hypokalemia	No (N=210)	reference	
	Yes (N=33)	0.952 (0.521 – 1.74)	0.873
Ferritin	Abnormal (N=222)	reference	
	Normal (N=21)	0.094 (0.010 – 0.86)	0.037 *

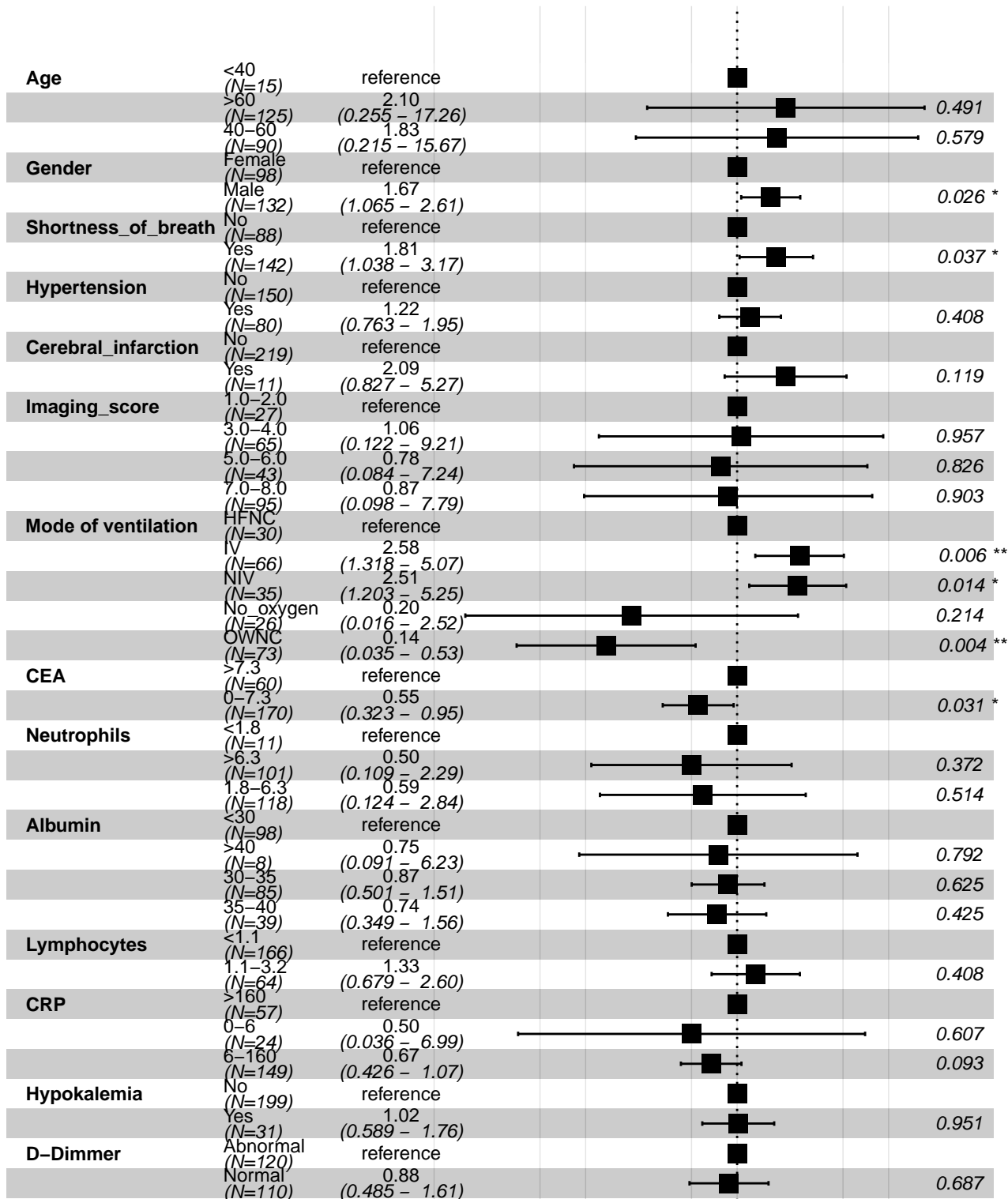*# Events: 101; Global p–value (Log–Rank): 4.7179e−19*

AIC: 852.31; Concordance Index: 0.82

0.01   0.05 0.1   0.5 1   5   10

Hazard ratio

Variable	Category	HR	95% CI	p-value
Age	<40 (N=15)	reference		
	>60 (N=125)	2.10	(0.255 – 17.26)	0.491
	40–60 (N=90)	1.83	(0.215 – 15.67)	0.579
Gender	Female (N=98)	reference		
	Male (N=132)	1.67	(1.065 – 2.61)	0.026 *
Shortness_of_breath	No (N=88)	reference		
	Yes (N=142)	1.81	(1.038 – 3.17)	0.037 *
Hypertension	No (N=150)	reference		
	Yes (N=80)	1.22	(0.763 – 1.95)	0.408
Cerebral_infarction	No (N=219)	reference		
	Yes (N=11)	2.09	(0.827 – 5.27)	0.119
Imaging_score	1.0–2.0 (N=27)	reference		
	3.0–4.0 (N=65)	1.06	(0.122 – 9.21)	0.957
	5.0–6.0 (N=43)	0.78	(0.084 – 7.24)	0.826
	7.0–8.0 (N=95)	0.87	(0.098 – 7.79)	0.903
Mode of ventilation	HFNC (N=30)	reference		
	IV (N=66)	2.58	(1.318 – 5.07)	0.006 **
	NIV (N=35)	2.51	(1.203 – 5.25)	0.014 *
	No_oxygen (N=26)	0.20	(0.016 – 2.52)	0.214
	OWNC (N=73)	0.14	(0.035 – 0.53)	0.004 **
CEA	>7.3 (N=60)	reference		
	0–7.3 (N=170)	0.55	(0.323 – 0.95)	0.031 *
Neutrophils	<1.8 (N=11)	reference		
	>6.3 (N=101)	0.50	(0.109 – 2.29)	0.372
	1.8–6.3 (N=118)	0.59	(0.124 – 2.84)	0.514
Albumin	<30 (N=98)	reference		
	>40 (N=8)	0.75	(0.091 – 6.23)	0.792
	30–35 (N=85)	0.87	(0.501 – 1.51)	0.625
	35–40 (N=39)	0.74	(0.349 – 1.56)	0.425
Lymphocytes	<1.1 (N=166)	reference		
	1.1–3.2 (N=64)	1.33	(0.679 – 2.60)	0.408
CRP	>160 (N=57)	reference		
	0–6 (N=24)	0.50	(0.036 – 6.99)	0.607
	6–160 (N=149)	0.67	(0.426 – 1.07)	0.093
Hypokalemia	No (N=199)	reference		
	Yes (N=31)	1.02	(0.589 – 1.76)	0.951
D–Dimer	Abnormal (N=120)	reference		
	Normal (N=110)	0.88	(0.485 – 1.61)	0.687

Events: 105; Global p–value (Log–Rank): 2.7448e–16

AIC: 896.81; Concordance Index: 0.8

0.01 0.05 0.1 0.5 1 5 10