

Supplemental Table. Alternative analysis methods.

I.Logistic regression for stroke with all available variable in model.*

a. Stroke within 90 days

Var	OR	95% CI	p-value
HZ	1.50	(0.99 , 2.27)	0.047
Age vs age<65:			
age 65-79	3.21	(1.76 , 5.85)	<.001
age 80+	6.16	(3.30 , 11.5)	<.001
Sex = F	1.35	(0.90 , 2.03)	0.150
Htn	1.45	(0.93 , 2.26)	0.099
CAD	1.18	(0.73 , 1.89)	0.502
Lipids	1.06	(0.69 , 1.65)	0.778
Arrhythmias	1.48	(0.95 , 2.32)	0.086
Depression	1.40	(0.85 , 2.33)	0.189
Diabetes	1.63	(0.95 , 2.78)	0.075
Substance abuse	1.32	(0.56 , 3.10)	0.525
Anxiety	1.09	(0.61 , 1.93)	0.768
Vasculopathy	2.19	(1.06 , 4.51)	0.034

- This may be “overfitting” since several risk factors are severely co-linear.

b. Stroke within 6 months

Var	OR	95% CI	p-value
HZ	1.27	(0.90 , 1.79)	0.178
Age vs age<65:			
age 65-79	3.17	(1.99 , 5.05)	<.001
age 80+	5.30	(3.25 , 8.65)	<.001
Sex = F	1.22	(0.88 , 1.69)	0.227
Htn	1.89	(1.33 , 2.69)	<.001
CAD	1.20	(0.82 , 1.76)	0.349
Lipids	1.20	(0.85 , 1.71)	0.297
Arrhythmias	1.21	(0.84 , 1.74)	0.317
Depression	1.40	(0.93 , 2.10)	0.108
Diabetes	1.52	(0.99 , 2.32)	0.055
Substance abuse	1.03	(0.47 , 2.24)	0.948
Anxiety	1.06	(0.66 , 1.68)	0.819
Vasculopathy	2.45	(1.37 , 4.39)	0.003

c. Stroke within 1 year

Var	OR	95% CI	p-value
HZ	1.03	(0.78 , 1.35)	0.840
Age vs age<65:	2.40	(1.72 , 3.34)	<.001
age 65-79	4.68	(3.32 , 6.59)	<.001
age 80+	1.13	(0.89 , 1.45)	0.315
Sex = F	1.73	(1.33 , 2.25)	<.001
Htn	1.35	(1.01 , 1.8)	0.043
CAD	1.50	(1.14 , 1.96)	0.003
Lipids	1.20	(0.91 , 1.58)	0.200
Arrhythmias	1.28	(0.93 , 1.75)	0.127
Depression	1.29	(0.94 , 1.76)	0.117
Diabetes	1.13	(0.64 , 1.97)	0.675
Substance abuse	1.03	(0.72 , 1.46)	0.889
Anxiety	2.93	(1.90 , 4.51)	<.001
Vasculopathy			

d. Stroke within 3 years

Var	OR	95% CI	p-value
HZ	1.01	(0.85 , 1.21)	0.902
Age vs age<65:	3.51	(2.80 , 4.41)	<.001
age 65-79	6.94	(5.48 , 8.8)	<.001
age 80+	1.23	(1.05 , 1.43)	0.011
Sex = F	1.61	(1.36 , 1.91)	<.001
Htn	1.35	(1.12 , 1.62)	0.001
CAD	1.41	(1.18 , 1.67)	<.001
Lipids	1.18	(0.98 , 1.41)	0.073
Arrhythmias	1.22	(0.99 , 1.50)	0.060
Depression	1.09	(0.90 , 1.31)	0.375
Diabetes	1.12	(0.77 , 1.62)	0.563
Substance abuse	1.10	(0.87 , 1.38)	0.415
Anxiety	1.63	(1.16 , 2.29)	0.005
Vasculopathy			

II. Logistic regression for MI with all available variables in model

a. MI within 90 days

Var	OR	95% CI	p-value
HZ	1.65	(1.00 , 2.71)	0.048
Age vs age<65:			
age 65-79	1.49	(1.07 , 2.08)	0.020
age 80+	1.32	(1.10 , 1.57)	0.003
Sex = F	1.11	(0.87 , 1.42)	0.392
Htn	1.42	(0.82 , 2.46)	0.209
CAD	3.78	(2.21 , 6.46)	<.001
Lipids	1.22	(0.71 , 2.07)	0.471
Arrhythmias	1.03	(0.59 , 1.79)	0.927
Depression	1.31	(0.71 , 2.43)	0.386
Diabetes	1.52	(0.89 , 2.61)	0.127
Substance abuse	1.34	(0.47 , 3.77)	0.584
Anxiety	1.17	(0.56 , 2.45)	0.672
Vasculopathy	1.98	(0.60 , 6.47)	0.260

b. MI within 6 months

Var	OR	95% CI	p-value
HZ	1.43	(0.96 , 2.14)	0.079
Age vs age<65:			
age 65-79	2.33	(1.36 , 3.99)	0.002
age 80+	4.13	(2.35 , 7.27)	<.001
Sex = F	1.23	(0.83 , 1.82)	0.297
Htn	1.29	(0.84 , 1.98)	0.252
CAD	3.51	(2.29 , 5.38)	<.001
Lipids	1.24	(0.81 , 1.90)	0.320
Arrhythmias	1.25	(0.79 , 1.96)	0.338
Depression	1.29	(0.79 , 2.09)	0.306
Diabetes	1.59	(1.04 , 2.44)	0.034
Substance abuse	1.68	(0.79 , 3.54)	0.175
Anxiety	1.06	(0.61 , 1.83)	0.842
Vasculopathy	1.04	(0.51 , 2.13)	0.907

c. MI within 1 year

Var	OR	95% CI	p-value
HZ	1.33	(0.98 , 1.80)	0.065
Age vs age<65:			
age 65-79	2.56	(1.73 , 3.80)	<.001
age 80+	4.59	(3.03 , 6.96)	<.001
Sex = F	1.59	(1.20 , 2.12)	0.001
Htn	1.16	(0.85 , 1.58)	0.358
CAD	2.19	(1.58 , 3.04)	<.001
Lipids	1.37	(1.00 , 1.88)	0.052
Arrhythmias	1.02	(0.73 , 1.42)	0.923
Depression	1.44	(1.01 , 2.06)	0.044
Diabetes	1.80	(1.31 , 2.47)	<.001
Substance abuse	1.51	(0.86 , 2.66)	0.153
Anxiety	1.11	(0.72 , 1.71)	0.625
Vasculopathy	1.35	(0.82 , 2.24)	0.241

d. MI within 3 years

Var	OR	95% CI	p-value
HZ	1.17	(0.96 , 1.41)	0.114
Age vs age<65:			
age 65-79	2.26	(1.79 , 2.85)	<.001
age 80+	4.35	(3.41 , 5.56)	<.001
Sex = F	1.46	(1.23 , 1.73)	<.001
Htn	1.38	(1.14 , 1.67)	0.001
CAD	2.01	(1.64 , 2.46)	<.001
Lipids	1.19	(0.98 , 1.44)	0.073
Arrhythmias	1.09	(0.89 , 1.33)	0.42
Depression	1.00	(0.79 , 1.27)	0.986
Diabetes	1.51	(1.24 , 1.84)	<.001
Substance abuse	1.35	(0.93 , 1.97)	0.117
Anxiety	1.01	(0.78 , 1.32)	0.931
Vasculopathy	1.21	(0.87 , 1.68)	0.252

III. Cox proportional hazard models for stroke

a. Time to stroke after HZ, all time

	coef	exp(coef)	se(coef)	z	p
HZ	0.0717	1.074	0.0483	1.48	.14
Age vs age<65:					
age 65-79	1.0760	2.933	0.0533	20.19	<.001
age 80+	1.6550	5.233	0.0641	25.84	<.001
Sex == F	-0.0876	0.916	0.0440	-1.99	.05
Htn	0.4045	1.499	0.0454	8.90	<.001
CAD	0.1794	1.197	0.0566	3.17	.002
Lipids	-0.2211	0.802	0.0493	-4.48	<.001
Arrhythmias	0.1921	1.212	0.0564	3.41	<.001
Depression	0.124	1.130	0.0643	1.92	.05
Diabetes	0.273	1.310	0.0567	4.83	<.001
Substance abuse	0.185	1.200	0.1127	1.64	.10
Anxiety	0.148	1.160	0.0680	2.18	.03
Vasculopathy	0.585	1.800	0.1138	5.14	<.001

b. Time to stroke after HZ, censor at 90 days

	coef	exp(coef)	se(coef)	z	p
HZ	0.4837	1.62	0.225	2.150	.03
Age vs age<65:					
age 65-79	1.1963	3.31	0.327	3.661	<.001
age 80+	1.7543	5.78	0.344	5.096	<.001
Sex == F	-0.2881	0.75	0.224	-1.286	.20
Htn	0.1612	1.17	0.240	0.672	.50
CAD	0.2683	1.31	0.259	1.035	.30
Lipids	0.0317	1.03	0.240	0.132	.89
Arrhythmias	0.2827	1.33	0.249	1.135	.26
Depression	0.496	1.643	0.272	1.823	.07
Diabetes	-0.291	0.748	0.285	-1.019	.31
Substance abuse	0.236	1.267	0.472	0.500	.62
Anxiety	-0.158	0.854	0.331	-0.478	.63
Vasculopathy	0.867	2.379	0.388	2.235	.03

c. Time to stroke after HZ, censor at 6 months

	coef	exp(coef)	se(coef)	z	p
HZ	0.2349	1.265	0.185	1.273	.20
Age vs age<65:					
age 65-79	1.2117	3.359	0.256	4.740	<.001
age 80+	1.7315	5.649	0.270	6.418	<.001
Sex == F	-0.3058	0.737	0.175	-1.749	.08
Htn	0.5890	1.802	0.190	3.104	.002
CAD	0.0606	1.063	0.207	0.292	.77
Lipids	-0.1525	0.859	0.187	-0.814	.42
Arrhythmias	0.1844	1.202	0.197	0.937	.35
Depression	0.3175	1.374	0.221	1.439	.15
Diabetes	-0.2634	0.768	0.222	-1.189	.23
Substance abuse	0.1053	1.111	0.396	0.266	.79
Anxiety	0.0954	1.100	0.249	0.384	.70
Vasculopathy	0.7498	2.117	0.326	2.301	.02

IV. Cox proportional hazard models for MI

a. Time to MI after HZ, all time

	coef	exp(coef)	se(coef)	z	p
HZ	0.0771	1.080	0.0545	1.42	.16
Age vs age<65:					
age 65-79	0.7940	2.212	0.0586	13.54	<.001
age 80+	1.4194	4.135	0.0710	19.99	<.001
Sex == F	-0.3482	0.706	0.0486	-7.17	<.001
Htn	0.3159	1.371	0.0518	6.10	<.001
CAD	0.5828	1.791	0.0632	9.21	<.001
Lipids	-0.1777	0.837	0.0553	-3.21	.001
Arrhythmias	0.1651	1.179	0.0632	2.61	.009
Depression	0.0579	1.060	0.0740	0.782	.43
Diabetes	0.4203	1.522	0.0614	6.848	<.001
Substance abuse	0.4141	1.513	0.1136	3.646	<.001
Anxiety	-0.0736	0.929	0.0817	-0.901	.37
Vasculopathy	0.3530	1.423	0.1102	3.204	.001

b. Time to MI after HZ, censor at 90 days

	coef	exp(coef)	se(coef)	z	p
HZ	0.41657	1.52	0.287	1.449	.15
Age vs age<65:					
age 65-79	0.50156	1.65	0.368	1.362	.17
age 80+	0.89127	2.44	0.396	2.249	.02
Sex == F	0.05106	1.05	0.288	0.178	.86
Htn	0.30885	1.36	0.318	0.971	.33
CAD	1.50285	4.49	0.311	4.840	<.001
Lipids	0.00182	1.00	0.304	0.006	0.999
Arrhythmias	0.05625	1.06	0.317	0.177	.86
Depression	0.233	1.263	0.354	0.659	.51
Diabetes	0.289	1.336	0.314	0.922	.36
Substance abuse	0.618	1.856	0.533	1.160	.25
Anxiety	-0.570	0.565	0.465	-1.225	.22
Vasculopathy	-0.430	0.650	0.609	-0.707	.48

c. Time to MI after HZ, censor at 6 months

	coef	exp(coef)	se(coef)	z	p
HZ	0.390	1.477	0.214	1.822	.07
Age vs age<65:					
age 65-79	0.829	2.292	0.288	2.875	.004
age 80+	1.360	3.896	0.304	4.472	<.001
Sex == F	-0.154	0.858	0.210	-0.730	.47
Htn	0.186	1.204	0.229	0.809	.42
CAD	1.210	3.355	0.230	5.273	<.001
Lipids	-0.135	0.874	0.226	-0.596	.55
Arrhythmias	-0.144	0.866	0.241	-0.598	.55
Depression	0.2653	1.304	0.259	1.022	.31
Diabetes	0.4370	1.548	0.230	1.896	.06
Substance abuse	0.1371	1.147	0.468	0.293	.77
Anxiety	0.0640	1.066	0.294	0.218	.83
Vasculopathy	-0.0771	0.926	0.405	-0.190	.85

V. Stepwise conditional logistic regression models

a. Stroke within 90 days, univariate model

	coef	exp(coef)	se(coef)	z	p
stroke 90days	0.464	1.59	0.21	2.21	.03

b. Stroke within 90 days, adjusted model

	coef	exp(coef)	se(coef)	z	p
stroke 90days	0.422	1.53	0.2120	1.99	.046
Vasculopathy	0.222	1.25	0.1121	1.98	.048
Arrhythmias	0.387	1.47	0.0453	8.55	<.001

VI. Stepwise conditional logistic regression models

a. MI within 90 days, univariate model

	coef	exp(coef)	se(coef)	z	p
MI 90days	0.436	1.55	0.167	2.6	.009

b. MI within 90 days, adjusted model

	coef	exp(coef)	se(coef)	z	p
MI 90days	0.317	1.37	0.1688	1.88	.06
CAD	0.316	1.37	0.0464	6.81	<.001