Supplementary material

Zhao X, Liu C, Zhou P, et al. Risk prediction score for the incidence of long-term cerebrovascular events among patients undergoing primary percutaneous coronary intervention: a retrospective real-world study. Pol Arch Intern Med. 2022; 132: 16088. doi:10.20452/pamw.16088

Table S1 Results of Univariate Cox proportional hazards model applied to assess correlates of stroke

Variables	**B**	**Wald**	**HR**	**CI (95%)**	***P* value**
Age	-0.032	3.750	0.969	0.938-1.000	0.053*
Male	-0.045	0.031	0.956	0.575-1.587	0.861
BP					
Optimal BP	REF	5.191	REF	REF	0.268*
Normal BP	0.501	2.005	1.650	0.825-3.300	0.157*
Hper Normal BP	0.555	2.008	1.743	0.808-3.757	0.156*
Hypertension stage I	0.759	4.119	2.137	1.026-4.448	0.042*
hypertension stage II	0.787	2.355	2.196	0.804-5.999	0.125*
BMI					
18.5≦BMI≦25	REF	0.511	REF	REF	0.775*
BMI<18.5	0.706	0.478	2.027	0.274-15.005	0.489*
BMI>25	-0.019	0.005	0.981	0.58401.650	0.943
EF					

50<EF at admission	0.075	0.064	1.078	0.602-1.932	0.800*
DTB time					
DTB time>90min	0.318	0.784	1.374	0.680-2.778	0.376*
Risk factors					
Hypertension	0.580	4.409	1.787	1.039-3.072	0.036*
Diabetes	0.175	0.457	1.191	0.718-1.977	0.499*
Atrial fibrillation	0.931	6.725	2.536	1.255-5.125	0.010*
CKD	0.103	0.040	1.109	0.403-3.050	0.842
hs-CRP					
3.5<hs-CRP≦10	REF	0.524	REF	REF	0.769*
hs-CRP≦3.5	0.114	0.111	1.121	0.572-2.199	0.739*
hs-CRP>10	0.219	0.511	1.245	0.683-2.269	0.475*
Crea					
44≦Crea≦133	REF	0.177	REF	REF	0.915
Crea<44	-0.311	0.094	0.733	0.101-5.334	0.759*
Crea>133	-0.295	0.086	0.745	0.103-5.371	0.770*
eGFR					
eGFR≧90	REF	0.975	REF	REF	0.614*
60≦eGFR<90	0.269	0.973	1.308	0.767-2.232	0.324*
eGFR<60	0.184	0.215	1.202	0.553-2.611	0.643*
LDL-C					
LDL-C≧3.0mmol/L	0.038	0.022	1.039	0.631-1.709	0.881
HDL-C					
HDL-C<1.0 mmol/L	0.123	0.191	1.131	0.651-1.964	0.662*

TG					
TG≧1.70 mmol/L	0.079	0.012	1.082	0.265-4.422	0.912
Lpa					
Lpa>300	0.305	1.389	1.357	0.817-2.255	0.239*
Results of coronary angiography					
No-reflow phenomenon	0.003	0.000	1.003	0.245-4.100	0.997
Triple-vessel lesions	0.374	2.298	1.452	0.896-2.356	0.130*
ALT					
ALT>80	0.507	0.492	1.661	0.403-6.851	0.483*
D-Bil					
D-Bil>7.32	0.111	0.093	1.118	0.548-2.281	0.760*
Urea nitrogen					
Urea nitrogen> 7.5mmol.l	0.166	0.391	1.181	0.702-1.986	0.532*
Target lesion with thrombus load	0.104	0.135	1.110	0.636-1.936	0.714*
Lesions involved in branches	0.251	0.773	1.285	0.735-2.246	0.379*

Abbreviations: B, correlation coefficient; BP, blood pressure; IABP, Intra-aortic balloon pump; EF, ejection fraction; DTB time, door to balloon time; CKD, chronic kidney disease; Crea, creatinine; eGFR, estimated glomerular filtration rate; PCI, percutaneous coronary intervention; CABG, coronary artery bypass grafting; HDL-C, high-density lipoprotein cholesterol; LDL-C, low-density lipoprotein cholesterol; TG, triglyceride; LPA, lipse activator; hs-CRP, high sensitive C-reactive protein; * P <0.8

Figure S1A

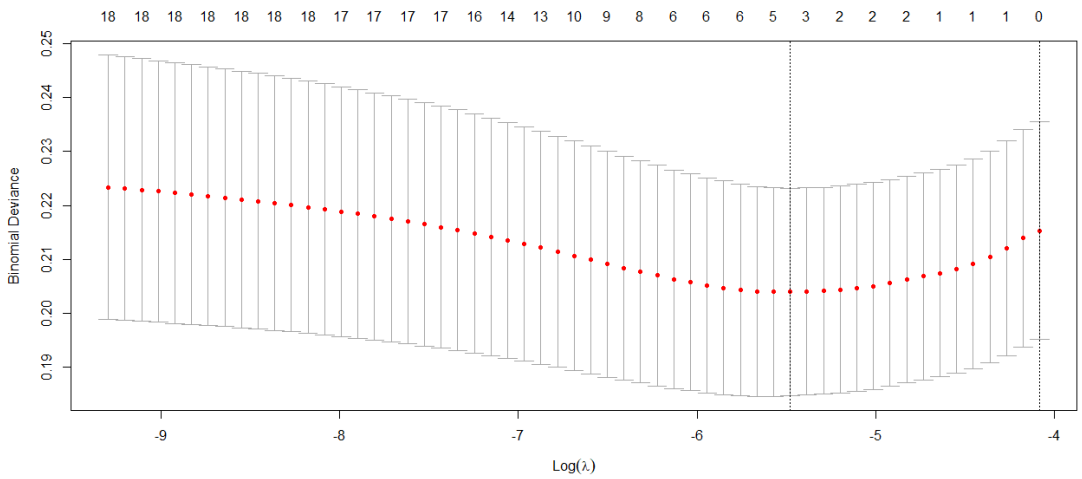

Figure S1B

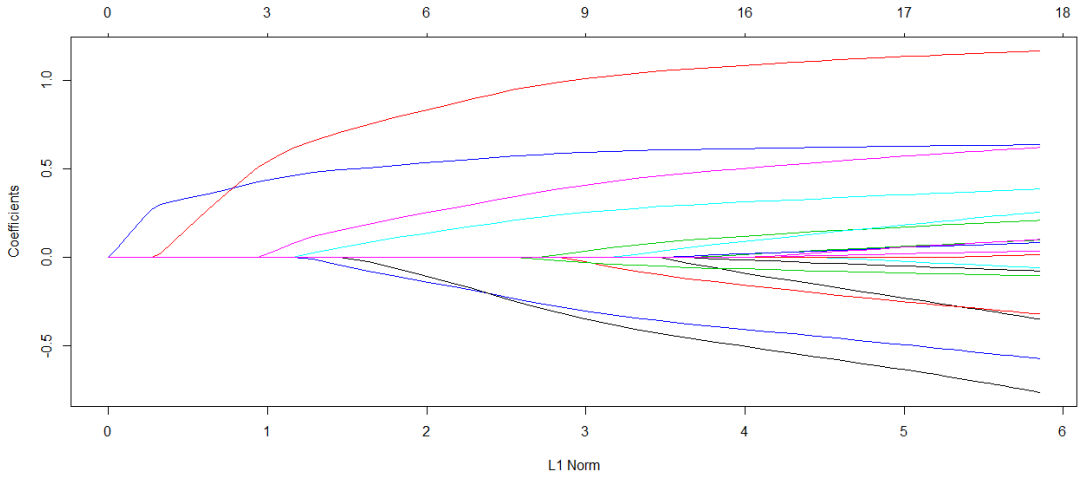

Figure S2 least absolute shrinkage and selection operator (LASSO) regression

Table S2 TRIPOD reporting checklist

Section	Item	Checklist description	Reported on Page Number/Line Number	Reported on Section/Paragraph
Title and abstract				
Title	1	Identify the study as developing and/or validating a multivariable prediction model, the target population, and the outcome to be predicted.	Page 1/Line 1	Title/ Para 1
Abstract	2	Provide a summary of objectives, study design, setting, participants, sample size, predictors, outcome, statistical analysis, results, and conclusions.	Page 2/ Line 19	Abstract/Para 1
Introduction				
Background and objectives	3a	Explain the medical context (including whether diagnostic or prognostic) and rationale for developing or validating the multivariable prediction model, including references to existing models.	Page 4	Background/ Para 1
	3b	Specify the objectives, including whether the study describes the development or validation of the model or both.	Page 4	Background/ Para 2
Methods				
Source of data	4a	Describe the study design or source of data (e.g., randomized trial, cohort, or registry data), separately for the development and validation data sets, ifapplicable.	Page 5	Material and Methods/Para 1
	4b	Specify the key study dates, including start of accrual; end of accrual; and, if applicable, end of follow-up.	Page 5	Material and
Participants	5a	Specify key elements of the study setting (e.g., primary care, secondary care, general population) including number and location of centres.	Page 5	Material and Methods/Para 2
	5b	Describe eligibility criteria for participants.	Page 5	Material and
	5c	Give details of treatments received, if relevant.	Page 5	Material and
Outcome	6a	Clearly define the outcome that is predicted by the prediction model, including how and when assessed.	Page 6	Definitions/Para 1
	6b	Report any actions to blind assessment of the outcome to be predicted.	Page 6	Definitions/Para 1
Predictors	7a	Clearly define all predictors used in developing or validating the multivariable prediction model, including how and when they were measured.	Page 6	Statistical analysis/Para 1
	7b	Report any actions to blind assessment of predictors for the outcome and other predictors.	Page 6	Statistical analysis/Para 1
Sample size	8	Explain how the study size was arrived at.	Page 6	Statistical analysis/Para 1
Missing data	9	Describe how missing data were handled (e.g., complete-case analysis, single imputation, multiple imputation) with details of any imputation method.	Page 6	Statistical analysis/Para 1
Statistical analysis methods	10a	Describe how predictors were handled in the analyses.	Page 7	Statistical analysis/Para 1
	10b	Specify type of model, all model-building procedures (including any predictor selection), and method for internal validation.	Page 7	Statistical analysis/Para 1
	10d	Specify all measures used to assess model performance and, if relevant, to compare multiple models.	Page7-8	Statistical analysis/Para 1
Risk groups	11	Provide details on how risk groups were created, if done.	Page 9	Statistical analysis/Para 2
Results				
Participants	13a	Describe the flow of participants through the study, including the number of participants with and without the outcome and, if applicable, a summary of the follow-up time. A diagram may be helpful.	Page 10	Results/Para 1
	13b	Describe the characteristics of the participants (basic demographics, clinical features, available predictors), including the number of participants with missing data for predictors and outcome.	Page 10	Results/Para 1
Model development	14a	Specify the number of participants and outcome events in each analysis.	Page 11	Results/Para 2
	14b	If done, report the unadjusted association between each candidate predictor and outcome.	Page 11	Results/Para 3
Model specification	15a	Present the full prediction model to allow predictions for individuals (i.e., all regression coefficients, and model intercept or baseline survival at a given time point).	Page 12	Results/Para 3-4
	15b	Explain how to the use the prediction model.	Page 12	Results/Para 5
Model performance	16	Report performance measures (with CIs) for the prediction model.	Page 12	Results/Para 6
Discussion				
Limitations	18	Discuss any limitations of the study (such as nonrepresentative sample, few events per predictor, missing data).	Page 17	Limitation/Para 1
Interpretation	19b	Give an overall interpretation of the results, considering objectives, limitations, and results from similar studies, and other relevant evidence.	Page 12	Discussion/Para 1-6
Implications	20	Discuss the potential clinical use of the model and implications for future research.	Page 18	Conclusion/Para 1
Other information				
Supplementary information	21	Provide information about the availability of supplementary resources, such as study protocol, Web calculator, and data sets.	Page 18	Data Availability/Para 1
Funding	22	Give the source of funding and the role of the funders for the present study.	Page 18	Funding/Para 1