Supplementary Table 1 Results of Multifactorial Cox Regression Analysis of MACE Before/After Adjustment by IPTW

Variable	Before IPTW			After IPTW		
	HR	95%CI	P	HR	95%CI	P
Group (B)						
A	0.691	0.542-0.879	0.002*	0.671	0.526-0.855	0.001*
Gender (Female)						
Male	0.711	0.498-1.012	0.058	0.701	0.487-1.008	0.055
Age (<55years)						
≥55 and <65	1.102	0.809-1.502	0.534	1.093	0.796-1.501	0.582
≥65 and <75	1.860	1.338-2.585	<0.001*	1.940	1.356-2.775	<0.001*
≥75	1.362	0.877-2.115	0.167	1.393	0.905-2.144	0.131
Nation (Han)						
Uygur	1.364	1.027-1.812	0.031*	1.388	1.036-1.858	0.027*
Other	1.695	1.193-2.409	0.003*	1.692	1.142-2.507	0.008*
BMI (<24kg/m^2)						
≥24	1.311	0.985-1.745	0.062*	1.277	0.935-1.742	0.123
Smoke (No)						
Yes	1.504	1.117-2.026	0.007*	1.546	1.127-2.121	0.006*
Diabetes (No)						
Yes	1.291	1.008-1.652	0.042*	1.252	0.969-1.617	0.084
Disease type (Chronic coronary syndrome)						
Acute coronary	1.025	0.802-1.309	0.843	1.005	0.787-1.282	0.966
Surgical intervention (No)						
PCI	1.134	0.859-1.496	0.372	1.176	0.895-1.545	0.242
CABG	0.309	0.096-0.992	0.048*	0.266	0.087-0.814	0.020*

Variable	Before IPTW			After IPTW		
Monocyte percentage (<10.00%)						
≥10.00	1.497	1.053-2.128	0.024[*]	1.452	1.037-2.033	0.029[*]
Platelet count(＜300.00×10^9/L)						
≥300.00	0.759	0.514-1.121	0.165	0.717	0.491-1.049	0.086
Mean platelet volume (＜12.50fL)						
≥12.50	1.192	0.669-2.125	0.550	1.431	0.768-2.662	0.258
Uric acid (<428.00μmol/L)						
≥428.00	1.614	1.121-2.324	0.009[*]	1.646	1.148-2.360	0.006[*]
Low density lipoprotein (<1.80mmol/L)						
≥ 1.80	0.951	0.736-1.228	0.702	0.913	0.701-1.189	0.501
Low left ventricular ejection fraction (≥50%)						
<50	1.129	0.752-1.694	0.556	1.196	0.792-1.808	0.393
Elevated risk of haemorrhage[#] (No)						
Yes	0.861	0.567-1.308	0.484	0.791	0.482-1.295	0.351

Supplementary Table 2 Results of Multifactorial Cox Regression Analysis of Hemorrhage Before/After Adjustment by IPTW

Variable	Before IPTW			After IPTW		
	HR	95%CI	P	HR	95%CI	P
Group (B)						
A	0.851	0.615-1.177	0.330	0.831	0.598-1.155	0.271
Gender (Female)						
Male	0.935	0.599-1.459	0.768	0.884	0.552-1.414	0.608
Age (<55years)						
≥55 and <65	1.137	0.750-1.723	0.544	1.104	0.735-1.658	0.631
≥65 and <75	1.317	0.832-2.085	0.239	1.227	0.749-2.010	0.415
≥75	1.121	0.624-2.011	0.703	1.077	0.581-1.998	0.813
Nation (Han)						
Uygur	0.604	0.386-0.945	0.027*	0.592	0.369-0.951	0.030*
Other	1.226	0.771-1.951	0.387	1.333	0.821-2.164	0.244
BMI (<24kg/m2)						
≥24	1.069	0.744-1.536	0.184	1.044	0.704-1.548	0.828
Smoke (No)						
Yes	0.769	0.522-1.133	0.716	0.721	0.531-1.198	0.275
Diabetes (No)						
Yes	0.751	0.529-1.068	0.111	1.044	0.498-1.043	0.082
Disease type (Chronic coronary syndrome)						
Acute coronary	1.232	0.872-1.739	0.235	1.218	0.859-1.727	0.267
Surgical intervention (No)						
PCI	1.633	1.087-2.452	0.018	1.723	1.147-2.588	0.008
CABG	0.309	0.041-2.301	0.251	0.385	0.051-2.887	0.353

Variable	Before IPTW			After IPTW		
	HR	95%CI	P	HR	95%CI	P
Monocyte percentage (<10.00%)						
≥10.00	0.966	0.559-1.669	0.903	0.927	0.512-1.678	0.802
Platelet count(＜300.00×10^9/L)						
≥300.00	1.088	0.652-1.816	0.745	1.123	0.705-1.790	0.623
Mean platelet volume (＜12.50fL)						
≥12.50	0.617	0.224-1.701	0.351	1.023	0.398-2.631	0.961
Uric acid (<428.00μmol/L)						
≥428.00	1.575	0.961-2.581	0.071	1.638	1.121-2.324	0.067
Low density lipoprotein (<1.80mmol/L)						
≥ 1.80	0.923	0.654-1.303	0.651	0.914	0.638-1.311	0.627
Low left ventricular ejection fraction (≥50%)						
<50	1.657	0.971-2.828	0.064	1.636	0.964-2.782	0.075
Elevated risk of haemorrhage# (No)						
Yes	0.982	0.570-1.691	0.947	0.901	0.519-1.561	0.710

Supplementary Table 3 Univariate analysis results of subgroup genetic data (single gene) n(%)

Factors	Totle No	Treatment for in-stent restenosis after therapy	Log-rank test
			P
CYP2C19 genotype			0.080
Ultra-Rapid Metabolizer	11	4(36.36)	
Extensive Metabolizer	60	8(13.33)	
Intermediate Metabolizer	61	13(21.31)	
Poor Metabolizer	12	3(25.00)	
ABCB1genotype			0.754
CC	45	9(20.00)	
CT	69	15(21.74)	
TT	30	4(13.33)	
ABCB1genotype combined			0.686
CC	45	9(20.00)	
CT+TT	99	19(19.19)	
PON1genotype			0.613
GG	50	9(18.00)	
GA	64	13(20.31)	
AA	30	6(20.00)	
PON1genotypecombined			0.742
GG	50	9(18.00)	
GA+AA	94	19(20.21)	

Supplementary Table 4 Univariate analysis results of subgroup genetic data (gene combination) n(%)

Factors	Totle No	Treatment for in-stent restenosis after therapy	Log-rank test
			P
CYP2C19 and ABCB1 Combination			0.121
CYP2C19 (Ultra-Rapid Metabolizer + Extensive Metabolizer) + ABCB1 CC	22	6(27.27)	
CYP2C19 (Ultra-Rapid Metabolizer + Extensive Metabolizer) + ABCB1 CT/TT or CYP2C19 (Intermediate Metabolizer + Poor Metabolizer) + ABCB1 CC	72	9(12.50)	
CYP2C19 (Intermediate Metabolizer + Poor Metabolizer) + ABCB1 CT/TT	50	13(26.00)	
CYP2C19 and PON1 Combination			0.378
CYP2C19 (Ultra-Rapid Metabolizer + Extensive Metabolizer) + PON1 GG	21	4(19.05)	
CYP2C19 (Ultra-Rapid Metabolizer + Extensive Metabolizer) + PON1 GA/AA or CYP2C19 (Intermediate Metabolizer + Poor Metabolizer) + PON1 GG	79	13(16.46)	
CYP2C19 (Intermediate Metabolizer + Poor Metabolizer) + PON1 GA/AA	44	11(25.00)	
ABCB1 and PON1 Combination			0.867
ABCB1 CC + PON1 GG	19	3(15.79)	
ABCB1 CC + PON1 GA/AA or	57	12(21.05)	
ABCB1 CT/TT + PON1 GG	68	13(19.12)	
ABCB1 CT/TT + PON1 GA/AA			0.136
CYP2C19, ABCB1, and PON1 Combination	26	7(26.92)	
Level -1 (Bleeding) + Level 0 (Normal)	54	7(12.96)	
Level 1 (Low Risk)	26	5(19.23)	
Level 2 (Moderate Risk)	38	9(23.68)	

Supplementary Table 5 Results of Preliminary study on the impact of CYP2C19 metabolic phenotypes on the efficacy of clopidogrel

Factors	β	Wald	HR	95%CI	*P*
Age (year)					
55-65	0.165	0.798	1.180	0.821~1.696	0.372
65-75	0.629	10.580	1.875	1.284~2.739	0.001
≥75	0.283	1.116	1.327	0.785~2.243	0.291
Gender (reference Male)					
Female	-0.130	0.335	0.878	0.566~1.363	0.563
Ethnics (reference Han)					
Uygur	0.462	7.553	1.587	1.142~2.206	0.006
Other	0.468	4.866	1.597	1.054~2.421	0.027
BMI ≥24(kg/m^2)	0.342	4.114	1.408	1.012~1.960	0.043
Smoking (reference No)	0.313	3.160	1.367	0.968~1.930	0.075
Diabetes (reference No)	0.138	0.919	1.148	0.866~1.523	0.338
Percentage of neutrophils ≥75 (%)	0.370	1.672	1.448	0.826~2.539	0.196
Monocyte percentage ≥10 (%)	0.546	6.849	1.727	1.147~2.600	0.009
Lymphocyte count ≥1.10 (10^9/L)	-0.215	0.473	0.806	0.436~1.490	0.492
Low red blood cell count <4.30 (10^12/L)	0.230	1.421	1.259	0.862~1.839	0.233
Low haemoglobin <120 (g/L)	0.366	2.093	1.441	0.878~2.365	0.148
Uric acid ≥428 (μmol/L)	0.380	3.056	1.462	0.955~2.240	0.080
Total protein ≥65 (g/L)	-0.195	1.740	0.823	0.616~1.099	0.187
Alanine aminotransferase ≥50 (U/L)	-0.419	2.588	0.658	0.395~1.096	0.108
Low-density lipoprotein ≥1.80 (mmol/L)	0.039	0.064	1.040	0.768~1.407	0.800
Low left ventricular shortening fraction <25 (%)	1.080	2.254	2.945	0.719~12.059	0.133
Low left ventricular ejection fraction <50 (%)	-0.715	1.030	0.489	0.123~1.946	0.310
CYP2C19 metabolic phenotype					
Ultrafast metabolism vs (fast metabolism)	-0.051	0.029	0.951	0.531~1.701	0.865
Intermediate metabolism vs (fast metabolism)	0.281	3.592	1.324	0.990~1.771	0.058
(slow metabolism) vs (fast metabolism)	0.269	0.907	1.309	0.752~2.277	0.341