

Supplemental information

**Remnant cholesterol but not LDL cholesterol
is associated with 5-year bleeding following
percutaneous coronary intervention**

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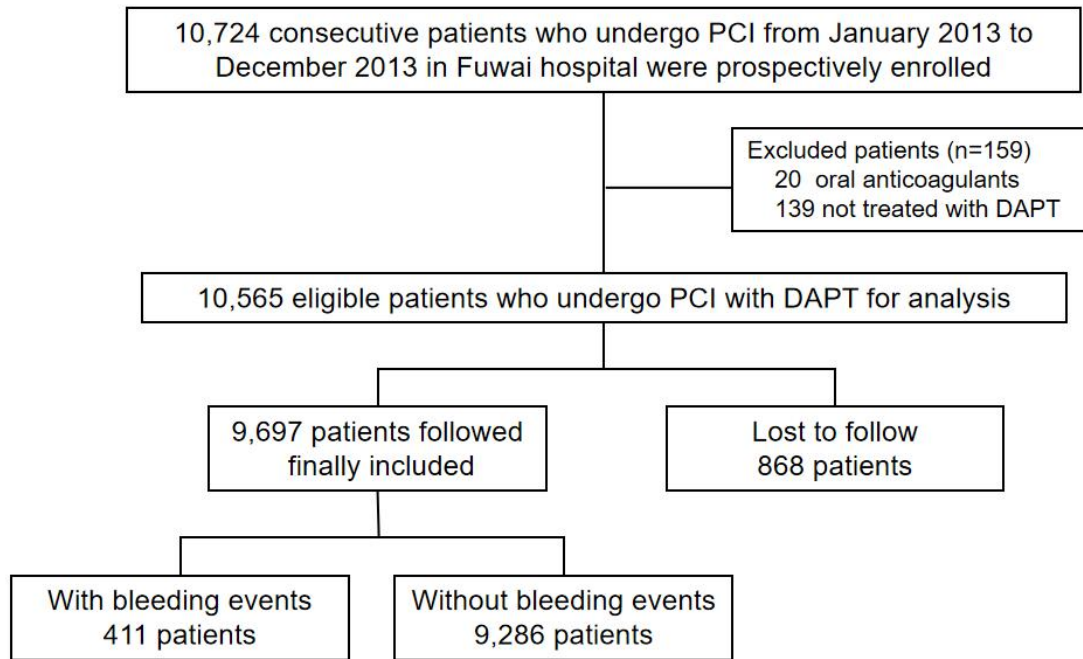


Figure S1: The flow chart of the study, related to Figure 1. Abbreviations: PCI: percutaneous coronary intervention; DAPT: dual antiplatelet therapy.

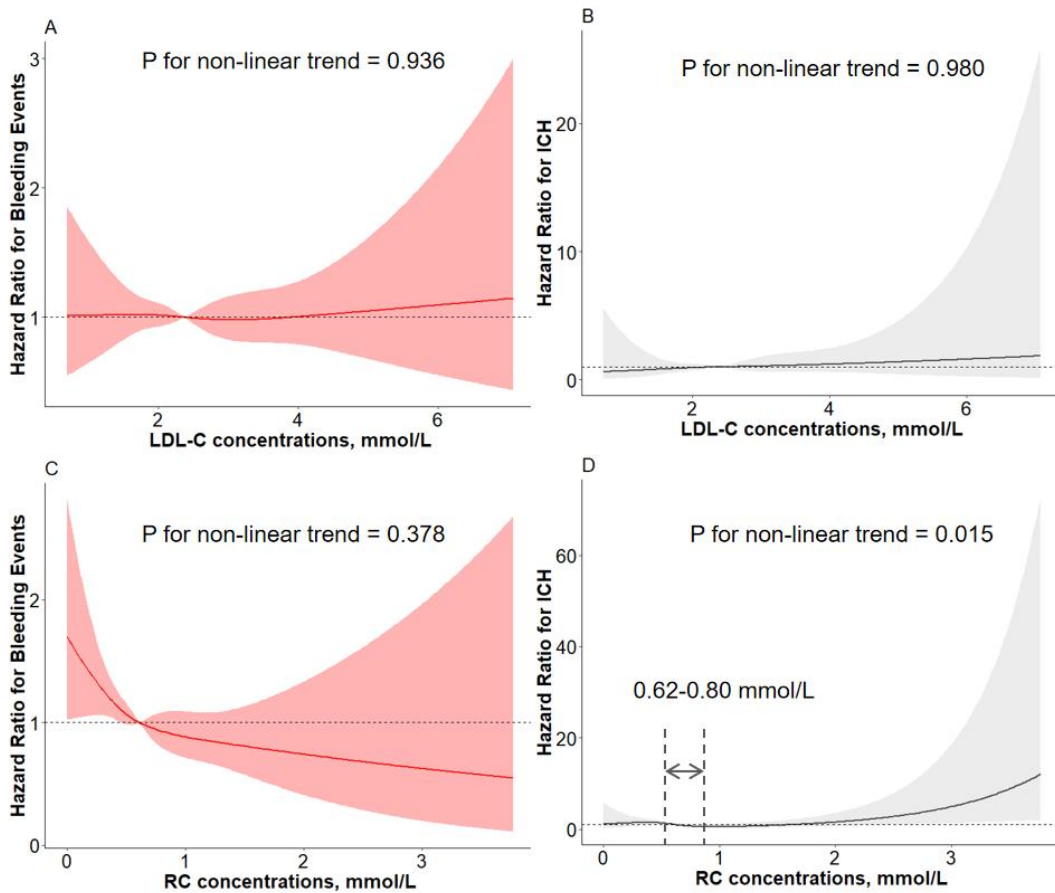


Figure S2: Restricted cubic splines of long-term outcomes for LDL-C and RC, related to Figure 2. We depicted the restricted cubic spline plots of bleeding events for (A) LDL-C concentrations and (C) RC concentrations as well as restricted cubic spline plots of ICH for (B) LDL-C concentrations and (D) RC concentrations. Heavy central lines represented the estimated adjusted hazard ratios, with shaded ribbons denoting 95% confidence intervals. The horizontal dotted lines represent the hazard ratio of 1.0.

The restricted cubic splines were adjusted for age, sex, body mass index, hypertension, previous bleeding, previous stroke, femoral artery approach, hemoglobin, estimated glomerular filtration rate, duration of DAPT, HDL-C, TG and high PRECISE-DAPT score, because of their statistical significances ($P < 0.05$) in univariate analysis.

Abbreviations: LDL-C: low-density lipoprotein cholesterol; RC: remnant cholesterol.

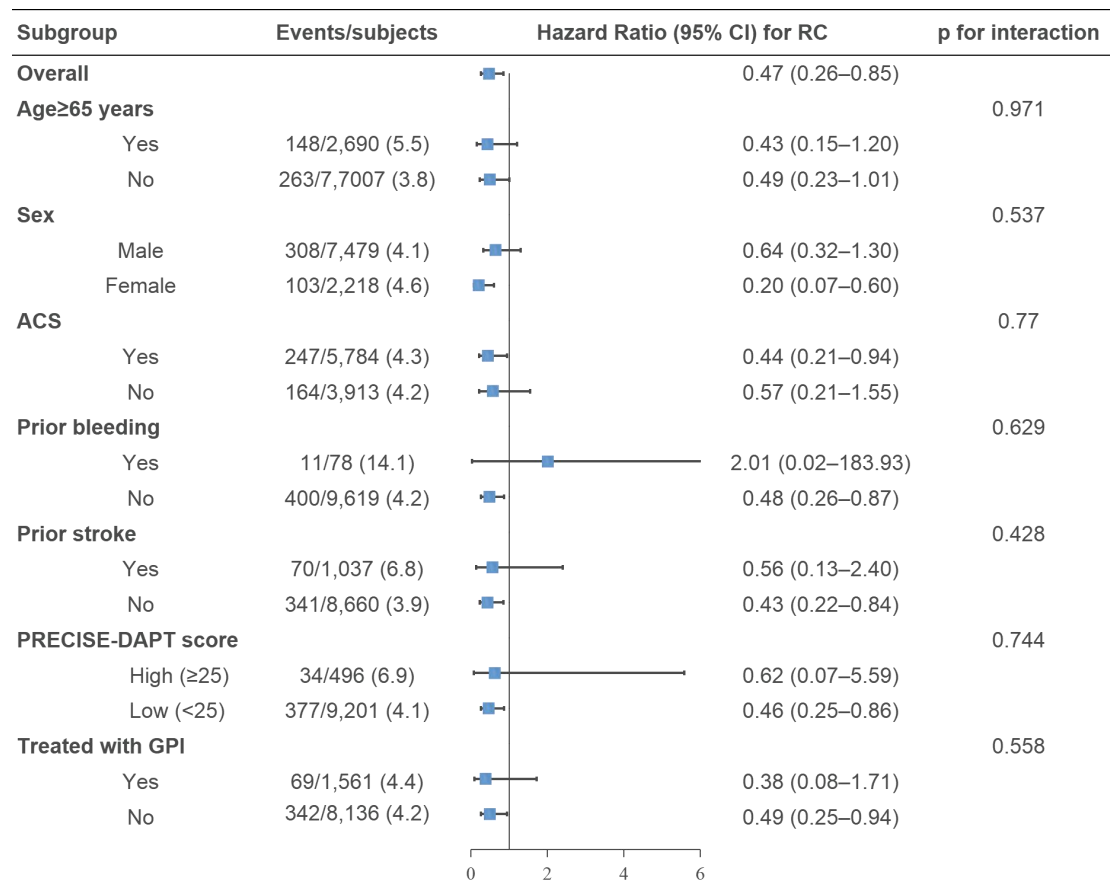


Figure S3. Subgroup analyses of association of RC concentrations with primary endpoint, related to Figure 2. All analyses were performed with Cox regression models with RC as a continuous variable after adjustment for age, sex, body mass index, hypertension, previous bleeding, previous stroke, femoral artery approach, hemoglobin, eGFR, duration of DAPT, HDL-C, TG and high PRECISE-DAPT score, because of their statistical significances ($P < 0.05$) in univariate analysis. Abbreviations: RC: remnant cholesterol; BMI: body mass index; DAPT: dual antiplatelet therapy; PRECISE-DAPT: predicting bleeding complications in patients undergoing stent implantation and subsequent dual antiplatelet therapy; GPI: glycoprotein IIb/IIIa inhibitor.

Table S1. Baseline characteristics of patients with different RC concentrations, related to Table 1.

Parameter	Q1 (<0.45 mmol/L) (n=2,486)	Q2 (0.45–0.61 mmol/L) (n=2,449)	Q3 (0.62–0.80 mmol/L) (n=2,419)	Q4 (>0.80 mmol/L) (n=2,343)	<i>p</i> value
Demographics					
Age, years	60.3±9.9	59.3±10.2	57.7±10.3	56.1±10.1	<0.001
Male sex, n (%)	1,937 (77.9)	1,925 (78.6)	1,854 (76.6)	1,763 (75.2)	0.030
BMI, kg/m ²	25.4±3.3	25.8±3.1	26.1±3.2	26.5±3.1	<0.001
Diagnosis on admission					
ACS, n (%)	1,410 (56.7)	1,445 (59.0)	1,466 (60.6)	1,463 (62.4)	<0.001
^a High PRECISE-DAPT score, n (%)	129 (5.2)	117 (4.8)	146 (6.0)	104 (4.4)	0.071
ARC-HBR criteria, n (%)	226 (9.1)	229 (9.4)	215 (8.9)	174 (7.4)	0.083
Medical history					
Smoking, n (%)	1,344 (54.1)	1,437 (58.7)	1,464 (60.5)	1,426 (60.9)	<0.001
Hypertension, n (%)	1,582 (63.6)	1,602 (65.4)	1,529 (63.2)	1,536 (65.6)	0.204
Dyslipidaemia, n (%)	1,523 (61.3)	1,620 (66.1)	1,648 (68.1)	1,729 (73.8)	<0.001
Diabetes mellitus, n (%)	724 (29.1)	762 (31.1)	692 (28.6)	757 (32.3)	0.017
COPD, n (%)	59 (2.4)	48 (2.0)	63 (2.6)	52 (2.2)	0.495
Prior bleeding, n (%)	23 (0.9)	23 (0.9)	21 (0.9)	11 (0.5)	0.219
Prior stroke, n (%)	278 (11.2)	281 (11.5)	254 (10.5)	224 (9.6)	0.143
Peripheral vascular disease, n (%)	79 (3.2)	52 (2.1)	67 (2.8)	62 (2.6)	0.148
Prior MI, n (%)	481 (19.3)	510 (20.8)	491 (20.3)	398 (17.0)	0.004
Prior PCI, n (%)	665 (26.7)	652 (26.6)	565 (23.4)	520 (22.2)	<0.001
Prior CABG, n (%)	96 (3.9)	102 (4.2)	83 (3.4)	113 (4.8)	0.099
Family history of coronary heart disease, n (%)	566 (22.8)	595 (24.3)	617 (25.5)	603 (25.7)	0.062
Laboratory variables					

TC, mmol/L	3.76±0.91	3.97±0.94	4.28±0.95	4.85±1.16	<0.001
HDL-C, mmol/L	1.17±0.30	1.05±0.26	0.99±0.24	0.92±0.22	<0.001
LDL-C, mmol/L	2.29±0.81	2.39±0.83	2.59±0.86	2.80±1.02	<0.001
TG, mmol/L	1.09±0.35	1.38±0.36	1.76±0.41	2.95±1.45	<0.001
Hemoglobin, g/L	141.59±15.31	142.66±15.20	142.79±15.40	144.85±15.52	<0.001
WBC, 10 ⁹ /L	6.52±1.90	6.81±1.99	7.05±2.06	7.22±2.08	<0.001
Platelet count, 10 ⁹ /L	196.44±50.99	201.44±53.09	209.57±55.64	213.36±57.22	<0.001
eGFR, ml/min	91.35±13.97	90.78±14.77	91.05±15.77	91.81±15.09	0.108
Serum glucose, mmol/L	5.37 (4.88, 6.36)	5.47 (4.92, 6.61)	5.64 (4.98, 6.53)	5.67 (5.04, 7.04)	<0.001
Uric acid, μmol/L	325.71±77.02	337.49±80.38	348.96±85.74	361.80±92.38	<0.001
LVEF, %	64.0 (60.0, 68.0)	63.0 (60.0, 67.0)	63.0 (60.0, 67.0)	63.0 (60.0, 67.0)	<0.001
Medications					
Statin	2,392 (96.2)	2,326 (95.0)	2,345 (96.9)	2,260 (96.5)	0.003
Aspirin	2,486 (100)	2,449 (100)	2,419 (100)	2,343 (100)	-
P2Y ₁₂ inhibitor					0.222
Ticagrelor	7 (0.3)	4 (0.2)	6 (0.2)	1 (0.1)	
Clopidogrel	2,479 (99.7)	2,445 (99.8)	2,413 (99.8)	2,342 (99.9)	
Glycoprotein IIb/IIIa inhibitor	387 (15.6)	413 (16.9)	399 (16.5)	362 (15.5)	0.459
PPI	449 (18.1)	473 (19.3)	506 (20.9)	482 (20.6)	0.050
Duration of DAPT					0.307
≤1 year	779 (31.3)	759 (30.9)	745 (30.8)	702 (30.0)	
1-2 year	936 (37.7)	947 (38.7)	986 (40.8)	928 (39.6)	
≥2 year	771 (32.0)	746 (30.5)	688 (28.4)	713 (30.4)	
Femoral artery approach	172 (6.9)	189 (7.7)	187 (7.7)	189 (8.1)	0.480

Table S2. Baseline characteristics of patients with different LDL-C concentrations, related to Table 1.

Parameter	Q1 (<1.88 mmol/L) (n=2,430)	Q2 (1.88–2.38 mmol/L) (n=2,430)	Q3 (2.39–3.0 mmol/L) (n=2,444)	Q4 (>3.0 mmol/L) (n=2,393)	<i>p</i> value
Demographics					
Age, years	58.6±10.3	58.7±10.3	58.3±10.1	57.9±10.2	0.023
Male sex, n (%)	1,975 (81.3)	1,935 (79.6)	1,843 (75.4)	1,726 (72.1)	<0.001
BMI, kg/m ²	25.8±3.1	25.9±3.2	26.0±3.2	26.1±3.2	0.001
Diagnosis on admission					
ACS, n (%)	1,394 (57.4)	1,422 (58.5)	1,512 (61.9)	1,456 (60.8)	0.005
^a High PRECISE-DAPT score, n (%)	122 (5.0)	140 (5.8)	127 (5.2)	107 (4.5)	0.239
ARC-HBR criteria, n (%)	250 (10.3)	230 (9.5)	205 (8.4)	159 (6.6)	<0.001
Medical history					
Smoking, n (%)	1,466 (60.3)	1,457 (60.0)	1,411 (57.7)	1,337 (55.9)	0.005
Hypertension, n (%)	1,606 (66.1)	1,590 (65.4)	1,554 (63.6)	1,499 (62.6)	0.044
Dyslipidaemia, n (%)	1,627 (67.0)	1,669 (68.7)	1,629 (66.7)	1,595 (66.7)	0.370
Diabetes mellitus, n (%)	825 (34.0)	746 (30.7)	724 (29.6)	640 (26.7)	<0.001
COPD, n (%)	55 (2.3)	65 (2.7)	55 (2.3)	47 (2.0)	0.428
Prior bleeding, n (%)	15 (0.6)	23 (0.9)	20 (0.8)	20 (0.8)	0.633
Prior stroke, n (%)	282 (11.6)	257 (10.6)	275 (11.3)	223 (9.3)	0.053
Peripheral vascular disease, n (%)	83 (3.4)	75 (3.1)	62 (2.5)	40 (1.7)	0.001
Prior MI, n (%)	552 (22.7)	532 (21.9)	422 (17.3)	374 (15.6)	<0.001
Prior PCI, n (%)	718 (29.5)	635 (26.1)	578 (23.6)	471 (19.7)	<0.001
Prior CABG, n (%)	111 (4.6)	102 (4.2)	92 (3.8)	89 (3.7)	0.394
Family history of coronary heart disease, n (%)	541 (22.3)	602 (24.8)	614 (25.1)	624 (26.1)	0.016

Laboratory variables					
TC, mmol/L	3.12±0.51	3.79±0.41	4.38±0.41	5.58±0.86	<0.001
HDL-C, mmol/L	0.98±0.29	1.03±0.28	1.04±0.25	1.10±0.27	<0.001
RC, mmol/L	0.61±0.42	0.64±0.36	0.68±0.35	0.74±0.37	<0.001
TG, mmol/L	1.61±1.22	1.71±1.03	1.83±0.94	1.98±0.95	<0.001
Hemoglobin, g/L	140.98±15.11	142.37±15.46	142.98±14.99	145.50±15.69	<0.001
WBC, 10 ⁹ /L	6.66±1.87	6.88±1.96	6.97±2.11	7.07±2.13	<0.001
Platelet count, 10 ⁹ /L	192.12±52.34	203.13±54.33	209.04±54.57	216.10±54.64	<0.001
eGFR, ml/min	91.14±15.04	91.29±14.91	91.10±15.46	91.44±14.96	0.856
Serum glucose, mmol/L	5.34 (4.86, 6.42)	5.48 (4.92, 6.56)	5.02 (5.71, 6.63)	5.04 (5.61, 6.90)	<0.001
Uric acid, μmol/L	340.73±83.23	342.66±83.80	341.51±85.04	347.33±87.71	0.035
LVEF, %	64.0 (60.0, 67.0)	63.0 (60.0, 67.0)	63.0 (60.0, 67.0)	63.0 (60.0, 67.0)	0.139
Medications					
Statin	2,324 (95.6)	2,336 (96.1)	2,353 (96.3)	2,310 (96.5)	0.429
Aspirin	2,430 (100)	2,430 (100)	2,444 (100)	2,393 (100)	-
P2Y ₁₂ inhibitor					0.774
Ticagrelor	5 (0.2)	6 (0.2)	3 (0.1)	4 (0.2)	
Clopidogrel	2,425 (99.8)	2,425 (99.8)	2,441 (99.9)	2,389 (99.8)	
Glycoprotein IIb/IIIa inhibitor	364 (15.0)	383 (15.8)	406 (16.6)	408 (17.0)	0.209
PPI	481 (19.8)	490 (20.2)	470 (19.2)	469 (19.6)	0.872
Duration of DAPT					0.549
≤1 year	718 (29.5)	761 (31.3)	776 (31.8)	727 (30.4)	
1-2 year	963 (39.6)	927 (38.1)	946 (38.7)	961 (40.2)	
≥2 year	749 (30.8)	742 (30.5)	722 (29.5)	705 (29.5)	
Femoral artery approach	228 (9.4)	184 (7.6)	172 (7.0)	153 (6.4)	0.001

Table S3. Univariate Cox regression of lipid profile and clinical variables with bleeding events and ICH, related to Table 1.

Parameter	Bleeding events		ICH		
	HR (95% CI)	P value	HR (95% CI)	P value	
Lipid profile					
LDL-C (continuous variable)	0.97 (0.87–1.08)	0.545	1.12 (0.82–1.54)	0.475	
LDL-C (categorical variable)					
Q1 (<1.88 mmol/L)	1[Reference]	NA	1[Reference]	NA	
Q2 (1.88–2.38 mmol/L)	0.90 (0.69–1.18)	0.454	1.34 (0.56–3.17)	0.512	
Q3 (2.39–3.0mmol/L)	0.78 (0.59–1.02)	0.073	0.89 (0.34–2.30)	0.806	
Q4 (>3.0 mmol/L)	0.93 (0.71–1.21)	0.591	1.46 (0.63–3.42)	0.380	
RC (continuous variable)	0.60 (0.44–0.82)	0.001	0.81 (0.34–1.97)	0.646	
RC (categorical variable)					
Q1 (<0.45 mmol/L)	1[Reference]	NA	1[Reference]	NA	
Q2 (0.45–0.61 mmol/L)	0.78 (0.60–1.01)	0.055	0.95 (0.47–1.92)	0.882	
Q3 (0.62–0.80 mmol/L)	0.74 (0.57–0.96)	0.025	0.19 (0.06–0.66)	0.009	
Q4 (>0.80 mmol/L)	0.61 (0.46–0.81)	0.001	0.53 (0.23–1.23)	0.137	
HDL-C	1.55 (1.11–2.16)	0.010	3.53 (1.44–8.62)	0.006	
TC	0.95 (0.87–1.05)	0.311	1.16 (0.90–1.51)	0.258	
TG	0.88 (0.79–0.98)	0.025	0.93 (0.67–1.28)	0.646	
Clinical variables					
Age	1.03 (1.02–1.04)	<.001	1.05 (1.02–1.08)	0.003	
Man	0.88 (0.70–1.09)	0.241	0.74 (0.38–1.44)	0.368	
BMI	0.98 (0.95–1.01)	0.118	0.89 (0.81–0.98)	0.022	
ACS	1.02 (0.84–1.25)	0.811	1.00 (0.54–1.86)	0.994	
High score	PRECISE-DAPT	1.79 (1.26–2.55)	0.001	2.65 (1.04–6.75)	0.041
ARC-HBR criteria	1.66 (1.25–2.21)	0.001	1.81 (0.76–4.29)	0.180	
Smoking	1.17 (0.96–1.43)	0.116	0.59 (0.32–1.07)	0.084	
Hypertension	1.31 (1.06–1.61)	0.013	1.78 (0.87–3.61)	0.113	
Dyslipidaemia	1.09 (0.88–1.34)	0.422	0.97 (0.51–1.85)	0.931	
Diabetes mellitus	0.98 (0.79–1.21)	0.813	0.82 (0.41–1.63)	0.573	
COPD	0.64 (0.29–1.43)	0.276	–	–	

Prior bleeding	3.62 (1.99–6.59)	<0.001	9.75 (3.01–31.55)	<0.001
Prior stroke	1.77 (1.37–2.28)	<0.001	2.00 (0.92–4.31)	0.079
Peripheral vascular disease	1.30 (0.76–2.21)	0.336	1.83 (0.44–7.59)	0.403
Prior MI	0.90 (0.70–1.16)	0.421	0.70 (0.29–1.65)	0.410
Prior PCI	0.98 (0.79–1.23)	0.886	0.96 (0.47–1.95)	0.905
Prior CABG	1.29 (0.83–2.00)	0.255	0.58 (0.08–4.24)	0.594
Family history of coronary heart disease	0.95 (0.76–1.20)	0.680	0.95 (0.47–0.90)	0.895
WBC	0.96 (0.91–1.01)	0.079	0.86 (0.71–1.03)	0.090
Hemoglobin	0.99 (0.99–1.00)	0.007	0.99 (0.97–1.01)	0.437
Platelet count	1.00 (1.00–1.00)	0.159	1.00 (0.99–1.00)	0.291
eGFR	0.99 (0.98–0.99)	<0.001	0.98 (0.97–1.00)	0.061
Serum glucose	0.97 (0.92–1.02)	0.219	0.98 (0.84–1.14)	0.772
Uric acid	1.00 (1.00–1.00)	0.892	1.00 (1.00–1.01)	0.441
LVEF	0.99 (0.98–1.01)	0.306	1.01 (0.97–1.06)	0.574
Statin	1.14 (0.67–1.95)	0.627	0.52 (0.16–1.68)	0.274
Ticagrelor	2.65 (0.66–10.62)	0.170	12.94 (1.78–94.08)	0.011
Glycoprotein IIb/IIIa inhibitor	1.05 (0.81–1.36)	0.702	0.55 (0.20–1.53)	0.251
PPI	1.02 (0.80–1.30)	0.871	0.82 (0.36–1.84)	0.624
Duration of DAPT				
≤1 year	1[Reference]	NA	1[Reference]	NA
1-2 year	0.75 (0.60–0.94)	0.014	0.44 (0.21–0.88)	0.021
≥2 year	0.83 (0.65–1.06)	0.130	0.43 (0.20–0.93)	0.032
Femoral artery approach	1.45 (1.06–1.99)	0.021	0.30 (0.41–2.18)	0.234

Table S4. Risk of bleeding events across LDL-C concentrations according to clinical cut-off points, related to Table 3.

Clinical points of LDL-C, mmol/L	cut-off Events/subjects	Bleeding events		ICH	
		HR (95% CI)	<i>P</i> value	HR (95% CI)	<i>P</i> value
Model 1 ^a					
<1.0	4/107 (3.7)	0.95 (0.35–2.58)	0.917	NA ^b	NA ^b
1.0–1.79	96/1,952 (4.9)	1.23 (0.92–1.63)	0.164	0.67 (0.24–1.86)	0.444
1.8–2.59	156/3,859 (4.0)	1.01 (0.78–1.31)	0.934	1.05 (0.48–2.27)	0.910
2.6–3.39	92/2,310 (4.0)	1[Reference] ^c	NA	1[Reference] ^c	NA
3.4–4.19	41/1,012 (4.1)	1.03 (0.71–1.49)	0.884	1.16 (0.40–3.40)	0.785
≥4.2	22/457 (4.8)	1.27 (0.80–2.03)	0.314	1.68 (0.46–6.14)	0.430
Model 2 ^d					
<1.0	4/107 (3.7)	0.92 (0.34–2.50)	0.862	NA ^b	NA ^b
1.0–1.79	96/1,952 (4.9)	1.19 (0.89–1.60)	0.236	0.72 (0.26–2.00)	0.524
1.8–2.59	156/3,859 (4.0)	0.99 (0.76–1.28)	0.919	1.04 (0.48–2.27)	0.920
2.6–3.39	92/2,310 (4.0)	1[Reference] ^c	NA	1[Reference] ^c	NA
3.4–4.19	41/1,012 (4.1)	1.03 (0.71–1.49)	0.872	1.09 (0.37–3.21)	0.873
≥4.2	22/457 (4.8)	1.27 (0.79–2.02)	0.325	1.53 (0.41–5.64)	0.525
Model 3 ^e					
<1.0	4/107 (3.7)	0.92 (0.34–2.51)	0.871	NA ^b	NA ^b
1.0–1.79	96/1,952 (4.9)	1.19 (0.89–1.59)	0.241	0.72 (0.26–2.00)	0.524
1.8–2.59	156/3,859 (4.0)	0.99 (0.76–1.28)	0.924	1.05 (0.48–2.28)	0.911
2.6–3.39	92/2,310 (4.0)	1[Reference] ^c	NA	1[Reference] ^c	NA
3.4–4.19	41/1,012 (4.1)	1.03 (0.71–1.49)	0.870	1.10 (0.37–3.22)	0.869
≥4.2	22/457 (4.8)	1.27 (0.79–2.03)	0.322	1.53 (0.41–5.64)	0.526
Model 4 ^f					
<1.0	4/107 (3.7)	0.91 (0.33–2.49)	0.858	NA ^b	NA ^b
1.0–1.79	96/1,952 (4.9)	1.19 (0.89–1.60)	0.235	0.72 (0.26–2.00)	0.524

1.8–2.59	156/3,859 (4.0)	0.99 (0.76–1.28)	0.919	1.04 (0.48–2.27)	0.917
2.6–3.39	92/2,310 (4.0)	1[Reference] ^c	NA	1[Reference] ^c	NA
3.4–4.19	41/1,012 (4.1)	1.03 (0.71–1.49)	0.871	1.09 (0.37–3.22)	0.871
≥4.2	22/457 (4.8)	1.27 (0.79–2.02)	0.325	1.53 (0.41–5.65)	0.525

^a The model was adjusted for age, sex, and body mass index.

^b The events happened too few to make statistical analysis.

^c To assess the risk of bleeding events associated with baseline LDL-C concentrations, we calculated HRs and 95% CIs according to clinical cut-off points of LDL-C with LDL-C 2.6–3.39 mmol/L as the reference.

^d The model was adjusted for Model 1 + hypertension, previous bleeding, previous stroke, femoral artery approach, hemoglobin, eGFR, duration of DAPT, HDL-C, and TG, because of their statistical significances ($P < 0.05$) in univariate analysis.

^e The model was adjusted for Model 2 + high PRECISE-DAPT score.

^f The model was adjusted for Model 2 + ARC-HBR criteria.

Table S5. Sensitivity analysis, related to Table 3.

Variables, mmol/L	Bleeding events		ICH	
	HR (95% CI)	<i>p</i> value	HR (95% CI)	<i>p</i> value
LDL-C				
Model 1 ^a				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.93 (0.71–1.22)	0.597	0.57 (0.23–1.37)	0.209
Q3	0.81 (0.61–1.07)	0.133	0.87 (0.39–1.91)	0.723
Q4	0.98 (0.75–1.28)	0.873	0.59 (0.25–1.43)	0.244
Model 2 ^b				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.94 (0.72–1.24)	0.677	0.65 (0.26–1.62)	0.356
Q3	0.82 (0.62–1.09)	0.175	0.95 (0.43–2.10)	0.891
Q4	1.02 (0.77–1.35)	0.882	0.64 (0.26–1.55)	0.322
Model 3 ^c				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.95 (0.72–1.24)	0.686	0.66 (0.27–1.62)	0.361
Q3	0.82 (0.62–1.09)	0.178	0.95 (0.43–2.11)	0.903
Q4	1.02 (0.77–1.35)	0.880	0.64 (0.26–1.56)	0.326
Model 4 ^d				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.94 (0.72–1.24)	0.678	0.65 (0.26–1.62)	0.358
Q3	0.82 (0.62–1.09)	0.175	0.95 (0.43–2.10)	0.890
Q4	1.02 (0.77–1.35)	0.880	0.64 (0.26–1.55)	0.322
RC				
Model 1 ^a				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.81 (0.62–1.05)	0.111	1.08 (0.52–2.20)	0.843
Q3	0.80 (0.62–1.05)	0.108	0.24 (0.07–0.82)	0.022
Q4	0.68 (0.51–0.91)	0.008	0.69 (0.29–1.67)	0.413
Model 2 ^b				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.81 (0.62–1.06)	0.121	1.15 (0.55–2.41)	0.711
Q3	0.80 (0.60–1.06)	0.122	0.24 (0.07–0.86)	0.029
Q4	0.66 (0.45–0.98)	0.040	0.56 (0.18–1.76)	0.319
Model 3 ^c				
Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.81 (0.62–1.06)	0.119	1.15 (0.55–2.41)	0.711
Q3	0.80 (0.60–1.07)	0.125	0.24 (0.07–0.87)	0.029
Q4	0.66 (0.45–0.98)	0.040	0.56 (0.18–1.77)	0.323

Model 4^d

Q1	1[Reference]	NA	1[Reference]	NA
Q2	0.81 (0.62–1.06)	0.119	1.15 (0.55–2.41)	0.710
Q3	0.80 (0.60–1.06)	0.120	0.24 (0.07–0.86)	0.029
Q4	0.66 (0.45–0.98)	0.038	0.56 (0.18–1.76)	0.320

Abbreviations: RC: remnant cholesterol; LDL-C: low-density lipoprotein cholesterol; ICH: intracranial haemorrhage; HR: hazard ratio; CI: confidence interval; NA, not applicable.

The Q1, Q2, Q3, and Q4 of LDL-C were <1.88, 1.88–2.38, 2.39–3.0 and >3.0 mmol/L, respectively. The Q1, Q2, Q3, and Q4 of RC were <0.45, 0.45–0.61, 0.62–0.80 and >0.80 mmol/L, respectively.

^a Model 1 was adjusted for age, sex, and body mass index.

^b Model 2 was adjusted for Model 1 + hypertension, previous bleeding, previous stroke, femoral artery approach, hemoglobin, eGFR, duration of DAPT, HDL-C, and TG, because of their statistical significances ($P < 0.05$) in univariate analysis.

^c Model 3 was adjusted for Model 2 + high PRECISE-DAPT score.

^d Model 4 was adjusted for Model 2 + ARC-HBR criteria.