

Statistics								
Pt No	% Total	Events	Rate	Rank	Range	Chi-Sq Hi/Mid/Lo		Max: 240.55
879	64.78	62	7.05	0 to 655	5.00 thru 1632.00	Lo vs Mid	61.3302	
327	24.10	74	22.63	656 to 965	1638.00 thru 5847.00	Mid vs Hi	41.8940	
151	11.13	75	49.67	966 to 1108	5875.00 thru 35000.00	Lo vs Hi	262.8511	
1357	100.00	211	15.55	0 to 1108	5.00 thru 35000.00	Relative Risk 1 vs 2 vs 3	1.00 / 3.21 / 7.04	

Figure S1 Statistic of X-tile analysis for NT-proBNP discretization.

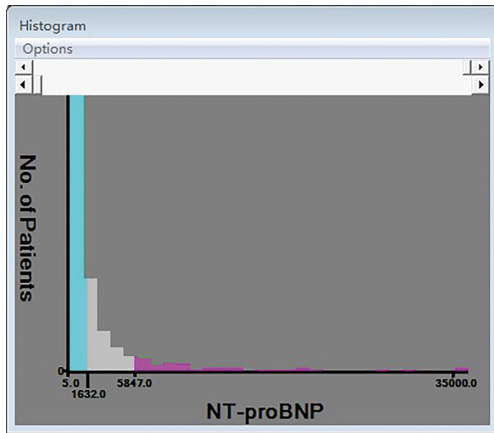


Figure S2 Distribution of serum concentration of NT-proBNP by X-tile analysis.

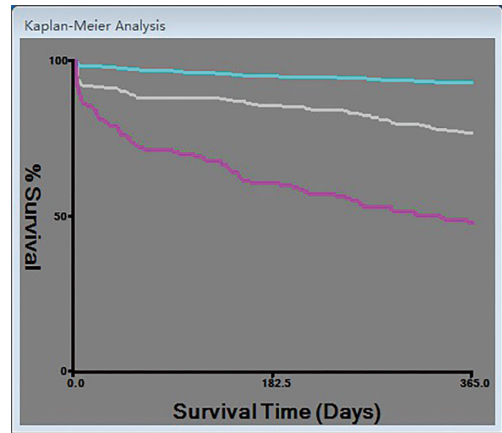


Figure S3 Survival (composite MACEs) of NSTEMI patients in three groups.

Table S1 Multivariable Cox regression for composite MACEs

Variables	HR (95%CI)	P value
NT-proBNP medium vs. low	2.19 (1.48, 3.32)	0.0002
NT-proBNP high vs. low	3.07 (1.78, 5.29)	<0.0001
Age (elder than 60)	1.54 (0.86, 2.74)	0.1433
Male	0.87 (0.59, 1.27)	0.4622
Smoking	0.92 (0.64, 1.31)	0.6370
Drinking	0.83 (0.53, 1.32)	0.4318
Hypertension	0.50 (0.79, 1.64)	0.4605
Diabetes	1.04 (0.75, 1.44)	0.8300
Previous stroke	1.26 (0.89, 1.78)	0.1859
Hyperlipidaemia	1.15 (0.74, 1.79)	0.5216
Previous MI	1.30 (0.89, 1.90)	0.1695
Heart rate	1.01 (0.99, 1.02)	0.0763
Left main involvement	1.32 (0.88, 1.99)	0.1858
Systolic pressure (mmHg)	1.01 (0.99, 1.02)	0.0836
Diastolic pressure (mmHg)	0.99 (0.97, 1.01)	0.0787
LVEF	0.98 (0.96, 0.99)	0.0280
HDLC (mmol/L)	0.83 (0.42, 1.64)	0.5964
LDLC (mmol/L)	0.94 (0.79, 1.13)	0.5297
hsTNT	1.16 (1.06, 1.26)	0.0011
Killip class		
1	Reference	Reference
2	1.17 (0.77, 1.80)	0.4597
3	0.65 (0.30, 1.40)	0.2682
4	1.39 (0.31, 6.17)	0.6655
GRACE		
<109	Reference	Reference
109–140	1.77 (0.90, 3.46)	0.0975
>140	3.43 (1.66, 7.07)	0.0008
Occluded vessel		
None	Reference	Reference
Single	1.69 (1.16, 2.45)	0.0059
Multiple	1.56 (0.88, 2.78)	0.1308
Revascularization strategy		
MT	Reference	Reference
PCI	0.42 (0.25, 0.69)	0.0006
CABG	0.80 (0.41, 1.56)	0.5125
Baseline Medication		
DAPT	0.42 (0.17, 1.03)	0.0580
Beta-blocker	0.17 (0.10, 0.28)	<0.0001
ACEI/ARB	0.68 (0.49, 0.94)	0.0189
Statin	0.69 (0.31, 1.53)	0.3577
Anticoagulants	0.17 (0.06, 0.52)	0.0018

ACEI, angiotensin-converting enzyme inhibitors; ARB, angiotensin II receptor blockers; high-density lipoprotein cholesterol; LDLC, low-density lipoprotein cholesterol; NT-proBNP, N-terminal pro-B type natriuretic peptide; hsTNT, hypersensitive troponin T; GRACE, Global Registry of Acute Coronary Events; LVEF, left ventricular ejection fraction; MI, myocardial infarction; MT, medical therapy; PCI, percutaneous coronary intervention; CABG, coronary artery bypass grafting; DAPT, dual anti-platelet therapy.

Table S2 Subgroup analysis of association between NT-proBNP and composite MACEs

Subgroup	NT-proBNP level	Number of events, n (%)	Crude HR (95% CI)	Crude P value	Adjusted HR (95% CI)*	Adjusted P value*
Age <60	Low	15 (3.72)	Reference	–	Reference	–
	Medium	5 (10.64)	3.11 (1.12, 8.62)	0.0296	2.36 (0.49, 11.39)	0.2856
	High	2 (16.67)	2.63 (0.35, 19.99)	0.3508	0.20 (0.01, 3.98)	0.2901
Age ≥60	Low	47 (9.87)	Reference	–	Reference	–
	Medium	69 (24.64)	2.87 (1.98, 4.14)	<0.0001	2.32 (1.48, 3.63)	0.0002
	High	73 (52.52)	7.92 (5.50, 11.41)	<0.0001	3.37 (1.90, 5.98)	<0.0001
Male	Low	48 (6.98)	Reference	–	Reference	–
	Medium	42 (21.76)	3.42 (2.26, 5.18)	<0.0001	2.03 (1.19, 3.44)	0.0089
	High	29 (45.31)	8.63 (5.44, 13.71)	<0.0001	2.46 (1.13, 5.36)	0.0236
Female	Low	14 (7.33)	Reference	–	Reference	–
	Medium	32 (23.88)	3.58 (1.91, 6.71)	<0.0001	2.82 (1.31, 6.10)	0.0084
	High	46 (52.87)	10.28 (5.64, 18.75)	<0.0001	4.02 (1.60, 10.05)	0.003
GRACE ≤140	Low	35 (4.82)	Reference	–	Reference	–
	Medium	24 (14.81)	3.24 (1.93, 5.45)	<0.0001	2.37 (1.28, 4.41)	0.0061
	High	14 (45.16)	12.35 (6.63, 22.99)	<0.0001	6.52 (2.45, 17.38)	0.0002
GRACE >140	Low	27 (17.65)	Reference	–	Reference	–
	Medium	50 (30.30)	1.90 (1.19, 3.03)	0.0075	2.20 (1.22, 3.97)	0.009
	High	61 (50.83)	3.83 (2.43, 6.03)	<0.0001	2.44 (1.19, 5.00)	0.015
Non-occluded vessel	Low	40 (6.94)	Reference	–	Reference	–
	Medium	45 (21.13)	3.26 (2.13, 4.99)	<0.0001	2.03 (1.17, 3.52)	0.0114
	High	48 (46.15)	9.46 (6.20, 14.42)	<0.0001	3.62 (1.79, 7.34)	0.0004
Occluded vessel	Low	22 (7.26)	Reference	–	Reference	–
	Medium	29 (25.44)	4.05 (2.32, 7.04)	<0.0001	2.58 (1.27, 5.24)	0.0086
	High	27 (57.45)	10.69 (6.08, 18.81)	<0.0001	3.50 (1.29, 9.53)	0.0141
MT	Low	20 (9.26)	Reference	–	Reference	–
	Medium	34 (22.73)	2.65 (1.52, 4.61)	0.0005	2.08 (1.01, 4.29)	0.0465
	High	47 (45.19)	6.47 (3.83, 10.94)	<0.0001	2.63 (1.15, 6.03)	0.0227
PCI/CABG	Low	42 (6.33)	Reference	–	Reference	–
	Medium	40 (22.86)	3.95 (2.56, 6.09)	<0.0001	1.95 (1.14, 3.32)	0.0146
	High	28 (59.57)	14.41 (8.91, 23.31)	<0.0001	2.61 (1.21, 5.66)	0.015
LVEF >40	Low	14 (12.73)	Reference	–	Reference	–
	Medium	26 (28.57)	2.41 (1.26, 4.62)	0.008	0.97 (0.43, 2.18)	0.9461
	High	42 (50.60)	5.22 (2.85, 9.58)	<0.0001	2.22 (0.88, 5.62)	0.0923
LVEF ≤40	Low	48 (6.24)	Reference	–	Reference	–
	Medium	48 (20.34)	3.57 (2.39, 5.33)	<0.0001	2.25 (1.42, 3.57)	0.0006
	High	33 (48.53)	10.71 (6.87, 16.72)	<0.0001	4.65 (2.50, 8.65)	<0.0001

Post-hoc explorative subgroup analysis was performed to detect the potential patients who can benefit from measure of NT-proBNP. Stratification factors including age, gender, GRACE score, single/multi-vessel lesion, revascularization strategy, LVEF. Some abbreviations are denoted as follows: GRACE, Global Registry of Acute Coronary Events; MT, medical therapy; PCI, percutaneous coronary intervention; CABG, coronary artery bypass grafting; LVEF, left ventricular ejection fraction. *, adjusted HR was calculated based on multivariable Cox proportional hazard model.

Table S3 Additional prognostic value of NT-proBNP on GRACE score

Outcome	Harrell C-index	IDI (95% CI)	P value	NRI (95% CI)	P value
Composite MACEs					
GRACE alone	0.7149	Reference	–	Reference	–
NT-proBNP alone	0.7223	0.048 (0.001, 0.102)	0.047	0.059 (–0.208, 0.126)	0.252
GRACE + NT-proBNP	0.7715	0.064 (0.027, 0.106)	<0.001	0.059 (–0.209, 0.304)	0.193
All-cause death					
GRACE alone	0.7645	Reference	–	Reference	–
NT-proBNP alone	0.8359	0.092 (0.042, 0.147)	<0.001	0.209 (–0.094, 0.642)	0.578
GRACE + NT-proBNP	0.8652	0.096 (0.047, 0.151)	<0.001	0.209 (–0.124, 0.597)	0.771
Hospital admission for UA					
GRACE alone	0.6407	Reference	–	Reference	–
NT-proBNP alone	0.5473	–0.009 (–0.022, 0.002)	0.08	–0.221 (–0.332, 0.016)	0.086
GRACE + NT-proBNP	0.6465	0.001 (–0.002, 0.006)	0.419	–0.012 (–0.137, 0.245)	0.93
Hospital admission for heart failure					
GRACE alone	0.7228	Reference	–	Reference	–
NT-proBNP alone	0.7727	0.031 (0.001, 0.068)	0.053	0.306 (–0.085, 0.419)	0.385
GRACE + NT-proBNP	0.805	0.035 (0.013, 0.065)	<0.001	0.531 (–0.013, 0.611)	0.066
Non-fatal recurrent MI					
GRACE alone	0.6374	Reference	–	Reference	–
NT-proBNP alone	0.6131	0.000 (–0.011, 0.016)	0.91	0.088 (–0.400, 0.363)	0.824
GRACE + NT-proBNP	0.6716	0.003 (–0.005, 0.014)	0.505	0.070 (–0.239, 0.393)	0.538
Target lesion revascularization					
GRACE alone	0.6779	Reference	–	Reference	–
NT-proBNP alone	0.554	NA	NA	NA	NA
GRACE + NT-proBNP	0.7144	NA	NA	NA	NA

Harrell C-index reflected the discrimination of the variable(s), the greater value is, the greater discrimination ability is. The net reclassification improvement (NRI) and integrated discrimination improvement (IDI) were also used to evaluate the additional clinical value of NT-proBNP. The positive value of IDI and NRI means positive improvement. NA, not available.