

TIMI Risk Score for UA and Non-STEMI

Antman EM et al. *JAMA*. 2000; 284:835-42.

Derivation and validation study derived from Thrombolysis in Myocardial Infarction (TIMI) 11B trial and ESSENCE trials. Seven of 12 characteristics significantly predicted adverse outcome.

Characteristic	Odds Ratio, based on multivariate analysis
Age ≥ 65 years	1.75 (1.35-2.25)
At least 3 CAD risk factors*	1.54 (1.16-2.06)
Prior coronary stenosis ≥ 50%	1.70 (1.30-2.21)
ST deviation on ECG ≥ 0.5 mm	1.51 (1.13-2.02)
≥ 2 anginal events in last 24 hrs	1.53 (1.20-1.96)
Use of ASA in last 7 days	1.74 (1.17-2.59)
Elevated serum cardiac markers	1.56 (1.21-1.99)

* CAD RF = Family hx early CAD, HTN, hypercholesterolemia, DM, active smoker

Primary end point measures = all-cause mortality, MI, or urgent revascularization within 14 days

End points within 14 days	TIMI score					
	0/1	2	3	4	5	6/7
All-cause mortality	1.2%	1.0%	1.7%	2.5%	5.6%	6.5%
MI	2.3%	2.1%	3.7%	5.0%	8.5%	15.8%
Urgent revascularization	1.2%	6.0%	9.5%	12.2%	14.3%	20.9%
All-cause mortality or non-fatal MI	2.9%	2.9%	4.7%	6.7%	11.5%	19.4%
All of above	4.7%	8.3%	13.2%	19.9%	26.2%	40.9%
All of above in ED patients within 30 days (see Pollack study below)	2.1-5.0%	10.1%	19.5%	22.1%	39.2%	45-100%

Patients with TIMI scores ≥ 3, are at significant risk for an adverse outcome in 14 days.

Limitation:

The JAMA study enrolled patients who were recruited and qualified for a study of UA/NSTEMI. It did not study patients who presented to ED's with undifferentiated CP.

Pollack CV et al. Application of the TIMI risk score for UA and non-ST elevation ACS to an unselected ED chest pain population. *Acad Emerg Med* 2006; 13:13-18.

- An ED-based observational study of 3,929 adult patients with chest pain syndrome requiring an ECG.
- Outcome measures = death, MI, revascularization within 30 days
- Note: STEMI ECGs were excluded. TIMI scores are to risk-stratify for UA and NSTEMI.