中文題目:利用白血球數升高配合 TIMI risk score 對 ST 段升高心肌梗塞並接受介入治療之病人作早期風險分級

英文題目：Rapid early triage by leukocytosis adding incremental value to the thrombolysis in myocardial infarction (TIMI) risk score for ST-elevation myocardial infarction undergoing primary percutaneous coronary intervention

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Background: To demonstrate the independent and incremental prognostic value of leukocyte count and to propose a practical model comprising leukocyte count for early triage in ST-elevation myocardial infarction (STEMI) undergoing primary angioplasty.

Methods and results: A prospective registry of consecutive STEMI cases receiving primary angioplasty at a tertiary medical center was retrospectively analyzed in a 5-year period. Patients with available admission leukocyte count and the TIMI risk score (TRS) for STEMI (n = 796) were divided into leukocytosis ($\geq$ 12,000/μL) and non-leukocytosis (< 12,000/μL) groups. Primary endpoints were 30-day and 1-year mortality. Propensity score-adjusted Cox regression models and subdivision analysis were performed. Leukocytosis group (n = 306) had higher 30-day mortality (5.9% vs. 3.1%, P = .048) and 1-year mortality (9.2% vs. 5.1%, P = .022). After adjustment by propensity score and TRS, leukocyte count (per 10^3/μL) was an independent predictor of 1-year mortality (HR 1.086, 95% CI 1.034–1.140, P = .001). Subdivision analysis demonstrated the correlation between leukocytosis and higher 1-year mortality within both high and low TRS strata (divided by 4, the median of TRS). Additionally, 24% (191 out of 796) of patients were characterized by non-leukocytosis and TRS < 4, having literally 0% risk of death at 1-year follow-up.

Conclusions: Leukocyte count is an independent prognostic factor adding incremental value to TRS for STEMI. Non-leukocytosis in conjunction with TRS < 4 identifies a large patient group at extremely low risk and thus provides rapid early triage for STEMI patients undergoing primary

PCI.