

High-sensitivity troponin levels can predict MI risk

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myocardial infarction was 15.3 percent among 22,651 patients. There was a correlation for lower high-sensitivity troponin concentrations at presentation and smaller absolute changes during serial sampling with lower likelihood of myocardial infarction and reduced short-term risk of cardiovascular events. The negative predictive value for myocardial infarction was 99.5 percent with high-sensitivity troponin I concentrations of less than 6 ng/L and an absolute change of less than 4 ng/L after 45 to 120 minutes (early serial sampling), with an associated 30-day risk of subsequent [myocardial infarction](#) or death of 0.2 percent.

"These data suggest that the concentration of high-sensitivity troponin may be useful as a risk-prediction biomarker as well as a [diagnostic test](#)," the authors write.

The high-sensitivity troponin I and [troponin T](#) assays were partly donated by Roche and Abbott.

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(HealthDay)—For patients presenting to the emergency department with symptoms suggestive of myocardial infarction, a tool developed to integrate high-sensitivity troponin I or T concentrations and dynamic change during serial sampling can estimate the probability of myocardial infarction and 30-day outcomes, according to a study published in the June 27 issue of the *New England Journal of Medicine*.

Johannes T. Neumann, M.D., from the University Heart Center Hamburg in Germany, and colleagues determined the concentrations of high-sensitivity troponin I or high-sensitivity troponin T in 15 international cohorts of patients with symptoms suggestive of myocardial infarction; troponin was measured at presentation to the [emergency department](#) and after early or late serial sampling. A [risk assessment tool](#) was developed to estimate the risk of index and subsequent myocardial infarction or death at 30 days.

The researchers found that the prevalence of

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