

NT-proBNP improves heart failure prediction in T2DM

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(HealthDay)—For patients with type 2 diabetes, N-terminal pro-B-type

natriuretic peptide (NT-proBNP) improves prediction of heart failure, according to a study published online July 6 in *Diabetes Care*.

Toshiaki Ohkuma, from the University of Sydney, and colleagues conducted a nested case-cohort study of 3,098 participants with type 2 diabetes. The authors examined the individual and combined effect of NT-proBNP, high-sensitivity cardiac troponin T (hs-cTnT), interleukin-6 (IL-6), and high-sensitivity C-reactive protein (hs-CRP) on the prediction of [heart failure](#) incidence or progression.

The researchers found that after adjustment for major [risk factors](#), a higher value of each biomarker was significantly associated with increased risk of heart failure incidence or progression, with hazard ratios of 3.06, 1.50, 1.48, and 1.32 for NT-proBNP, hs-cTnT, IL-6, and hs-CRP, respectively. There was a meaningful improvement in five-year risk-predictive performance with the addition of NT-proBNP to the model that included conventional risk factors (C-statistic, 0.8162 to 0.8800; continuous net reclassification improvement, 73.1 percent). There was no improvement in prediction metrics with the addition of hs-cTnT, IL-6, or hs-CRP in combination or when added to NT-proBNP.

"Only NT-proBNP strongly and consistently improved the prediction of [heart](#) failure in patients with type 2 diabetes beyond a wide range of clinical risk factors and biomarkers," the authors write.

Several authors disclosed financial ties to the pharmaceutical industry.

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