

LETTERS

How likely is “likely”?

In their Practice article in *CMAJ*,¹ Moayed and colleagues illustrate how challenging it can be to rule in or out acute heart failure in a patient with undifferentiated dyspnea. The authors suggested testing brain natriuretic peptide (BNP) or N-terminal pro BNP (NT-proBNP) level, listing the respective test result thresholds above which heart failure is “likely.” But how is a clinician to interpret these dichotomous test results at the bedside — Is a slightly positive result less likely to be correct than a moderately elevated result, versus a markedly elevated one? How much does the clinician’s gestalt factor into the final decision-making?

With these issues in mind, we retrospectively studied this patient population in the emergency department setting and derived a diagnostic mathematical model using only the patient’s age, the clinician’s pretest probability and the absolute value of NT-proBNP.² We then validated it prospectively in an international randomized controlled trial.³ This clinical prediction tool is available to anyone on a universally accessible website or

application (available at www.mdcalc.com/steinhart-model-acute-heart-failure-ahf-undifferentiated-dyspnea).

In creating this tool, my colleagues and I hope to reduce the guesswork when trying to assimilate test results for BNP in this challenging patient population.

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References

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