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To: All providers

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RE: Introduction of NTproBNP assay

Effective Monday, April 27, 2026 the Care New England Chemistry laboratories at Kent and Women and Infants Hospitals will offer N-terminal pro B-type natriuretic peptide (**NTproBNP**) as a marker to aid in the diagnosis of heart failure in patients with clinical suspicion. The new test is a chemiluminescent microparticle immunoassay for determination of NTproBNP in human plasma, run on the Alinity system. *B-type natriuretic peptide (BNP) will be discontinued in our laboratories because the testing instrument is being phased out.*

Both BNP and NTproBNP are reliable markers reflecting myocardial stress. BNP is the biologically active hormone that causes vasodilation and diuresis, while NTproBNP is an inactive fragment that is cleaved from the same precursor molecule, proBNP. (1) The key differences are that NTproBNP has a longer half-life (120 vs. 20 minutes for BNP) and it is not affected by neprilysin inhibitors (ARNIs). The diagnostic performance of BNP and NTproBNP is comparable (2,3) and use of either marker is supported by the AHA/ACC/HFSA Guideline for the Management of Heart Failure.

Reporting units for NTproBNP are higher than those of BNP. The age-dependent reference intervals for NTproBNP are as follows:

Age (years)	Heart failure rule-in NTproBNP cut-off (pg/mL)	Heart failure rule-out NTproBNP cut-off (pg/mL)
18 - < 50	450	
50 - 75	900	
> 75	1800	
All ages		300

Caution is advised when interpreting results for patients with eGFR < 60 mL/min/1.73 m² (4) and BMI > 30 kg/m² as false positive and negative NTproBNP results, respectively, may occur.

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3. Weber M, Hamm C. Role of B-type natriuretic peptide (BNP) and NT-proBNP in clinical routine. *Heart*. 2006 Jun;92(6):843-9.
4. Farnsworth CW, Bailey AL, Jaffe AS, Scott MG. Diagnostic concordance between NT-proBNP and BNP for suspected heart failure. *Clin Biochem*. 2018 Sep; 59:50-55.