



# LAB UPDATE

## TRANSITION FROM BNP TO NTpro-BNP

**EFFECTIVE DATE: DECEMBER 12, 2019**

On December 12, 2019, Mid America Clinical Laboratories will transition testing from BNP to NTpro-BNP at our medium and large hospital laboratories. This transition is part of the migration from chemistry testing on the Abbott Architect to the Ortho Vitros platform.

### What is the difference between BNP and NTpro?

While both are used as biomarkers of heart failure, there are some significant differences between the two.

- ENTRESTO – a neprilsyn inhibitory therapy indicated to reduce the risk of cardiovascular death and hospitalization for heart failure in patients with chronic heart failure.
  - BNP is not a suitable biomarker for patients taking ENTRESTO as the drug interferes with the target molecule and thus measurement.
  - BNP levels would increase during treatment whereas NTpro levels decrease providing a more accurate picture of the patient's status.
- Half-life and Stability
  - BNP has a half life of 20 minutes and a RT stability of 4 hours, which limits the ability to add testing on later as well as determining when the cardiac event started. BNP has a clinical range of 0-5000 pg/mL depending on method.
  - NTpro has a half life of 120 minutes and a stability of 48 hours which makes it very stable, allowing for a better baseline when the patient presents to the ER. NTpro-BNP has a clinical range of 0-35000 pg/mL.
    - This also allows for patients transferring from smaller facilities to be re-baselined at larger facilities without jeopardizing patient care.
- Diagnostic information provided with the NTpro-BNP result is established based on demographic information, providing additional information and guidance to the provider.
  - Normal Ranges
    - 18-74y <125 pg/mL
    - 75y and older <450 pg/mL
  - Interpretation:

The International Collaborative of NT-proBNP Study Data suggests the following Age-Stratified Rule-in-Cut-points to diagnose acute heart failure:

Modality	Age (years)	Optimal Cut Point pg/mL
Diagnosis (rule in HF)	<50	450
	50-75	900
	>75	1800
Exclusion (rule out HF)	N/A	300

### Who will be affected?

The following sites will transition to NTpro-BNP, BNP will no longer be orderable for these locations:

Community Health North	Community Health East	Community Health South
Community Health Howard		

If you have any questions or need more information, please contact:

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