



LABORATORY ALLIANCE

of Central New York, LLC

laboratoryalliance.com

B-Type Natriuretic Peptide (BNP)

Effective **February 15**, 2022 Laboratory Alliance will transition to the Siemens Atellica as the primary chemistry analyzer at each of our three laboratory locations. Although methodology and reference ranges for many analytes will remain the same or very similar, this transition requires us to replace our existing Siemens Vista NT-proBNP assay with the Atellica® BNP assay. The NT-proBNP assay is not available on the Atellica platform.

The clinical utility of the natriuretic peptides NT-proBNP and BNP is similar. Measurement of BNP is indicated as an aid in the diagnosis and assessment of the severity of heart failure. In patients with acute coronary syndromes (ACS), this test, in conjunction with other known risk factors, can also be used to predict survival and the likelihood of future heart failure.

BNP levels in patients beginning treatment with the angiotensin receptor neprilysin inhibitor Entresto (sacubitril/valsartan) may initially rise as BNP is a substrate for neprilysin, and thus they may not accurately reflect the patient's volume status. BNP levels typically decline with continued treatment. Therefore, BNP measurement about 1 month after start of treatment is recommended to obtain a new baseline value for follow-up testing.

BNP is performed on the Siemens Atellica, our new primary chemistry analyzer. The test is available 24/7 and as a stat test with turn-around time (TAT) less than 1 hour from receipt in the lab. The specimen type is **EDTA plasma**; a dedicated lavender tube is the preferred specimen submission.

Plasma levels of biotin above 38 ng/mL, as may be seen in patients taking biotin supplements, may lead to falsely depressed BNP results as measured by this assay.

The patient report will include the following interpretive comment:

BNP levels in patients beginning treatment with Entresto (sacubitril/valsartan) may initially rise as part of the therapeutic effect and then subsequently decrease. BNP measurement about 1 month after start of treatment is recommended to obtain a new baseline value for follow-up testing.



Test code:	BNP
Method:	Direct chemiluminescent immunoassay
Reference ranges:	<100 pg/mL
Analytical range:	2.0 – 5000.0 pg/mL
Specimen requirements:	EDTA plasma – dedicated tube preferred NOT ACCEPTABLE – Serum, sodium heparin and sodium fluoride/potassium oxalate plasma specimens
Specimen stability:	<ul style="list-style-type: none">• Room temperature storage is not recommended.• 24 hours when tightly capped and stored at 2 to 8°C.• Plasma samples are stable 9 months when frozen at $\leq -20^{\circ}\text{C}$
Schedule of testing:	Daily, 24/7
CPT code:	83880
Billing code:	1010009

Questions regarding this test may be directed to Bodhraj Acharya, Ph.D., FAACC, MT (ASCP), Chemistry Manager, at 315-410-7028 or bodhrajacharya@lacny.com.