Effective January 30, 2019 Clinical Labs of Hawaii will offer in-house testing for N-terminal pro B-type Natriuretic Peptide (NT-proBNP) as a replacement for current BNP testing.

Atrial- and brain-type natriuretic peptide (ANPs and BNPs) are produced in cardiac tissues in response to ventricular dysfunction and atrial distension.

**NT-proBNP aids in the:**

- Diagnosis and prognosis of individuals suspected of having congestive heart failure
- Risk stratification of patients with acute coronary syndrome and congestive heart failure
- Assessment of increased risk of cardiovascular events and mortality in patients at risk for heart failure who have stable coronary artery disease

**NT-proBNP, in contrast to Brain Natriuretic Peptide (BNP), is:**

- Unaffected by the new class of Neprilysin Inhibitors (e.g. Entresto®)
- Suitable as a Biomarker for congestive heart failure
- Stable when collected, stored and transported at Room, Refrigerated and Frozen temperature

**To Diagnose Acute HF: The “Triple Cut Point”**

<table>
<thead>
<tr>
<th>Age Strata</th>
<th>Optimal Cut-Point</th>
<th>Sensitivity</th>
<th>Specificity</th>
<th>PPV</th>
<th>NPV</th>
<th>Accuracy</th>
</tr>
</thead>
<tbody>
<tr>
<td>All &lt;50 years (n=183)</td>
<td>450 pg/mL</td>
<td>97%</td>
<td>93%</td>
<td>76%</td>
<td>99%</td>
<td>95%</td>
</tr>
<tr>
<td>All 50-75 years (n=554)</td>
<td>900 pg/mL</td>
<td>90%</td>
<td>82%</td>
<td>82%</td>
<td>88%</td>
<td>85%</td>
</tr>
<tr>
<td>All &gt;75 year (n=519)</td>
<td>1800 pg/mL</td>
<td>85%</td>
<td>73%</td>
<td>92%</td>
<td>55%</td>
<td>83%</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td>90%</td>
<td>84%</td>
<td>88%</td>
<td>66%</td>
<td>86%</td>
</tr>
</tbody>
</table>

Superior to single cut-point strategy in multivariable bootstrapping models

**Reference:**
1. Januzzi, J., et al. Amino-Terminal Pro-B-Type Natriuretic Peptide Testing for Diagnosis or Exclusion of Heart Failure in Patients with Acute Symptoms, Am J Cardiol, 2008;101[suppl]:29A-38A

**Test Name/Order Code: NT-proBNP/NTBNP (3683)**

- Specimen Requirements: 1.0 mL (0.5 mL minimum) Plasma Lithium Heparin (Green top) or Serum SST
- Stability: Room temperature: 3 days
  - Refrigerated: 6 days
  - Frozen: 2 years
- Turnaround Time: Performed: Sun-Sat; Available STAT; Reported: Same day
- Reference Range: <75 Years: 0-125 pg/mL
  - >=75 Years: 0-450 pg/mL