

NTproBNP vs. Resting EKGs

NTproBNP is a hormone produced by the ventricles of the heart and is elevated in the setting of ventricular strain. It was originally used in ER settings to help physicians determine underlying pathology for shortness of breath, differentiating between pulmonary and cardiac cause. Recent literature has been expanding the correlations associated with NTproBNP.

In the life insurance industry, there is increased interest in its use as a replacement for resting EKGs. We have received many requests to opine on its efficacy. We have conducted and are continuing to research the value of NTproBNP as a screen. Through the gracious support of several of our client companies and also a separate study with a lab, we have been able to conduct side by side comparisons for the value of resting EKGs and NTproBNP. Because we are looking at both tests on the same applicant pool, we can also contrast the value found by each test and compare their overlap. Our study population was comprised of individuals ages 60 and older. This is because NTproBNP has been historically reserved for this population.

OUR FINDINGS SUGGEST:

- + NTproBNP and resting EKGs find approximately the same number of debits at ages 60 plus.
- + Where both tests are ratable at the same time, our study shows there is a small overlap in findings, in the range of 28 - 33%.
- + Our cost benefit studies of applicant's age 60 plus suggest that both forms of testing are cost justified at face amounts of \$25,000 and higher. This value is not adjusted for overlap of findings from other underwriting requirements.
- + The medical literature is still mixed on value below age 60. That said, research is ongoing.
- + As age increases, so does the prevalence of cardiovascular disease in the general population, and consequently, the value of testing with NTproBNP.

OUR OPINION:

- + Because this test is still new, cautious implementation and follow up studies should be considered, as well as new literature monitored.
- + Where resting EKGs are currently obtained, age 60 plus, we feel the NTproBNP test may be used to offset the resting EKG.
- + We believe its use in replacing EKGs should include boundaries until further research emerges. Thus a possible approach at this time might be to use NTproBNP:
 - + Up to \$1 million ages 60-70
 - + Up to \$500,000 ages 71+
- + Because of the small amount of overlap in findings, we believe there is value in obtaining both tests at higher face amounts.
- + Where both tests are simultaneously obtained, dropping one will result in a loss of protective value.
- + How you choose to employ this new test at your company is obviously your call. Through our research we believe we are better positioned to offer a reinsurance solution that meets your needs for whatever path you pursue.