

NHS Leicester, Leicestershire and Rutland PCT Direct Access Diagnostic Service (DADS) BNP & Echocardiography Service, GP Guidelines

NT ProBNP Assay Guidelines for use as a “Rule Out” test for heart failure in Primary Care

NTProBNP is a peptide produced by the ventricles of the heart in response to cardiac wall stretch. It has been shown that in the vast majority of cases the circulating level of NTProBNP is increased significantly when a patient is experiencing heart failure.

This means that if a patient is experiencing the non-specific signs and symptoms of heart failure (breathlessness, fatigue, ankle swelling, chest crackles etc) but their NTProBNP level is “normal” then there is a >95% chance that they **DO NOT** have heart failure.

Across the UK between 22% and 30% of patients referred for Echocardiogram are actually confirmed as having heart failure. The use of the NTProBNP test will significantly reduce the number of patients referred for unnecessary Echo investigation, and ensure that Echo resources are used to maximum effect.

When to request the NTProBNP test

- New patients presenting with suspected heart failure.
- Patients who are already on anti-heart failure therapy (diuretics, ACEi, beta blockers) may have lowered NTProBNP levels due to therapy itself; hence a “normal” result in this group will be less sensitive as a “rule out” test (echocardiography would be more appropriate).

Results

Cut off point for Heart Failure: 300 pg/ml

If results are above the cut off point then heart failure cannot be ruled out as a cause for symptoms. Recommend patient is referred for further investigation (according to guidelines). NICE guidelines are shown overleaf and local guidelines are attached. Results below the cut off point make heart failure a very unlikely cause for the patients symptoms.

NICE Algorithm: Recommendations for the diagnosis of Heart Failure

