



NTproBNP Interpretative guidance and support for Primary Care

Natriuretic Peptide (NP) testing interpretative notes (20/12/2021)

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1. Current indications for NT-proBNP use in the community are as follows:
 - (i) Case finding and diagnostic work up for (new) heart failure, where clinically indicated
 - (ii) Registration/First visit to Treatment programme if type 2 diabetes, ischemic heart disease or atrial fibrillation
 - (iii) Baseline NT-proBNP for existing HF*
 - (iv) Existing HF, cardiology specialist request or deterioration

*Note BNP and NT-proBNP results differ by several fold and are not interchangeable

2. NT-proBNP reports (results and interpretation)
 - (i) All NT-proBNP results from primary care are reported with the nationally agreed decision cut-off of 400 ng/L, which can be used to help ruling out/in (new) heart failure and adjudicate the need for ECHO and specialist referral^{1,2}. This threshold is not applicable in all indications involving NT-proBNP testing.
 - (ii) NT-proBNP >400 ng/L does not confirm a diagnosis of Heart failure as levels may be raised in other cardiac (e.g. left ventricular hypertrophy) and non-cardiac e.g. chronic renal failure) conditions. Levels also increase with age (See table on Reference limits below)
 - (iii) NT-proBNP <400 ng/L does not completely exclude heart failure. Levels may also be lower in obesity and in presence of certain drugs e.g. ACEi, ARBs, beta blocker, diuretics etc which could cause false negatives. Levels <125 ng/L provide greater certainty for exclusion of heart failure.
 - (iv) NT-proBNP increases with age and is higher in younger females compared to males:

NT-proBNP Upper reference limit (97.5th pcentile, ng/L)				
	<45	45-54	55-64	65-74
Male	115	173	386	879
Female	237	284	352	623

- (v) A change in NT-proBNP of 50% from previous maybe clinically significant

See below for further information:

1. "Natriuretic Peptide testing" guideline accessed *via*:
<https://www.hse.ie/eng/about/who/cspd/ncps/pathology/resources/natriuretic-peptide-testing-guideline1.pdf>
2. Enhanced Community Care (ECC) GP Direct Access to Diagnostics NTproBNP *Frequently Asked Questions* accessed *via*
<https://www.mater.ie/healthcare-professionals/gp-referrals>