





BNP (NT-proBNP)

Synonyms

N-terminal pro-b-type natriuretic peptide

Clinical Indication

B-type natriuretic peptide (BNP) is released from the cardiac ventricles in response to stretching of the chamber and is cleaved to form biologically active BNP and N-terminal pro-BNP (NT-proBNP).

It's main use is to 'rule-out' suspected heart failure and help select patients requiring cardiac imaging. It is important that it is only requested in patients meeting specific criteria otherwise many 'false positive' results may be generated which will need follow-up cardiac imaging.

NT-Pro BNP is available for investigation of new cases of suspected heart failure in primary care.

NT-Pro BNP is also available at Basildon Hospital for A&E/MAU patients on admission with suspected Acute Heart Failure (see pathway); and at Southend Hospital for AMU and Ambulatory Care wards.

These requests are usually initiated by the Heart Failure team.

Part of Profile / See Also

N/A

Request Form

Combined Pathology manual Blood form or ICE request

Availability / Frequency of

Analysed if requested by GP or specific criteria met.

Analysis

Minimum retesting interval is 12 months.

Turnaround Time

Same day.

Patient Preparation

None required

Sample Requirements

Specimen Type

Serum

Volume

2 ml

Container



Yellow top (SST) tube

Reference Range & Units

< 300 ng/L < 75 years age

< 450 ng/L if 75 years age or over

Interferences

None



PF-PTD-53

Interpretation & Clinical Decision Value (if applicable)

Basildon patients – hospital or primary care:		
BNP result	Interpretive comment	
≤400 ng/L	Diagnosis of heart failure unlikely.	
401-899 ng/L and patient ≥75y	Please correlate with clinical signs and symptoms to determine if further investigations or referral needed.	
401-1999 ng/L and patient <75y	BNP greater than 400 ng/L – refer for open access echocardiogram with the presence of supporting clinical signs and symptoms.	
900-1999 ng/L and patient ≥75y	BNP greater than 900 ng/L - refer for open access echocardiogram with the presence of supporting clinical signs and symptoms.	
≥2000 ng/L	BNP >2000 ng/L - refer immediately for open access echocardiogram.	

Southend patients – hospital or primary care:

BNP result	Interpretive comment
≤400 ng/L	This patient is not suitable for the one-stop service. Please refer via the normal route to cardiology if you are still concerned regarding heart failure.
401-899 ng/L	Patient will automatically be referred into the physiologist one stop service within 6 weeks if the patient has not had an echo or cardiology review in the last 2 years.
900-1999 ng/L	Patient will be automatically referred to the one stop service within 4 weeks if the patient has not had an echo or cardiology review in the last 2 years.
≥2000 ng/L	Patient will be automatically referred to the one-stop service within 2 weeks if the patient has not had an echo or cardiology review in the last 2 years.

References

NICE CG108 Chronic heart failure in adults: management

NICE CG187 Acute heart failure: diagnosis and management

Test code

BNP

Lab Handling

Analysed from primary tube and stored at 4°C. Stable for 6 days 2–8 °C.