

Use of NT proBNP in suspected acute heart failure

Suspected heart failure

Previous echocardiogram confirmed diagnosis of heart failure?

YES

Do not test NT proBNP

Review echocardiogram result and refer to heart failure team via PANDA

NO

Previous echocardiogram normal

No previous echocardiogram

Test NT proBNP ONCE only

If NT proBNP <300ng/l heart failure is unlikely

Do NOT request an echocardiogram

Consider alternative causes of symptoms

If NT proBNP >300ng/l

Request an inpatient echocardiogram

Refer to heart failure team via PANDA

Please do not test NT pro-BNP more than once. If a patient presents with worsening symptoms they may need further assessment with repeat echocardiogram.

Be aware that: obesity, African or African-Caribbean family origin, or treatment with diuretics, ACE inhibitors, beta blockers, angiotensin II receptor blockers, or mineralocorticoid receptor antagonists can reduce levels of serum natriuretic peptides.

High levels of serum natriuretic peptides can have causes other than heart failure (for example, age over 70 years, left ventricular hypertrophy, ischaemia, tachycardia (eg AF), right ventricular overload, hypoxaemia (including pulmonary embolism), renal dysfunction (eGFR <60ml/minute/1.73m²), sepsis, chronic obstructive pulmonary disease, diabetes, or cirrhosis of the liver (NICE 2018).

BSUH Heart Failure team April 2019