

Natriuretic peptide level at heart failure diagnosis and risk of hospitalisation and death

- Natriuretic peptide (NP) testing in primary care is used to prioritise referral for specialist diagnostic assessment in people with heart failure symptoms.
- NICE recommend patients with a moderate NT-proBNP (400-2000pg/ml) are seen within six weeks and a high NT-proBNP (>2,000pg/ml) within two weeks.

Aim

To report risk of hospitalisation and death by NP level at time of heart failure diagnosis.

Population

Patients with NP test in primary care and HF diagnosis.

40,007 participants

78.5 years Mean age

52% Female
48% Male

Time to diagnosis

Moderate NT-proBNP 72 days

High NT-proBNP 28 days

Hospitalisation

Hospitalised in the year following diagnosis

40,007 diagnosed

55.2% (22,085)

44.8% (17,922)

Hospitalised

Not hospitalised

High vs Moderate NT-proBNP associated with:



All-cause hospitalisation



20%
OR 1.2 (1.13-1.28)

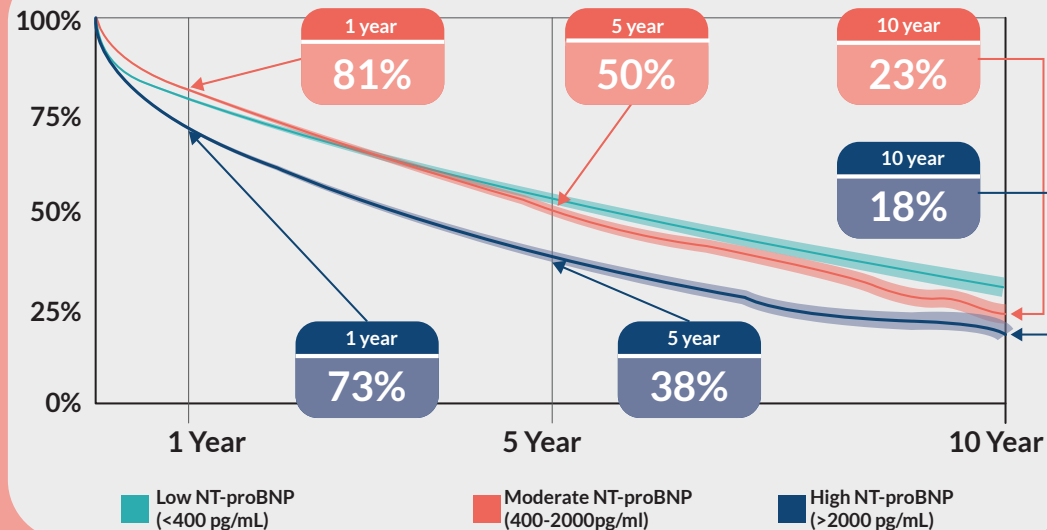


Heart failure related hospitalisation



225%
OR 2.26 (1.98-2.59)

Survival at 1, 5 and 10 years



Interpretation

A national mandatory rapid referral pathway, like the cancer 'two-week wait', for people with heart failure symptoms and a high natriuretic peptide level may be needed to prevent unnecessary hospital admissions and potentially improve survival.

SUPPORTED BY

NIHR

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Reference:

Natriuretic peptide level at heart failure diagnosis and risk of hospitalisation and death in England 2004-2018. Taylor CJ, Lay-Flurrie SL, Ordóñez-Mena JM, et al. Heart Epub ahead of print: 28-Jun2021. doi:10.1136/heartjnl-2021-319196