

Clinical society guidelines



Canadian Cardiovascular Society Guidelines for the management of HF

Recommended to support diagnosis, prognosis and management

ESC guidelines recognise that testing for natriuretic peptides can be used as an initial diagnostic test in patients with unexplained shortness of breath to rule out the possibility of heart failure. The CCS guidelines also advise on what the test can be used for and what it cannot¹.

Uses of BNP/NT-proBNP that are advised²

Prevention of HF and asymptomatic LV dysfunction

- Natriuretic peptide (NP) screening of individuals at risk for the development of HF can aid decision making on whom to send for echocardiography

Biomarkers for diagnosis of HF

- BNP/NT-proBNP test to help confirm or rule out diagnosis of HF in the acute or ambulatory care setting in patients in whom cause of unexplained shortness of breath is in doubt

Biomarkers for diagnosis and prognosis

- Elevated NP levels are recommended as an additional diagnostic criterion for HFpEF
- BNP/NTproBNP levels should be considered in patients with an established diagnosis of HFrEF for prognostic stratification

Uses of BNP/NT-proBNP that are advised²

Biomarkers in chronic HFrEF

- Measurement of BNP or NTproBNP in patients hospitalized for HF should be considered before discharge, because of the prognostic value of these biomarkers in predicting rehospitalization and mortality

Biomarkers for diagnosis of acute HF

- If acute heart failure (AHF) is suspected, the initial work-up may be supplemented by NP testing and/or an AHF diagnosis score

Uses of BNP/NT-proBNP that are not advised²

HF diagnosis solely based on BNP/NT-proBNP

- For the diagnosis of HF in the outpatient setting where NPs are ideally suited to assist in ruling out HF as a diagnosis, NPs cannot be used independent of signs, symptoms, and other diagnostic information

Chronic HFrEF in patients older than 75 years

- The benefit of NP testing is uncertain in patients with chronic HFrEF who are older than 75 years

References

BNP: B-type natriuretic peptide; NT-pro BNP: N-terminal pro-BNP, HF: heart failure; HFrEF: HF with reduced ejection fraction.

1. Verhestraeten C, et al. PLoS ONE 2020; 15:e0244485;
2. Ezekowitz J, et al. Can J Cardiol 2017; 33: 1342-1433.