

Table 10: Summary of Recommendations in Included Guidelines

Recommendations	Strength of Evidence and Recommendations
Ezekowitz (CCS), ⁵ 2017, Canada	
<p><u>Guidance related to management</u> Evidence 1: Evidence was obtained from multiple small RCTs, most of which found benefit, and three meta-analyses, which showed benefit. It was also mentioned that an ongoing RCT is likely to affect this recommendation. Further details were not reported</p> <p>Recommendation 1: “We suggest, in ambulatory patients with HFrEF, measurement of BNP or NT-proBNP to guide management should be considered to decrease HF-related hospitalizations and potentially reduce mortality. The benefit is uncertain in individuals older than 75 years of age (Weak Recommendation; Moderate-Quality Evidence).” (p. ...)</p> <p><u>Guidance related to prognosis</u> Evidence 2: Three studies showed that there was an association between NP levels and risk of mortality and/ or hospitalization</p> <p>Recommendation 2: “We recommend that measurement of BNP/NTproBNP levels be considered in patients with an established diagnosis of HFrEF for prognostic stratification, in view of optimizing medical therapy (Strong Recommendation; High-Quality Evidence).” (p.1351)</p> <p>Evidence 3: Evidence is from multiple small RCTs, all of which found an association with clinical outcomes. Further details were not reported</p> <p>Recommendation 3: “We suggest that 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 (Strong Recommendation; Moderate-Quality Evidence).”</p>	<p>Strength of Evidence 1: Moderate quality</p> <p>Strength of Recommendation 1: Weak</p> <p>Strength of Evidence 2: High quality</p> <p>Strength of Recommendation 2: Strong</p> <p>Strength of Evidence 3: Moderate quality</p> <p>Strength of Recommendation 3: Strong</p>
SIGN, ¹⁵ 2016, UK	
<p>Evidence: Evidence was based on two systematic reviews with meta-analyses, published in 2013. One systematic review showed that there was reduction in all-cause mortality with NP-monitoring compared to standard care. It also reported that HF-related hospitalization was significantly reduced in younger (less than 75 years) patients and or in those with higher baseline BNP. Another systematic review showed that there was no significant reduction in in BNP-guided therapy, but all-cause mortality was significantly reduced with NT-proBNP guided therapy. It also reported that combined mortality and HF-related hospitalization was significantly reduced in patients of age less than 75 years compared to patients of age 75 years or older.</p> <p>Recommendation: “NT-proBNP-guided treatment may be considered in patients with heart failure aged less than 75 years, especially in the presence of higher baseline NT-proBNP levels (>2,114 pg/ml).” (p.24)</p>	<p>Strength of Evidence: 1++</p> <p>Strength of Recommendation: Not reported</p>

BNP = B-type natriuretic peptide; CCS = Canadian Cardiovascular Society; HFrEF = heart failure with reduced ejection fraction; NT-proBNP = N-terminal proBNP; RCT = randomized controlled trial; SIGN = Scottish Intercollegiate Guidelines Network