ELIGIBILITY FOR DAPAGLIFLOZIN IN A REAL-LIFE HEART FAILURE CLINIC

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Introduction The rising prevalence of heart failure due to an aging population, higher post-myocardial infarction survival and the increasing burden of cardio-metabolic diseases, presents public health and economic challenges. Optimisation of heart failure therapy is essential in preventing the morbidity and mortality associated with this disease. The landmark DAPA-HF trial identified a 26% relative reduction in a composite primary outcome of worsening heart failure or death with use of dapagliflozin in patients with heart failure and reduced ejection fraction (HFrEF), irrespective of diabetic status. Although this class of drug is not yet incorporated into ESC guidelines, such a marked benefit may prompt consideration. The objective of this study is to determine the proportion of patients eligible for dapagliflozin at our site, based on inclusion and exclusion criteria of the DAPA-HF trial.

Methods This retrospective observational study was conducted at Our Lady of Lourdes Hospital, Heart Failure Clinic. Data was collected on all patients referred from January 2018 to December 2019. We employed four data sources: CELIMA, a programme used to record clinical information; PACS (radiology); WinPath (blood work); and patient charts. This multi-pronged approach served to limit missing data. Eligibility required: EF ≤40%; NYHA ≥II; absence of type 1 diabetes mellitus (T1DM); SBP ≥95 mmHg; eGFR ≥30 ml/min; comorbid T2DM; and at least an ACE inhibitor, ARB or sacubitril/valsartan combined with a beta blocker (BB). Complete case analysis was used, as data was complete for >90% patients.

Results In all, there were 587 referrals during this period, of which 278 (47.4%) had HFrEF and 130 (22.1%) had an EF <40% (DAPA-HF inclusion). 31% were female with a mean age of 69±12. Of the subset of interest (EF ≤40%), comorbid T2DM was identified in 38 (29.2%) and AF in 62 (47.7%). Mean EF was 30.4 ±7% and median BNP was 419 pg/ml. 102 (78.5%) were receiving at least minimum pharmacological therapy as stated above. 12 (9.2%) were prescribed fully titrated dosages of ACE inhibitor, BB and mineralocorticoid receptor antagonists. The DAPA-HF inclusion criteria were not met in 68/130 (52.3%). Of these, 25 were not on minimum pharmacological therapy, 24 were below the BNP threshold, 11 were NYHA I, 10 had an eGFR <30, 14 were hypotensive and 2 had T1DM. Exclusion criteria overlapped in 17 cases. In total, 62 patients were eligible for dapagliflozin, equating to 10.6% of the full 587 sample, rising to 22.3% when we focus on the 278 HFrEF patients.

Conclusion In a real-life Heart Failure Clinic almost one quarter of HFrEF patients fulfilled the DAPA–HF inclusion criteria. These patients may stand to benefit from dapagliflozin in terms of reduced hospitalisations and mortality, were this drug prescribed in addition to guideline–recommended heart failure therapies.