# SGLT-2 INHIBITORS IN THE TREATMENT OF HEART FAILURE WITH REDUCED EJECTION FRACTION: A SYSTEMATIC REVIEW

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## INTRODUCTION

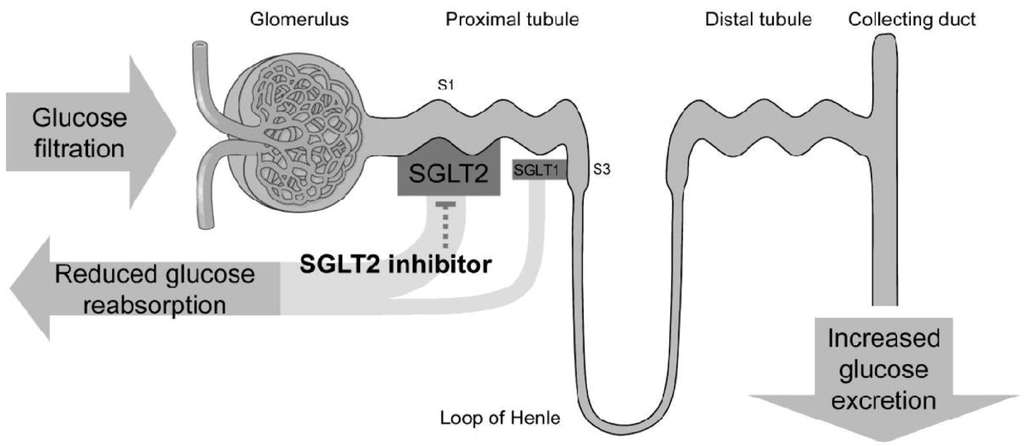
The use of a sodium-glucose co-transporter inhibitor 2 (ISGLT2) in patients with heart failure (HF) has been beneficial, being evidenced in large studies.

## OBJECTIVES

Review the use of ISGLT2 in the treatment of HF in the current literature.

## METHODS

Bibliographic survey in the main databases without language restriction.




## RESULTS

EMPAREG was the first study to demonstrate efficacy of ISGLT2 in cardiovascular disease (CVD), showing lower mortality in the use of empaglifozin versus placebo (3.7% x 5.7%). The study with canaglifozin, CANVAS, showed a 14% lower risk of cardiovascular death in patients without CVD and 18% in patients with previous CVD. The DECLARE-TIMI 58 showed that in patients with type 2 diabetes (T2D) there is a lower risk of HF and death from cardiovascular events among patients who used dapaglifozin versus placebo (4.9% x 5.8%), in patients at risk or patients with atherosclerotic disease there was no significant difference, following the MACE classification. The DAPA HF, only with HF patients with reduced ejection fraction, mortality from CVD was 9.7% x 11.5% for placebo. 10% of patients had worsening of HF x 13.7%. In the EMPEROR-REDUCED study, the primary outcome was 19.4% with empagliflozin versus 24.7% with placebo. The SOLOIST-WHF, using Sotaglifozin, evaluated the drug's safety in patients with T2D and recent HF decompensation, with primary outcome in 245 patients in the drug group versus 335 with placebo, also showing efficiency.

## CONCLUSION

The effectiveness of ISGLT2 in patients with HF was evident throughout the studies in decreasing deaths from cardiovascular causes.

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