



**CARDIOPROTECTIVE MECHANISMS OF EMPAGLIFLOZIN IN
PATIENTS WITH TYPE 2 DIABETES MELLITUS AND ISCHEMIC
HEART DISEASE**

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Relevance: Type 2 diabetes mellitus (T2DM) significantly increases the risk of ischemic heart disease (IHD). Traditional hypoglycemic therapy often fails to reduce cardiovascular risk, which necessitates the use of drugs with proven cardioprotective effects.

Objective: To analyze the pharmacological mechanisms of cardioprotective action of empagliflozin in patients with T2DM and IHD.

Materials and methods: A review of current clinical studies and meta-analyses (2015–2024) on the use of empagliflozin in patients with T2DM and IHD was conducted[2,4].

Results and conclusions: Empagliflozin, a sodium-glucose co-transporter 2 (SGLT2) inhibitor, not only provides effective glycemic control but also reduces the risk of hospitalization for heart failure and cardiovascular death. Its mechanisms include osmotic diuresis, reduction of preload and afterload, improvement of endothelial function, modulation of myocardial metabolism, and reduction of oxidative stress. Large clinical trials (EMPA-REG OUTCOME and subsequent studies) have confirmed the cardioprotective efficacy of empagliflozin, making it an important component of therapy for patients with T2DM and IHD.

REFERENCES

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