

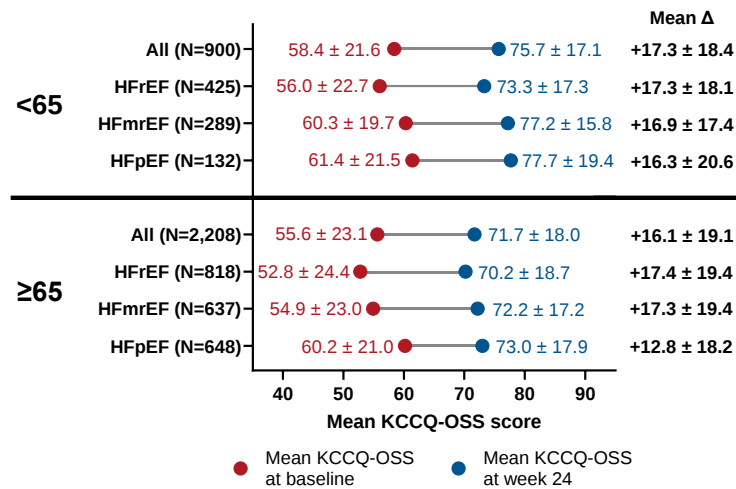
Commentary on the sub-analysis of the Emp-Activity study: “Exploring the impact of age and comorbidities on quality-of-life improvements with empagliflozin: Findings from a broad European real-world population“¹, which was presented at the ESC Congress in Munich from August 28 to August 31, 2026.

The aim of the Emp-Activity study sub-analysis was to determine the impact of age and major comorbidities – specifically type 2 diabetes mellitus (T2DM) and chronic kidney disease (CKD) – on the quality of life of patients with chronic heart failure who had initiated empagliflozin (EMPA) therapy.

Emp-Activity is a multicenter, prospective, non-interventional cohort study of adult patients with chronic heart failure (NYHA functional class II to IV) – regardless of left ventricular ejection fraction, with initiation of EMPA. The study was conducted across 275 centers in six European countries (the Czech Republic, Bulgaria, Poland, Hungary, Romania and Switzerland). The primary outcome measure was the change in quality of life at week 24 following the initiation of EMPA therapy. Quality of life was assessed using Kansas City Cardiomyopathy Questionnaire (KCCQ). The overall score was evaluated at baseline and at week 24, an increase of ≥ 5 % points in the KCCQ Overall Summary Score (OSS) was considered clinically significant. A secondary outcome measure was the change in NYHA functional status. Other monitored parameters included the change in distance covered during six-minute walk test (6MWT) and the change in left ventricular ejection fraction (LVEF). The study enrolled 3,309 patients treated with EMPA. The cohort consisted of 63 % men, with a mean age of 69.6 years. Regarding heart failure classification, 40 % of patients had HFrEF, 30 % had HFmrEF, and 26 % had HFpEF.

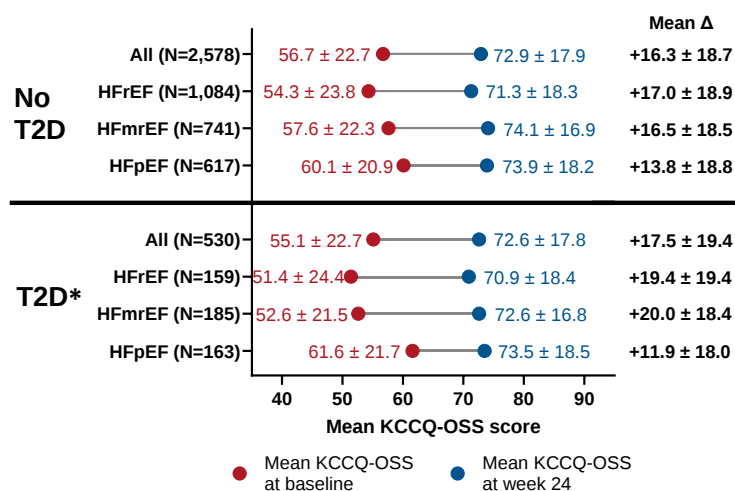
The currently presented sub-analysis of the Emp-Activity study during the ESC Congress 2026 focused on the impact of age and comorbidities on patients’ quality of life, assessed using the KCCQ OSS (Overall Summary Score) at week 24 of EMPA therapy. The analysis was conducted on 3,108 patients for whom KCCQ-OSS results were available at baseline and after 24 weeks of empagliflozin therapy. In patients aged < 65 years ($n = 900$), there was a mean increase in KCCQ-OSS of 17.3 points, while in patients aged ≥ 65 years ($n = 2208$), the mean increase was 16.1 points. A clinically significant increase in the score was observed in 76.3% of patients aged < 65 years and in 71.6% of those aged ≥ 65 years.

Change in KCCQ Overall Summary Score (OSS) from Baseline to Week 24



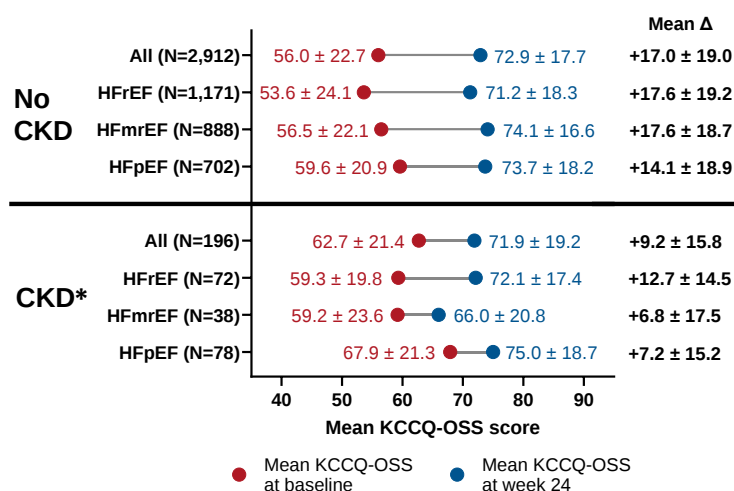
Among patients with T2DM (n = 530), the increase in the score was slightly higher than in non-diabetic patients (n = 2578) (17.5 vs. 16.3 points, with improvement rates of 75.1% vs. 72.5%). The sub analysis further examined the impact of CKD on changes in quality of life during EMPA therapy. A history of CKD was present in 196 patients, while 2,912 did not have CKD. The increase in the score was lower in patients with CKD than those without CKD (9.2 vs. 17.0 points), likewise, the proportion of patients experiencing a clinically significant improvement in quality of life was lower among those with CKD (56.1% vs. 74.1%). A higher proportion of patients with CKD experienced a deterioration in quality of life compared to those without CKD (13.3% vs. 7.5%). The proportion of patients in NYHA class I/II increased by 15% across all subgroups, except for patients with CKD, where the proportion of patients in NYHA class I/II increased by 10 %.

Change in KCCQ Overall Summary Score (OSS) from Baseline to Week 24



The results must be interpreted with the understanding that the absence of a comparator - the study's main limitation – may have introduced bias. Nevertheless, treatment with EMPA shows a clearly positive trend, a finding supported by the results of previous randomized clinical trials. A sub-analysis of the Emp-Activity study showed that a clinically significant improvement in quality of life occurred in the majority of patients across all analyzed subgroups, including both younger and older patients treated with EMPA. A slightly greater effect was observed in patients with type 2 diabetes mellitus compared to non-diabetic patients. In contrast, the impact on quality-of-life improvement was lower in patients with CKD than those without CKD.

Change in KCCQ Overall Summary Score (OSS) from Baseline to Week 24



The authors conclude that the greater impact of treatment with the SGLT2 inhibitor EMPA on the quality of life of patients with type 2 diabetes could be explained by a beneficial dual effect (antidiabetic and hemodynamic). The presence of CKD attenuates the treatment's beneficial impact on the evolution of patients' quality of life, highlighting the significance of this comorbidity in patients with chronic heart failure.

According to European guidelines for HF 2026², EMPA is one of the fundamental pillars of treatment for chronic heart failure, regardless of left ventricular ejection fraction. The presented sub analysis contributes to the body of evidence regarding the benefits of EMPA therapy in patients with heart failure in real-world clinical practice.

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SC-RCV-03544

1. Tomaszuk-Kazberuk A, et al. *Exploring the impact of age and comorbidities on quality-of-life improvements with empagliflozin: findings from a broad European real-world population*. Oral presentation, Abstract 85817. ESC Congress 2026, Munich, Germany, 31 August 2026
2. Køber L, et al. *2026 ESC Guidelines for the management of heart failure*. Eur Heart J. 2026. doi:10.1093/eurheartj/ehag100