During the follow-up period, 616 deaths occurred by cardiovascular causes (15.5%),\(^1\) with an overall incidence rate of 5.7/100 person-years. After adjusting for significant baseline characteristics (see figure legends below), the risk of cardiovascular mortality was 48% lower among patients adherent to polytherapy compared with those nonadherent to polytherapy (IRR = 0.52; 95% CI = 0.40–0.67; \(P < 0.001\)). No significant effect modification by age was found (\(P = 0.49\)), suggesting that the benefits associated with adherence to polytherapy did not vary with increasing age (Figure 1).

Adherence to each of the 4 medications was associated with a significant mortality decrease, although the magnitude of this association was higher for ACEIs/ARBs (IRR = 0.61; 95% CI = 0.50–0.74; \(P < 0.001\)) and statins (IRR = 0.68; 95% CI = 0.53–0.86; \(P < 0.01\)), and lower for \(\beta\)-blockers (IRR = 0.76; 95% CI = 0.58–1.00; \(P = 0.05\)) and antiplatelet drugs (IRR = 0.79; 95% CI = 0.65–0.95; \(P = 0.01\)). As illustrated in Figure 2, the beneficial effect of adherence to antiplatelet drugs declined gradually after the age of 75-80, and was no more significant after the age of 90; on the contrary, there was no evidence of an interaction between age and adherence to ACEIs/ARBs, \(\beta\)-blockers and statins, suggesting that the relationship between adherence to these drugs and cardiovascular mortality was independent of age.

\(^1\) ICD-10-CM codes I00–I99.
**Fig. 1** Effects of adherence and nonadherence to polytherapy on cardiovascular mortality as a function of patient’s age (with 95% CIs)

![Graph showing the effect of adherence and nonadherence on cardiovascular mortality](image)

*Note:* Results are not reported for patients aged > 95 years because of the limited sample size (n = 48). Predicted mortality rates were adjusted for significant covariates, including percutaneous coronary intervention and bypass at index episode, length of index episode, malignant tumors, conduction disorders and cardiac dysrhythmias, cerebrovascular diseases, vascular diseases, chronic nephropathies, old bypass, and heart failure.

*Abbreviations:* 95% CIs, 95% confidence intervals.

**Fig. 2** Effects of adherence and nonadherence to each of the 4 EB medications on cardiovascular mortality as a function of patient’s age (with 95% CIs)

![Graphs showing the effect of adherence and nonadherence on each of the 4 EB medications](image)

*Note:* Results are not reported for patients aged > 95 years because of the limited sample size (n = 48). Predicted mortality rates were adjusted for significant covariates, including concomitant adherence to the other EB medications, percutaneous coronary intervention and bypass at index episode, length of index episode, previous use of antidiabetic drugs, malignant tumors, conduction disorders and cardiac dysrhythmias, cerebrovascular diseases, vascular diseases, chronic obstructive pulmonary disease, chronic nephropathies, old bypass, and heart failure.

*Abbreviations:* ACEIs/ARBs, angiotensin-converting enzyme inhibitors/angiotensin receptor blockers.