

Persistence of fixed and free combination of perindopril and amlodipine in hypertension

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Topic(s):

Treatment of hypertension

Citation:

European Heart Journal (2016) 37 (Abstract Supplement), 213

Introduction: Patient adherence is very important factor in the management of chronic disorders such hypertension. In hypertension cardiovascular risk reduction can be reached only by prolonged and effective pharmacotherapy.

Purpose: Our aim was to evaluate the persistence on one year treatment of free and fixed dose combination of perindopril and amlodipine in hypertension.

Methods: Information from the National Health Insurance of Hungary prescriptions database on pharmacy claims between October 1, 2012 and September 30, 2013 was analyzed. We identified patients who filled prescriptions for free and fixed dose combinations (FDC) of perindopril and amlodipine, prescribed for the first time for the therapeutic indication of hypertension. Patients have not received antihypertensive therapy with similar active substances during the one year preceding the study. To model the persistence, the apparatus of survival analysis was used, where “survival” was the time to abandon the medication. As it was available to month precision, discrete time survival analysis was applied: a generalized linear model was estimated with complementary log-log link function with the kind of drug being the only explanatory variable.

Results: 107,120 patients met the inclusion criteria. Combination antihypertensive therapy with perindopril and amlodipine was started with a free or a fixed combination of these agents in 19,365 and 87,755 patients, respectively. One year persistence rate in patients taking perindopril

and amlodipine as a free combination was 27%, whereas it was 40% in those on the FDC. Analyzing persistence on treatment with these combinations showed that the actual rate of discontinuation was approx. twice higher during treatment with the free, compared with the use of the FDC (HR=1.94, 95% CI: [1.91–1.98], $p<0.001$).

Conclusions: In our study we demonstrated the clear benefit of initiating antihypertensive therapy with the FDC of perindopril and amlodipine over starting treatment with the free combination.

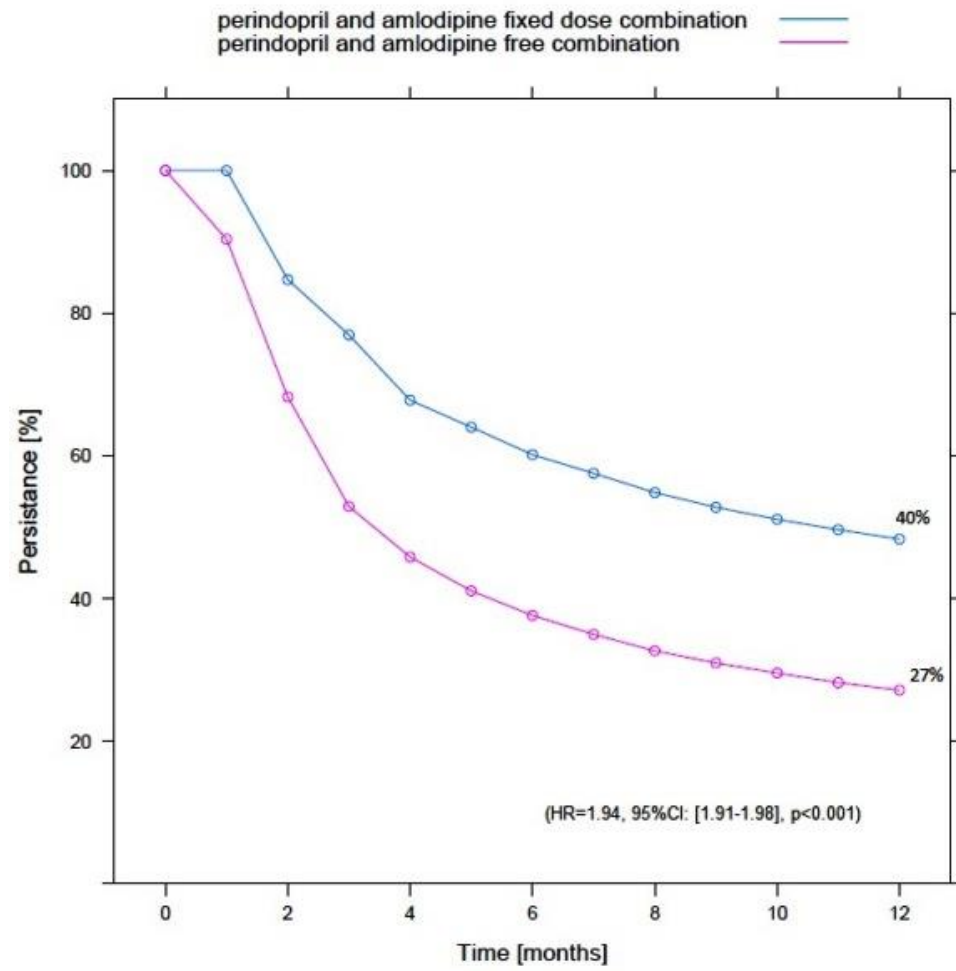


Figure 1