

Cost-Effectiveness Analysis of Rivaroxaban for Treatment of Stroke Prevention in Atrial Fibrillation

<u>Kurnaz M¹</u>, Buyukisik Kayı T², Okcun S¹, Seyhun O¹ ECONiX Research, Istanbul, Türkiye¹, Bayer Türk, Istanbul, Türkiye²

OBJECTIVES

Strokes related to Atrial Fibrillation (AF) lead to higher mortality rates, greater disability, and longer hospitalization, resulting in significantly higher costs. The aim of the study is to conduct a cost-effectiveness analysis in the case of using warfarin versus rivaroxaban in the treatment of Stroke Prevention in AF (SPAF) from the perspective of the payer.

METHOD

In the study, a decision tree and a Markov model with a 30-year time horizon were created for analysis. The clinical data (minor, major, intracranial, critical organ and fatal bleeding, stroke, myocardial infarction (MI), mortality and no event; for health states: post-MI, post-stroke, post-intracranial bleeding, post-multiple event and death) used in the model was created in line with expert opinions through a survey created as a result of literature review. From the economic data, drug costs are calculated based on the public price according to the daily dose of the drug in question, while healthcare utilization costs are obtained by recalculating the costs obtained from the literature according to expert opinions.

RESULTS

As a result of the analysis, the gain in life years was found to be 21.64 for rivaroxaban and 14.42 for warfarin. The 30-year cost was also calculated to be TRY162,651 for rivaroxaban and TRY170,223 for warfarin. According to the results of the analysis, rivaroxaban was superior in terms of both the more life years it gained and the lower cost it offered.

	RIVAROXABAN	WARFARIN
LIFE YEARS GAINED	21.64	14.42
30-YEAR COSTS	TRY 162K	170K

CONCLUSIONS

When the incremental cost-effectiveness ratio based on years of life gained is compared to rivaroxaban versus warfarin, rivaroxaban is the dominant treatment option because it is both more cost-effective and has more years of life gained. According to these results, it is clear that the use of rivaroxaban in the treatment of SPAF will benefit public finances and health.





