



## COMPARISON OF MEDICAL COSTS AVOIDED AMONG NONVALVULAR ATRIAL FIBRILLATION PATIENTS TREATED WITH DABIGATRAN, RIVAROXABAN, APIXABAN, AND EDOXABAN VERSUS WARFARIN

Poster Contributions  
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**Background:** This study evaluated differences in medical costs associated with clinical endpoints from randomized trials that compared the new oral anticoagulants (NOACs), dabigatran, rivaroxaban, apixaban, and edoxaban (60 mg) to warfarin for treatment of patients with nonvalvular atrial fibrillation (NVAF).

**Methods:** The rates of efficacy and safety clinical events for warfarin were estimated from the published data of the NOAC vs. warfarin clinical trials. Incremental medical costs to a U.S. health payer of clinical events were obtained from published literature and inflation adjusted to 2013 costs. Medical costs were evaluated and compared for each NOAC vs. warfarin. Univariate and multivariate Monte Carlo sensitivity analyses were additionally conducted.

**Results:** Based on differences in clinical event rates associated with use of each of the NOACs when compared with warfarin, the annual medical cost avoidances associated with use of dabigatran, rivaroxaban, apixaban, and edoxaban were estimated at -\$204, -\$140, -\$495, and -\$340 per patient, respectively. Of the 10,000 random Monte Carlo simulation cycles, 94.2%, 85.1%, 100.0%, and 99.9% had a cost reduction <\$0 for dabigatran, rivaroxaban, apixaban, and edoxaban 60 mg, respectively.

**Conclusion:** Medical costs are reduced when NOACs are used instead of warfarin for the treatment of NVAF, with apixaban being associated with the greatest medical cost avoidance.

Outcomes	Dabigatran-150mg vs. warfarin (\$/patient-yr)	Rivaroxaban vs. warfarin (\$/patient-yr)	Apixaban vs. warfarin (\$/patient-yr)	Edoxaban-60mg vs. warfarin (\$/patient-yr)
<b>Primary Efficacy Endpoints</b>				
Ischemic or uncertain type of stroke	-\$126	-\$40	-\$37	\$0
Hemorrhagic stroke	-\$161	-\$104	-\$132	-\$124
Systemic embolism	-\$9	-\$32	-\$3	-\$9
<b>Secondary Efficacy Endpoints</b>				
Myocardial infarction	\$71	-\$88	-\$30	-\$19
Pulmonary embolism or deep-vein thrombosis	\$11	-\$1	-\$2	\$1
<b>Safety Endpoints</b>				
Major bleedings-excluding hemorrhagic stroke	\$12	\$122	-\$280	-\$181
Clinically relevant non-major bleedings	\$0	\$2	-\$5	-\$8
Other minor bleedings	-\$1	\$0	-\$6	-\$1
<b>Total Medical Cost Difference</b>	<b>-\$204</b>	<b>-\$140</b>	<b>-\$495</b>	<b>-\$340</b>