

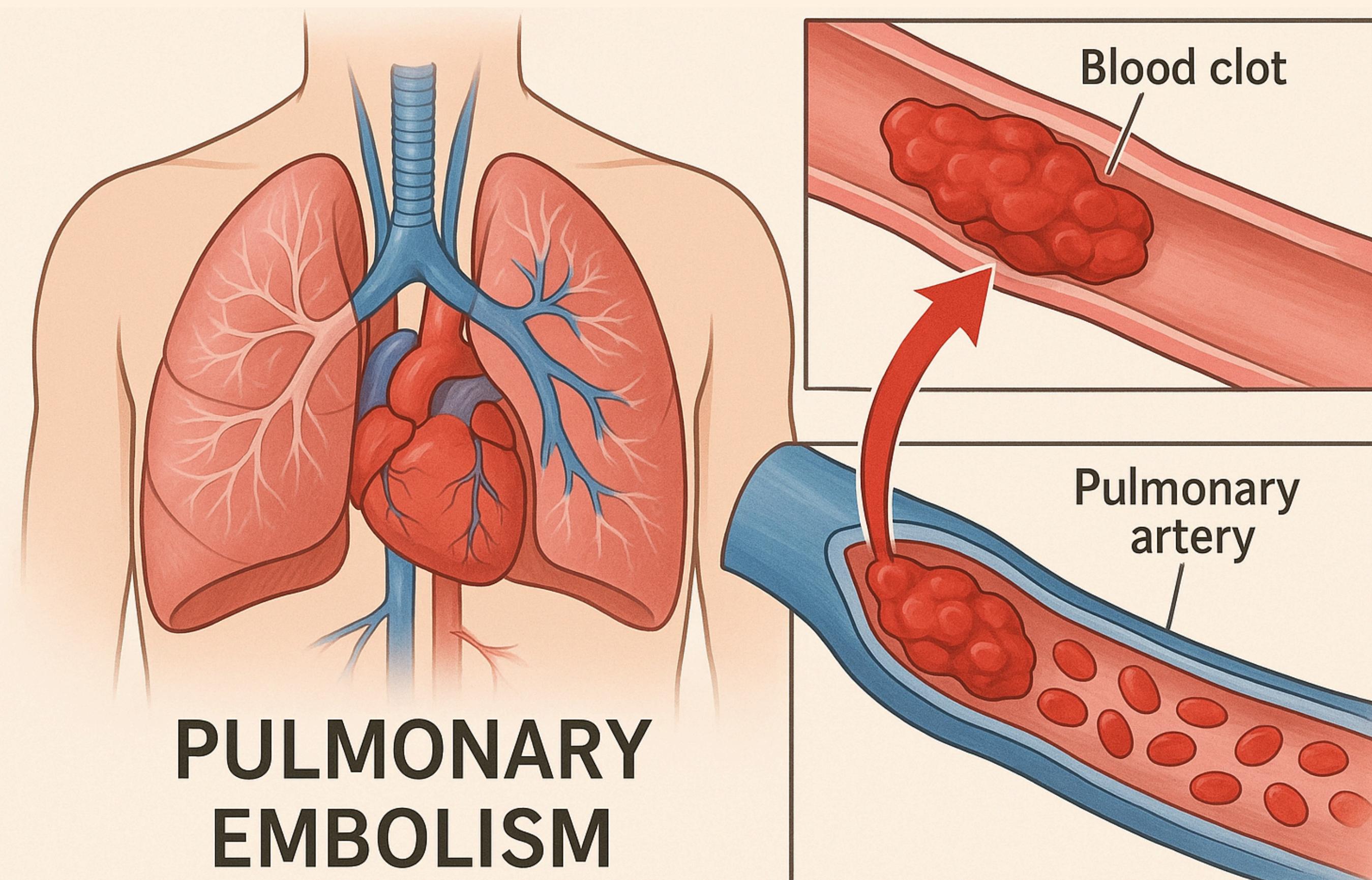
SOCIETAL AND ECONOMIC IMPACT OF NOAC THERAPY FOR DEEP VEIN THROMBOSIS AND PULMONARY EMBOLISM IN BULGARIA

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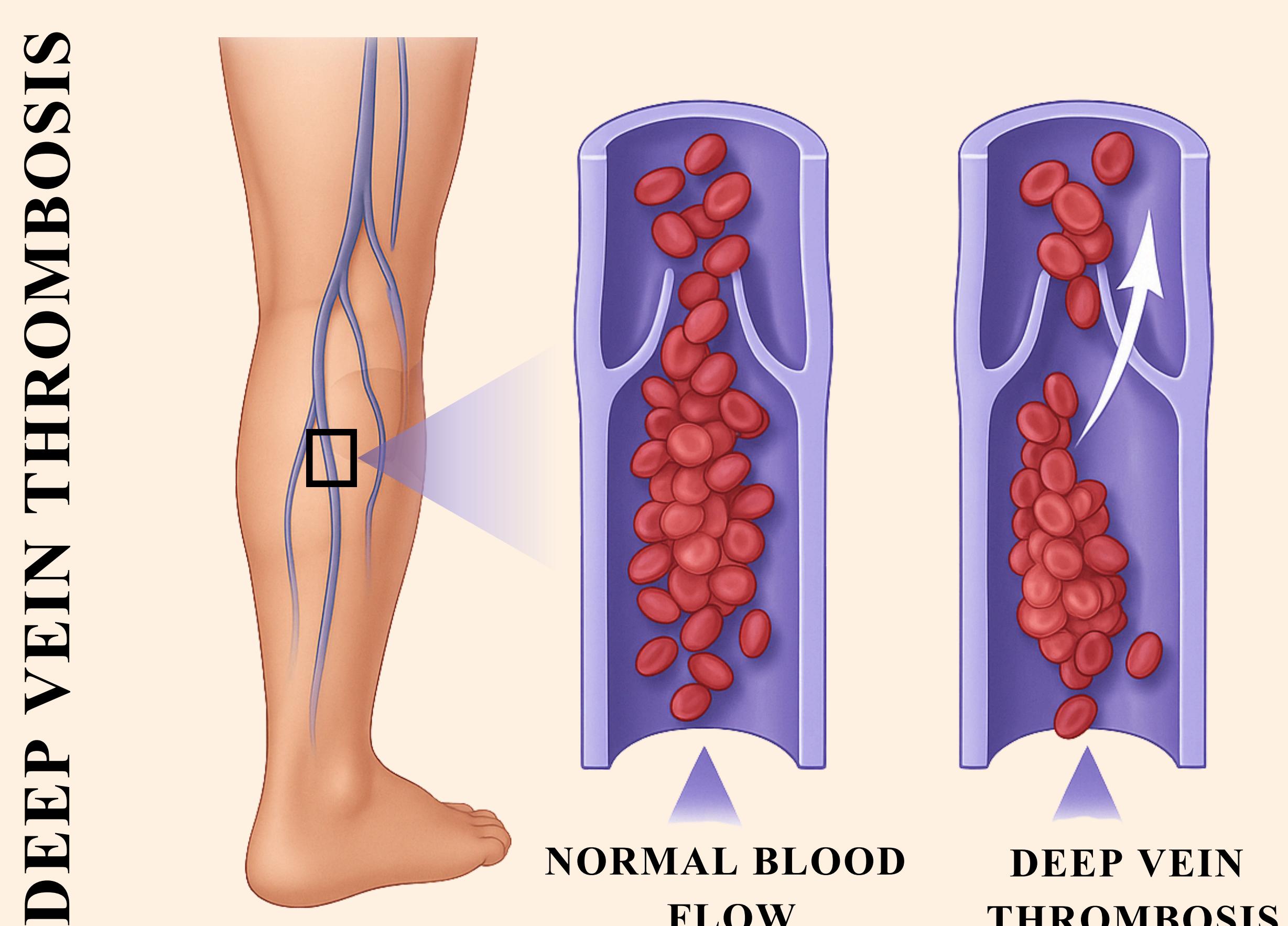
INTRODUCTION

Deep vein thrombosis (DVT) and pulmonary embolism (PE) are serious and potentially life-threatening conditions that pose a significant health and economic burden to Bulgarian society. They are associated with high risks of long-term complications and productivity loss. Non-vitamin K antagonist oral anticoagulants (NOACs) have emerged as a modern therapeutic option, offering advantages in safety and efficacy. While their clinical benefits are increasingly recognised, their economic impact in Bulgaria remains unquantified. This analysis aimed to assess the societal economic benefit of NOAC use by estimating quality-adjusted life years (QALYs) gained and translating them into productivity-related economic value.



METHODOLOGY

A Markov model with a lifetime horizon and a 3.5% annual discount rate was developed to project long-term health outcomes. The model allows adaptation to other countries with similar data availability. Average gain was estimated at 10.7 QALYs per treated patient. When applied to the treated population of 96,360 patients (2023 data, 34% increase since 2021), the total QALYs gained for working-age patients reached 1,064,226.



CONCLUSION

NOAC therapies deliver important health benefits for individuals with DVT and PE and provide measurable societal value. These results support prioritising access to innovative anticoagulants within Bulgaria's healthcare strategy to reduce thromboembolic disease burden and support economic sustainability.

RESULTS

To evaluate economic impact, total QALYs were multiplied by GDP per working individual in Bulgaria, considering the working-age patient proportion. The resulting added contribution to GDP was estimated at EUR 3,475,627,287. This reflects the value of enabling patients with DVT and PE to live longer, healthier, and more productive lives.

MODEL & INPUTS	HEALTH GAINS	ECONOMIC IMPACT
MARKOV MODEL	96 360 PATIENTS (2023)	€3,48 BILLION ADDED GDP CONTRIBUTION
3.5% DISCOUNT RATE	+10.7 QALYS PER PATIENT	
LIFETIME HORIZON		

