

SECOND EUROPEAN CAROTID SURGERY TRIAL (ECST-2): A COST-EFFECTIVENESS STUDY FOR THE DUTCH DOMAIN

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INTRODUCTION

- International multicenter randomized open-label non-inferiority trial
- Symptomatic carotid artery stenosis $\geq 50\%$
- 5-year recurrent stroke risk (CAR-score) $<20\%$
- Started in 2012
- So far 38 patients included in the Netherlands

HYPOTHESIS

- Optimal Medical Treatment (OMT) alone is clinically non-inferior and cost-effective compared to Carotid Endarterectomy (CEA) and OMT combined

OBJECTIVE

- To assess non-inferiority, costs and cost-effectiveness of OMT alone versus CEA plus OMT
- In patients with low or intermediate recurrent stroke risk and a symptomatic carotid stenosis

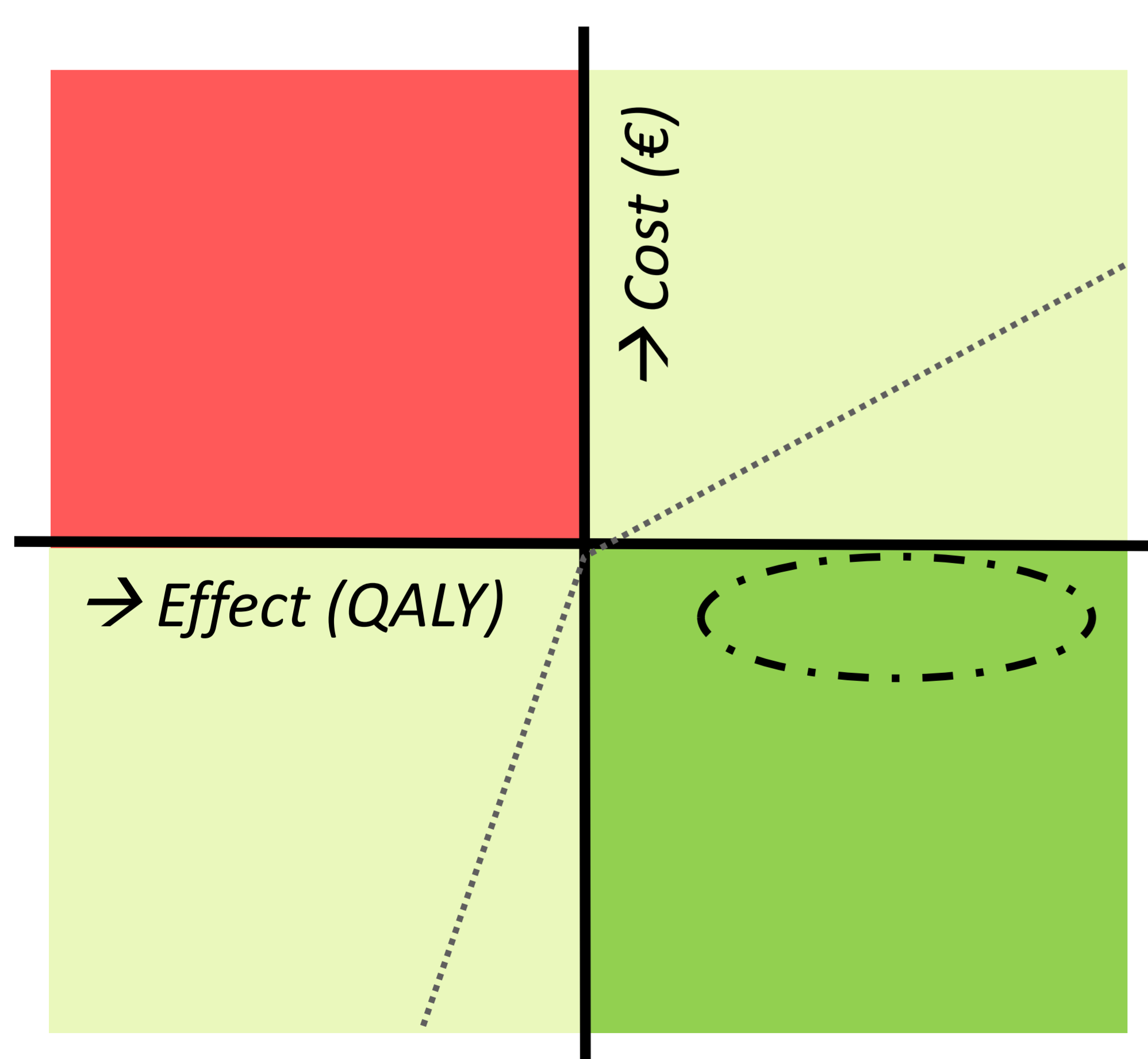


Figure 1
Shows a cost-effectiveness plane. With on the X-axis the difference in effectiveness of new treatment versus the comparator, and on the Y-axis the difference in costs. The green area indicates a more effective and less costly treatment, compared to the comparator. This treatment should be implemented if side effects and other disadvantages are equal. The red area indicates a less effective and more costly treatment. For cost-effectiveness located in the white areas, the question whether the intervention is cost-effective, relative to the comparator, depends on the willingness to pay per unit of health gain (life saved or QALY gained), as indicated by the gray dotted line. Results of this study are expected to lie within the black dotted oval area

METHODS

- An economic evaluation alongside the randomized controlled trial using a societal perspective and a 2-year and life-time horizon
- Resource use will be estimated from clinical data and patient administered questionnaires (iMTA medical and productivity questionnaires)
- Quality of life measured with the EQ-5D
- Clinical outcome measures will be death within 30 days, any stroke during 2-year follow-up, quality of life, resource utilization and total costs
- Cost-effectiveness analysis and cost-utility analysis, including sensitivity analyses for parameter uncertainty and stochastic uncertainty (Monte Carlo method)

EXPECTED RESULTS

- We aim to include 200 patients in the Netherlands
- We hypothesize no clinical differences in outcome and a major cost difference in favor of OMT alone
- A budget-impact analyses will extrapolate the results to the estimated annual cost savings in the Dutch health care system

