



The Impact of Future Medical Costs on Dutch Pharmacoeconomic Assessments

R.H. Ophuis, PhD¹

Objectives

Drugs that increase life expectancy may cause additional health-care consumption in the life years gained. Future (unrelated) medical costs result from the life-extending effect of the intervention. These costs are not related to the specific disease.

This exploratory study assessed the impact of including the future medical costs on the incremental cost-effectiveness ratios (ICERs) of pharmacoeconomic assessments of the National Health Care Institute (Zorginstituut Nederland; ZIN).

Methods

The ICERs of pharmacoeconomic assessment reports published between 2016 and May 2019 were collected. ZIN publishes a pharmacoeconomic assessment report when the expected total budget impact exceeds €10 million per year after reimbursement and when the product has a therapeutic added value in comparison with the alternative treatment (based on advice of the Scientific Advisory Board). Pharmacoeconomic assessment reports in which both ICERs with and without future medical costs were reported were considered for analysis.

FIGURE 1: DRUGS AND CORRESPONDING ICERs INCLUDED IN THE ANALYSIS

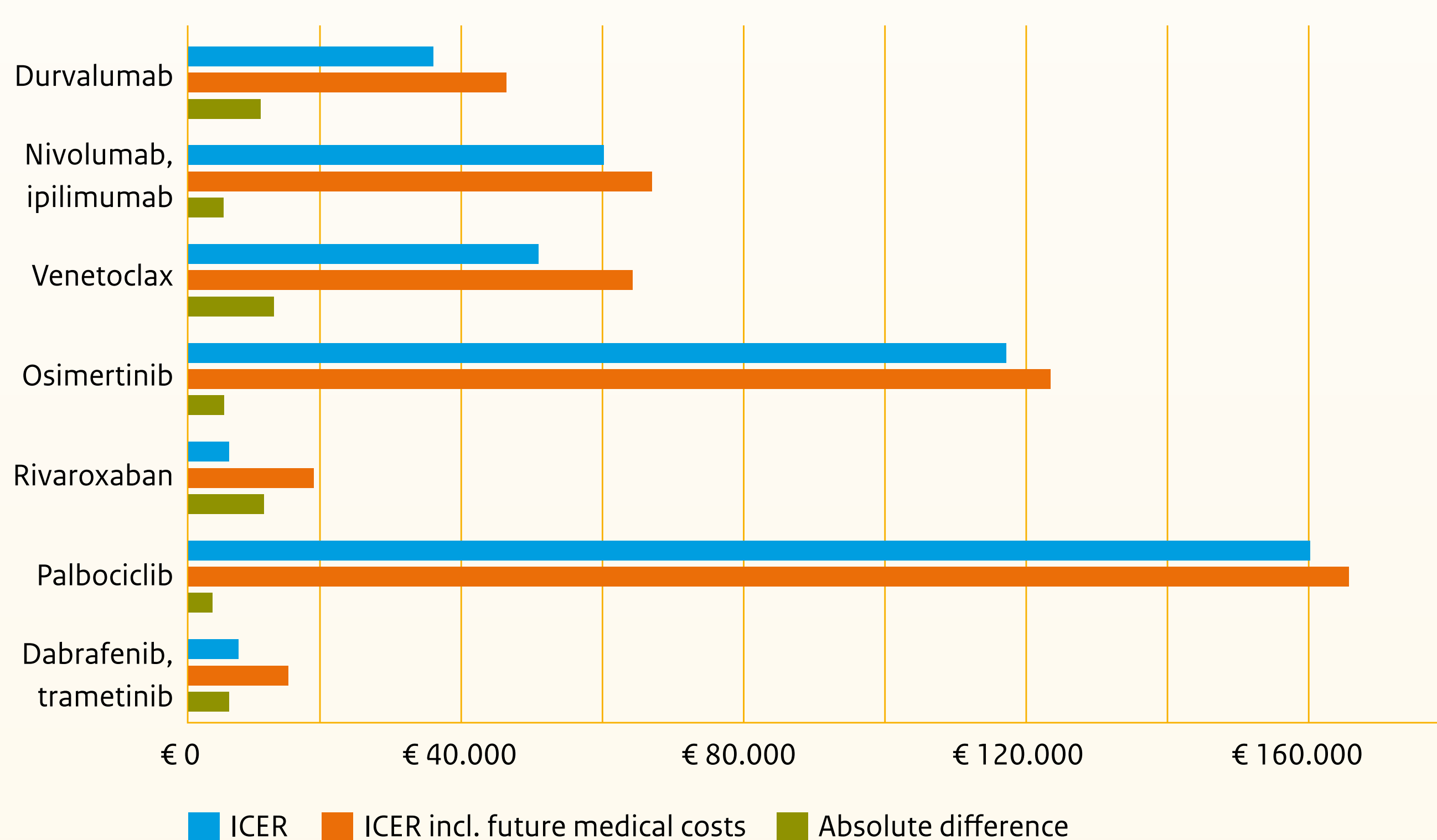


TABLE 1: OVERVIEW OF THE INCLUDED DRUGS

Drug(s)	Absolute difference ICER ¹	Incremental life years gained (ILYG)	Costs per ILYG	WTP threshold ²
Durvalumab	€ 10,798	2.47	€ 4,372	€ 80,000
Nivolumab, ipilimumab	€ 6,383	1.52	€ 4,199	€ 80,000
Venetoclax	€ 13,471	4.00	€ 3,368	€ 80,000
Osimertinib	€ 6,252	1.04	€ 6,012	€ 80,000
Rivaroxaban	€ 11,774	0.55	€ 2,407	€ 20,000
Palbociclib	€ 4,939	0.50	€ 9,878	€ 80,000
Dabrafenib, trametinib	€ 6,876	2.84	€ 2,421	€ 50,000

¹ Difference between the ICER including future medical costs and the ICER without future medical costs

² Willingness-to-pay threshold applied in the assessment

Results

- ICERs with and without future medical costs were reported in 44% (7 out of 16) of all pharmacoeconomic assessment reports since 2016, the year in which inclusion of these costs became recommended.
- ICERs of 1 extramural drug (cardiovascular) and 6 specialistic drugs (oncology) were included.
- On average, the ICERs increased with €8,600 per QALY (median €6,900).
- ICERs that were lower than the relevant willingness-to-pay threshold did not exceed the threshold after including future medical costs.

Conclusions

Although the inclusion of future medical costs had a variable impact on the ICERs, the relevant willingness-to-pay thresholds were not exceeded. It is therefore unlikely that the inclusion of these costs in the base case analysis would have influenced former reimbursement recommendations of ZIN. The methodology of including future medical costs was insufficiently described in the submitted reimbursement dossiers, which hampered comparison.