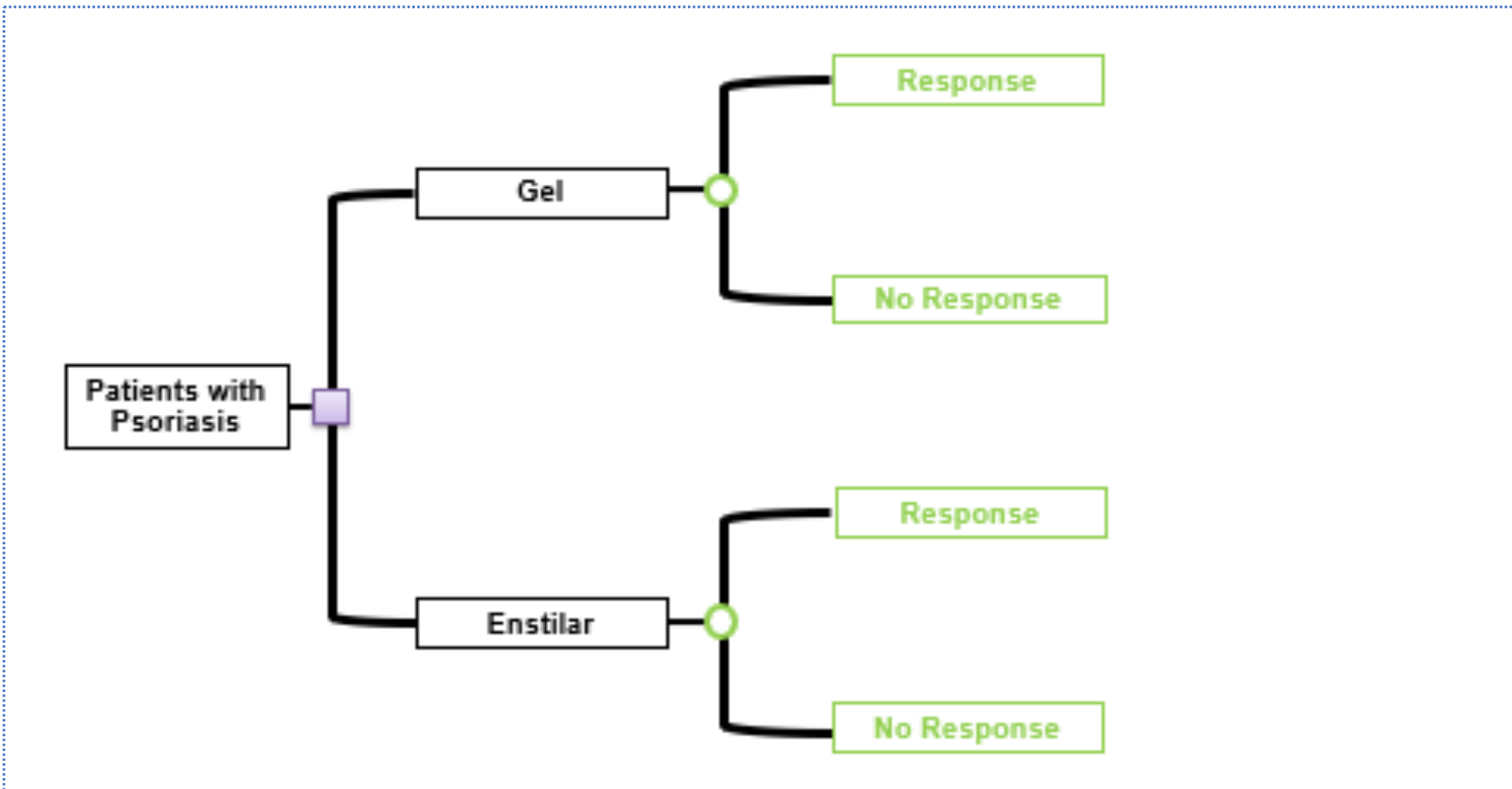


COST-EFFECTIVENESS ANALYSIS OF THE USE OF ENSTILAR® COMPARED TO DOVOBET® GEL IN THE TREATMENT OF PSORIASIS IN ITALY

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Introduction: Psoriasis is a common chronic inflammatory skin condition that affects approximately 2%–3% of the Caucasian population in western countries. In Italy about the 3% of the adult population is affected by psoriasis, the 10%-12% of whom has a severe type of psoriasis.



The latest data indicate that the incidence of the disease among the adult population in Italy is 230/100,000 person- year.

Objectives: The aim of this study was to determine the cost-effectiveness of Enstilar® compared to the Standard of Care in treating patients with psoriasis vulgaris. Enstilar® is a fixed combination foam (calcipotriene and betamethasone dipropionate) approved for the treatment of psoriasis vulgaris in adult patients. The current Standard of Care in Italy is Dovobet® Gel, indicated for the topical treatment of mild to moderate psoriasis.

Figure 1. Decision Tree model

Methods: A decision-tree model (Figure 1) was used to compare costs and effects of Enstilar® and Dovobet® Gel using the Italian National Healthcare Service perspective. The time horizon used in this simulation is one year, considering the length of one cycle equal to one year; it was deemed sufficient to evaluate cost and results of both therapies. Efficacy and length of treatment cycle for the two therapies were determined using a head to head study. The utility is expressed in terms of QALYs for the two health states considered (patients respond to treatment or not) and was derived from published data (Table 1). Results are presented in terms of incremental cost per quality-adjusted life years gained. Probabilistic sensitivity analysis was conducted using Monte Carlo simulation.

	Consumption per cycle	Units per cycle*	Actual Units per Year	PGA at cycle end*	Cost per Cycle
Dovobet® Gel	164.24	5.47	6.00	22.50%	€ 91,86
Enstilar®	98.60	164	2.00	38.30%	€ 83,86

Table 1.: Prices, units and costs in an Italian setting
*Paul et al. 2016

Results: The Incremental Cost-Effectiveness Ratio (ICER) for Enstilar® compared to Dovobet® Gel is -117,75 € in an Italian setting. Indeed, the introduction of Enstilar® reduces the cost per cycle (83,86 € compared to 91,86 € with Dovobet® Gel) and increase the efficacy (PGA of 38,3% with Enstilar® Vs 22,5% with Dovobet® Gel). The sensitivity analysis confirmed these results showing an average ICER of -106,92€ with a standard deviation of 217,35€.

	Costo	QALY	Incremental cost	Incremental QALY	ICER
DOVOBET® GEL	€ 91,86	0,547			
ENSTILAR®	€ 83,86	0,615	-€ 8,00	0,07	DOMINANT

Table 2. Left Side: Cost-effectiveness analysis.

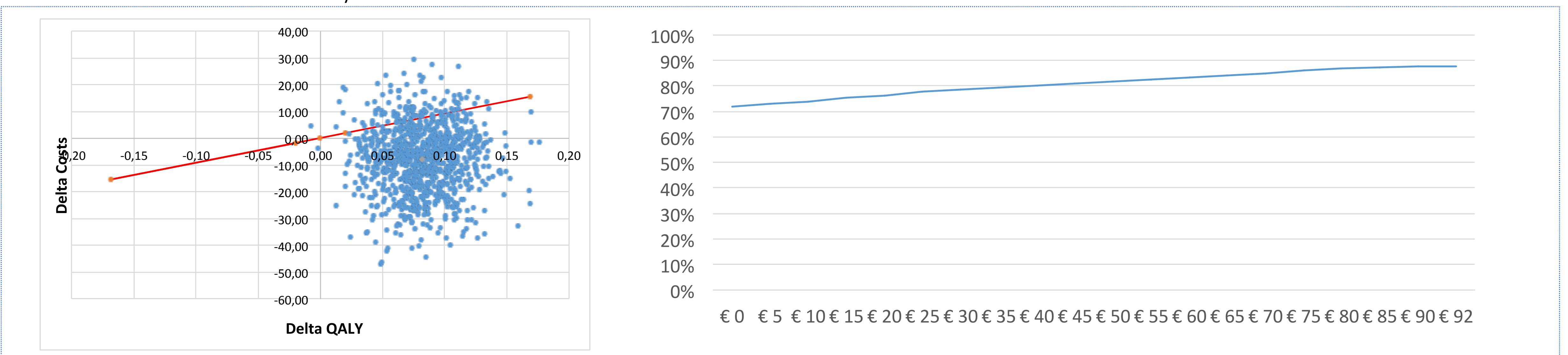


Figure 2. Left Side: Sensitivity analysis. Right Side: Acceptability Curve

Conclusions: The present study indicates that Enstilar® is Dominant compared to the Italian standard of care (Dovobet® Gel). The sensitivity analysis demonstrates that in-72% of the 1.000 simulations conducted Enstilar® is still dominant and that in the 88% of the simulations the ICER falls below the maximum acceptable ceiling ratio, fixed equal to the Dovobet® Gel cost per cycle (92€).