

Introduction

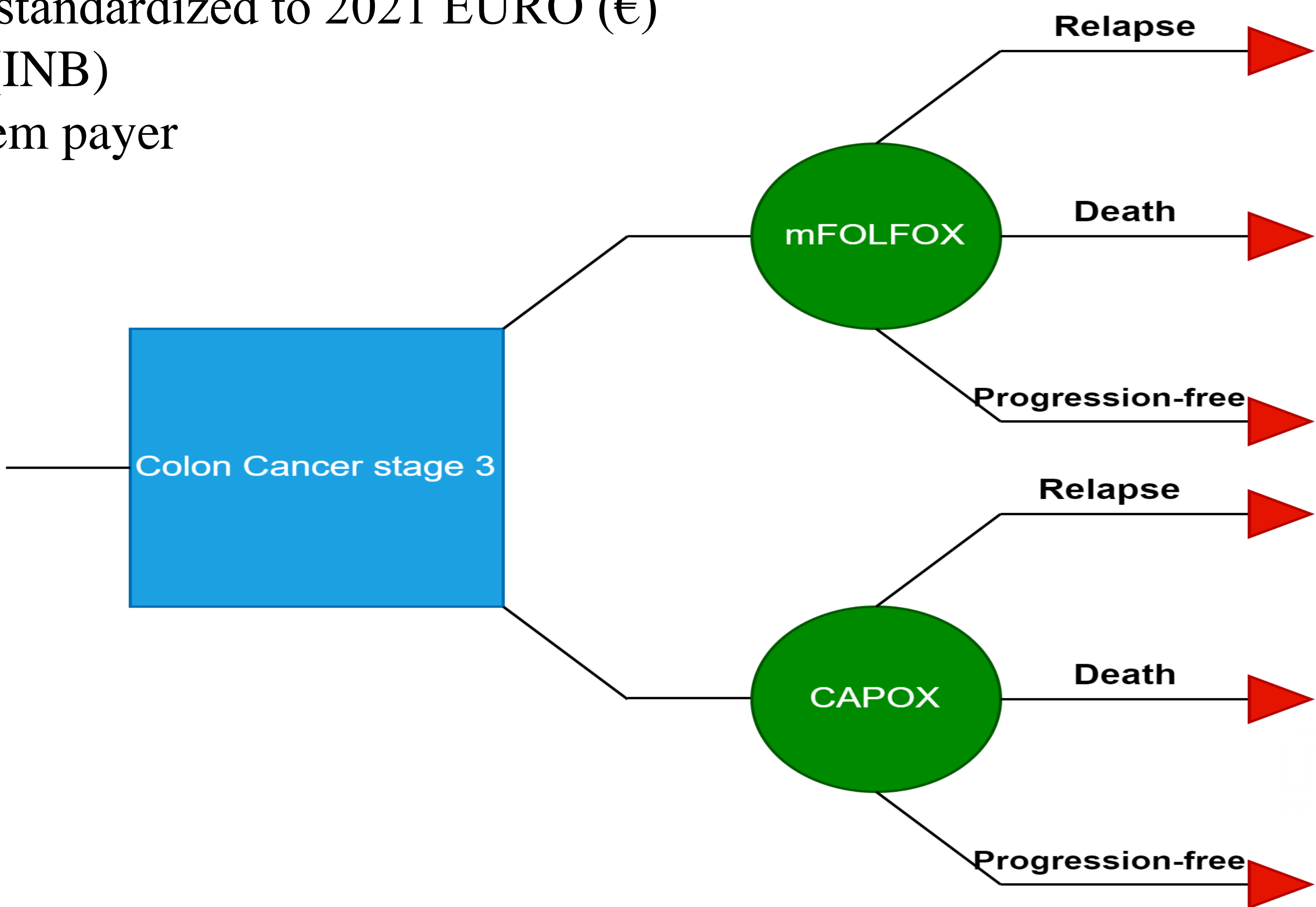
- Administration of mFOLFOX (combination of 5-fluorouracil, leucovorin and oxaliplatin) or CAPOX (combination of capecitabine and oxaliplatin) as adjuvant chemotherapy after tumor resection in patients with stage 3 colon cancer is recommended by National Comprehensive Cancer Network (NCCN) Clinical Practice Guidelines in Oncology to improve survival.
- mFOLFOX administration: cycle repeated every 2 weeks, a total of 12 cycles (24 weeks).
- CAPOX administration: cycle repeated every 3 weeks, a total of 8 cycles (24 weeks).

objectives

- To assess the cost-effectiveness of CAPOX versus mFOLFOX in patients with stage 3 colon cancer.

Method

- Population:** Adult patients with stage 3 colon cancer
- Intervention and comparator:**
 - CAPOX versus mFOLFOX
- Outcomes:**
 - Total direct medical cost standardized to 2021 EURO (€)
 - Incremental Net Benefit (INB)
- Perspective:** Health-care system payer
- Decision tree:**



- Sensitivity analysis:**
 - Based on Willingness To Pay (WTP) of 10,000-100,000 EURO.
 - Based on MIN-MAX expected cost of each regimen.

Results

	mFOLFOX	CAPOX
Total expected cost (€)	68,347	51,201
Minimum expected cost (€)	36,155	34,281
Maximum expected cost (€)	115,184	78,436
Incremental Net Benefit (INB) (€)	101,146	

Figure1. Sensitivity analysis based on WTP

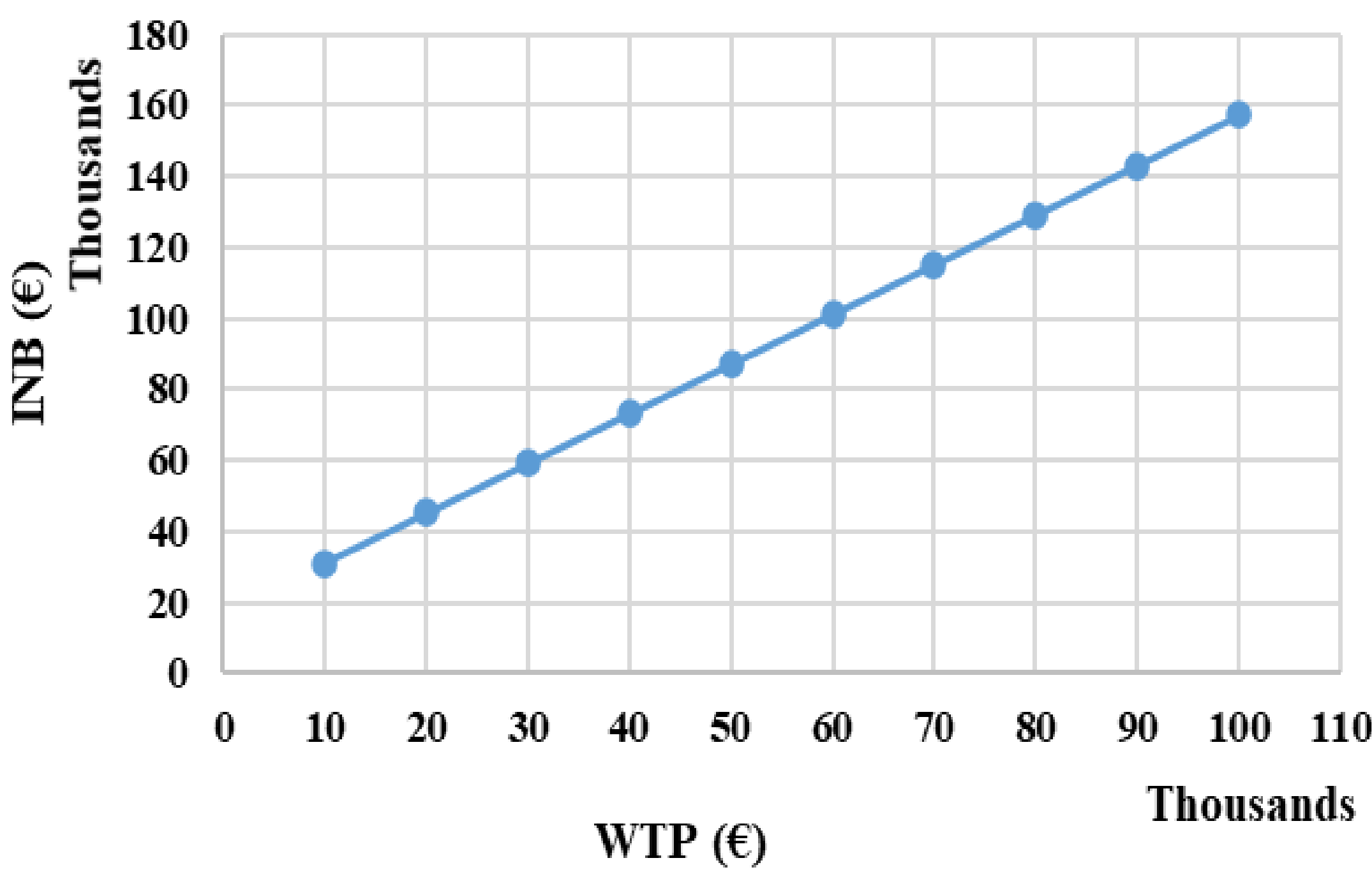
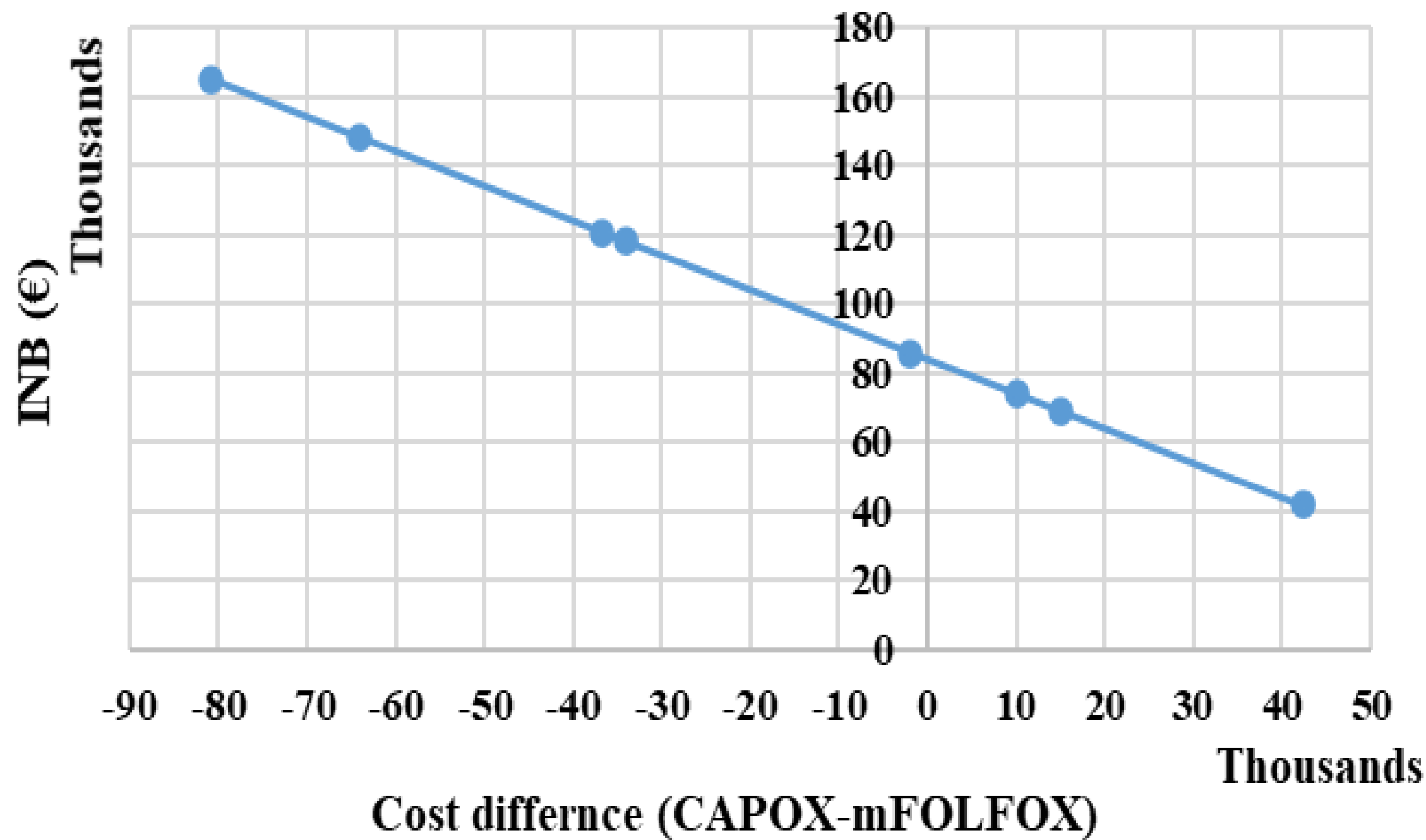


Figure2. Sensitivity analysis based on cost difference



Main findings

- Based on our calculation, CAPOX compared to mFOLFOX, was cost-effective.
- The incremental net benefit (INB) was 101,146 € at a WTP of 60,000 €.
- The administration cost of mFOLFOX has the highest impact on the cost-effectiveness results as it requires intravenous (IV) access and more hospital visits compared to CAPOX in which capecitabine is given orally.

References used in cost and effectiveness estimation

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