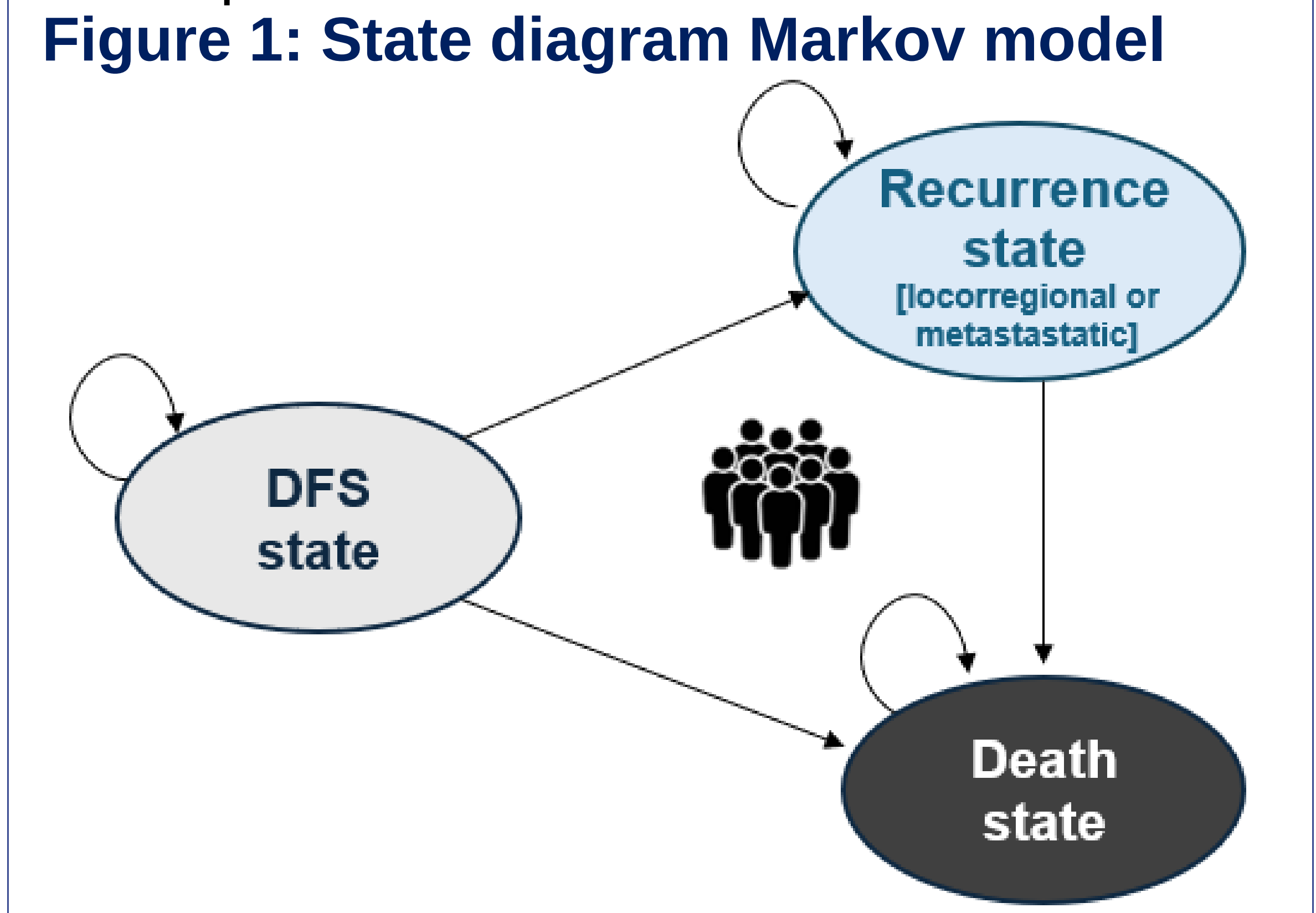


INTRODUCTION

- Surgery followed by adjuvant platinum-based chemotherapy (PbCH) is the current standard of care for early-stage ALK+ non-small cell lung cancer (eNSCLC) patients^{1,2}.
- This analysis aimed to estimate the economic burden of disease recurrence in patients with ALK+ eNSCLC after complete resection and adjuvant PbCH in Spain.

METHODS

- #### Data collection
- A two-round consensus panel was held with 6 Spanish experts (3 medical oncologists and 3 hospital pharmacists), involving both questionnaire completion and a consensus and validation meeting.
- #### Model design
- 3-states Markov model was built (fig.1).
 - 5-years time horizon was considered.
 - Payer perspective (only direct costs) was adopted.



METHODS (cont.)

- #### Model parameters
- A target population of 98 hypothetical eNSCLC ALK+ patients was estimated based on the literature³⁻⁹.
 - Clinical data were obtained from the ALINA study² and other published articles on NSCLC¹⁰⁻¹⁵.
 - Treatment approach (local or systemic) in relapses and specific therapies obtained from the experts, are shown in table 1.

Table 1: Recurrence treatment patterns

Local tx: 22.0%		Systemic tx: 78.0%					
Type	(%)	1L Type (%)	2L Type (%)	3L Type (%)			
SBRT	66	Lorlatinib 75	Lorlatinib 33	Docetaxel 50			
Surgery	34	Alectinib 23	Alectinib 6	TKI* 50			
-		Brigatinib 2	Brigatinib 2	-			
		-	PbCH 59				

- SBRT: stereotactic body radiation therapy; PbCH: platinum-based chemotherapy; TKI: tyrosine-kinase inhibitor; *not used previously
- Unit costs (euros of 2025) were obtained from national databases^{16,17}.
 - A one-way sensitivity analysis was performed.

DISCUSSION AND CONCLUSION

Although the number of patients with early-stage ALK+ NSCLC is low, the cost of recurrences represents a substantial burden for the Spanish Health System.

Early intervention and the incorporation of more efficacious adjuvant therapies than current PbCH to mitigate recurrence risk are critical to optimize disease management.

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RESULTS

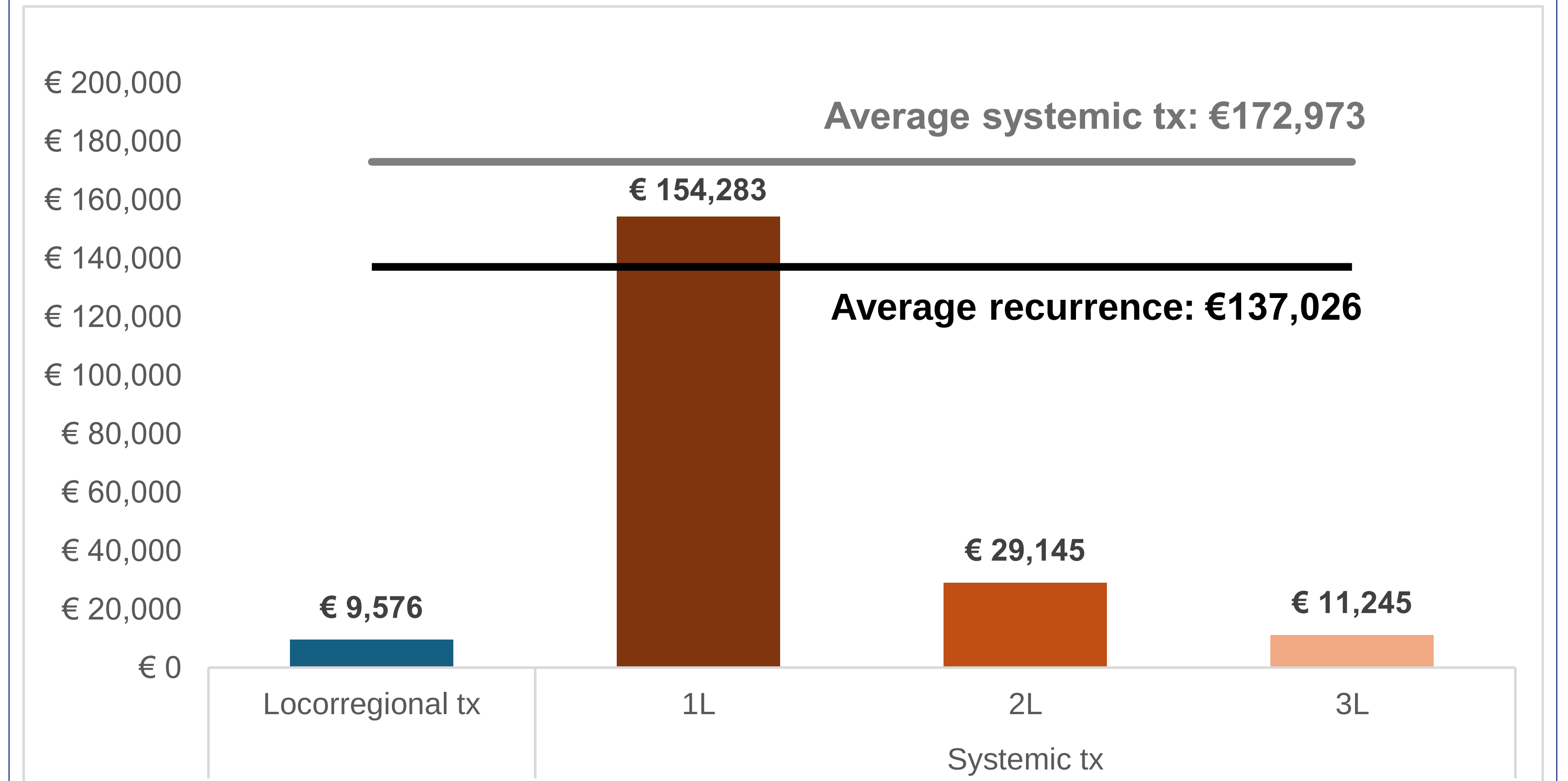
- According to the model, of the target population of 98 hypothetical patients with resected ALK+ NSCLC, **62 would experience recurrence** after 5 years from the adjuvant PbCH.
- 5-years total cost was **€ 9,226,675** (all target population), and total cost of the 62 recurrence was **€ 8,519,175** (tab.2).

Table 2: Total cost of illness analysis results

Health state and treatment		Total Cost (5-year management)		
DFS health state	Adjuvant pbCHT	€ 439,287	€ 707,500	€ 9,226,675
	Patient follow-up	€ 268,213		
Recurrence health state	Local tx	€130,982	€ 8,519,175	
	1L	€7,481,866		
	2L	€690,932		
	3L	€215,395		

- DFS: disease-free survival; PbCH: platinum-based chemotherapy
- The **average cost** of one recurrence from eNSCLC ALK+ would be **€137,026** (€9,576 and €172,973 for recurrences managed with local or systemic treatment, respectively) (fig.2).

Figure 2: Average cost of recurrence (overall and by type).



- One-way sensitivity analyses reinforced the robustness of the results obtained and identified the key drivers of the model.

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