

Costs of Gastrointestinal Stromal Tumors and Non-Gastrointestinal Stromal Tumor Soft Tissue Sarcomas in Türkiye: A Delphi Panel Study



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Introduction

- Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal neoplasm of the gastrointestinal tract¹.
- Because GISTs are relatively rare tumors, most of the data in this area comes from single and multicenter studies, as well as case reports and case series with low to moderate case numbers. However, the actual incidence and prevalence of GIST in Türkiye is still unknown².
- This study aims to calculate the annual treatment costs for GIST and non-GIST soft tissue sarcomas (STSs) in Türkiye.

GIST Progression-Free	
126,988 TL	
Laboratory and Imaging Cost	3,688 TL
Follow-Up and Hospitalization Cost	22,797 TL
Medication Cost	100,503 TL

GIST Post-Progression	
251,042 TL	
Laboratory and Imaging Cost	5,932 TL
Follow-Up and Hospitalization Cost	10,323 TL
Medication Cost	234,787 TL

GIST Terminal Care	
149,060 TL	
Laboratory and Imaging Cost	1,925 TL
Follow-Up and Hospitalization Cost	15,385 TL
Medication Cost	131,750 TL

Non-GIST Progression-Free	
29,103 TL	
Laboratory and Imaging Cost	2,678 TL
Follow-Up and Hospitalization Cost	3,201 TL
Medication Cost	23,224 TL

Non-GIST Post-Progression	
113,097 TL	
Laboratory and Imaging Cost	4,988 TL
Follow-Up and Hospitalization Cost	2,766 TL
Medication Cost	105,343 TL

Non-GIST Terminal Care	
33,811 TL	
Laboratory and Imaging Cost	1,046 TL
Follow-Up and Hospitalization Cost	3,515 TL
Medication Cost	29,249 TL

Methods

- Data were collected using the Delphi Panel method; expert opinions were gathered from four oncologists with experience in cancer treatment.
- The standardized questionnaire were consisted of questions eliciting the opinions of the expert panelists on the clinical characteristics of patients with GIST and non-GIST STSs.
- Analyses were conducted using Microsoft Office Excel from the perspective of a reimbursement agency. First, the costs of specific treatments for GIST and non-GIST STSs were calculated separately.
- Treatments were categorized as examinations (laboratory and imaging tests), follow-up and hospitalization (radiotherapy, surgical interventions, outpatient treatment, and hospitalization) or medication (chemotherapy and other medications).
- Next, the total costs for all treatments during the progression-free period, the post-progression period, and terminal care were calculated.

Results

- The annual cost per patient for GIST treatment was 126,988 TL, 251,042 TL, and 149,060 TL for the progression-free, post-progression, and terminal care periods, respectively in Türkiye.
- The annual cost per patient for non-GIST STSs treatment was 29,103 TL, 113,097 TL, and 33,811 TL for the progression-free, post-progression, and terminal care periods, respectively.
- Medication accounted for the highest costs in all periods.

Conclusions

- It is important for decision makers to understand the costs of treating a disease. The number of studies on GIST and non-GIST costs are quite limited.
- The study aims to help decision makers who assess health technology evaluating the new treatment options for GIST and non-GIST STSs.
- In this study, in which GIST and non-GIST STSs treatment costs were calculated for the first time in Türkiye, it was determined that the largest share of the costs resulted from the drugs used in chemotherapy treatment.
- According to this result, the first issue that decision-makers should consider is the cost of medications in Türkiye.

References

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