

Budget Impact of Anakinra in Türkiye: An Analysis from the Social Security Institution’s Perspective

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INTRODUCTION

Anakinra is indicated for treatment of cryopyrin-associated periodic syndrome (CAPS), familial Mediterranean fever (FMF) and Still’s disease that covers both systemic juvenile idiopathic arthritis (sJIA) and adult onset Still’s disease (AOSD). CAPS is an extremely rare chronic condition affecting approximately 1 per 1,000,000 individuals. CAPS comprises 3 phenotypes that represent a continuum of increasing symptom severity: familial cold autoinflammatory syndrome (FCAS), Muckle-Wells syndrome (MWS), and neonatal-onset multisystem inflammatory disease (NOMID), also known as chronic infantile neurological cutaneous articular syndrome (CINCA)¹. FMF is a rare genetic disease characterized by recurrent and self-limiting attacks of fever accompanied by serositis, synovitis or skin rash². The disease primarily affects ethnic groups of Mediterranean ancestry, especially Turks, Arabs, non-Ashkenazi Jews and Armenians³. In a recent study the prevalence of the disease in Turkey was estimated as 1/1,000⁴. Still’s disease is also a rare disease. The prevalence rates of sJIA and AOSD were 3.5/100,000⁵ and 1-34/1,000,000⁶.

Anakinra is reimbursed by the Social Security Institution (SGK) in Türkiye for CAPS, FMF and Still’s disease. Anakinra was first reimbursed under the Imported Drugs List scheme (Attachment 4C) until December 2024 in Türkiye. Other molecules reimbursed for these diseases are canakinumab (for CAPS, FMF and SJIA) and tocilizumab (for SJIA).

OBJECTIVES

The aim of this study is to analyze the budget impact of anakinra’s reimbursement by the SGK and to demonstrate the potential budget saving.

METHODS

The budget impact analysis methodology used by the SGK was followed for the research. According to SGK reimbursement guidelines, a budget impact analysis for three years is necessary to demonstrate the financial impact of reimbursing a new molecule for specific indications. The analysis included potential market share with and without anakinra with public prices of all products. Anakinra was reimbursed under the Imported Drugs List scheme (Attachment 4C) until December 2024 in Türkiye. Therefore, comparisons were made between the availability of the drug under this scheme and after full reimbursement (Attachment 4A).

RESULTS

The total number of units in the market with and without reimbursement of anakinra is presented in Table 1.

Table 1: Number of Units with and without Anakinra

	2024	2025	2026	2027
Number of units with 4C Reimbursement				
Canakinumab	21,000	23,000	25,000	27,500
Tocilizumab	34,796	34,896	34,996	35,006
Anakinra	19,200	21,120	23,232	25,555
Total Market Without Reimbursement	74,996	70,096	83,228	88,061
Number of units with 4A Reimbursement				
Canakinumab	21,000	13,809	14,348	15,584
Tocilizumab	34,796	29,313	29,397	29,405
Anakinra	19,200	36,000	39,600	43,200
Total market with Reimbursement	74,996	79,122	83,344	88,189

The total market value for anakinra (under 4C), canakinumab and tocilizumab was calculated as 3.597.673.589 TRY for 2025, 3.890.413.803 TRY for 2026 and 4.245.539.587 TRY for 2027. After the reimbursement of anakinra, the total market value was 2.633.982.678 TRY, 2.773.976.914 TRY and 2.992.588.349 TRY for 2025, 2026 and 2027 respectively. The results of the analysis are presented in Table 2 and Figure 1.

Figure 1: The Total Market Value and Budget Impact of Anakinra Reimbursement by the SGK in Türkiye (TRY)

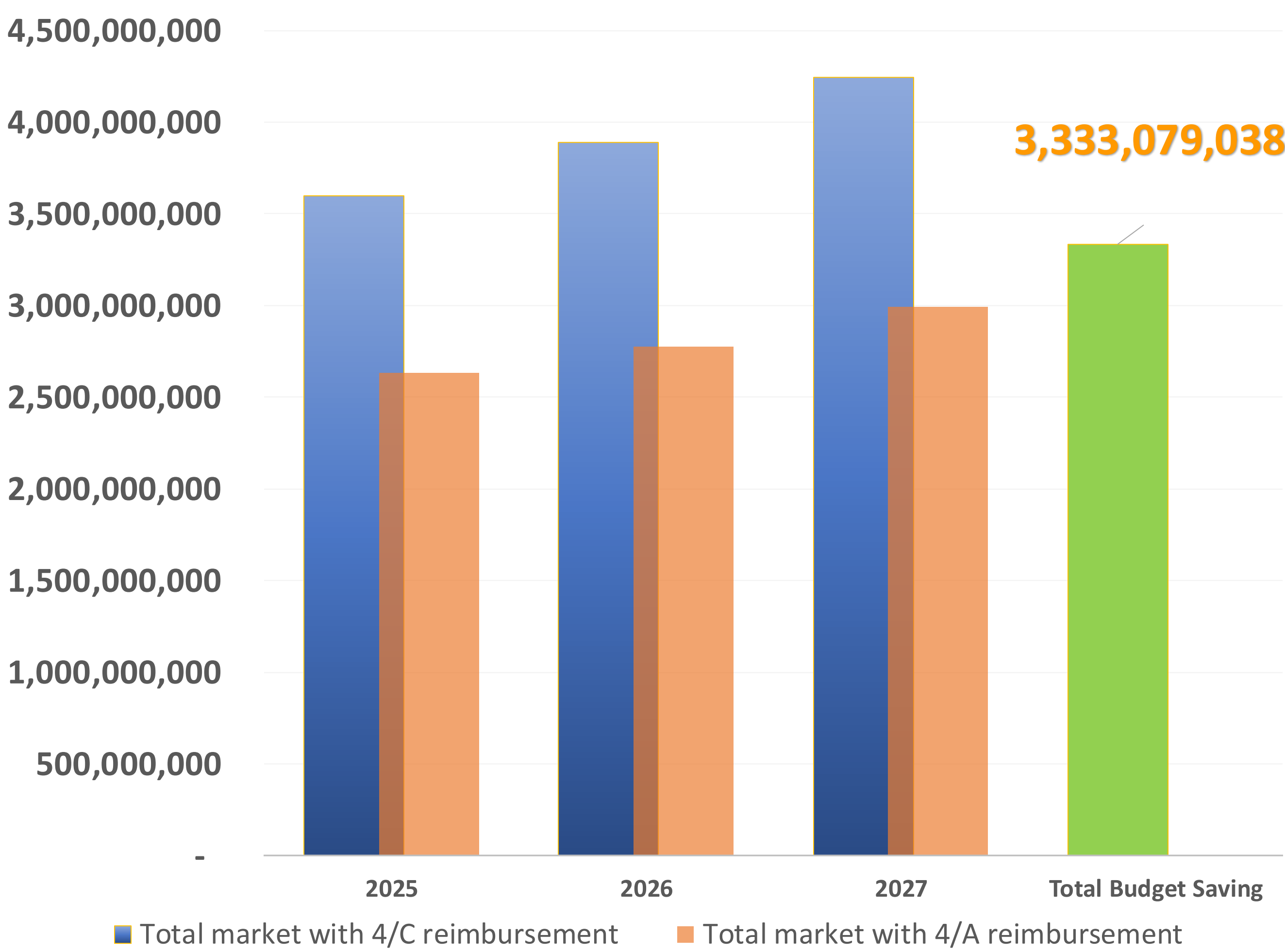


Table 2 : Budget Impact of Anakinra Reimbursement by the SGK in (TRY)

	2025	2026	2027
Budget Impact with 4C Reimbursement			
Canakinumab	2.613.064.730	2.840.287.750	3.124.316.525
Tocilizumab	339.155.969	340.127.874	340.225.064
Anakinra	645.452.890	709.998.179	780.997.997
Total Budget Without Reimbursement	3.597.673.589	3.890.413.803	4.245.539.587
Budget Impact with 4A Reimbursement			
Canakinumab	1.568.884.064	1.630.041.140	1.770.550.175
Tocilizumab	284.891.014	285.707.414	285.789.054
Anakinra	780.207.600	858.228.360	936.249.120
Total Budget with Reimbursement	2.633.982.678	2.773.976.914	2.992.588.349
Total Budget Impact	-963.690.911	-1.116.436.889	-1.252.951.238

References

- ¹Yu JR, Leslie KS. Cryopyrin-associated periodic syndrome: an update on diagnosis and treatment response. *Curr Allergy Asthma Rep.* 2011;11(1):12-20.
- ²Alghamdi M. Familial Mediterranean fever, review of the literature. *Clin Rheumatol.* 2017;36(8):1707-13.
- ³Sari I, Birlik M, Kasifoglu T. Familial Mediterranean fever: An updated review. *Eur J Rheumatol.* 2014;1(1):21-33.
- ⁴Ozen S. Update on the epidemiology and disease outcome of Familial Mediterranean fever. *Best Pract Res Clin Rheumatol.* 2018;32(2):254-60.
- ⁵Modesto, J. Ant’ on, B. Rodriguez et al., “Incidence and prevalence of juvenile idiopathic arthritis in Catalonia (Spain),” *Scandinavian Journal of Rheumatology*, vol. 39, no. 6, pp. 472–479, 2010.
- ⁶Mahroum N, Mahagna H, Amital H. Diagnosis and classification of adult Still’s disease. *J Autoimmun.* 2014;48-49:34–7.

CONCLUSION

Anakinra is a budget saving option for the SGK for treating CAPS, FMF and Still’s disease in Türkiye. The SGK is projected to save 963.690.911 TRY in 2025, 1.116.436.889 TRY in 2026 and 1.252.951.238 TRY in 2027. **The total saving over three years amounts to 3.333.079.038 TRY.**

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