

PHARMAECONOMIC ANALYSIS AND THE APPROPRIATE USE OF IMATINIB MESYLATE IN THE PIEDMONT REGION

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Introduction: Gastrointestinal stromal tumors (GISTs) are the most common mesenchymal tumors of the gastrointestinal tract. Surgery is the mainstay of treatment for patients with operable GISTs. After complete resection, treatment with imatinib (IM) can be proposed as adjuvant therapy to reduce or delay the risk of relapse.

The results of the Scandinavian/German Phase III -(SSG)XVIII/AIO- clinical study regarding adjuvant IM were announced at the ASCO conference in June 2011 and show that after five years 66% of patients receiving IM for three years remained free of recurrence compared to 48% who had received IM for only one year. Therefore the ASCO announcement will determine the new standard of 3 years for adjuvant IM therapy in GIST patients at high risk of recurrence.

The aim of this paper is to analyze the budget impact on Piedmont Region, over 3 years, of the new 3 years lasting IM adjuvant therapy for patients with operable GISTs at high risk of recurrence.

Methods: The analysis was performed on 100 patients, with operable GISTs at high risk of recurrence, related to the Piedmont Region. We estimated that of these patients, after complete tumour resection, 20 were untreated because at low risk of relapse; 20 patients were at intermediate risk of recurrence and received IM for 1 year; 20 patients were at high risk of relapse and were treated with adjuvant IM for 3 years; 20 patients with metastatic disease received IM all li-felong. The price of IM used in the study was fixed in the regional competition in Piedmont (6-2011).

Results and Conclusions: The analysis shows that, within three years, the shift to three years adjuvant IM therapy for patients with operable GISTs at high risk of relapse will triple the cost for IM for these patients (20% of patients with operable GISTs). This is equivalent to an increase of approximately € 1.612.154 in 3 years just for the medicine (43% of total IM expenditure for the 100 operable GIST patients). It could also be supposed that in addition to the medicine amount there will be an increase in the cost of the medical staff, due to increased health visits of patients undergoing adjuvant treatment with IM during the 3 years, and in the costs of instrumental tests necessary to monitoring tumour progression.

Based on the prevision that some type of tumors will progressively turn into chronic conditions, the regional health expenditure is destined to grow because of the high cost of dedicated medicines. The availability of comprehensive databases or regional registries of these treatments would allow a more accurate analysis that does not take into account only the cost of medicines but also the remaining direct and indirect costs related to treatments.