



Response to treatment with imatinib mesylate in previously treated chronic-phase chronic myeloid leukemia patients in a hospital in Brazil

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ABSTRACT. We analyzed the results of treatment with imatinib mesylate in 70 patients with chronic-phase chronic myeloid leukemia who had previously been treated (with second-line or higher imatinib), many of them in a late chronic phase. The median follow-up period was 60.5 months (range 3-100 months). Our objective was to assess the efficacy and safety of treatment. The mean dose was 400 mg per day. The hematologic response rate was 92.1% at six months, while the cumulative rates of major and complete cytogenetic responses were 73.6 and 66.3%, respectively. Molecular response rate improved slowly and steadily over time, reaching 65.8% at 60 months, remaining stable for up to 96 months. The five-year progression-free survival and overall survival were 84 and 89%, respectively. Cytogenetic response by 12 months significantly correlated with overall survival ($P = 0.0007$) and progression-free survival ($P = 0.0280$). Sokal risk score did not differ significantly between subgroups. The medication was well tolerated, with only

16% of patients showing hematologic toxicity grades 3 and 4. At the end of the assessment, 57% of the patients were still on imatinib mesylate; most of those who discontinued treatment (17/30) did so because of unsatisfactory response. Treatment with imatinib mesylate in previously treated chronic-phase chronic myeloid leukemia induced durable responses in a high proportion of patients and was related to satisfactory long-term and event-free survival.

Key words: Chronic myeloid leukemia; Imatinib mesylate; Cytogenetic response