TREATMENT- FREE REMISSION IN CHRONIC MYELOID LEUKEMIA -EXPERIENCE OF A SINGLE BRAZILIAN PRIVATE INSTITUTION USING IMATINIB COPIE

RT Centrone [a], M Bellesso [a], R Santucci [a], DF Dias [a], I Bendit [b], J Aranha [a], F Bruniera [a], AT Trunkel [a], A Alves [a]

[a] *Instituto Hemomed de Oncologia e Hematologia, São Paulo, SP, Brazil*
[b] *Universidade de São Paulo (USP), São Paulo, SP, Brazil*

Introduction: Evidence of several studies suggest that patients who have achieved a sustained stable deep molecular response (DMR) as MR4 and MR4.5 can be safely discontinued with close monitoring without relapse, despite BCR/ABL1 DNA remaining detectable. In Brazil, CML patients have received almost exclusively Imatinib as first-line treatment. However, in both scenarios there is a limit coverage of PCR exams/ year which allows for adequate monitoring but it is not sufficient for the implementation of TFR safely in eligible patients. **Aims:** To report a Brazilian single institution Imatinib discontinuation trial and to evaluate factors impacting treatment -free response (TFR) and treatment free survival (TFS) provided by own founds. **Methods:** From 2020 -2021, 26 eligible patients were invited to participate in a single arm trial of Imatinib discontinuation (DIP). Inclusion criteria: age > 18 years, chronic phase, minimum of 04 years of Imatinib therapy, deep molecular response sustained > or = 02 years (confirmed by 04 tests in the last two years, defined MR4.0 or MR 4.5 and a confirmatory exam at the moment of the screening). Atypical transcripts were excluded. After discontinuation, patients were monitored by RT- PCR monthly in the first year, every two months in the second year and every three months since the third year. Criteria for Imatinib re-initiation: loss of MMR confirmed by two exams, loss of cytogenetic response, loss of hematologic response, disease progression. TFR was calculated from the date of discontinuation until first event: loss of MMR, Imatinib reintroduction, death any cause or last follow up. TFS was calculated from the date of imatinib discontinuation until reintroduction or last follow- up (censoring deaths not related to CML). The costs of exams were provided by own founds of our institution. **Results:** From 26 patients, 20 patients agreed to consent inform to discontinuation of imatinib. 06 patients declined despite information because their insecurity about TFR. Twelve patients (60%) presented MR4. Median age was 52.3 years old and 13 (65%) were female. Median time diagnosis to discontinuation of imatinib 8.04(4.6-15.5) years. Twelve (60%) patients sustained TFR. Seven patients of twelve had presented MR 4 and five had MR 4.5 in the screening, respectively. (p = 0,85). It means 58,3% of the total of patients with MR 4 and 62,5% with MR 4.5. In this interim analysis the median time of follow up was 14.5 (2.7-18.8) months. One patient died due to COVID19 with major molecular response (MMR). Eight (40%) lost MMR and imatinib was restarted. In this group the median time until MMR loss was 7.24 (2.1-13.8) months. At this moment, 07 patients (87,5 %) recovered MMR. In addition, in this group 06 patients (75%) achieved the same level of MR with reintroduction of imatinib with median 5.2 (3.7-6.3) months. Regarding adherence, 4 (20%) had some absences in monthly medical consultations and 1(5%) missed follow-up. Fifteen tests (6.14%) were performed to confirm MR loss, however only in 8 tests (53.3%) were confirmed. In fact, 04 patients (33,33%) still in TFR because of the double confirmatory test. There was no transformation to advanced phases. Gender, age at de diagnosis, age at discontinuation, Sokal, BCR-ABL trasncripts type, duration of Imatinib therapy, duration of MR 4.0 or MR4.5 did not affect TFR. Withdrawal syndrome occurred in 05 patients (25%); 04 patients with grade 1 and 01 patient with grade 2, had been used corticosteroid for few days. **Conclusions:** The preliminary results of this trial demonstrated the feasibility and safety of Imatinib discontinuation, even using Brazilian copies, and the results were similar of that presented in another trials.

https://doi.org/10.1016/j.htct.2022.09.359

FINANCIAL IMPACT OF IMATINIB DISCONTINUATION IN BRAZIL – A PHARMACOECONOMIC STUDY IN CHRONIC MYELOID LEUKEMIA OF A PRIVATE INSTITUTION

RT Centrone, M Bellesso, R Santucci, JBMR Ferreira, LC Travassos, C Espadas, T Gomes, MC Rodrigues, AA Silva

Instituto Hemomed de Oncologia e Hematologia, São Paulo, SP, Brazil

Introduction: Recent studies showed that tyrosine kinase inhibitors (TKI) treatment could be safely discontinued in a selected group of chronic phase (CP) chronic myeloid leukemia (CML) patients that achieved deep molecular response (DMR), making treatment-free remission (TFR) a new goal of therapy. The discontinuation of treatment in patients with sustained molecular response to MR4 or MR4.5, a practice that has been performed in other countries is not feasible in Brazil outside clinical trials because of the lack of coverage for performing RQ-PCR as recommended by the international guidelines. For all these aspects, it seemed essential to us to analyze the financial impact of TKI discontinuation, following strict monitoring criteria, and perform a projection of economic costs in a population of CML patients treated in first-line with imatinib eligible for discontinuation. **Aims:** To demonstrate the feasibility of coverage of Q-PCR to perform discontinuation of imatinib treatment on eligible patients [treatment free-response (TFR)] in Brazil based on the financial impact. **Material and Methods:** From 2020 -2021, 20 eligible patients from a single private institution in Brazil were invited to participate in a single-arm trial of Imatinib discontinuation (DIP). After discontinuation, patients were monitored by RT- PCR monthly in the first year, every two months in the second year, and every three months after the third year. Criteria for Imatinib re-initiation were the same of the Euro-Ski trial. Considering that US$ 1.00 are R$ 5.3 (Brazilian currency- March /2022) for Branded Imatinib – 400 mg/d, the monthly cost has been estimated at R$ 16,933.90 or US$