PB1897 DISCONTINUATION OF IMATINIB IN PATIENTS FOLLOWED FOR CHRONIC MYELOID LEUKEMIA IN DEEP MOLECULAR RESPONSE

**Topic:** 08. Chronic myeloid leukemia - Clinical

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**Background:** Treatment-free remission (TFR) in CML is defined as achieving a deep molecular remission (DMR) corresponding to molecular remissions of grade 4 or >4. Classically, Imatinib allows it to be achieved in nearly 20% of cases.

**Aims:** We present our experience of stopping Imatib (IMc) (a copy of Imatinib)

**Methods:**

This was a study of 25 patients (pts): median age at diagnosis 40 years (9-62) including 2 children and 23 adults, at the time of discontinuation 50 years (18-73), sex ratio M/F=0.92 (12H/13F); the sokal: 11 pts are intermediate risk, 8 low risk and 6 high risk. According to ELTS, 10 pts low-risk, 10 intermediate-risk, and 5 high-risk, all in chronic phase, all Mbcrr/abl and received IMc at 400 mg/day, the first since June 2007 and the last in October 2013. The pts were followed by GeneXpert automated PCR, until deep MR [MMR4 and MMR4.5 ](Xpert BCR-ABL Ultra test) was achieved and maintained for more than 24 months with a hindsight of more than 5 years. Follow-up of discontinuation was done by PCR every month (2 to 3 months during covid-19); resumption of IMc if BCR/ABL transcript > 0.1% and maintenance of IMc discontinuation, if transcript ≤ 0.1% with monitoring. Deep MR (DMR) was completed at a mean of 70 months; 2 pts (8.3%) were in MMR4 and 23 pts (91.7%) in MMR4.5. with a median follow-up of 8.5 years (6-12 years) . Imatib discontinuation was started in January 2019

**Results:**

CHR was maintained in 24 pts, relapse at 6 months in one pt. TFR was lost in 9 pts (36%); [2 pts (20%) at 1 month, 3 pts (30%) at 2 months, 5 pts (50%) at 6 months]. The median duration of TFR was 23.5 months, 16 pts (64%) remained in DMR (2 children and 14 adults), no progression, withdrawal syndrome noted in 36% (9pts) at one month of stopping, mainly musculoskeletal pain in 28% (7pts), skin rash with pruritus in 12% (3 pts), asthenia in12%, palpebral myositis; among patients who presented these events 66.6% (6pts) are still in TFR. For relapsed patients, the resumption of IMc was effective in 9 patients, with MMR4 and MMR4.5 achieved on average at 6 months,

**Summary/Conclusion:** Comments: the FIT rate is 64% in our cohort, the relapses (9/25) occurred very quickly, during the first 6 months, the duration of impregnation in our patients who lost their TFR was on average 9 years (6-12 years), without difference with the patients who maintained the FIT which is 8.7 years (6-13). Sokal and ELTS scores had no influence on FIT since 44.4% (4pts) of intermediate, 33.3% (3pts) of low and 2 of high risk relapsed vs 37.5% (6pts) of intermediate, 25% (4pts) of low and 4 of high risk in FIT, an influence of gender since 77.7% of relapses were men, age and even depth of MMR are all potential factors for cessation but the results in our cohort. The results in our cohort do not confirm their influence since 88.8% of our relapses were in MMR4.5 with a median age of 45 years (42-69)

**Conclusion:** The A-STIM and EURO-SKI studies demonstrate that the depth of response before stopping does not
play a prognostic factor for a good FIT, which is confirmed by our study; therapeutic impregnation is the only factor ensuring the maintenance of the FIT found in the studies less in our cohort, hence the factors ensuring the maintenance of the FIT in CML are still to be determined, in order to select the eligible patients.