EFFICACY AND SAFETY OF RUXOLITINIB IN 132 TURKISH PATIENTS WITH MYELOFIBROSIS: A MULTICENTER AND RETROSPECTIVE ANALYSIS

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Objective

Ruxolitinib has been approved for the treatment of patients with high- or intermediate-risk myelofibrosis with symptomatic splenomegaly.

The aim of this study is to assess the efficacy and safety of ruxolitinib in patients with chronic myeloproliferative neoplasms.

Materials & Methods

Across all of Turkey, 14 centers were enrolled in the study. We retrospectively evaluated 132 patients who treated with ruxolitinib.

Results

Among 132 MPN patients, 72 (54.5%) of them were male, 60 (45.5%) cases were female. Twenty (15.2%) of the patients were post- ET MF, 32 were (24.2%) post-PV MF and 80 (60.6%) were diagnosed as PMF. Hepatomegaly was detected in 63.6% of the patients whereas pruritus was present only 31% of the patients.

Minor neurological and constitutional symptoms were observed in 26.5% and 81% of the patients, respectively. There was thrombosis and bleeding history before diagnosis in 15.2% and 8.3% of the patients, respectively. Only two patients had concomitant cancer history. Antiplatelet, androgen, steroid and erythrocyte stimulating agent treatments were present in 59.9%, 12.1%, 7.6% and 2.3% patients, respectively. Splenectomy was performed only in 3.8% of the patients. Conventional cytogenetic analysis was applied in 31 patients. Twenty three patients had normal karyotype and 8 patients had complex karyotype. Leukemic transformation was observed in 6 (4.5%) patients. Only one patient was undergone hematopoietic stem cell transplantation (Table 1).

All patients had first line cytoreductive treatment. Hydroxyurea (85.2%) was the most common drug as first line treatment. Anagrelide (n=18) and interferon (n=14) were the most common drugs as second line treatment. Eight patients were used third line treatment. Interferon was the most common drug.

Twenty patients were lost. Exitus reasons were pneumonia/sepsis in 10 patients, myocardial infarction (n=1), acute respiratory distress syndrome (n=19, bleeding (n=1), and cholangiocellular carcinoma (n=1) in other patients.

Table 1: clinical parameters of patients with MPN

Parameter	Data
Age	58 (26- 83)
Spleen size before ruxolitinib(mm)	220 (110-350)
White blood cell (x10 ³ /µl)	10.75 (0.8- 61.3)
Platelet (x10 ³ /µl)	346 (42- 1920)
Hemoglobin (gr/dl)	10.8 (6. 6- 20.7)
JAK-2 mutation (Y)(%)	66.9
MPL mutation (Y)(%)	14.6
Ruxolitinib dosage (mg)	30 (10- 40)
Improvement of constitutional symptoms after ruxolitinib (Y/N) (%)	88/ 19 (82.2)
Spleen size after ruxolitinib(mm)	193 (110-270)

Discussion

We observed a reduction in spleen size after ruxolitinib treatment in Turkish patients with MPN and constitutional symptoms were improved. Ruxolitinib is both safe and efficacious in Turkish patients with MPNs.

References

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