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634.MYELOPROLIFERATIVE SYNDROMES: CLINICAL AND EPIDEMIOLOGICAL

Ruxolitinib or Interferon-α Treatment As a Protective Strategy for Patients with Philadelphia-Negative Myeloproliferative Neoplasms (MPN) during the COVID-19 Pandemic

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Background: Both myeloproliferative neoplasms (MPNs) and coronavirus disease 2019 (COVID-19) are characterized by systemic inflammation and with intrinsic thrombotic risk. Series of studies found that ruxolitinib treatment was efficacy for COVID-19 in patients with hyperinflammation, and interferon-α as the innate immune system rapidly to combat viral infections, has been considered a potential therapeutic strategy to treat COVID-19 disease. However, ruxolitinib or interferon-α treatment with response outcomes for MPN patients were still unidentified.
Patients and methods : We prospectively analyzed the outcome of ruxolitinib (n=175) or interferon-α (n=165) treatment group versus other available therapy (n=478) group for MPN patients during the COVID-19 Pandemic (from May, 2020, to December, 2022). Outcomes were the rate of thrombosis, bleeding, acute respiratory distress syndrome (ARDS) and death.
Results: There were no difference between ruxolitinib and interferon-α treatment group in thrombosis rate, bleeding, the rate of ARDS and death. Thrombosis occurred lower frequently in patients treated with ruxolitinib or interferon-α than other available therapy group (1.1% vs 1.8% vs 5.6%, p = 0.004), rates of bleeding (1.7% vs 1.8% vs 2.0%, p = 0.93), rates of ARDS (1.1% vs 1.8% vs 4.2%, p = 0.048), and death (6.8% vs 3.0% vs 6.9%, p = 0.22) of COVID-19 disease were similar.
Conclusion: Ruxolitinib or interferon-α therapy was associated with lower thrombosis event and lower rate of ARDS for MPN patients in COVID-19 Pandemic.
Keywords: MPN, Ruxolitinib, thrombosis event, interferon-α

Disclosures No relevant conflicts of interest to declare.

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