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721.ALLOGENEIC TRANSPLANTATION: CONDITIONING REGIMENS, ENGRAFTMENT AND ACUTE TOXICITIES

Efficacy and Safety of Herombopag for the Treatment of Secondary Failure of Platelet Recovery after Allogeneic Hematopoietic Stem Cell Transplantation: The Single Center Prospective Study from China

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Background Thrombocytopenia is a frequent and serious complication after Allogeneic hematopoietic stem cell transplantation (allo-HSCT). It often has a multifactorial etiology, including poor graft function, GVHD, drugs, infections, and microangiopathy. Prolonged thrombocytopenia after HSCT, which is an independent adverse prognostic factor for transplant-related mortality (TRM) and overall survival, has not yet been systematically investigated. Among then, secondary failure of platelet recovery (SFPR) is the most common type of thrombocytopenia after allo-HSCT. SFPR refers to thrombocytopenia that develops after initial platelet engraftment and is not due to graft rejection or relapse. It defined as a decline in platelet count of $< 20\times10^9$/L for 7 consecutive days or requiring transfusion support after achieving a sustained platelet count $> 50\times10^9$/L without transfusion for 7 consecutive days after HSCT. **Methods** Here, we conduct a retrospective study to the efficacy and safety of herombopag in 81 patients with SFPR after allo-HSCT. Patients were administered the following treatment regimen: 5 mg/d herombopag; if the PLT count was less than 50×10^9/L for at least 2 weeks, the dose was increased to 7.5 mg/d; if the PLT count was 200-400$\times10^9$/L, the dose was reduced; and if the PLT count was greater than 400×10^9/L, herombopag was terminated. **Results** Baseline platelet count of patients before treatment is 12 (2-20)$\times10^9$/L. The initial time of treatment is 5 (3-14) months after allo-HSCT, and the median duration of treatment is 103 (45-276) days. Among the 81 patients, 51 patients (62.9%) had complete response (CR, defined as PLT$\geq50\times10^9$/L without PLT transfusion for 7 continuous days), 9 patients (11.1%) had a partial response (PR, defined as PLT of [20-50] $\times10^9$/L without PLT transfusion for 7 continuous days), and 21 patient (26.0%) had no response (NR, defined as the application of the maximum tolerated dose for 8 weeks and PLT$<20\times10^9$/L or the need for PLT transfusion). The median time to obtain CR was 49 (18-229) days after treatment. The time to reach 20×10^9/L$<$PLT$<50\times10^9$/L in the 9 patients with PR was 74 (52-276) days after treatment, respectively. One patient died of intracranial hemorrhage and two patients died of severe infection. **Conclusion** Our results indicated that herombopag can promote platelet recovery for patients with SFPR after allo-HSCT, thereby improving the survival rate of patients and improving the quality of life of patients after transplantation, and providing a new method and strategy for the treatment of thrombocytopenia after allo-HSCT.

Disclosures No relevant conflicts of interest to declare.

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