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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 $< 20 \times 10^{9}$ /L for 7 consecutive days or requiring transfusion support after achieving a sustained platelet count $> 50 \times 10^{9}$ /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 \times 10 ⁹/L, the dose was reduced; and if the PLT count was greater than 400 \times 10 ⁹/L, herombopag was terminated. **Results** Baseline platelet count of patients before treatment is 12 (2-20)×10 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≥50×10 ⁹/L without PLT transfusion for 7 continuous days), 9 patients (11.1%) had a partial response (PR, defined as PLT of [20-50] ×10 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 $PLT < 20 \times 10$ 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<50×10 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 guality 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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