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615.ACUTE MYELOID LEUKEMIAS: COMMERCIALY AVAILABLE THERAPIES, EXCLUDING TRANSPLANTATION AND CELLULAR IMMUNOTHERAPIES
Is Short-Course Antibiotic Therapy Suitable for Pseudomonas Aeruginosa Bloodstream Infections in Onco-Hematology Patients with Febrile Neutropenia? Results of a Multi-Institutional Analysis

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Background. Several studies have suggested that short-course antibiotic therapy does not increase infection recurrence or mortality in immunocompetent patients. While similar studies in patients with hematological malignancies were rare.

Methods. This cohort included onco-hematology patients with *Pseudomonas aeruginosa* (PA) bloodstream infections (BSI). These patients had undergone chemotherapy or hematopoietic stem cell transplantation (HSCT) and experienced febrile neutropenia. Inverse probability of treatment weighting was used to balance the confounding factors.

Results. 434 patients met eligibility criteria (short-course, 7-11 days, n=229; prolonged therapy, 12-21 days, n=205). In the weighted cohort, after multivariate analysis, the recurrent PA infection at any site or mortality within 30 days of completing therapy occurred in 8 (3.9%) patients in the short-course group and in 10 (4.9%) in the prolonged-course group ($p = 0.926$), the recurrent infection within 90 days occurred in 20 (9.8%) patients in the short-course group and in 13 (6.3%) patients in the prolonged-course group ($p = 0.276$), and the recurrent fever within 7 days occurred in 17 (8.3%) patients in the short-course group and in 15 (7.4%) in the prolonged-course group ($p = 0.980$). While multidrug-resistant PA, relapsed/refractory hematological malignancies and perianal mucositis were the key determinants of infection recurrence/mortality other than the short course of antibiotic treatment ($p < 0.05$ for all). On average, patients who received short-course antibiotic therapy spent 3.3 fewer days in the hospital ($p < 0.001$).

Conclusions. We found that onco-hematology patients with PA BSI who received approximately 8 days of antibiotics had similar clinical outcomes to those who received a prolonged-course therapy, with the potential added benefit of earlier hospital discharge.

Disclosures No relevant conflicts of interest to declare.

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