

**P0657 The bloodstream infections of patients with haematological malignancies**Habip Gedik\*<sup>1</sup>

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**Background:** It was aimed to assess the bloodstream infections (BSIs) during the neutropenic episodes (NE) of patients with hematological malignancies.

**Material/methods:** The bloodstream infections (BSIs) during NE of adult patients with hematological malignancies followed up at the department of Hematology of Ministry of Health Okmeydanı Research Hospital, Istanbul, Turkey between November 2010 and November 2012 were assessed, retrospectively.

**Results:** A total of 282 febrile episodes of 126 consecutive patients with neutropenia was retrospectively analyzed during the study period, with 65 cases examined in the first year and 78 in the second year. The mean age was  $51.73 \pm 14.4$  years (range: 17–82 years) and 60 patients were female. The mean MASCC score was  $17.18 \pm 8.27$  (Table 1). During 282 febrile episodes in 126 patients, 66 (23%) episodes of bacteremia and 24 (8%) episodes of fungemia were recorded in 48 (38%) and 18 (14%) patients, respectively.

Gram-negative bacteria (GNB) caused 74% (n: 49) of all bacteremia episodes. Carbapenem Resistant (CR)-GNB (n: 6) caused 12% and 9% of Gram-negative bacteremia episodes and all bacteremia episodes, respectively. Clinical and microbiological responses were achieved using either PIP-TAZ or CEP-SUL therapy in 76% (32/42) of the cases with bacteremia caused by carbapenem-sensitive Gram-negative bacteria (CS-GNB). The fatality rate was 50% among six patients with bacteremia caused by CR-GNB as a result of two cases of death associated with carbapenem-resistant *A. baumannii* and one case of death associated with carbapenem-resistant *P. aeruginosa*. Over the 2-year period, 18 cases with fungemia in 24 FN episodes, 19 cases with probable invasive pulmonary aspergillosis (IPA) infection in 25 FN episodes, 38 cases with possible IPA infection in 42 NE, 30 cases with suspected IFI in 31 episodes, and 5 cases (5%) with hepatosplenic candidiasis were diagnosed and treated.

**Conclusions:** BSIs, which occur during febrile neutropenic episodes in hematological patients due to GNB could be treated as soon as possible taking into local antimicrobial resistance status and antimicrobial stewardship. Non-azole antifungal drugs should be preferred as an empirical antifungal therapy in case of invasive fungal infection without pulmonary findings due to increasing azole resistance.

