

P0295 **When to start antifungal prophylaxis with posaconazole in AML patients: on or after chemotherapy cycles (CC)?**

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**Background:** The goal of this study was to evaluate the efficacy of posaconazole prophylaxis in AML patients when it was started on the CC or on the first day after the CC.

**Materials/methods:** Patients with AML and prophylaxis with posaconazole were included in this study. Antifungal prophylaxis with oral posaconazole suspension (dosage 200 mg three times daily) was started on the CC (in the first 2 days) or on the first day after the CC. Efficacy of prophylaxis was evaluated in cases of using posaconazole for  $\geq 7$  days.

**Results:** A total of 59 patients with AML (median age 39 (17–62) years) in 77 chemotherapy cycles received prophylaxis with posaconazole. Administration of posaconazole predominated in patients with *de novo* AML (84.5%) on 1st induction CC (66.3%). Neutropenia was present in all patients with median duration of 22 days. Median duration of prophylaxis was 21 (2–57) days. Prophylaxis with posaconazole was interrupted in 28 (36.4%) of 77 CC, mainly due to diarrhea (28.6%), and was resumed in 17 (61%) of 28 cases in a median of 4 days. In 72 (93.5%) of cases duration of posaconazole prophylaxis was  $\geq 7$  days, in 5 (6.5%) cases  $< 7$  days. Invasive pulmonary aspergillosis (probable) was in 2 (2.7%) of 72 cases. Administration of posaconazole with duration  $\geq 7$  days was in 46 cases on CC, in 26 cases – after the CC. Patients using posaconazole after the CC in comparison with patients receiving the drug on the CC had significantly less interruptions of prophylaxis (11,5% vs 41,3%,  $p=0.009$ ) and a reduction in duration of posaconazole using (19 days vs 27 days,  $p=0.007$ ). One case of invasive aspergillosis was registered in each group.

**Conclusions:** We confirmed the efficacy of posaconazole for prophylaxis of invasive mycoses in patients with AML during neutropenia. Administration of posaconazole for prophylaxis on first day after the end of CC results in saving of drug, reducing of posaconazole use on 8 days and does not increase the incidence of invasive mycoses.