

Determining Optimal Antifungal Prophylaxis in Acute Myeloid Leukemia Patients Receiving Venetoclax

Abstract

Purpose: This study looks at patients with AML that received antifungal prophylaxis to compare the effectiveness of the antifungal agent. At the University of Kansas Health System (TUKHS), antifungal prophylaxis recommendations have not yet been determined, though fluconazole or posaconazole are often prescribed. The primary outcome is to compare the rate of fungal infections in patients receiving venetoclax in combination with fluconazole or posaconazole. The secondary outcome is to compare the duration of cytopenias [specifically absolute neutrophil count (ANC) and thrombocytopenia] in patients receiving the previously mentioned treatment. It is hypothesized that patients receiving fluconazole antifungal prophylaxis will have higher rates of invasive fungal infections.

Methods: This study is a single center, retrospective cohort study looking at 100 patients at TUKHS from November 1, 2018 through January 31, 2020. Patients 18 years and older who received treatment with venetoclax in combination with a hypomethylating agent for AML will be included. Data that will be analyzed include dosing of venetoclax, the hypomethylating agent used, dosing of the hypomethylating agent, the response seen after each cycle, and days from induction therapy until ANC and platelet recovery. If a fungal infection is present, additional data collected include antifungal agent used, location of the fungal infection, and fungal pathogen.

Results: Study and data collection are ongoing.

Conclusion: Not known yet.

Keywords: Acute Myeloid Leukemia (AML), Venetoclax, Hypomethylating agent, antifungal prophylaxis