

Session B55 - NONTUBERCULOUS MYCOBACTERIA

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# P377 - A Retrospective Analysis to Assess the Effect of Targeted Clinical Interventions on the Discontinuation Rate of Amikacin Liposome Inhalation Suspension Therapy Among Patients Treated for Refractory Mycobacterium Avium Complex Lung Disease

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Area E, Hall F (North Building, Exhibition Level),  
Moscone Center

## Participant

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## Abstract

**RATIONALE:** A national rare pharmacy identified that the primary reason patients discontinue amikacin liposome inhalation suspension (ALIS) is due to adverse events. Utilizing this data, targeted clinical interventions were implemented by the dispensing pharmacy to decrease premature discontinuation of therapy. Patients on ALIS may benefit from additional support, however, there are currently no studies assessing targeted clinical interventions and their effect on ALIS discontinuation.

**METHODS:** This retrospective analysis utilizes a national rare pharmacy's database to identify patients receiving ALIS from April 1, 2020 to February 28, 2021. Targeted clinical interventions, including side effect mitigation strategies, education on goals of therapy, and expectations of taking ALIS, were initiated in March of 2020 and continue to be made by pharmacists telephonically to patients. The total population is defined as patients receiving at least one shipment of ALIS within the timeframe. The discontinue population includes patients receiving at least one shipment who also discontinued therapy within the timeframe. Patient profiles were reviewed to obtain patient demographics, shipments and reasons for discontinuation to assess the percentage of patients who discontinued therapy due to adverse events and persistence on therapy after clinical interventions were initiated.

**RESULTS:** The leading reasons for discontinuation of ALIS were adverse events, completion of therapy and prescriber's decision. Among the total population (n=344), 21.2% (n=73) discontinued due to an adverse event and remained on therapy for an average of 71 days. The overall discontinue population (n=133) remained on therapy for an average of 91 days. Patients who reported completion of ALIS (n=13) persisted on therapy for an average of 139 days, in which 4 patients reported culture conversions and 3 patients reported improvement in symptoms or lung function. Cough, dysphonia and fatigue were among the most common adverse events that led to discontinuation of ALIS in a previously completed study, which prompted the addition of side effect management education for these side effects. Compared to the previous study, patients in this study who experienced cough, dysphonia, and fatigue were able to persist on ALIS therapy approximately 25 days longer.

**CONCLUSION:** Adverse events continue to be the primary reason patients prematurely discontinue ALIS. In this study, patients who discontinued therapy due to cough, dysphonia, and fatigue persisted on therapy longer, compared to a previously completed study. This improvement suggests that targeted

clinical interventions made by the dispensing pharmacy may benefit this patient population by helping them persist on therapy longer.