Background: Patients on palliative care are often susceptible to infection due to decreased immunity from immune-suppressive chemotherapy. Antibiotics have been suggested for symptom relief in these patients if they have contraindications, to improve their remaining quality of life. However, the benefit of antibiotic usage in palliative care patients is questionable as studies have concluded that infections had no correlation with mortality in these patients. To date, there are no studies looking at the implementation of Antimicrobial Stewardship Program (ASP) on patients on palliative management. Hence, we aim to evaluate the impact of ASP interventions on patient safety and outcomes in these patients.

Methods: A retrospective review was conducted on palliative care patients who were prescribed with broad-spectrum antibiotics and were audited by ASP from 2010 to 2013 at Singapore General Hospital. Primary outcomes evaluated were length of stay and 30-day mortality between those whose ASP interventions were accepted and those whose interventions were rejected.

Results: 348 cases were reviewed by ASP and 232 interventions were recommended. Majority of the interventions recommended were to discontinue antibiotic use (81.0%), followed by narrowing of empirical coverage (6.9%), and de-escalating antibiotic based on available cultures (6.9%). The overall acceptance rate was 60.3%, with physician preference and death within 48 hours of intervention being the most common reasons for rejection. There was no difference in the length of stay of patients whose ASP interventions were accepted (17.9 ± 15.5 days) and those whose interventions were rejected (16.2 ± 19.9 days) (p = 0.31). There was also no difference in overall 30-day mortality (p = 0.18) between the two groups.

Conclusion: ASP interventions were able to reduce inappropriate antibiotics use in palliative patients without any concessions to the safety of the patients.