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## Evaluation of Antibiotic Use and Duration for Febrile Neutropenia

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# **Evaluation of antibiotic use and duration** for febrile neutropenia

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# Introduction

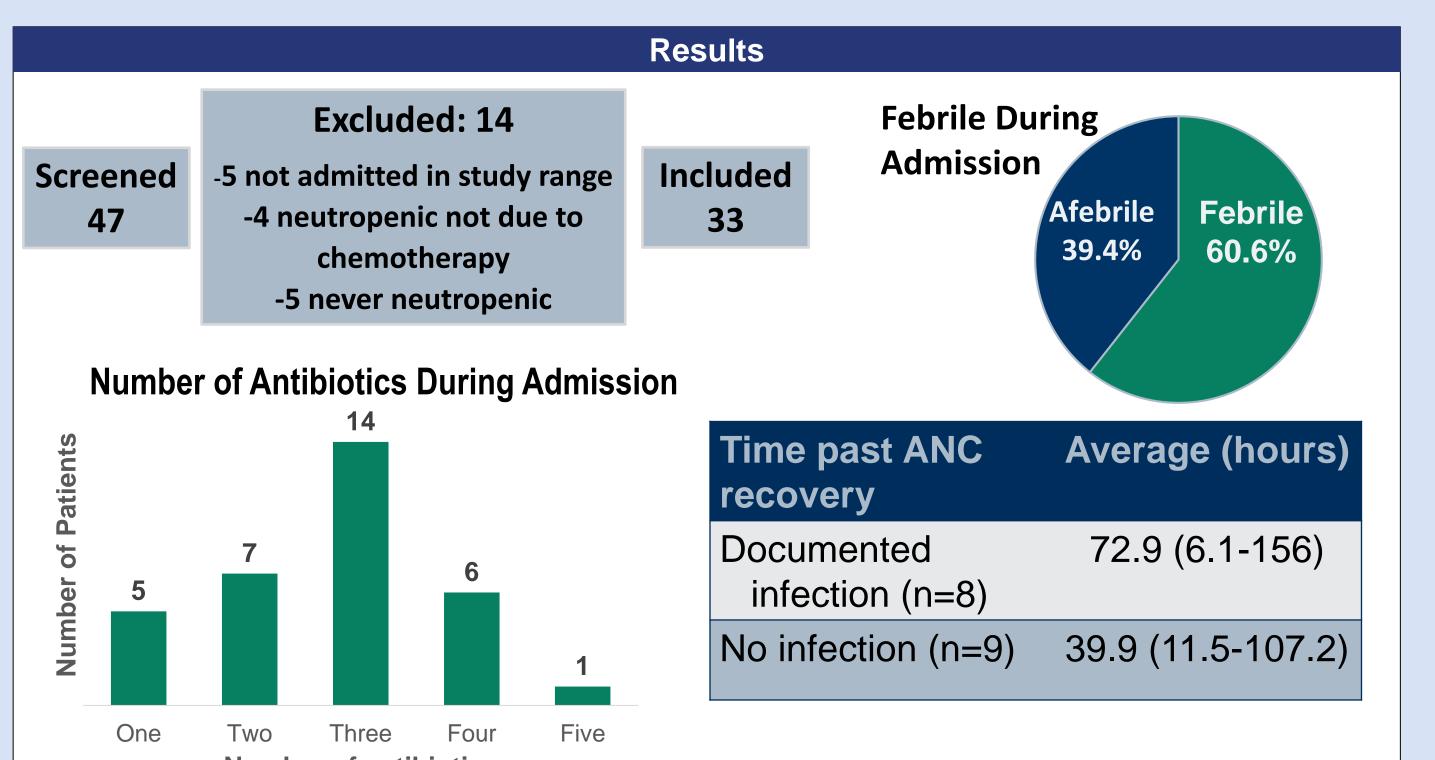
- Febrile neutropenia (FN) affects over 80% of patients with hematologic cancer and 10% to 50% of patients with solid tumors
- National Comprehensive Cancer Network (NCCN) guidelines recommend empiric broad-spectrum monotherapy until the absolute neutrophil count (ANC) is over 500 cells/ $\mu$ L.
- Extended durations with broad-spectrum agents leads to increased risk of antibiotic resistance, toxicity, and C. difficile infection.

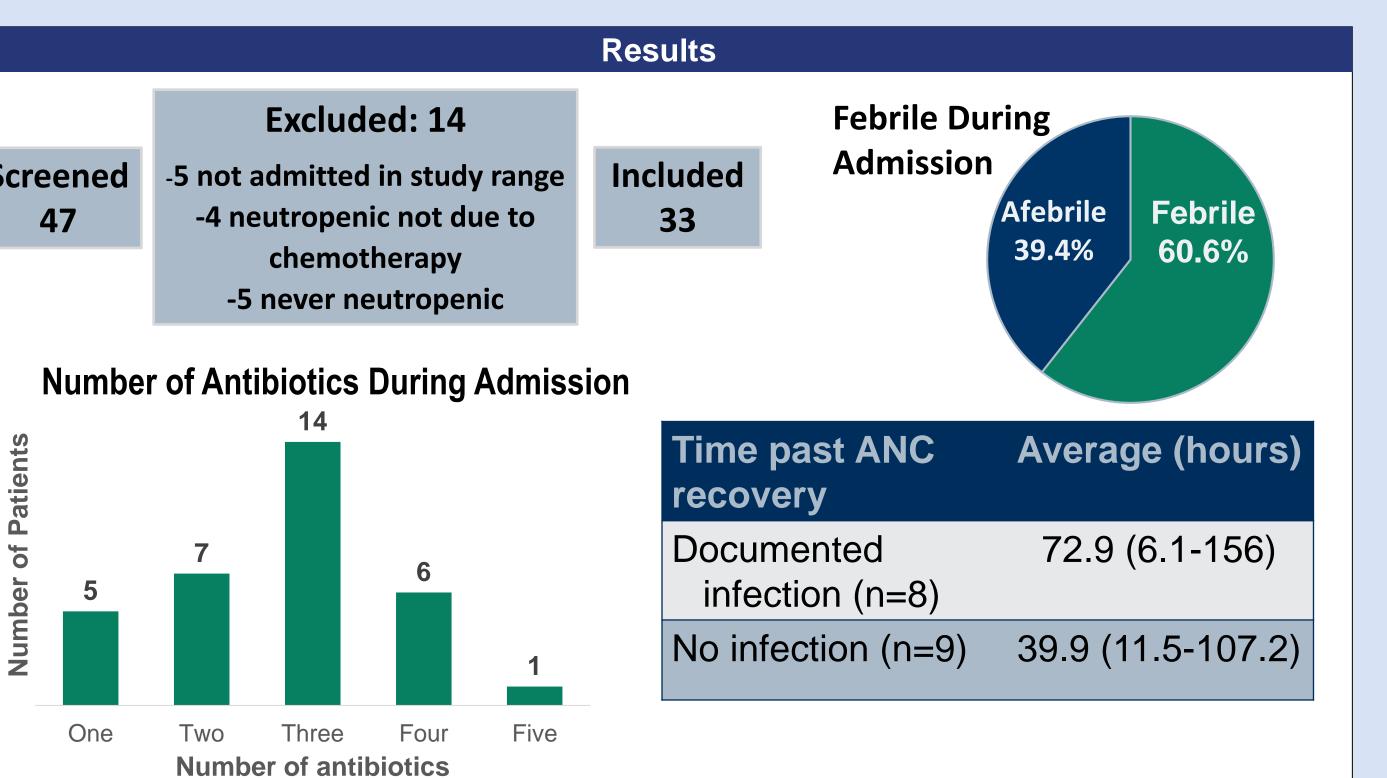
# Purpose

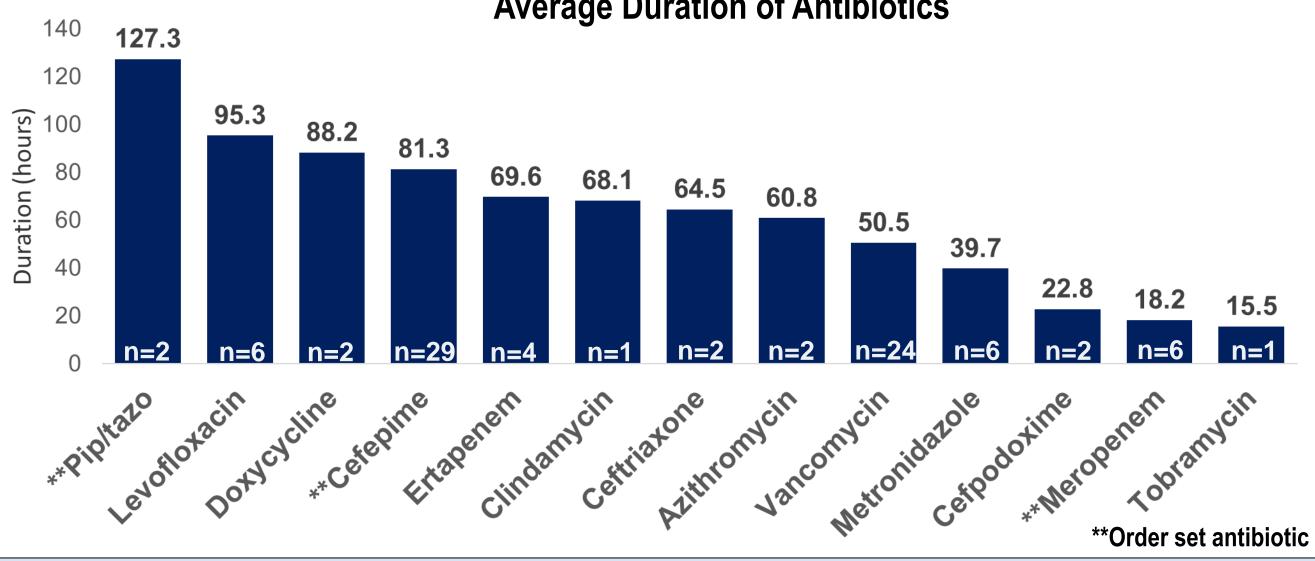
• To evaluate antibiotic prescribing patterns for patients with FN to optimize antibiotic stewardship

# **Methods**

- IRB-approved, retrospective chart review from 1/1/2020 to 8/31/2020
- Charts identified based on FN diagnosis code
- Antibiotic administered, antibiotic duration, ANC, and culture data were assessed







# **Average Duration of Antibiotics**

- infection.

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Authors of this presentation disclose the following relationships with commercial interests related to the subject of this poster:

Kayla Jensen: Nothing to disclose Patricia Aubert: Nothing to disclose Joy Ward: Nothing to disclose Ann Wigton: Nothing to disclose

- Network. 2020;1:FEV10-11.



# CentraCare St. Cloud Hospital

**Evaluation** 

• Antibiotics continued past ANC recovery in 27% of patients without documented

• Medications were ordered from the FN order set in 33% of patients.

• Vancomycin was commonly prescribed although patients had few risk factors.

• In 85% of patients, multiple antibiotics were given although NCCN

recommends IV monotherapy.

Conclusion

There is an opportunity to improve antibiotic selection and duration for patients admitted for FN

# **Disclosure**

# References

1. Freifeld, A., Bow, E., et al. Clinical Practice Guideline for the Use of Antimicrobial Agents in Neutropenic Patients with Cancer: 2010 Update by the Infectious Diseases Society of America. Clinical Infectious Diseases. 2011;52(4):e56-e93.

2. Baden, L., Swaminathan, S., et al. Prevention and Treatment of Cancer-Related Infections. National Comprehensive Cancer