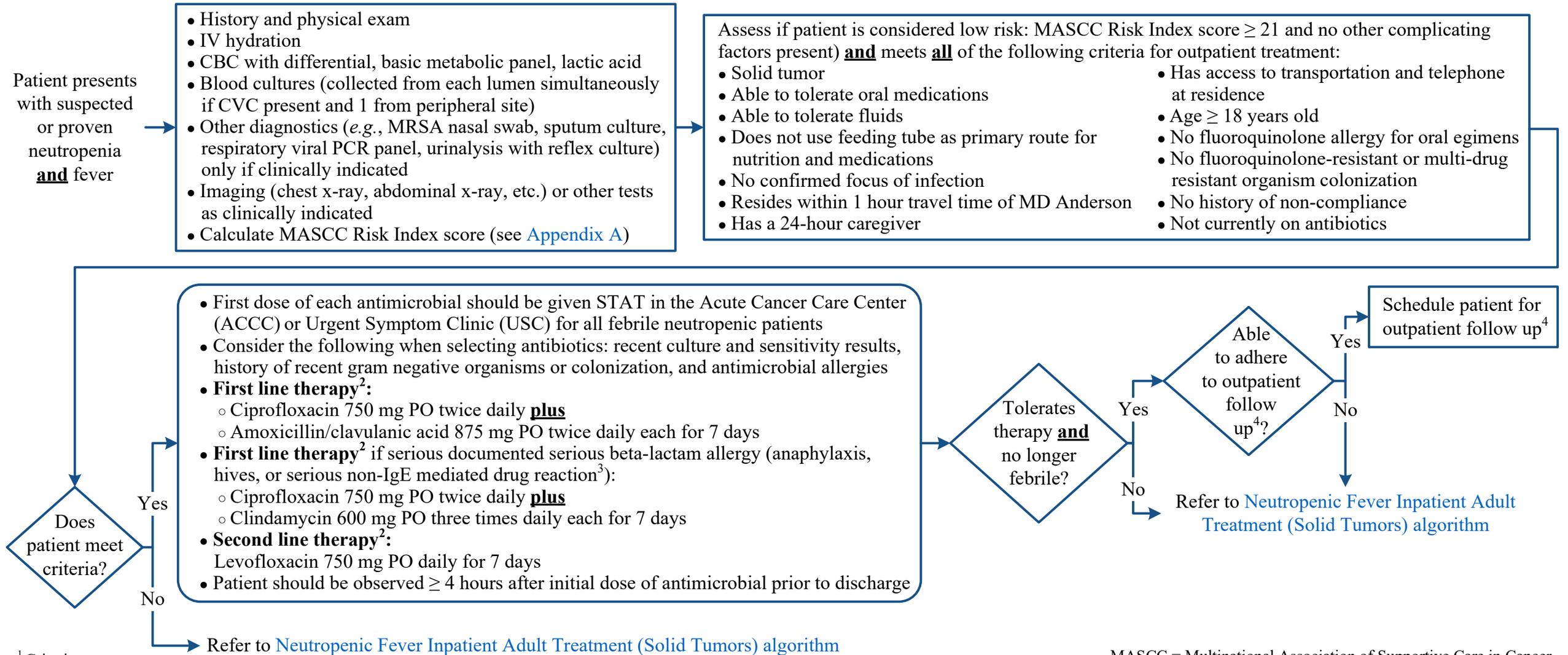


Neutropenic Fever¹ Outpatient Treatment For Solid Tumor Patients (Age ≥ 18 years)

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. Local microbiology and susceptibility/resistance patterns should be taken into consideration when selecting antibiotics. This algorithm should not be used to treat pregnant women.



¹ Criteria:

- Absolute neutrophil count (ANC) ≤ 0.5 K/microliter **and** a temperature either $\geq 38.3^\circ\text{C}$ or $\geq 38^\circ\text{C}$ for 1 hour or longer **or**
- ANC ≤ 1 K/microliter and an expected decline to ≤ 0.5 K/microliter over 48 hours **and** a temperature either $\geq 38.3^\circ\text{C}$ or $\geq 38^\circ\text{C}$ for 1 hour or longer

² Doses indicated are for patients with normal renal/hepatic function. Refer to institutional renal dosing guide (internal only) or tertiary dosing references (e.g., Lexicomp) for renal dosing recommendations.

³ Examples of non-IgE mediated drug reactions include Stevens-Johnson syndrome, toxic epidermal necrolysis, and drug reaction with eosinophilia and systemic symptoms (DRESS)

⁴ See [Appendix B](#): Outpatient Follow up

MASCC = Multinational Association of Supportive Care in Cancer
 MRSA = methicillin-resistant *Staphylococcus aureus*

Neutropenic Fever Outpatient Treatment For Solid Tumor Patients (Age ≥ 18 years)

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson’s specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient’s care. Local microbiology and susceptibility/resistance patterns should be taken into consideration when selecting antibiotics. This algorithm should not be used to treat pregnant women.

APPENDIX A: Multinational Association for Supportive Care in Cancer (MASCC) Risk Index Score

Characteristic	MASCC Score
Burden of illness: no or mild symptoms	5
No hypotension	5
No chronic obstructive pulmonary disease	4
Solid tumor	4
No dehydration	3
Burden of illness: moderate symptoms	3
Outpatient status	3
Age < 60 years	2

- “Burden of illness” not cumulative
- Patients with score ≥ 21 are considered low risk

APPENDIX B: Outpatient Follow Up¹

- Schedule outpatient visit for Days 2, 3 and 7; **and** video visit follow-up for Days 4, 5, and 6
- Day 2: CBC with differential; repeat creatinine if baseline > 1.2 mg/dL
- Day 3: CBC with differential, repeat creatinine
- Day 7: CBC with differential, repeat creatinine

CDU = Clinical Decision Unit

¹ Refer to ACCC/CDU Neutropenic Scheduling Orders or if in the USC, refer to the AMB USC Fever/Febrile Neutropenia (Express Lane)

Neutropenic Fever Outpatient Treatment For Solid Tumor Patients (Age ≥ 18 years)

Disclaimer: This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. Local microbiology and susceptibility/resistance patterns should be taken into consideration when selecting antibiotics. This algorithm should not be used to treat pregnant women.

SUGGESTED READINGS

- Freifeld, A. G., Bow, E. J., Sepkowitz, K. A., Boeckh, M. J., Ito, J. I., Mullen, C. A., . . . Wingard, J. R. (2011). Executive summary: 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*, 52(4), 427-431. <https://doi.org/10.1093/cid/ciq147>
- National Comprehensive Cancer Network. (2023). *Prevention and Treatment of Cancer-Related Infections* (NCCN Guideline Version 2.2023). Retrieved from https://www.nccn.org/professionals/physician_gls/pdf/infections.pdf
- Taplitz, R. A., Kennedy, E. B., Bow, E. J., Crews, J., Gleason, C., Hawley, D. K., . . . Flowers, C. R. (2018). Outpatient management of fever and neutropenia in adults treated for malignancy: American Society of Clinical Oncology and Infectious Diseases Society of America Clinical Practice guideline update. *Journal of Clinical Oncology*, 36(14), 1443-1453. <https://doi.org/10.1200/JCO.2017.77.6211>
- Zimmer, A. J., & Freifeld, A. G. (2019). Optimal management of neutropenic fever in patients with cancer. *Journal of Oncology Practice*, 15(1), 19-24. <https://doi.org/10.1200/JOP.18.00269>

Neutropenic Fever Outpatient Treatment For Solid Tumor Patients (Age ≥ 18 years)

Disclaimer: *This algorithm has been developed for MD Anderson using a multidisciplinary approach considering circumstances particular to MD Anderson's specific patient population, services and structure, and clinical information. This is not intended to replace the independent medical or professional judgment of physicians or other health care providers in the context of individual clinical circumstances to determine a patient's care. Local microbiology and susceptibility/resistance patterns should be taken into consideration when selecting antibiotics. This algorithm should not be used to treat pregnant women.*

DEVELOPMENT CREDITS

This practice consensus statement is based on majority opinion of the Neutropenic Fever experts at the University of Texas MD Anderson Cancer Center for the patient population. These experts included:

Core Development Team Leads

Antimicrobial Stewardship Team

Workgroup Members

Angela S. Bassaragh, MBA, APRN (General Internal Medicine)

Patrick Chaftari, MD (Emergency Medicine)

Wendy Garcia, BS[♦]

Tami N. Johnson, PharmD (Pharmacy Clinical Programs)

Loretta Nastoupil, MD (Lymphoma/Myeloma)

Zayd Adnan Razouki, MBBCH, MS (General Internal Medicine)

Mary Lou Warren, DNP, APRN, CNS-CC[♦]

[♦]Clinical Effectiveness Development Team