## MDAnderson Cancer Center (Solid Tumors)

Making Cancer History®

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.

Note: For patients receiving stem cell transplantation or immune effector cell (IEC) therapy, please refer to the Neutropenic Fever Inpatient Adult Treatment (Hematologic Cancers including Lymphoma/Myeloma) algorithm for management.

#### PRESENTATION

ASSESSMENT

### TREATMENT

Page 1 of 6





#### <sup>1</sup>Criteria:

• Absolute neutrophil count (ANC)  $\leq 0.5$  K/microliter <u>and</u> temperature either  $\geq 38.3^{\circ}$ C or equal to  $38^{\circ}$ C for 1 hour or longer <u>or</u>

• ANC  $\leq 1$  K/microliter and an expected decline to  $\leq 0.5$  K/microliter over 48 hours <u>and</u> temperature either  $\geq 38.3^{\circ}$ C or equal to 38°C for 1 hour or longer <sup>2</sup> See Inpatient Sepsis Management - Adult algorithm for sepsis screening criteria

<sup>3</sup> Patient must have a Multinational Association of Supportive Care in Cancer (MASCC) Risk Index Score of  $\geq 21$  (see Appendix A) and no other complicating risk factors and meet the following criteria listed below for outpatient treatment:

- Solid tumor
- Able to tolerate oral medications
- Able to tolerate fluids
- Does not use feeding tube as primary route for nutrition and medications
- No confirmed focus of infection
- Resides within 1 hour travel time of MD Anderson
- Has a 24-hour caregiver
- Has access to transportation and telephone at residence
- Not currently on antibiotics

- Age  $\geq$  18 years
- No fluoroquinolone allergy for oral regimens
- No history of non-compliance
- No fluoroquinolone-resistant or multi-resistant organism colonization

Department of Clinical Effectiveness V4 Approved by the Executive Committee of the Medical Staff on 07/16/2024

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### Page 2 of 6

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### MDAnderson Neutropenic Fever Inpatient Adult Treatment Cancer Center (Solid Tumors)

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Page 3 of 6

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**RE-ASSESSMENT** 



<sup>1</sup>Refer to institutional antimicrobial dosing guide (internal only) or tertiary dosing references (e.g., Lexicomp) for dosing recommendations

<sup>2</sup>Consider narrowing therapy based on cultures and sensitivities (e.g., discontinue anti-MRSA or anti-VRE agents if no gram positive organisms are identified, negative MRSA nares swab, and/or no active cellulitis)

<sup>3</sup>Consider transition to antimicrobial prophylaxis if otherwise indicated and no clear infectious source of fever is identified

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### Page 4 of 6

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

	MASCC Score
Characteristic	Weight
Burden of illness: no or mild symptoms	5
No hypotension	5
No chronic obstructive pulmonary disease	2 4
Solid tumor	4
No dehydration	3
Burden of illness: moderate symptoms	3
Outpatient status	3
Age < 60 years	2
<ul> <li>"Burden of illness" not cumulative</li> <li>Patients with score ≥ 21 are considered lo</li> </ul>	w risk

#### **APPENDIX B: Potential Indications for use of Therapeutic G-CSF**

Consider therapeutic use if the following risk factor(s) are present:

- Sepsis
- Age > 65 years old
- Pneumonia or other documented infection
- Invasive fungal infection
- ANC < 100 K/microliter
- Expected neutropenia duration > 10 days
- Hospitalization at the time of fever or prior episode of neutropenic fever

Note: Continue G-CSF if patient was receiving as daily prophylaxis.

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Page 5 of 6

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#### SUGGESTED READINGS

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#### **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:

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