



Febrile Neutropenia Empiric Treatment

2 months and older

(Adapted with Permission by IWK Health Centre June 2021)

K07002307 Jun/7/2002 M

SCA, TEST Visit

ER0000145/12 HCN: 22222222

Van den Hof, TEST / TEST, Maureen

Dec/8/2012

Patient: _____

Alert Record Reviewed No Allergies Known

Allergies–Adverse Reactions–Cautions: _____

Age _____ Patient's Weight _____ kg Date of Patient's Weight _____

DIAGNOSIS: _____

Items preceded by a **bullet (•)** are active orders. Items preceded by a **checkbox (☐)** are only actioned if checked (✓)

Refer to the APPHON website for the link to the complete guidelines (<https://www.apphon-rohppa.com>)

• Phone pediatric oncologist immediately. Time consulted: _____ hours

FLUIDS AND NUTRITION

• NaCL 0.9% at (1.5 x maintenance, maximum 150 mL/hour) _____ mL/hour IV, reassess daily and step down to maintenance daily fluid intake once patient is afebrile and stable

INVESTIGATIONS

• CBCD, lactate, Na+, K+, creatinine, blood glucose within 30 minutes of arrival

Blood gas if hemodynamically unstable

• Blood from all CVL lumens (peripheral only if no CVL*) for culture and sensitivity within 30 minutes of arrival and prior to starting IV antibiotics (*if blood is drawn from CVL there is no need to draw an additional peripheral culture)

Urinalysis Urine culture (no PUC samples – all urine cultures must be midstream or catheter only)

NPA (PCR) for: Influenza/RSV Extended viral panel (ID approval required)

COVID19 (if extended viral panel not available)

Throat mycoplasma

Other: _____

Repeat daily:

• CBCD, Na+, K+ while receiving daily IV fluids, and daily creatinine if receiving vancomycin or tobramycin

• Blood cultures from all lumens for culture and sensitivity **if** temperature is greater than or equal to 38° C one hour apart or greater than or equal to 38.3° C, or if patient appears unwell.

MONITORING

• BP, HR, RR, O₂ saturation and temperature q1h until stable, then q4h

DIAGNOSTIC IMAGING

If clinically indicated Chest X-ray Other: _____

MEDICATIONS

• All patients to receive antibiotics within 60 minutes of presentation, or less as indicated below

• Alternate antibiotics through each lumen once daily

If **NO penicillin allergy AND [For IWK inpatients ONLY; NOT receiving or clearing high dose methotrexate]:**

2 to 6 months of age: piperacillin–tazobactam (80 mg/kg/dose, max:4000 mg/dose) _____ mg IV q6h

6 months and greater: piperacillin–tazobactam (100 mg/kg/dose, max:4000 mg/dose) _____ mg IV q6h
(Dosing based on piperacillin component)

If **penicillin allergy OR [For IWK inpatients ONLY; receiving or clearing high dose methotrexate]:**

cefepime (50 mg/kg/dose, max: 2000 mg/dose) _____ mg IV q8h

If patient presents with abdominal or perianal tenderness or possible typhlitis and is not receiving piperacillin–tazobactam or meropenem **ADD:**

metronidazole (10 mg/kg/dose, max: 500 mg/dose) _____ mg IV q8h

For **UNSTABLE patient or patient with line associated infection**

ADD vancomycin (to be started immediately after blood cultures drawn):

Less than 12 years of age: vancomycin (15 mg/kg/dose, max: 1000 mg/dose) _____ mg q6h

12 years of age and older: vancomycin 15 mg/kg/dose, max: 1000 mg/dose) _____ mg q8h

• Vancomycin–Pre (trough) level pre 4th or 5th dose

AND (for unstable patient)

Less than or equal to 6 years of age: tobramycin (10.5 mg/kg/dose, max: 400 mg/dose) _____ mg IV q24h

Greater than 6 years of age: tobramycin (8 mg/kg/dose, max: 400 mg/dose) _____ mg IV q24h

• Tobramycin–Post (peak) level 30 minutes after first infusion complete

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Prescriber Signature Printed Surname/Registration #

DATE (yyyy/MON/dd) Time (24hour/hh:mm) Verified By (Signature) Printed Surname

Note: Page 2 Clinician Information Only

"Unofficial document if printed.

To ensure this is the latest version, please see www.apphon-rohppa.com "



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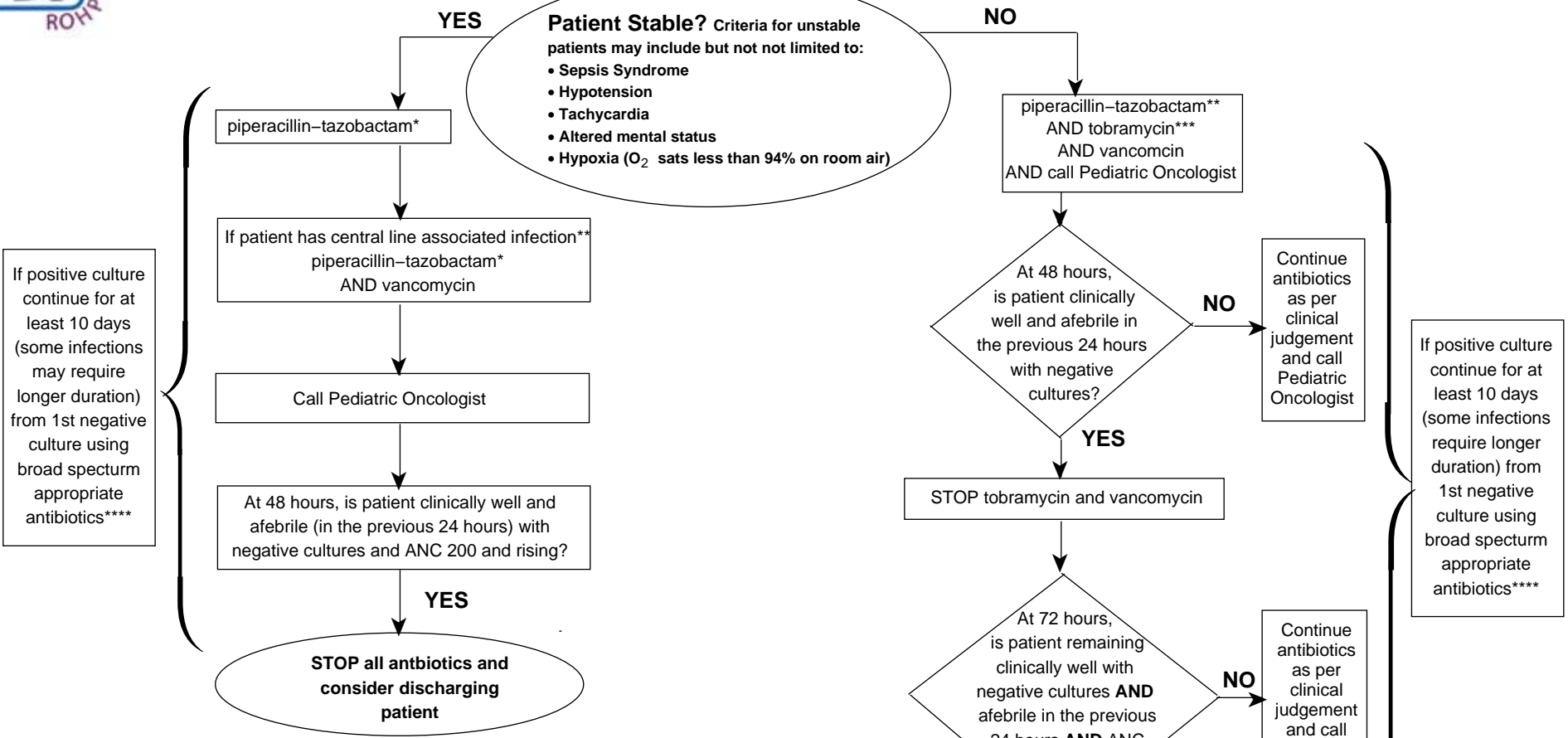
IWKFENEOR



Febrile Neutropenia Orders and Algorithm for treatment of children less than 2 months of age see APPHON guideline (<https://www.apphon-rohppa.com>)

Patient Stable? Criteria for unstable patients may include but not limited to:

- Sepsis Syndrome
- Hypotension
- Tachycardia
- Altered mental status
- Hypoxia (O₂ sats less than 94% on room air)



* If penicillin **ALLERGIC OR** receiving or clearing high-dose methotrexate, use cefepime instead of piperacillin-tazobactam

** Central line associated infection (CLABSI) may present as fever and/or rigors related to recent access to the CVAD, infection at the catheter exit site or as infection along the subcutaneous course of the catheter

*** Any patient with hearing loss (sensorineural hearing loss 30 dBHL or greater at one or more frequencies between 250 Hz to 4000 Hz) **OR** renal impairment (i.e. GFR 60 mL/min/1.73 m² or less, serum creatinine 1.5 times upper limit of normal for age) **AVOID** aminoglycoside and contact pediatric hematologist/oncologist or infectious disease specialist. In these cases antibiotics of choice are meropenem (20 to 40 mg/kg/dose IV q8h maximum 6 g/day) AND vancomycin

**** Redraw culture from all lumens to ensure negative before discontinuation of antibiotics

