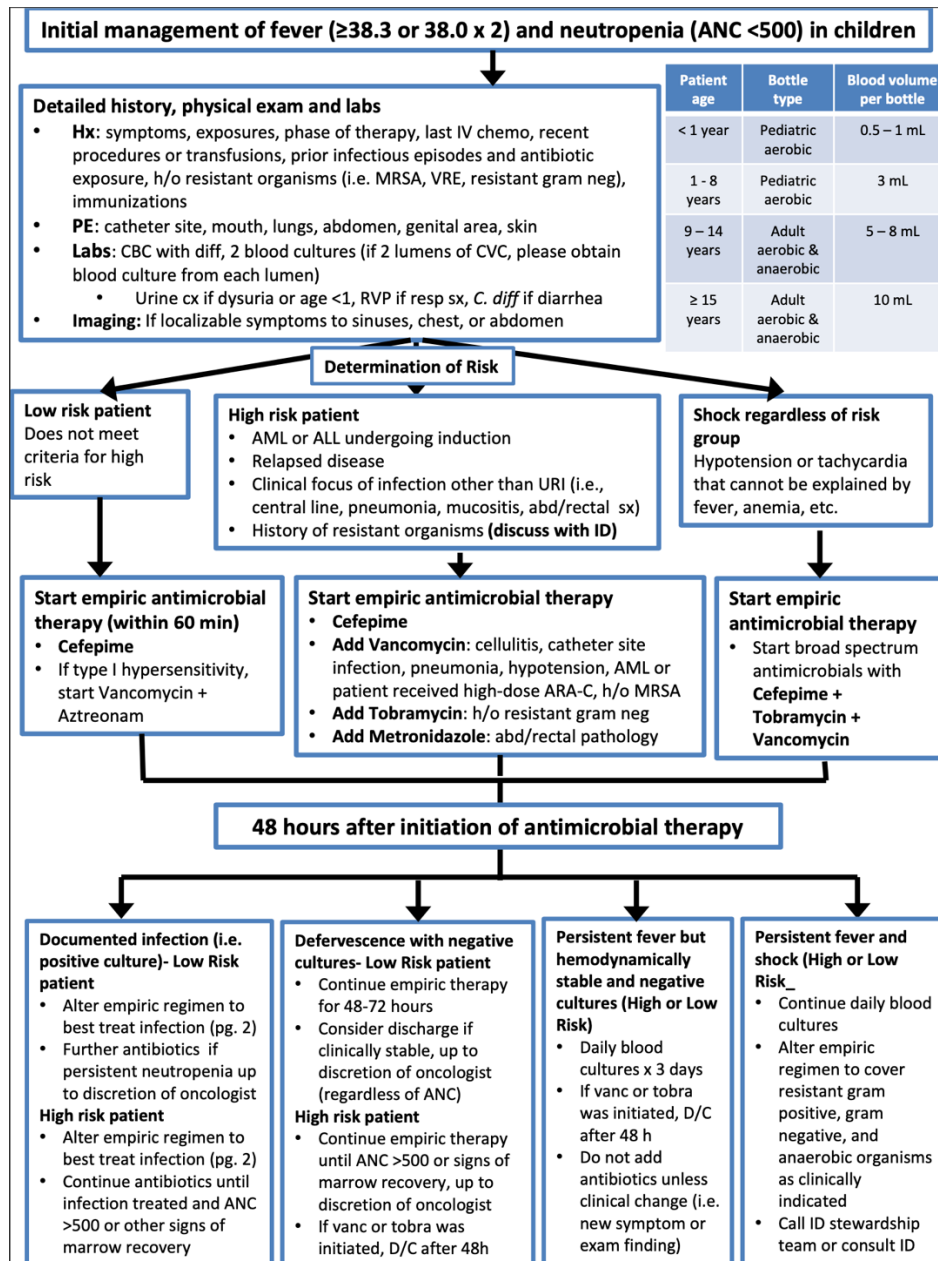


PEDIATRIC FEBRILE NEUTROPENIA GUIDELINE

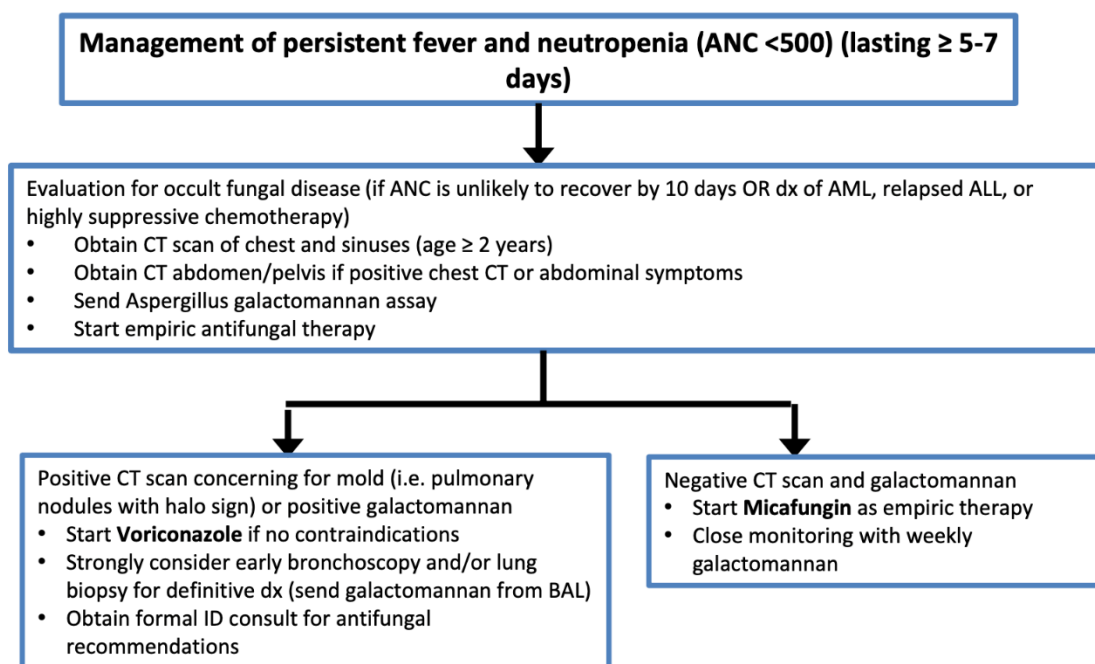
Initial management of fever (≥ 38.3 or 38.0×2) and neutropenia (ANC < 500) in children



Modification of empiric regimen in setting of documented infection

Documented infection	Modification of empiric regimen
Gram positive bacteremia	Add vancomycin until susceptibilities available; Consider ethanol lock x 5 days if broviac (not port).
Gram negative bacteremia	Add tobramycin until susceptibilities available; Consider ethanol lock x 5 days if broviac (not port). Consider line removal if Pseudomonas .
Pneumonia	Consider addition of vancomycin if MRSA suspected.
Neutropenic enterocolitis	Add metronidazole.

Management of persistent fever and neutropenia (ANC < 500) (lasting > 5-7 days)



Antimicrobial dosages and monitoring parameters

Antimicrobial agent	Dose	Monitoring parameters	Trough level
Cefepime	50 mg/kg/dose IV q8h (max 2000 mg/dose)	<ul style="list-style-type: none"> CBC 	N/A
Meropenem	20 mg/kg/dose IV q8h (max 1000 mg/dose)	<ul style="list-style-type: none"> CBC 	N/A
Metronidazole	10 mg/kg/dose q8h (max 1500 mg/day)		N/A
Micafungin	1.5-3 mg/kg IV once daily (max 150 mg/dose)	<ul style="list-style-type: none"> Renal function, LFTs 	N/A
Tobramycin	2.5 mg/kg/dose Q8H <i>Note: ≥ 18 years old, consider extended interval dosing (may call pharmacy for guidance)</i>	<ul style="list-style-type: none"> Renal function 	<ul style="list-style-type: none"> Peak drawn 1 hour from start of infusion of the 3rd dose Trough drawn 30 minutes prior to 4th dose Goal peak: 6-8 mcg/mL Goal trough: 0.5-1 mcg/mL
Vancomycin	15 mg/kg/dose q6h (max 4000 mg/day)	<ul style="list-style-type: none"> Renal function 	<ul style="list-style-type: none"> Trough prior to 4th dose Goal trough: range is 10-20 mcg/mL (discuss with pharmacy)
Voriconazole	<p>Age < 2: IV: 9 mg/kg q12h PO: 9 mg/kg q12h</p> <p>Age 2-11: IV: 9 mg/kg q12h x 2 doses, then 8 mg/kg q12h (max 350mg/dose) PO: 9 mg/kg q12h</p> <p>Age ≥ 12: IV: <ul style="list-style-type: none"> < 50kg: 9 mg/kg q12h x 2 doses, then 4 to 8 mg/kg q12h ≥ 50kg: 6 mg/kg q12h x 2 doses, then 3 to 4 mg/kg q12h PO: <ul style="list-style-type: none"> < 50kg: 9 mg/kg q12h (max 350mg/dose) ≥ 50kg: 200 mg q12h </p>	<ul style="list-style-type: none"> LFTs, renal function, electrolytes AEs: visual disturbances, photosensitive rash, encephalopathy 	<ul style="list-style-type: none"> Trough after 5 days Goal: 2-5 µg/mL (trough of 1-2 may be ok) <i>Note: Intermittent therapeutic drug monitoring is warranted</i>

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