

# Neutropenic Sepsis : Continuing Antimicrobial Management Algorithm 2

Reassess at 48 hours

Still  
Febrile?

Yes

No

**Persistent fever at 48 hours:**

- Reassess daily
- Repeat history and exam
- Repeat investigations

**Febrile but stable:**

- Continue antibiotics based on C&S
- Review need for ongoing Gentamicin and Vancomycin/ Teicoplanin

**Febrile and unstable:**

- Continue antibiotics
- Discuss with microbiology or ID
- ADD Vancomycin/Teicoplanin if not already on them
- Consider Meropenem if already on vancomycin / teicoplanin and still febrile and unstable.

**Neutropenic  
AND/OR Culture  
positive**

Continue antibiotics based on c/s.  
Review need for ongoing Vancomycin and Gentamicin

**Afebrile,  
Culture negative,  
Neutropenia  
resolved**

Stop antibiotics

**Treatment duration**

**Antibiotics:**

- Treat for 7 to 14 days or until neutrophil count recovery.
- Review need for ongoing Gentamicin and Vancomycin at 48 hours.

**Antifungals:**

- Treat for 14 days after first negative blood culture for candidaemia.
- Liaise with Microbiology / Infectious Diseases for duration of treatment for all other fungal infections.

**Persistent Fever at 96 - 168 hours (4-7 days)**

Consider fungal infection and perform appropriate investigations

First line: Caspofungin 70mg IV stat, then 50mg IV every 24 hours (70mg if >80kg)

Second line: Ambisome 3mg/kg IV every 24 hours (after test dose 1mg over 10 minutes)

Failing to respond or unstable patient  
Discuss with Microbiology or ID

## Other Infections

### Treatment of Viral Infections

Local Herpes Simplex:  
Oral: Valaciclovir 1g PO every 12 hours OR  
IV: Aciclovir 5mg/kg IV (IBW\*) every 8 hours  
Herpes Zoster:  
Aciclovir 10mg/kg IV (IBW\*) every 8 hours, then change to Valaciclovir 1g PO every 8 hours when lesions healing  
Consider CMV serology & PCR  
\*IBW = Ideal Body Weight

### Treatment of PJP (PCP)

Co-Trimoxazole IV/PO  
120mg/kg daily in 4 divided doses  
PLUS steroids for severe disease

### Tuberculosis

Consider TB and perform appropriate investigations after consultation with Microbiology / Infectious Diseases.

### Consider need for prophylaxis:

See prophylaxis guidelines  
Antiviral: Valaciclovir PO 500mg BD

PJP: Co-trimoxazole 960mg twice daily on Mon/Wed/Friday

Antifungal: Posaconazole tabs 300mg twice daily on first day then 300mg once daily thereafter OR Ambisome 100mg MWF iv (unlicensed)

This is a brief summary guideline. For more detailed and further information see full Guidelines for the Management of Febrile Neutropenic Patients in CUH