

## ▼ Spontaneous Bacterial Peritonitis (SBP) or Spontaneous Bacterial Pleuritis, Cirrhosis Adult Panel

For adults with cirrhosis diagnosed with Spontaneous Bacterial Peritonitis (ascites PMN greater than 250 cells/mm<sup>3</sup>) or Spontaneous Bacterial Pleuritis (pleural fluid PMN greater than 500 cells/mm<sup>3</sup> or greater than 250 cells/mm<sup>3</sup> with positive culture).

Recommendations for Plasma Protein Albumin infusions (ordered using the Plasma Protein Albumin 25% panel):

Day 1 - Albumin 25% (100ml=25g) IV 1.5 g/kg. Maximum dose is 400ml (100g) per day.

THEN

Day 3 - Albumin 25% (100ml-25g) IV 1g/kg on day 3 of SBP treatment. Maximum dose is 400ml (100g) per day.

Blood Culture Panel - Adult x 2

### Diagnostic Imaging

Ultrasound guided paracentesis - Consider repeating a diagnostic paracentesis after 48 hours of antibiotic therapy. With non-response (less than 25% reduction in the PMN count), consider broadening antibiotic therapy and ruling out secondary peritonitis: open and merge Gastroenterology Ascites Fluid Analysis panel (diagnostic).

Consider CT Abdomen if polymicrobial culture or signs of secondary peritonitis and no contraindication to CT.

CT Abdomen

Once

### Medications

#### Antibacterial

##### Select Risk Factor:

Consider the following risk factors when choosing appropriate antibiotics: Hospitalization or antibiotic use within the last 3 months, from long-term care or on hemodialysis, infection starting at or after 72 hours post admission, previous documented colonization or infection with MRSA, VRE or an Extended Spectrum Beta-lactamase producing organism, presentation with sepsis/septic shock. In all patients, it is essential to review and narrow the antibiotic spectrum as soon as possible (72 hours) using culture and susceptibility results. Most patients will need treatment for 7 days.

##### For patients without risk factors for healthcare associated infection, hospital acquired infection or sepsis/septic shock

cefTRIAxone IV

2 g, intravenous, every 24 hours, scheduled

##### ciproFLOxacin IV or PO

ciprofloxacin IV

400 mg, intravenous, every 12 hours

ciprofloxacin tablet

500 mg, oral, 2 times per day

##### Risk factors for healthcare associated infection (hospitalization or antibiotic use within the last 3 months, from long-term care, or on hemodialysis)

piperacillin-tazobactam IV

4.5 g, intravenous, every 8 hours, scheduled

##### If patient has a known Penicillin Allergy

cefTRIAxone injection 2 g

2 g, intravenous, every 24 hours, scheduled, First dose today at 1500

vancomycin IV

##### Vancomycin Loading dose followed by scheduled dose

vancomycin injection 25 mg/kg/dose

25 mg/kg/dose, intravenous, once, today at 1500, For 1 dose

Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.

Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.

Consult pharmacist before rescheduling administration times as it may impact drug levels.

##### Followed By

vancomycin injection 15 mg/kg/dose

15 mg/kg/dose, intravenous, every 12 hours, First dose tomorrow at 0300

Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.

Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.

Consult pharmacist before rescheduling administration times as it may impact drug levels.

If patient has a known Cephalosporin Allergy

ciproFLOXacin IV or PO

- ciprofloxacin IV  
400 mg, intravenous, every 12 hours, scheduled
- ciprofloxacin tablet  
500 mg, oral, 2 times per day

vancomycin IV

Vancomycin Loading dose followed by scheduled dose

vancomycin injection 25 mg/kg/dose  
25 mg/kg/dose, intravenous, once, today at 1500, For 1 dose  
Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.  
Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.  
Consult pharmacist before rescheduling administration times as it may impact drug levels.

**Followed By**

vancomycin injection 15 mg/kg/dose  
15 mg/kg/dose, intravenous, every 12 hours, First dose tomorrow at 0300  
Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.  
Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.  
Consult pharmacist before rescheduling administration times as it may impact drug levels.

Hospital acquired infection (infection starting at or after 72 hours post admission) OR previous documented colonization or infection with an Extended Spectrum Beta-lactamase or AmpC producing organism

meropenem IV

500 mg, intravenous, every 6 hours, scheduled, adjust dose based on creatinine clearance

Sepsis/septic shock

meropenem and vancomycin IV

meropenem 1 gram injection vial 500 mg  
500 mg, intravenous, every 6 hours, scheduled, First dose today at 1800  
adjust dose based on creatinine clearance

vancomycin IV

Vancomycin Loading dose followed by scheduled dose

vancomycin injection 25 mg/kg/dose  
25 mg/kg/dose, intravenous, once, today at 1500, For 1 dose  
Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.  
Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.  
Consult pharmacist before rescheduling administration times as it may impact drug levels.

**Followed By**

vancomycin injection 15 mg/kg/dose  
15 mg/kg/dose, intravenous, every 12 hours, First dose tomorrow at 0300  
Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results.  
Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.  
Consult pharmacist before rescheduling administration times as it may impact drug levels.

meropenem and linezolid

meropenem 1 gram injection vial 500 mg  
500 mg, intravenous, every 6 hours, scheduled, First dose today at 1800  
adjust dose based on creatinine clearance

linezolid IV or PO

- linezolid injection  
600 mg, intravenous, every 12 hours, scheduled, use instead of Vancomycin if suspected VRE
- linezolid tablet  
600 mg, oral, every 12 hours, scheduled, use instead of Vancomycin if suspected VRE

For any unstable patient with prior colonization/infection with MRSA, add in

vancomycin IV

Vancomycin Loading dose followed by scheduled dose

vancomycin injection 25 mg/kg/dose

25 mg/kg/dose, intravenous, once, today at 1500, For 1 dose

Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables- reassess at 48-72h with culture results. Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.

Consult pharmacist before rescheduling administration times as it may impact drug levels.

**Followed By**

vancomycin injection 15 mg/kg/dose

15 mg/kg/dose, intravenous, every 12 hours, scheduled, First dose tomorrow at 0800

Based on actual body weight; maximum maintenance dose is 2 grams. Adjust based on CrCl and dosing tables-reassess at 48-72h with culture results. Vancomycin pre-level 30 minutes or less prior to 4th dose. Do not hold next dose while waiting for results.

Consult pharmacist before rescheduling administration times as it may impact drug levels.

For any unstable patient with prior colonization/infection with VRE, add in

linezolid IV or PO

linezolid injection

600 mg, intravenous, every 12 hours, scheduled, use instead of Vancomycin if suspected VRE

linezolid tablet

600 mg, oral, every 12 hours, scheduled, use instead of Vancomycin if suspected VRE

Long Term Prophylaxis

After IV antibiotics are complete start secondary prophylaxis with ciprofloxacin or co-trimoxazole. (Consider switching to Norfloxacin 400 mg PO daily at discharge as the first choice for long-term therapy).

Note: These are currently defaulted to start in 7 days from start of order. Change start time as needed.

ciprofloxacin tablet

500 mg, oral, daily, 2 hours after breakfast, Starting H+168 Hours

sulfamethoxazole-trimethoprim 800 mg-160 mg per tablet

160 mg of trimethoprim, oral, daily, Starting H+168 Hours