

## Transcript of overview of bug/drug combinations from review session

This list is a compilation of the discussion at the end of the review session regarding main drugs for certain bugs. It is not comprehensive (see syllabus for that), but it is meant to simplify and hopefully clarify somewhat. Just because a drug is not included with a certain bug, does NOT mean that drug does not work for that bug. These are the more frequently used drugs.

### Staph aureus

Usually penicillin-resistant (if not, use penicillin)  
Semisynthetic penicillins/penicillinase-resistant penicillins (oxacillin, diclox, etc.)  
If MRSA, Vancomycin

### Group A Strep

Penicillin  
If allergic, macrolide or maybe 1<sup>st</sup> generation cephalosporin

### Strep pneumo

Penicillin if sensitive  
If intermediate resistant to penicillin, use 3<sup>rd</sup> generation cephalosporin (ceftriaxone, cefotaxime); if high-level resistance may need vancomycin  
3<sup>rd</sup> generation quinolones (levofloxacin)

### Enterococcus

Penicillin or Ampicillin  
If resistant, Vancomycin  
In endocarditis, use with aminoglycoside for synergy

### Group B strep

Penicillin or ampicillin

### Anaerobes:

Metronidazole, 2<sup>nd</sup> gen cephalosporin, clindamycin, carbapenem, penicillin, extended spectrum penicillin with beta-lactamase inhibitor, vancomycin (vanco for clostridium and C. dif)

### Enterobacteriaceae (e.g., E. coli, Klebs, Enterobacter)

3<sup>rd</sup> generation cephalosporin, quinolones, aminoglycosides, carbapenems, extended-spectrum penicillin (i.e., piperacillin), aztreonam

### Pseudomonas

Extended-spectrum penicillin, quinolones, aminoglycosides, carbapenems, 3<sup>rd</sup> generation cephalosporin (ceftazidime)

### Rickettsia/ehrlichia/borrelia burgdorferi

Tetracycline (Doxycycline); (amoxicillin and ceftriaxone also for borrelia)

Gonorrhoea

Penicillin if sensitive; otherwise 3<sup>rd</sup> generation cephalosporin (ceftriaxone), or quinolones (but resistance in Asia, U.S. West coast)

Syphilis

Penicillin

Maybe doxycycline if penicillin-allergic, but consider desensitization

Chlamydia trachomatis

Macrolide/azalide, tetracycline

Atypical pneumonias (mycoplasma, legionella, chlamydia, bordetella)

Macrolides/azalide, quinolones, +/- tetracycline

Resistant Gram positive cocci (e.g., vancomycin-resistant enterococcus or vancomycin-resistant staphylococcus)

Linezolid, Streptogramins, Daptomycin (note streptogramins active against enterococcus faecium but not faecalis)