

Beta Lactams

penicillins

	anti-staph	amino	+ beta-lactamase inhibitor
PCN VK PCN G • strep throat • syphilis	oxacillin (bactocil) dicloxacillin - PO (diclozil) nafcillin • bacteremia (unipen) • endocarditis • staph • strep • gram + • MSSA	amoxicillin (amoxil) ampicillin (omnipen) • doc: enterococcus • strep • e coli • MCAT • Klebsiella • H. flu	amoxicillin-clavulanate (augmentin) • upper respiratory infections • skin-soft tissue infections • dog bites piperacillin-tazobactam (zosyn) ampicillin-sulbactam (unasyn) ticarcillin-clavulanate (timentin) • strep • gram - • beta-lactamase • anaerobes • enterococcus

cephalosporins

1st	2nd	3rd	4th	5th
cephalexin - PO (keflex) cefazolin - IV (ancef) NO enterococcus! • gram + • staph • strep • MSSA • beta-lactamase - • gram - rods	cefuroxime (ceftin) • UTI • SSTI • upper respiratory infections cefoxitin • anaerobes ONLY! (mefoxin) • strep • beta-lactamase - • gram - rods	cefpodoxime (vantin) ceftriaxone (rocephin) Cefdinir (omnicef) • function like PCN + BL inhibitor with the exception of anaerobes & enterococcus	cefepime (maxipime) • Pseudomonas • beta-lactamase + • gram -	Ceftazidime (fortaz) • works like ceftriaxone & when added to avibactam, has pseudomonal coverage ceftaroline (teflaro) • works like ceftriaxone with MRSA coverage also... • CAP • SSTI • resistant bacteremias

carbapenems

meropenem (merrem)

- Staph
- Strep
- enterococcus
- * gram -
- beta-lactamase +
- ESBL: Klebsiella & e coli
- * anaerobes
- Pseudomonas

imipenem-cilastatin (primaxin)

- Staph
- Strep
- enterococcus
- * gram -
- beta-lactamase +
- ESBL: Klebsiella & e coli
- * anaerobes
- Pseudomonas

do not use
because
of seizure
risk

doripenem (doribax)

- Staph
- Strep
- enterococcus
- * gram -
- beta-lactamase +
- ESBL: Klebsiella & e coli
- * anaerobes
- Pseudomonas

ertapenem (invez)

- Staph
- Strep
- * gram -
- beta-lactamase +
- ESBL: Klebsiella & e coli
- * anaerobes

does not cover ...
A- acinetobacter
P- pseudomonas
E- enterococcus

monobactam

aztreonam (azactam)

- gram - rods
- beta-lactamase +
- Pseudomonas

no gram +
or
anaerobes

Fluoroquinolones

* good for UTIs

* need anaerobic coverage? ... add flagyl

<p>ciprofloxacin (cipro)</p> <ul style="list-style-type: none"> • gram - rods • pseudomonas 	<p>levofloxacin (levaquin)</p> <p>* respiratory... Strep pneumo</p> <ul style="list-style-type: none"> • gram - rods • pseudomonas 	<p>moxifloxacin (avelox)</p> <p><i>No pseudomonal coverage... does not get in urine</i></p> <p>* respiratory... Strep pneumo</p>	<p>gatifloxacin (zymaxid) <i>* eye drop</i></p>	<p>norfloxacin (noroxin)</p> <p>* SBP prophylaxis ONLY!</p> <p><small>• Spontaneous Bacterial Peritonitis</small></p>
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macrolides

- no pseudomonas
- very high rate of resistance
- CYP interactions

<p>azithromycin (zithromax)</p> <ul style="list-style-type: none"> • gram - rods • atypicals • Strep pneumo 	<p>clarithromycin (biaxin)</p> <ul style="list-style-type: none"> • Strep pneumo • upper respiratory infections • H. pylori • atypicals • gram - rods
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tetracyclines

doxycycline (vibramycin)

- strep
- staph
- gram -
- atypicals
- anaerobes
- skin soft tissue infections

minocycline (minocin)

- strep
- staph
- gram -
- atypicals
- anaerobes
- skin soft tissue infections

tigecycline (tygacil)

- strep
- staph
- gram -
- atypicals
- anaerobes
- skin soft tissue infections
- MRSA
- Proteus
- Providencia

aminoglycosides

· synergy with gram + agent

amikacin (amikin)

· reserved
for hard to
treat
infections

- gram -
- pseudomonas

gentamicin (garamycin)

*synergy
agent

- gram -
- pseudomonas

tobramycin (tobrex)

respiratory
infections

- gram -
- pseudomonas

trimethoprim/
sulfamethoxazole
(bactrim)

Inhibits
folate =
no
pregnancy

- MSSA
- MRSA
- gram +

clindamycin
(cleocin)

causes
C. diff

- gram +
- anaerobes

metronidazole
(flagyl)

treats
C. diff

- anaerobes

glycopeptide

vancomycin
(vancocin)

- gram +
- C. diff
- anaerobes

anaerobic bacteria & antibiotic coverage

BUGS

Veillonella
Acidominococcus
Bacteroids
Fusobacterium
Actinomyces
Clostridium
Eubacterium
Bifidobacterium
Lactobacillus
Propionibacterium
Peptostreptococcus
Peptococcus

gram
negative

gram
positive

DRUGS

Clindamycin
Augmentin
Metronidazole
Piperacillin/tazobactam
Carbapenems
Unasyn
Moxifloxacin
"CAMP sCUM"

gram NEgative bacteria & antibiotic coverage

BUGS

Pseudomonas
Shigella
Haemophilus
Ecoli
Salmonella
Enterobacter
Helicobacter
Bacteriodes
Proteus
Acinetobacter
Neisseria
Klebsiella
Bruella
Bordetella

DRUGS

fluoroquinolones

-ciprofloxacin

-levofloxacin

aminoglycosides

-gentamicin

-tobramycin

-amikacin

monobactam

-aztreonam

carbapenems

-doripenem

-imipenem

-meropenem

-ertapenem

aztreonam

penicillins

-piperacillin

-ticarcillin

cephalosporins

-ceftriaxone

-ceftazidime

-cefepime

polymyxin

-colistin

atypical bacteria & antibiotic coverage

BUGS

Mycoplasma
Chlamydia
Legionella

DRUGS

Fluoroquinolones

Azithromycin (macrolides)

Tetracyclines

"FAT"

gram positive bacteria & antibiotic coverage

BUGS

Peptostreptococcus
Enterococcus
Listeria
Corynebacterium
Staphylococcus
Bacillus
Nocardia
Clostridium
Streptococcus

DRUGS

antistaph PCN

- dicloxacillin

-oxacillin

-nafcillin

PCN

amoxicillin

ampicillin

Bactrim

PCN/BL

-augmentin

-timentin

-zosyn

-unasyn

1st gen cep

-cefazolin

-cephalexin

Tetracyclines

-doxycycline

-minocycline

-tigecycline

carbapenems

-meropenem

-doripenem

-imipenem

-ertapenem

macrolides

-azithromycin

-clarithromycin

-levofloxacin

-clindamycin

-vancomycin

MRSA

CLINdamycin

VANcomycin

CefTARoline

DOXycycline

BACtrim

dapTOmycin

"A CLeaning VAN filled with TARO ran
over the DOgs BACK TOe"

pseudomonas

Meropenem

Pipercillin/tazobactam

Aztreonam

Cefepime

Fluoroquinolones (not

Ceftazidime

Imipenem

Aminoglycosides

"MAFIA Pseudomonas Challenges Clinicians"

