

Quinolones, Macrolides, Tetracyclines

- 1 - Which of the following quinolones does not reach adequate levels in the urine and should not be used for UTIs?
 - A. Levofloxacin
 - B. Moxifloxacin**
 - C. Ciprofloxacin
 - D. Delafloxacin
 - E. Gemifloxacin

- 2 - Which of the following best describes the mechanism of action of quinolones?
 - A. Inhibit bacterial protein synthesis by binding to the 30S ribosomal subunit
 - B. Inhibit bacterial protein synthesis by binding to the 50S ribosomal subunit
 - C. Inhibit bacterial cell wall synthesis
 - D. Inhibit bacterial DNA topoisomerase IV and DNA gyrase causing breakage of double-stranded DNA**
 - E. None of the above

- 3 - Which of the following is a key counseling point for a patient taking ciprofloxacin for UTI?
 - A. This medication may cause a metallic taste
 - B. Avoid sun exposure; this medication can increase your sensitivity to the sun**
 - C. This medication can cause permanent discoloration of teeth
 - D. Take this medication with a full glass of milk for better absorption
 - E. This medication may cause dry mouth and increased thirst

- 4 - Which of the following statements regarding quinolones is false?
 - A. They are first line options for acute bacterial sinusitis and uncomplicated UTI**
 - B. They are not recommended for routine use in children due to risk of cartilage toxicity
 - C. They can increase the effects of warfarin
 - D. They may cause hyper or hypoglycemia
 - E. There is decreased absorption if administered with antacids containing magnesium, aluminum or calcium

- 5 - All of the following are warnings associated with quinolones except?
 - A. QT prolongation
 - B. Tendonitis
 - C. Glucose abnormalities
 - D. Psychiatric disturbances
 - E. Ototoxicity**

6. Identify the quinolones:

- 1 - Do not use to treat UTIs Moxifloxacin
- 2 - Active against Pseudomonas Ciprofloxacin, Levofloxacin
- 3 - No renal dose adjustment required Moxifloxacin
- 4 - Do not use for community acquired- pneumonia Ciprofloxacin
- 5 - Effective against MRSA Delafloxacin

7 - Which of the following best describes the mechanism of action of Macrolides?

- A. Inhibit bacterial protein synthesis by binding to the 30S ribosomal subunit
- B. Inhibit bacterial protein synthesis by binding to the 50S ribosomal subunit**
- C. Inhibit bacterial cell wall synthesis
- D. Inhibit bacterial DNA topoisomerase IV and DNA gyrase causing breakage of double-stranded DNA
- E. None of the above

8 - Macrolides have excellent coverage of:

- A. MRSA
- B. Pseudomonas
- C. Atypicals**
- D. Anaerobes
- E. All of the above

9 - LP is a 38 year old female diagnosed with H. pylori disease. The doctor sent in a prescription for prevpac (amoxicillin + clarithromycin + lansoprazole). Patient's home medications include: simvastatin 40mg daily, lisinopril 20mg daily. How should you proceed with this prescription?

- A. Verify the prescription as written
- B. Do not verify as lansoprazole is contraindicated with simvastatin
- C. Do not verify as clarithromycin is contraindicated with simvastatin**
- D. Do not verify as clarithromycin is contraindicated with lisinopril
- E. Do not verify as lansoprazole is contraindicated with simvastatin

10 - Which of the following statements regarding macrolides is false?

- A. Macrolides Inhibit bacterial protein synthesis by binding to the 50S ribosomal subunit
- B. Brand name of clarithromycin is Biaxin
- C. There is growing macrolides resistance against S. pneumoniae
- D. Azithromycin is a strong CYP3A4 inhibitor**
- E. Macrolides are associated with QT prolongation

11 - Azithromycin is an appropriate treatment option for which of the following?

- A. COPD exacerbation
- B. Community acquired pneumonia
- C. Chlamydia
- D. Travelers' diarrhea

E. All of the above

12 - Which of the following statements regarding doxycycline is false?

- A. It requires no renal dose adjustment
- B. It does not have activity against MRSA**
- C. It may cause photosensitivity
- D. It is the first line treatment option for lyme disease
- E. IV to PO ratio is 1:1