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 _____
2 - Active against Pseudomonas _____
3 - No renal dose adjustment required _____
4 - Do not use for community acquired- pneumonia _____
5 - Effective against MRSA _____

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