

## Antibiotics Review Quiz

1 . Which of the following classes of antibiotics is associated with a risk for developing *Clostridium difficile*-associated diarrhea?

- A) Macrolides
- B) Quinolones
- C) Cephalosporins
- D) All of the above

2 . Bacteria become resistant to the effects of antibiotics by

- A) altered cellular permeability.
- B) increased efflux of the antibiotic from the cell.
- C) elaboration of deactivating enzymes that alter interactions at binding sites.
- D) All of the above

3 . Which of the following are common ways for bacteria to gain antibiotic resistance?

- A) Genetic mutations
- B) Transfer of genetic information on plasmids
- C) Both A and B
- D) None of the above

4 . The first oxazolidinone created, which was developed in an attempt to stay ahead of the developing bacteria resistance, was

- A) linezolid.
- B) cefprozil.
- C) norfloxacin.
- D) meropenem.

5 . What recommendation has the CDC made regarding infection control to minimize the spread of antibiotic resistances among patients in hospitals and residential care facilities?

- A) Tailor treatment plans to the most likely pathogens
- B) Proper hand washing during and after patient care
- C) Only use invasive medical devices when they are necessary
- D) All of the above

**6 . The antibacterial effect of penicillins is caused by the drugs' action of**

- A) inhibiting protein synthesis.
- B) impairing cell wall synthesis.**
- C) blocking the binding of aminoacyl transfer-RNA.
- D) displacing cations that link phospholipids together.

**7 . Labeled uses for the natural penicillins include treatment of infections of the**

- A) eye.
- B) meninges.
- C) gastrointestinal tract.
- D) upper and lower respiratory tracts.**

**8 . Which of the following is an absolute contraindication for administering penicillins?**

- A) Severe renal failure
- B) Severe hepatic failure
- C) Prior allergic reaction to a member of the class**
- D) All of the above

**9 . Which of the following is considered a first-generation cephalosporin?**

- A) Cefixime
- B) Cefepime
- C) Cefadroxil**
- D) Loracarbef

**10 . What route of elimination is used by members of the cephalosporin class of antibiotics?**

- A Renal  
)
- B) Mixed renal/hepatic
- C) Hepatic metabolism with excretion into the bile
- D) All of the above**  
)

**11 . Probenecid increases serum levels of which cephalosporin?**

- A) Cefotetan
- B) Cefotaxime
- C) Ceftriaxone

D) All of the above

12 . Meropenem is approved by the FDA for the treatment of

- A) pneumonia.
- B) urinary tract infections.
- C) intra-abdominal infections.
- D) meningitis in patients younger than 3 months of age.

13 . One side effect associated with the use of imipenem/cilastatin is

- A diarrhea.
- )
- B) headache.
- C) hypotension.
- D phlebitis at the infusion site.
- )

14 . Aztreonam is considered pregnancy category

- A) A.
- B) B.
- C) C.
- D) D.

15 . Aminoglycosides are effective for the treatment of

- A) anaerobic bacilli.
- B) gram-positive bacilli.
- C) aerobic gram-negative bacilli.
- D) All of the above

16 . Which of the following aminoglycosides is taken orally as a bowel decontaminant due to its minimal absorption?

- A) Neomycin
- )

- B) Gentamicin
- C) Tobramycin
- D) Streptomycin
- )

**17 . Which of the following is a well-established side effect of the aminoglycosides?**

- A) Ototoxicity
- B) Nephrotoxicity
- C) Both A and B
- D) None of the above

**18 . Which of the following is a topical sulfonamide?**

- A) Sulfadiazine
- B) Sulfasalazine
- C) Sulfacetamide
- D) Sulfadoxine/pyrimethamine

**19 . Of the tetracyclines, which drug is mainly excreted in the urine?**

- A) Tetracycline
- B) Minocycline
- C) Doxycycline
- D) All of the above

**20 . Which of the following is a contraindication for administering tetracycline?**

- A) Age older than 65 years
- B) Age younger than 8 years
- C) Patient history of syndrome of inappropriate antidiuretic hormone secretion
- D) Both A and B