

Test Bank for Advanced Pharmacology for Prescribers 1st Luu

Chapter 2: Pharmacokinetics

Patrick Chan and James Uchizono

Multiple Choice Questions

1. Which of the following statements best describes pharmacokinetics?

- *A. It is what the body does to the drug
- B. It is what the drug does to the body
- C. It is the therapeutic monitoring of the drug
- D. It is how a disease affects a drug

Answer: Correct answer is option (A).

2. An essential hypothesis of pharmacokinetics is:

- A. The dose must correlate with the pharmacological effect
- B. Adverse reactions must correlate with plasma concentrations
- C. There is a qualitative relationship between dose and pharmacological effect
- *D. There is a quantitative relationship between drug concentration and pharmacological effect

Answer: Correct answer is option (D).

3. A therapeutic drug monitoring protocol would include which of the following factors?

- A. Ethnicity
- B. Socioeconomic status
- *C. Defined therapeutic endpoints
- D. Smoking history

Answer: Correct answer is option (C).

4. Which of the following affects the absorption of a drug?

- A. Clearance
- *B. Route of delivery
- C. Plasma pH
- D. Patient body weight

Answer: Correct answer is option (B).

5. Drug interactions involving cytochrome P450 enzymes may:

- A. Increase drug concentrations
- B. Decrease drug concentrations
- C. Increase distribution
- *D. A and B

Answer: Correct answer is option (D).

6. Bioavailability is defined as:

- A. The amount of drug made available following metabolism
- B. The amount of drug present in the plasma following distribution

- *C. The extent of drug absorption, or the percentage or fraction of the parent compound that reaches systemic (plasma) circulation
- D. The extent of drug absorption following metabolism and excretion

Answer: Correct answer is option (C).

7. Creatinine clearance is an estimate of:

- *A. Glomerular filtration
- B. Hepatic metabolism
- C. Biliary excretion
- D. Pulmonary excretion

Answer: Correct answer is option (A).

8. If a drug has a small value for volume of distribution, V_d , it is most likely residing in the:

- A. Brain
- *B. Blood
- C. Bone
- D. Spleen

Answer: Correct answer is option (B).

9. The loading dose for a patient can be calculated using:

- *A. V_d and $C_{p_{target}}$
- B. Cl and F
- C. V_d and Cl
- D. $C_{p_{target}}$ and F

Answer: Correct answer is option (A).

10. Half-life is useful for estimating:

- A. Clearance
- B. Volume of distribution
- *C. The time to reach steady-state
- D. Absorption

Answer: Correct answer is option (C).