

QUESTIONS ON THE PRESENTATION

“Quetiapine Case 2: Therapeutic Drug Monitoring” (1-27-16)

Please select the single best choice.

1. Quetiapine has pharmacodynamic effects in the periphery.
 - A. True
 - B. False

2. Regarding the effects of phenytoin on quetiapine:
 - A. Phenytoin tends to decrease quetiapine's metabolism.
 - B. After 2-3 weeks of phenytoin discontinuation, quetiapine's metabolism may increase.
 - C. Phenytoin discontinuation may increase quetiapine's serum concentration by a factor of five times.
 - D. All of the above are correct.

3. Regarding the pharmacokinetic drug-drug interactions of quetiapine:
 - A. Inducers tend to increase quetiapine's blood concentration.
 - B. Inhibitors may increase quetiapine's metabolism, and inducers may decrease its metabolism.
 - C. Inhibitors may decrease quetiapine's metabolism, and inducers may increase its metabolism.
 - D. Removal of an inhibitor tends to increase quetiapine's blood concentration.

4. The three major antiepileptic drug inducers are
 - A. Valproate, topiramate and levetiracetam.
 - B. Valproate, phenytoin and phenobarbital.
 - C. Carbamazepine, phenytoin and phenobarbital.
 - D. Carbamazepine, oxcarbazepine and topiramate.

5. Some inducers and some inhibitors have major effects on CYP3A4 activity.
 - A. True
 - B. False

6. Regarding quetiapine concentration:

- A. Smoking cessation may increase quetiapine concentration.
- B. Adding ketoconazole may decrease quetiapine concentration.
- C. Discontinuing phenytoin may increase quetiapine concentration.
- D. All of the above are correct.

7. The main CYP for quetiapine (and lurasidone) metabolism is:

- A. CYP2D6.
- B. CYP2C9.
- C. CYP1A2.
- D. CYP3A.

8. The main CYP for clozapine (and olanzapine) metabolism is:

- A. CYP3A.
- B. CYP2D6.
- C. CYP2C9.
- D. CYP1A2.

9. It is difficult to use quetiapine levels in clinical practice due to quetiapine's short half-life.

- A. True
- B. False

10. The concentration-to-dose (C/D) ratio is calculated by dividing the serum concentration by the dose, and is an approximate measure of that drug's metabolism and how the drug is cleared from the body.

- A. True
- B. False