

Pharmacogenomics: Foundations, Competencies, and the Pharmacists' Patient Care Process Updates and Corrections

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Chapter 1

Figure 1-7

A.

	*1	*1	
*1	*1/*1	*1/*1	CYP2C19*1/*1 (NM) 100%
*1	*1/*1	*1/*1	

B.

	*1	*2	
*1	*1/*1	*1/*2	CYP2C19*1/*1 (NM) 50%
*1	*1/*1	*1/*2	CYP2C19*1/*2 (IM) 50%

C.

	*1	*2	
*1	*1/*1	*1/*2	CYP2C19*1/*1 (NM) 25%
*1	*1/*1	*1/*2	CYP2C19*1/*2 (IM) 50%
*2	*1/*2	*2/*2	CYP2C19*1/*2 (IM) 25%

Chapter 2

Table 2-4

Update:

Cells/Tissue Basolateral (cell/tissue – blood interface)	Influx (Uptake) Transporters	Efflux Transporters
Kidney (proximal tubule cells)	OCT2, OAT1, OAT2, OAT3	
Liver (hepatocytes)	OATP1B1, OATP2B1, OAT2, OCT1	MRP3, MRP4, MRP5
Brain (capillary endothelial cells)	OATP1A2, OATP2B1	P-gp, BCRP

Figure 2-6 caption update:

With the k_a held constant, the k_e is influencing the T_{max} , C_{max} , and AUC. The rate of absorption is noted by the T_{max} . The extent of absorption is noted by the AUC. The C_{max} is influenced by both the rate and extent of absorption.

Chapter 7

Cardiology: Clopidogrel/CYP2C19 Case

Update to question 5:

5. If James were 67 years of age, and all other clinical considerations were consistent, what other therapeutic possibilities should have been reasonably considered?

- A. Prasugrel would have fewer concerns related to the black box warning information.
- B. Clopidogrel 150 mg PO daily could be used due to expected drug metabolism changes.
- C. Ticagrelor 90 mg PO b.i.d as a maintenance dose.
- D. Aspirin should have been increased to 325 mg.

Answer:

C. Ticagrelor is indicated at a standard 90 mg PO b.i.d. maintenance dose. Prasugrel is still problematic due to the patient's history of TIA.

Reference:

DailyMed.

Ticagrelor. <https://dailymed.nlm.nih.gov/dailymed/drugInfo.cfm?setid=f7b3f443-e83d-4bf2-0e96-023448fed9a8>. Accessed May 30, 2021.

Chapter 13

Infectious Diseases: Atazanavir/UGT1A1 Case Question 2. Correct option miss-keyed.

Update:

2. Which of the following drugs may be influenced by pharmacogenomic variants of UGT1A1?

- A. Irinotecan
- B. Atazanavir
- C. Nilotinib
- D. A and B
- E. All of the above

Answer:

- E. A, B, and C

Chapter 14

Infectious Diseases: Voriconazole/CYP2C19 Case Objective information:

1. Typo dose for tacrolimus dose. “0.05 mg IV” should be “0.05 mg/kg/day”.
2. Laboratory. “Pharmacogenetic (donor): Component” should be “Pharmacogenetic (recipient): Component”