## **Pharmacokinetic Cases:**

1) Mrs. X is a 40 yo female who has Bipolar disorder and Generalized anxiety disorder both of which have been well controlled on lorazepam 2mg qday, desvenlafaxine 50mg, bupropion XL 300mg qday, lithium ER 900mg qhs, aripiprazole 15mg qhs, and been diagnosed with a chronic, progressive kidney disease. Her GFR is now 15.

What would you recommend she do with the lorazepam dosing? What would you recommend she do with the desvenlafaxine dosing? What would you recommend she do with bupropion? What would you recommend she do with the lithium dosing? What would you recommend she do with the aripiprazole dosing?

2) Mrs. X is a 40 yo female who has Schizoaffective disorder-bipolar type and Social anxiety disorder both of which have been well controlled on diazepam 10mg qday, amitriptyline 200mg, bupropion XL 300mg qday, lamotrigine 200mg qhs, paliperidone 6mg qhs, and been diagnosed with liver disease. She is child-pugh class C.

What would you recommend she do with the diazepam dosing? What would you recommend she do with the amitriptyline dosing? What would you recommend she do with the bupropion? What would you recommend she do with the lamotrigine dosing? What would you recommend she do with the paliperidone dosing?

3) Mrs. X is a 40 yo female who has Major depressive disorder with psychotic features and epilepsy, both of which have been well controlled on fluoxetine 40mg, levothyroxine 50mcg, carbamazepine XR 200mg BID, lamotrigine 300mg qday, lithium ER 900mg qhs, and quetiapine 300mg qhs. She is now in her third trimester of her pregnancy and has had a major depressive episode relapse.

What would you recommend she do with the fluoxetine dosing? What would you recommend she do with the levothyroxine dosing? What would you recommend she do with the carbamazepine dose? What would you recommend she do with the lamotrigine dosing? What would you recommend she do with the lithium dosing? What would you recommend she do with the quetiapine dosing?

4) Mrs. X is a 40 yo female who has Major depressive disorder with anxious/psychotic features and diabetes both of which have been well controlled on lorazepam 2mg qday, fluoxetine 40mg, bupropion XL 300mg qday, lithium ER 900mg qhs, olanzapine 15mg qhs, and recently had Roux-en-Y bariatric surgery to cure his obesity.

What would you recommend she do with the lorazepam dosing? What would you recommend she do with the fluoxetine dosing? What would you recommend she do with the lithium dosing? What would you recommend she do with the olanzapine dosing? What would you recommend she do with metformin dosing?

## **SAMPLE RESPONSE**

## **Pharmacokinetic Cases:**

1) Mrs. X is a 40 yo female who has Bipolar disorder and Generalized anxiety disorder both of which have been well controlled on lorazepam 2mg qday, desvenlafaxine 50mg, bupropion XL 300mg qday, lithium ER 900mg qhs, aripiprazole 15mg qhs, and been diagnosed with a chronic, progressive kidney disease. Her GFR is now 15.

What would you recommend she do with the lorazepam dosing? (no change; lorazepam glucuronide has no CNS activity)

What would you recommend she do with the desvenlafaxine dosing? (max of 50mg q48h) What would you recommend she do with bupropion? (max of 150mg daily) What would you recommend she do with the lithium dosing? (discontinue use) What would you recommend she do with the aripiprazole dosing? (no change)

For answers to remaining questions, please email Jeffrey Rakofsky, MD at jrakofs@emory.edu