**Antibiotic Allergies**

Essential reading: Shenoy ES, Macy E, Rowe T, Blumenthal KG. Evaluation and Management of Penicillin Allergy: A Review. JAMA. 2019 321:188-199.

1. What are the differences in clinical presentation (mechanisms, time to onset, hypersensitivity reaction, and mode of diagnosis) for type I, type II, type II and type IV drug reactions?
2. What are the low vs. medium versus high-risk clinical histories for penicillin allergy. Which allergy history can safely allow for an oral amoxicillin challenge (Hint see table 3 of the Shenoy paper)?
3. In clinical settings where penicillin skin testing is available, what type Non-type I reactions are contraindications to penicillin allergy testing (hint see Amoxicillin challenge forms on website or lecture slides, Toolkit C)
4. What is the mechanism of antibiotic desensitization? Can it be used for non-type I antibiotic allergies? If a penicillin with a 2 hour half- life was held for 36 hours, does the desensitization procedure need to be reperformed before restarting the antibiotic?
5. If a patient has a documented allergy to penicillins, what is the likely cross-reactivity risk with:
   1. Cefazolin
   2. Other cephalosporins
   3. Carbapenems
   4. Aztreonam
6. How does the mechanism of allergies with sulfonamides (i.e. trimethoprim-sulfamethoxazole) differ from beta-lactams?