

## ROLE: **ARNP/DNP** IN PIPERACILLIN/TAZOBACTAM (ZOSYN CASE)

### BACKGROUND

ALBERT JONES, 92 y.o. male or female patient, was admitted to emergency department (ED) from local skilled nursing facility (SNF). Before admission, s/he became increasing SOB, with yellow-greenish sputum, and febrile to 38.5 with pulse oximetry = 88. The SNF staff were concerned the patient had developed pneumonia and, after receiving permission from the patient's family member, called an ambulance for transport to the ED.

### ADMISSION STATUS

You did the intake examination for Mr. Jones and took report from the ambulance crew. Mr. Jones received a chest x-ray, labs and physical exam in ED confirming diagnosis of pneumonia. You reported the information to the physician on duty when he finished with a prior case. The physician started Mr. Jones on Zosyn (Piperacillin/ Tazobactam) IV every 6 hours. First dose was given at 2200. Mr. Jones experienced an anaphylactic reaction within 20 minutes involving flushing, itching, difficulty swallowing, coughing, wheezing, hypotension and difficulty breathing. Patient was intubated and treated with epinephrine.

Mr. Jones was transferred to the ICU for close observation around 2330 with orders for additional epinephrine as needed, discontinue piperacillin/tazobactam and start vancomycin and levofloxacin IV.

### CURRENT

Mr. Jones was extubated this AM without incident. Currently he is afebrile, vital signs stable, rash resolving. He is able to follow commands, but is confused to person, place and time. Notes from the SNF indicate that the patient has required assistance with ADLs for approximately 3 years due to confusion and general physical deterioration and weakness. He usually recognizes family members but is confused to time and place.

This morning you learn that Mr. Jones had a penicillin allergy documented in the SNF records that accompanied him. There was a notation about a penicillin allergy from one-year prior when the patient received oral penicillin in the SNF (developed hives and abdominal cramping). Piperacillin/tazobactam is contra-indicated with penicillin allergies. Albert's last hospitalization was two years prior. The penicillin allergy was also noted on a face page but this page was out of order in the record and you had not seen the allergy on your initial review. In addition, the allergy was not noted in your facility's computer system presumably because it occurred since the last admission. There was an alert for another allergy (codeine) in the computer system. You vaguely remember the ambulance crew saying something about allergies but you had just come from a very complicated code and remember struggling with feeling distracted when you took report from them.

### SITUATION

Albert's family member is here visiting. The physician has asked you to join the team to talk with the family about the events of the evening and why Albert is in the ICU.