

I approached this assignment by trying to pick antibiotics that covered the more common infections, especially seen in a hospital. I also tried to pick antibiotics that are safe in certain populations. The 5 antibiotics I chose are:

1. **Ampicillin**- since it has great gram-positive & gram-negative coverage and it is available in multiple forms (PO, IM, IV) as compared to Amoxicillin. I also think it's important to have a drug that is safe to use in pregnancy and infants. I picked Ampicillin over Amoxicillin because although they cover the same things, there is different forms available and it is used more in serious infection like meningitis.
2. **Ceftriaxone**- this is one of the most commonly used antibiotics, especially inpatient, and it's good treat a broad range of infections such as CAP, gonorrhea, UTI's, intraabdominal infections, and meningitis. It could also be used as surgical prophylaxis.
3. **Azithromycin**- a macrolide offers good gram-positive and gram-negative coverage but is an important antibiotic to have for atypical organism coverage. It's also good to have a drug that can be used in the case of a penicillin allergy.
4. **Trimethoprim-Sulfamethoxazole**- this is a good drug to use since it offers MRSA coverage and can be used for common infections like UTI. I was going to pick Vancomycin but I feel like it's only used for MRSA coverage and Bactrim offers more than that. In addition, Vancomycin seems to be worse on the kidneys.
5. **Zosyn**- this is a useful drug to include for good pseudomonal coverage because a pseudomonas infection is a real concern in hospital-acquired infections, especially in critically ill and immunocompromised patients. It is also good to have for coverage of anaerobic organisms.

P.S. This was pretty tough to do and narrow down to just 5, but it was good to review what covers what.