



THE BRISTOL-MYERS SQUIBB CHILDREN'S HOSPITAL at Robert Wood Johnson University Hospital

Dear Faculty and Staff

In 2018, the Bristol-Myers Squibb Children's Hospital began a formal pediatric antimicrobial stewardship program, with a goal of optimizing patient outcomes while minimizing unintended consequences of antimicrobial use. One important initiative undertaken was to evaluate antimicrobial utilization in pediatric patients. After reviewing pediatric charts and pharmacy records, it has come to our attention that the use of Piperacillin-Tazobactam (Zosyn) is excessive at our institution and needs to be more carefully monitored to ensure proper and judicious utilization and avoid associated adverse effects. In 2017, BMSCH use of Zosyn was an average of 57 days of therapy/ 1000 patient days, which is about double that of other comparable Children's Hospitals in the NY/NJ/PA area.

Piperacillin-Tazobactam has a broad spectrum covering Streptococci, penicillin-sensitive Enterococci and Staphylococci, enteric gram negative rods, *Pseudomonas* species, and anaerobic bacteria. While it may be appropriate for some nosocomial infections, most community-onset infections do not require coverage for *Pseudomonas*. Some indications for Piperacillin-Tazobactam use include:

1. Complicated or late-onset hospital-acquired or health-care associated pneumonias, ventilator-associated pneumonias, community-acquired pneumonia if *P. aeruginosa* is a consideration (e.g., in patients with bronchiectasis, cystic fibrosis)
2. Intra-abdominal infection
3. Presumed sepsis, especially from an intra-abdominal or renal source

It is important to note that re-evaluation and adaptation of antimicrobial therapy after cultures and sensitivities are obtained is critical and the regimen should be appropriately de-escalated or changed, as necessary.

As part of an ASP initiative, we will be formally monitoring the use of this agent and will be asking for your help as providers in ensuring appropriate use. In that regard, we will be setting up educational sessions, providing helpful resources, and performing case-by-case reviews.

Thank you for your attention to this matter,

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