

PROCALCITONIN-GUIDED ANTIBIOTIC THERAPY IN THE INTENSIVE CARE UNIT (B3), Carol Kim, Rosemary O'Meeghan, Mike Witherby, Stephanie Chao. Hoag Memorial Hospital Presbyterian, Newport Beach, CA (Carol.Kim@hoaghospital.org)

Early diagnosis and appropriate selection of antibiotics is a daily challenge in the ICU. Antibiotic therapy in critically-ill patients is often based on empiric therapy that can result in antibiotic overuse, contribute to antibiotic resistance and increase treatment-related costs. Procalcitonin (PCT) normally has a plasma level of <0.1 mcg/mL in healthy subjects. Levels rise substantially in response to triggers released during bacterial infections. The purpose of this study is to evaluate whether obtaining PCT levels can assist in determining opportunities to deescalate or reduce antibiotic usage in the ICU and the potential associated cost-savings. This study will also identify antibiotic prescribing patterns, prescribers' adherence to institution-specific infection pathways, and examine patients admitted to the ICU with a diagnosis of a possible or known bacterial infection. Prospective data collection will include diagnosis, antibiotic use and duration, cultures, WBC count, %Bands, Tmax, PCT levels on day 1, 3, 5, 8, and an antibiotic cost analysis. This data will then be used to analyze current antibiotic prescribing patterns and potential cost savings, and assist in determining opportunities to guide antibiotic therapy by utilizing PCT as a marker of bacterial infection.

