

From: Genevieve Mckew (NSW Health Pathology) [mailto:Genevieve.Mckew@health.nsw.gov.au]  
Sent: Thursday, 28 April 2022 2:36 PM To: Coombs, Geoffrey Cc: Thomas Gottlieb (Sydney LHD)  
Subject: PSSA AGAR isolates

Hi Geoff, It was good to talk to you today! I think it would be interesting to correlate PSSA-B patient outcomes with penicillin 1mcg disc zone size, given the currently unstudied question of whether blaZ may be of relevance if the MIC/zone size is in the susceptible range, given the potential for a useful concentration of penicillin above the MIC over the dosing interval.

It would be of particular interest for those isolates with MIC 26mm, and are blaZ positive. I imagine the numbers may be too small to show anything, but if any of those patients had received penicillin, it would be useful ancillary data to answer the question of whether patients with phenotypically-determined PSSA could have penicillin treatment. There is concern, particularly in North America, that the small numbers of PSSA-B where blaZ may be missed by phenotypic testing (estimated to be 0.5-1% of "Vitek" PSSA), mean that penicillin should not be used at all.

If you are happy, we would love to analyze any PSSA data available from ASSOP patients, with respect to patient outcomes by definitive antibiotic, and P1 zone size/edge +/- blaZ if available. If zone size/edge data wasn't available, we could repeat this testing here.

Best wishes,

Dr Genevieve McKew Staff Specialist,

Microbiology and Infectious Diseases | Concord Repatriation and General Hospital Department of  
Microbiology and Infectious Diseases | NSW Health Pathology Monday, Tuesday, Thursday and  
Friday