

Technical Bulletin

Suppression of Clostridioides difficile Result in Multiplex GI Panel

TO: Medical Staff and Clients

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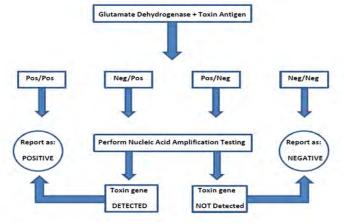
DATE: May 25, 2021

SUBJECT: The *C. difficile* result is suppressed in the multiplex panel because it can be misleading

In consultation with Queen's Infection Control and Antimicrobial Stewardship programs, DLS is suppressing the *C. difficile* result on the Stool GI Pathogen Panel (Test Code 5600): Stool GI pathogen panel pcr.pdf. The panel will signal positive if toxin A and/or toxin B genes are present, however toxin B appears to be the major determinate of disease while the role of toxin A is controversial¹. Colonization with a strain that only has toxin A gene is unlikely the cause of clinical disease, but would result in a positive test and can lead to inappropriate treatment.

Since 2012 DLS has offered a rapid membrane enzyme immunoassay (EIA) for the simultaneous detection of *C. difficile* glutamate dehydrogenase antigen (GDH) and toxins A and B (**Test Code 7123**):

C diff gdh toxin reflex pcr.pdf. Test results revealing +/- or -/+ for GDH/Toxin will be reflexed to the Simplexa *C difficile* Universal Direct real-time PCR assay for the toxin B gene, which is consistent with Infectious Diseases Society of America guidelines². The rapid EIA is testing is available at both Queen's Punchbowl, West Oahu, and North Hawaii laboratories, as well as at Central (Tech Memo C diff 2019 v1.pdf).



If susceptibilities are desired on identified pathogens, or if bacterial agents that are not represented on the panel (e.g., *Aeromonas*) are suspected, stool culture should be ordered (Test Code 622). Specific orders for *Aeromonas* culture are no longer needed.

¹Nat Rev Microbiol. 2016; 14(10): 609–620. doi:10.1038/nrmicro.2016.108. ²CID 2018;66(7):e1–e48

Please refer any questions to Dr. Amy Woron, Manager - DLS Molecular Laboratory at 441-5436, or DLS Client Services at 589-5101.