



Technical Bulletin

Pyrazinamide (PZA) Testing for Mycobacterium tuberculosis

TO: Medical Staff and Clients

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SUBJECT: **Routine phenotypic testing for PZA susceptibility will be discontinued**

Diagnostic Laboratory Services, Inc. (DLS) will discontinue routine liquid culture-based testing for PZA susceptibility in *Mycobacterium tuberculosis* (MTB) complex isolates for technical and logistical reasons. DLS will continue to routinely perform susceptibility testing for isoniazid, rifampin and ethambutol. Second line drug testing is performed at CDC or our Quest reference laboratory.

1. There is a high rate of false resistance when testing by liquid culture methods.
2. There is a high rate of tests failing quality control (QC) with liquid culture methods, which requires repeat testing and delayed reporting.
3. Superior testing by targeted next-generation sequencing (tNGS) is available from the Centers for Disease Control and Prevention (CDC) through coordination with the Hawaii Department of Health Tuberculosis Control Branch (808-832-5731) for patients meeting certain criteria.
4. The manufacturer notified customers on May 8, 2024 that they are having difficulty getting raw materials to manufacture PZA kits, and that “**Currently we have no product to ship towards any customer orders. The next anticipated batch release (best case) is estimated to be 10-12 weeks out.**”
5. We will continue to perform the test until we exhaust our PZA reagents (as long as QC passes); however, because of the false resistance, we will only report if the result is sensitive. We will NOT report if the result is resistant.

Susceptibility testing is performed in conjunction with acid-fast bacillus (AFB) smear and culture.

Test order code: 651 (non-sterile) or 651S (sterile)
Acceptable Specimen: Sputum, extrapulmonary specimens (tissue, fluids, stool, etc.)
Optimal Specimen Volume: 2 mL
Ambient Stability: 3 days
Refrigerated Stability: 10 days

Please refer any questions to:
Tori Enomoto, Manager - DLS Microbiology Laboratory at 808-441-5470, or DLS Client Services at 808-589-5101.