Put It on the Board

Slice testing consensus report provides ordering to reporting guidance

January 2024—The Association for Molecular Pathology on Dec. 14 published a joint report on what to consider for a slice testing strategy for diagnostics, including gene selection, analytic performance, coverage, quality, and interpretation. Slice testing is the practice of bioinformatically selecting a subset of genes from exome or genome sequencing assays.

The report offers expert consensus recommendations and results from an AMP-sponsored survey that compares a slice testing approach with traditional static gene panels and comprehensive exome analysis. "Slice Testing—Considerations from Ordering to Reporting: A Joint Report of the Association for Molecular Pathology, College of American Pathologists, and National Society of Genetic Counselors" was released online ahead of print in *The Journal of Molecular Diagnostics* (https://bit.ly/jmoldx-slice).

Similar to traditional disease-focused panels, a slice test sequences a broad set of genes but limits the interpretation to a predetermined list (slice) of relevant genes. This approach combines the advantages of high-quality gene panels with the flexibility and broad scope of exome sequencing.

"This new report summarizes the current collective state of knowledge and assists clinical laboratory professionals with best-practice guidance for test design and utilization," Susan Hsiao, MD, PhD, 2023 AMP clinical practice committee chair and associate professor of pathology and cell biology at Columbia University Vagelos College of Physicians and Surgeons, said in a news release.

Quest reports findings of novel psychoactive substance study

A Quest Diagnostics analysis found xylazine in nearly one in 12 randomly selected remnant specimens tested using a pilot version of Quest's novel psychoactive substances panel between March and July 2023. Among all panel-positive remnant specimens, xylazine was detected in three of five specimens.

Quest reported these and other findings in its health trends report on drug misuse in America in 2023, issued in December last year.

Although xylazine was the most frequent illicit additive found within the panel surveillance period, according to the report, five percent of the 3,734 samples tested were positive for other novel psychoactive substances. Other analytes detected included acetyl fentanyl (5.4 percent) within the designer fentanyl analogs class, bromazolam (2.3 percent) within the designer benzodiazepine class, and dimethylpentylone (1.2 percent) within the designer stimulant class. No specimens tested contained only xylazine.

The report says one-third of fentanyl-positive specimens were also positive for xylazine, and nearly all specimens positive for xylazine were also positive for fentanyl. Xylazine positivity among fentanyl-positive specimens was most prevalent in the Southeast, Northeast, and eastern U.S. regions. Results in the Southwest and on the West Coast suggest xylazine has yet to fully penetrate these regions, according to the report.