250 Industry Drive
Pittsburgh, PA 15275
revvity.com

November 13, 2025

As part of Revvity Omics' innovation approach, this letter provides details related to protocol changes for the X-linked adrenoleukodystrophy (XALD) newborn screening assay, effective **January 1, 2026**.

Assay Method:
Starting January 1, 2026, the lab will transition from the current two-step algorithm (MS/MS-based first tier followed by LC-MS/MS-based second tier) to a single-step approach using only the Liquid Chromatography Tandem Mass Spectrometry (LC-MS/MS) assay for all XALD samples. This change will streamline workflows and improve operational efficiency, including the ability to multiplex with other assays.

Calculation Method:
In line with recommendations from scientific leaders in the field, the lab is updating how screening outcomes are determined:

Each day, the lab will calculate the median concentration of C26:0 lysophosphatidylcholine (LPC) from all samples tested. Each individual sample result will be compared to this daily median, and a "multiple of the median" (MoM) value will be calculated. The MoM value is used to determine whether a sample is considered screen positive or negative, based on the validated cutoff. This approach is increasingly recognized and accepted by the scientific community as a best practice for screening methods that utilize LC-MS/MS for analysis.

Result Reporting:
The lab will no longer report the absolute concentration of C26:0 lysophosphatidylcholine (LPC). Only the screening outcome (abnormal or within normal limits) will be reported for each sample. The lab will continue to request a repeat specimen on the initial abnormal specimen and reflex to ABCD1 gene sequencing when the repeat specimen remains abnormal.

Please let us know if you have any questions by sending an email to RevvityGenetics.Information@Revvity.com or by calling +1 (866) 354-2910.

Sincerely,

The Revvity Omics Team