Falsely Elevated CO2 (Bicarbonate) In Samples with High LDH

On October 14, 2025, the laboratory received notification from the manufacturer that certain bicarbonate reagent lots may produce falsely elevated CO2/bicarbonate results in specimens with elevated lactate dehydrogenase (LDH).

Samples with LDH \geq 2,000 U/L may show a positive bias in CO2/bicarbonate of up to 12%. The degree of bias increases with LDH concentration.

Samples within the normal adult or neonatal/infant LDH reference ranges are not affected.

The following comment will be appended to abnormal CO2 results:

"Elevated lactate dehydrogenase (LDH) levels may cause falsely elevated bicarbonate results. Interpret bicarbonate in conjunction with LDH when appropriate."

Questions may be directed to Ria C. Fyffe-Freil, Ph.D., NRCC (Director of Clinical Chemistry) at rfyffefreil@unmc.edu, office phone 402-552-7204, or pager 402-888-6436.

Contact Regional Pathology Services

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