

Legacy Laboratory Services

Legacy LabAlert

September 2020

An Important Update from Legacy Laboratory Services

Bovine ALP Interference with Estriol Used in Prenatal Screening

Bovine (cow) alkaline phosphatase (ALP) may increase the results for unconjugated estriol (UE3) in approximately 3% of patient samples. This interference is specific to Estriol and does **NOT** interfere with the other three tests in the QUAD panel (β -hCG, AFP, and DIA). Endogenous human ALP does not cause this interference and is unique to an individual exposed to bovine ALP. The manufacturer, Beckman-Coulter, is working to resolve this issue by the first quarter of 2021.

Estriol is used in conjunction with Total β -Human Chorionic Gonadotropin (β -hCG), Alpha-Fetoprotein (AFP), and Dimeric Inhibin A (DIA) to calculate risk of Trisomy 21 (Down syndrome) and Trisomy 18 in second trimester prenatal screening (test mnemonic: MS QUAD).

Therefore, effective September 11, 2020, Legacy Laboratory Services will add the following interpretation statement to all Estriol results:

“IMPORTANT – About 3% of patients may demonstrate bovine (cow) ALP associated interference specific to the Beckman Estriol Assay. This interference may cause a significant increase in Estriol results, which may lead to inaccurately classifying the relative risk of chromosomal abnormalities in QUAD screening. If the Estriol is suspected to be falsely high, please, contact Legacy Laboratory Services Prenatal Screening Department immediately at 503-413-5133 or Client Services at 503-413-1234.”

For additional information, please contact your account representative, client services or consult our website:

Legacy Laboratory Client Services: 503-413-1234, 877-270-5566

www.legacyhealth.org/labservices