



Charleston Area
Medical Center

CLINICAL LABORATORY MEMORANDUM

Date: 6/7/2021

To: CAMC LabWorks Clients
CAMC Providers

From: Milton Plata, MD
Laboratory Director

Milton Plata MD 6/8/2021.

The Laboratory assay for Estradiol Level at CAMC is currently performed on Beckman Coulter Dxl instrumentation which utilizes chemiluminescent immunoassay methodology. Beckman Coulter has recently sent out a product notice which identifies the potential for interference with this assay in samples containing elevated levels of Estrone and Estrone-3-Sulfate. The interference can be a positive or negative bias.

Per the product notice, the Estradiol assay results are not intended to be used to measure the effectiveness of exogenous Estradiol supplementation, for example, when the patient is on hormone replacement therapy. The presence of estradiol drug analogues and their metabolites could have an impact on estradiol recovery when using this assay.

Results obtained from adults and adolescents with typical Estrone and Estrone-3-Sulfate levels are not impacted.

It is recommended that the effectiveness of estradiol supplements are to be monitored using the assay performed at Mayo Laboratories which utilizes a Mass Spectrometry methodology.

If you have any concerns or questions about this change, feel free to contact **Dr. Milton Plata** at 304-388-9351 or milton.plata@camc.org , or Della Haynes at 304-388-4184 or della.haynes@camc.org (Memorial Laboratory)