**To:** Dartmouth Health Providers Utilizing Estradiol Testing at DHMC

**From:** K. Aaron Geno, PhD, DABCC

Sarah E. Labore, MLS (ASCP)CM, Chemistry and Night Shift Supervisor

**Date:** May 21, 2025

**Re:** Updated estradiol reportable range

**What is changing?**

Effective today, May 21, the lower reportable range for estradiol (LAB523) has been increased from 5 pg/mL to 25 pg/mL.

**Why are we making this change?**

Low estradiol concentrations are best obtained by mass spectrometry. While our Roche immunoassay allows reporting of measurements as low as 5 pg/mL, the precision of this assay is best at concentrations 25 pg/mL and above. To provide the most accurate results, we are adopting the higher concentration as our reportable limit.

**How should patients with estradiol concentrations below 25 pg/mL be evaluated?**

The recommendation for patients with low expected estradiol concentrations is to measure by mass spectrometry, which has not changed. Our Laboratory Information Systems (LIS) team is currently working to build an eDH orderable for estradiol testing by mass spectrometry at Mayo Clinic Labs; in the interim, estradiol measurement by mass spectrometry may be obtained via a miscellaneous order for Mayo test code EEST.

**For questions or additional information, please contact:**

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