

<b>DATE:</b>	2022 June 13
<b>TO:</b>	All healthcare professionals in Central, Edmonton, and North Zone
<b>FROM:</b>	Alberta Precision Laboratories (APL) North Sector, and DynaLIFE Medical Labs
<b>RE:</b>	<b>Standardization of Estradiol Reference Intervals and Interpretive Comments</b>

**PLEASE POST OR DISTRIBUTE AS WIDELY AS APPROPRIATE**

**Key Message**

- Effective **June 21, 2022**, provincially standardized reference intervals (RIs) and interpretative comments for Estradiol will be implemented at DynaLIFE Medical Labs and University of Alberta Hospital.
- These changes will help optimize test interpretation and are important for supporting laboratory standardization efforts across the province.

**How this will impact you**

Current Estradiol RIs and Selected Interpretive Comments			Provincially Standardized Estradiol RIs and Interpretive Comments		
Age	Gender	RI, pmol/L	Age	Gender	RI, pmol/L
0 to <1 month	F, M, U, X	<370	0 to <1 month	F, M, U, X	<350
1 month to <10 years	F, M, U, X	<70	1 month to <10 years	F, M, U, X	<30
>=10 years	F	*Comment	>=10 years	F	*Comment
>=10 years	M	<200	>=10 years	M	<160
>=10 years	U, X	**Comment	>=10 years	U, X	**Comment

\* Reference Interval:  
 Follicular: 70 - 680 pmol/L  
 Midcycle: 550 - 1950 pmol/L  
 Luteal: 200 - 780 pmol/L  
 Post-menopausal: <= 115 pmol/L

\*\* Appended comment includes male and female reference intervals.

\* Reference Interval:  
 Follicular: 110 - 330 pmol/L  
 Midcycle: 220 - 1960 pmol/L  
 Luteal: 220 - 850 pmol/L  
 Post-menopausal: <= 500 pmol/L

\*\* Appended comment includes male and female reference intervals.

Additional comment for F, M, U, X ages 10 to <18 years:  
 Clinical correlation with puberty status suggested.

F, Female; M, Male; U, Unknown; X, Gender X

**Action Required**

- Be aware of updates to Estradiol RIs and interpretative comments outlined in the above table.

**Questions/Concerns**

- Dr. Josh Raizman, Clinical Biochemist, APL, (780) 718-2402, josh.raizman@aplabs.ca
- Dr. Albert Tsui, Clinical Biochemist, APL, (587) 782-2674, albert.tsui@aplabs.ca
- DynaLIFE Clinical Chemists, (780) 451-3702 ext. 3572, clinical.chemists@dynalife.ca

**Approved by**

- Dr. Kareena Schnabl, Section Chief, Clinical Biochemistry, APL North Sector
- Dr. Michael Mengel, Medical Director, APL North Sector
- Dr. Mathew Estey, Director of Clinical Chemistry, DynaLIFE Medical Labs
- Dr. Erene Farag, Medical Director, DynaLIFE Medical Labs