

DATE:	20 January 2025
TO:	Central Zone: Red Deer Regional Hospital Centre (RDRHC) - All Healthcare Providers
FROM:	Clinical Biochemistry, Alberta Precision Laboratories (APL)
RE:	Referral of Luteinizing Hormone (LH), Follicle Stimulating Hormone (FSH), and Prolactin Testing from RDRHC to Edmonton Base Lab

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Key Message

- Effective January 21, 2025, Luteinizing hormone (*LH*), Follicle-stimulating hormone (*FSH*) and *Prolactin* testing that are currently performed at the APL RDRHC Laboratory will be referred to the APL Edmonton Base Laboratory for testing.

Background

- A provincial Regional Hospital Test Menu Standardization working group was formed to address test menu gaps, find efficiencies and improve workflows.
- Fertility testing is a low-volume test and has been deemed by RDRHC Obstetrics/Gynecology as non-urgent. As a result, it will be referred to the Edmonton Base Lab.

How this will impact you

- There will be no changes to test orders in Connect Care.
- The minimum collection volume will be increased from 0.5 mL to 1.0 mL.
- There are differences in methods used for testing between Edmonton Base Lab and RDRHC lab:
 - Be aware that age-stratified reference intervals will change (see **Appendix I**).
- The anticipated turnaround time will be 24-72 hours (previously within 24 hours).

Action Required

- Be aware of minimum collection volume, reference interval, and turnaround time changes to *LH*, *FSH* and *Prolactin* for tests ordered from RDRHC.

Questions/Concerns

- Dr. Yury Butorin, Clinical Biochemist, RDRHC, APL, 403-406-5633 | yury.butorin@aplabs.ca
- Carrie Walker, Regional Technologist, APL, 403-343-4472 | carrie.walker@aplabs.ca

Approved by

- Dr. Allison Venner, Clinical Biochemistry Section Chief, South Sector, APL
- Dr. Matthew Estey, Medical Lead, Clinical Biochemistry, Edmonton Base Lab, APL
- Dr. Krishna Narra, Associate Medical Director, Rural, South Sector, APL
- Dr. Kate O'Connor, Medical Director South Sector, APL



Appendix I. Changes in Reference Intervals for *FSH*, *LH* and *Prolactin* with Test Site Change from RDRHC to Edmonton Base Lab

Prolactin

RDRHC			Edmonton Base Lab		
Age	Sex	RI	Age	Sex	RI
Any age	F	4.0-25 ug/L	1 month and up	F	<25 ug/L
Any age	M	4.0-15.0 ug/L	1 month and up	M	<21 ug/L

Luteinizing Hormone (*LH*)

RDRHC			Edmonton Base Lab		
Age	Sex	RI	Age	Sex	RI
0 to ≤11 years	F	<7.0 IU/L	0 to < 10 years	F	<10 IU/L
≥11 years	F	Clinical correlation with puberty status suggested	≥10 years	F	Follicular/Luteal: <15.0 IU/L Midcycle: 30.0-100.0 IU/L Post Menopausal: 18.0-65.0 IU/L
0 to ≤11 years	M	<7.0 IU/L	0 to < 10 years	M	<10.0 IU/L
11 to 70 years	M	1.0 - 9.0 IU/L	≥10 years	M	<12.0 IU/L
≥70 years	M	3.0 - 35.0 IU/L			

Follicle Stimulating Hormone (*FSH*)

RDRHC			Edmonton Base Lab		
Age	Sex	RI	Age	Sex	RI
0 to ≤2 years	F	<8.0 IU/L	0 to <10 years	F	<6.0 IU/L
2 to ≤6 years	F	<5.0 IU/L			
6 to ≤11 years	F	<4.0 IU/L			
≥11 years	F	Clinical correlation with puberty status suggested	≥10 years	F	Follicular/Luteal: <7.0 IU/L Midcycle: 4.0-15.0 IU/L Post Menopausal: 16.0-80.0 IU/L
0 to ≤11 years	M	<3.0 IU/L	Any age	M	<7.0 IU/L
11 to ≤13 years	M	<9.0 IU/L			
≥13 years	M	1.0 -18.0 IU/L			