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Laboratory Bulletin

Date: **February 10, 2020**
To: **All Zones**
From: **Alberta Precision Laboratories (APL) – North Sector, University of Alberta Hospital (UAH)**
Re: **Changes to anti-adrenal cortex autoantibody (21-hydroxylase antibody) testing**

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Key Message:

- Effective Thursday February 20, 2020, a new method for anti-adrenal cortex (21-hydroxylase antibody) testing has been implemented at UAH, the only site in Alberta that offers this test.
- Results are now qualitative and will be reported as either **negative or positive**, rather than with a numerical value.

	New method	Old method
Test name	No change	Anti-adrenal cortex autoantibodies
Synonyms	No change	Anti – 21 hydroxylase
Turnaround time	No change	3 weeks
*Method type	Qualitative	Quantitative
*Reference interval	Negative	<5 U/ml

Why this is important:

- The manufacturer recently discontinued its radioimmunoassay (RIA) kits and replaced it with enzyme-linked immunosorbent assays (ELISA) kits.
- Although there is good concordance between new and old kits, the new kit is designed only for qualitative reporting and is unable to report similar quantitative values as its predicate.
- 21-hydroxylase antibodies are useful in identification of underlying cause of adrenal insufficiency and aiding in risk prediction of autoimmune adrenal failure when there is a high index of suspicion.
- Clinical studies by the manufacturer demonstrated a sensitivity of 87% in detecting autoimmune adrenal disease in patients with or without autoimmune polyglandular syndrome.

Action Required:

- Be aware that results will now be reported as either **negative or positive.**
- False positives and false negative results can still occur with the new method, therefore, the test should always be used in conjunction with other clinical and laboratory findings, is not a population screening tests or a substitute for stimulation testing required to diagnose adrenal insufficiency.

Inquiries and feedback may be directed to:

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