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Partner Update

July 2024

Change to Routine Chemistry and Immunoassay Testing Platform (British Columbia).

Audience
All Healthcare providers who order routine Chemistry testing from Dynacare (previously known as Valley Medical Laboratories).

Overview
The Dynacare vision is to be Canada's health and wellness solutions leader. Effective **July 29th, 2024**, Dynacare will be introducing new instrumentation for routine chemistry and immunoassay testing. As part of this implementation, several reference interval changes will also be introduced.

Details
For routine chemistry testing, the instrumentation is changing from the Roche Cobas c701 to the Roche Cobas c503 instrument. For routine immunoassay testing, the instrumentation is changing from the Siemens Centaur chemiluminescence immunoassay to the Roche Cobas e801 electrochemiluminescence immunoassay technology. In addition to these changes, Dynacare will also be bringing Insulin, Sex Hormone Binding Globulin (SHBG) and Bioavailable Testosterone testing in-house on these instruments.

A comprehensive list of all the updated reference intervals that are changing are highlighted and bolded in the Reference Interval document, which can be found at the following link: Reference Intervals – Chemistry, and will be available to view July 29th, 2024. Note, that for some of the tests, a change to the reference interval is not due to a method change, but rather due to standardization with other national Dynacare laboratories and to be consistent with current clinical guidelines. Those tests which have a change in methodology and the impact to results are summarized in Table 1.

Action Required
Refer to the updated Reference Interval document for a list of the updated reference intervals along with the table below for the impact to results due to the change in methodology.

Questions about the Change?
If you have any questions regarding this communication, please contact Customer Care at 250-763-4813.

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TABLE 1: Impact to Results for Tests with a Change to Methodology

Test	Change	Impact to Results
Amphetamine, Urine	The cut-off value has been changed from 1000 ng/mL to 500 ng/mL	Due to the lower cut-off, an increase in the number of positive results may occur.
Cocaine, Urine	The cut-off value has been changed from 300 ng/mL to 150 ng/mL. The test name has also been changed to Cocaine Metabolite to reflect that the method is actually detecting Benzoylecognine, a metabolite of Cocaine.	Due to the lower cut-off, an increase in the number of positive results may occur.
AST	Change to pyridoxal phosphate activation method.	Results are about 10% higher with new method
ALT	Change to pyridoxal phosphate activation method.	Results are about 10% higher with new method
HbA1c	Change from BioRad DCA to Roche c503	No impact.
Anti-TPO	Change from Centaur to Roche	Results are about 80% lower with new method
βHCG	Change from Centaur to Roche	Results are about 15% lower with new method
BNP	Change from Centaur to Roche. Test name has been changed to NTproBNP to reflect what is actually being measured with the Roche method	Results between 2 methods cannot be compared as they are measuring different analytes. In general, results are 5-10 times higher with new method
Cortisol	Change from Centaur to Roche	Results are about 25% lower with new method
DHEAS	Change from Centaur to Roche	Results are about 50% higher with new method
eGFR	The CKD-EPI 2021 equation used to calculate eGFR has been endorsed by the Canadian Society of Nephrology and will replace the CKD-EPI 2009 equation.	Results will be about 6% higher with new calculation.
Estradiol	Change from Centaur to Roche	Results are about 10% lower with new method
Ferritin	Change from Centaur to Roche	Results are about 50% higher with new method
Free T3	Change from Centaur to Roche	Results are about 10-15% higher at Free T3 values greater than 5 pmol/L and about 5-10% lower at Free T3 values lower than 5 pmol/L
Free T4	Change from Centaur to Roche	Results are about 10-20% higher at Free T4 values greater than 20 pmol/L
FSH	Change from Centaur to Roche	Results are about 5% lower with new method
IgE	Change from Centaur to Roche	Results are about 5% higher with new method
LH	Change from Centaur to Roche	Results are about 20% higher with new method
Progesterone	Change from Centaur to Roche	Results are about 10% higher with new method, although some results are significantly lower due to change in specificity of method
Prolactin	Change from Centaur to Roche	Results are about 50% higher with new method
PSA, Total	Change from Centaur to Roche	Results are about 10% higher with new method
PTH Intact	Change from Centaur to Roche	Results are about 30% lower with new method
Testosterone	Change from Centaur to Roche	No significant impact to results
TSH	Change from Centaur to Roche	Results are about 15% higher at TSH values greater than 10 mIU/L with the new method
Vitamin B12	Change from Centaur to Roche	Results are about 15% higher with the new method
Vitamin D	Change from Centaur to Roche.	No significant impact to results