

## **CLIENT NOTICE**

Changes to Testing of 24-hr Urine: 1. Catecholamines, 2. Metanephrines, 3. VMA (Vanillylmandelic Acid), 4. HVA (Homovanillic Acid), 5. 5-HIAA (5-Hydroxyindoleacetic Acid)

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LifeLabs is pleased to announce changes to five tests including 24-hr urine Catecholamines, Metanephrines, VMA, HVA, and 5-HIAA that will take effect on **September 9, 2019.**

### **Sample Collection Requirements and Turnaround Time (TAT):**

- There are minor updates to Sample Collection Requirements for each of the five tests.

Patient Test Instructions with details on how to prepare for this test can be found on LifeLabs website: <https://www.lifelabs.com/patients/preparing-for-a-test/patient-test-instructions/> (Urine Collection) and will also be provided when a patient visits one of our Patient Collection Centers (PSCs).

- TAT remains 7 days

### **Reporting:**

- There are no changes to reference cut-offs, units, and reporting format for Catecholamines, VMA, HVA, 5-HIAA
- There are a number of important changes to 24-hr urine Metanephrines:
  1. The new method will test for Free instead of Total Metanephrines. Clinical guidelines endorse use of 24-hr urine Free Metanephrines and recent literature shows that 24-hr urine Free Metanephrines have better diagnostic accuracy over total Metanephrines. (References: Lenders JWM et al, 2014, J Clinical Endocrinol Metab, 99(6): 1915-1942; Eisenhower G et al, 2018, Clinical Chemistry, 64:11, 1646-1656).
  2. Test results for Free Metanephrine and Normetanephrine will be approximately 80% lower compared to the current method (Total Metanephrine and Normetanephrine).
  3. 3-MT (3-Methoxytyramine), a metabolite of Dopamine, will be added to the Free Metanephrines panel in addition to Metanephrine and Normetanephrine.



4. Reporting format and units will remain the same but the reference cut-offs will change as per table below.

24-hr Free Urine Metanephrines	NEW Reference Cut-Off
Free Metanephrine /day	< 0.25 µmol/day
Free Normetanephrine /day	< 0.28 µmol/day
Free 3-Methoxytyramine (3-MT)/day	< 0.52 µmol/day

**Improved Testing Methodology:**

- Current testing done by high pressure liquid chromatography (HPLC) will be replaced by Liquid Chromatography-Tandem Mass Spectrometry (LC-MS/MS). The LC-MS/MS technology is considered a gold standard in this area of testing and has improved analytical specificity compared to HPLC.
- All LC-MS/MS methods are developed by LifeLabs. Their performance characteristics have been fully validated and the tests have been designated fit for use in routine patient testing. The tests have not been submitted to Health Canada for evaluation, and as in-house validated tests, do not require Health Canada approval for diagnostics use.

The development of these new methodologies demonstrates our continued commitment to improving quality of testing, and to help build a healthier Canada.

If you have any questions, please contact our Customer Care Centre: 1-877-849-3637. We welcome your feedback!