



January 11, 2011

Dear Laboratory Reference Centre Clients,

Re: Reporting changes for **Urine Metabolic Screen** and **Urine Cystinuria Monitoring**

Effective January 31, 2011,

Currently, **Urine Metabolic Screen** (Meditech code: UMS) includes a group of tests that are useful in the diagnosis of a number of inherited metabolic disorders. These tests are: quantitative urine creatine, amino acids, purines and pyrimidines as well as semi-quantitative glucose, ketones and reducing substances (plus an automatic reflex to sugar thin layer chromatography if the reducing substances are abnormal). The current reporting format does not list the various purine and pyrimidine metabolites or their quantitation and only includes a comment on these analytes if an abnormality is noted. As well, the urine amino acids are reported in American units (umol/gram creatinine) rather than the SI units (umol/mmol creatinine).

The reporting change is to list all the quantitative analytes, including purines and pyrimidines, in SI units.

Selected analytes will also be reported as umol/L when that is diagnostically important. See attached list of all quantitative analytes and updated reference intervals.

The price of the Urine Metabolic Screen will decrease to \$80.

Currently **Urine Cystinuria Monitoring (Meditech code: UCYSTQ)** includes quantitative reporting of the 4 dibasic amino acids (cystine, ornithine, lysine, arginine) as umol/gram creatinine plus the absolute concentration of cystine as umol/L. The only one of these numbers that is useful for **monitoring of known cystinuria patients** is the cystine in umol/L, as it is the concentration of cystine in the urine that correlates with the risk of stone formation (risk when concentration >1200 umol/L).

The reporting change is to report only the cystine level in umol/L.

To **diagnose** cystinuria the ratio of the dibasic amino acids to creatinine is useful. These values are included in the Urine Metabolic Screen and that is the test that should be ordered for diagnostic purposes. Additionally, the Urine Metabolic Screen includes a number of other analytes that are useful in the evaluation of crystaluria / urinary stones, including adenine, xanthine and orotic acid.

The price of Urine Cystinuria Monitoring will decrease to \$70.

Recent changes to our internal electronic reporting have allowed us to offer full quantitative reporting for the same workload as providing interpretive comments only. For the purposes of screening for inherited metabolic diseases there is no added clinical benefit with this change as each analysis is already interpreted by a Biochemical Geneticist, but we hope that this change will provide clients with a better understanding of the analysis behind the UMS interpretive comments. If there are any concerns about this proposed change please contact me at 905-521-2100 x73718.

Sincerely,

A handwritten signature in black ink, appearing to read 'M Potter', written in a cursive style.

Murray Potter, MD, FRCPC, FCCMG

Head – Biochemical Genetics Laboratory