



To: UCM Medical Staff, House staff, Nursing Staff, Patient Care Centers, and Outpatient Clinics

From: Melissa S Pessin, MD, PhD
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Medical Director of Hyde Park Clinical Laboratories and Alternative Site Testing

Date: 10/3/2024

Subject: Cystatin C (with eGFR) Testing Offered at UCM Clinical Chemistry Lab - Hyde Park

Effective Date: 10/3/2024

Laboratory Section: Chemistry

Summary:

Effective 10/3/2024, the Hyde Park Clinical Chemistry Laboratory will begin performing Cystatin C (with estimated GFR) testing in-house.

Cystatin C is a low-molecular weight protease inhibitor that is constitutively expressed by all nucleated cells and freely filtered by the kidneys. Serum/plasma concentrations of Cystatin C is inversely correlated with GFR.

Our new test methodology, test characteristics, and reference ranges mirror our current reference laboratory test performed at Mayo Clinic Laboratories.

UCM Test Name (and Code): Cystatin C (LABCHCYSC)

Availability: 24 hours, 7 days per week

Acceptable Specimen Types: Serum (red or gold top) or plasma (mint green or purple top)

Reference Ranges:

Age Group	Cystatin C
0-17 years	Not established
18-49 years	0.63 – 1.03 mg/L
≥ 50 years	0.67 – 1.21 mg/L

Cystatin C-based estimated GFR is calculated using the Schwartz Cystatin C equation for patients under 18 years old and the CKD-EPI Cystatin C Equation (2012) for patients 18 years of age and older.

(<https://www.kidney.org/ckd-epi-cystatin-c-equation-2012>)

- Salvador CL, *et al.* Estimating glomerular filtration rate in children: evaluation of creatinine- and cystatin C-based equations. *Pediatr Nephrol.* 2019 Feb;34(2):301-311.
- Inker LA, Schmid CH, Tighiouart H, *et al.* Estimating glomerular filtration rate from serum creatinine and cystatin C. *N Engl J Med.* 2012;367(1):20-29.

Questions:

If there are any questions regarding this change, please contact the UCM Clinical Chemistry Lab – Hyde Park at 773-702-1772.