



An Affiliate of Methodist Health System

THE PATHOLOGY CENTER

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Bulletin Technical

ESTIMATED GLOMERULAR FILTRATION RATE (eGFR)

November 16, 2005

Effective **November 22, 2005** The Pathology Center will begin reporting the estimated glomerular filtration rate (eGFR) with all adult creatinine including the basic, comprehensive and renal panels. The eGFR provides an assessment of the filtering capacity of the kidney. The National Kidney Disease Education Program recommends that a calculated eGFR be reported with all creatinines to screen for chronic kidney disease.

The Pathology Center will use the modification of diet in renal disease (MDRD) equation to calculate the eGFR. This predictive equation takes into account the serum creatinine concentration, age, gender, and race. Since the laboratory will not know the patient's race, the report will print values for both African American and Non African American. The results are normalized to average adult surface area of 1.73m^2 . Values will not be reported on patients less than 18 years of age.

The reference range value is greater than $60\text{ ml/min}/1.73\text{m}^2$. Values less than $60\text{ ml/min}/1.73\text{m}^2$ will be reported with actual quantitative numbers. eGFR results equal to or greater than $60\text{ ml/min}/1.73\text{m}^2$ will be reported simply as $\geq 60\text{ ml/min}/1.73\text{m}^2$ without reporting a specific quantitative number.

The MDRD equation should be used with caution in subgroups of the population that were not included in the development or validation samples, such as children, the elderly (>70 years), non-Caucasian or African American ethnic groups, pregnant women, and patients with reduced muscle mass, liver disease or malnutrition. Some medications (Trimethoprim, Cimetidine, some fibric acid derivatives, and cephalosporins) may cause falsely reduced eGFR.

Additional information and the MDRD equation calculator can be found on the National Kidney Disease web site at www.nkdep.nih.gov.

Please call The Pathology Center at 354-4541 or 888-432-8980 if there are any questions or concerns.