CKD-EPI 2021 eGFR Worksheet

Patient's name: _____ Date: _____ dd / mm / yyyy

Age: _____ Medical record no.: _____

Sex: _____ Completed by: _____

WHICH EQUATION THIS IS

This worksheet uses the 2021 CKD-EPI creatinine equation, which does not include a race coefficient. The NKF-ASN Task Force recommended laboratories adopt it in place of the 2009 equation, which applied a separate multiplier for Black patients.

Creatinine must be IDMS-standardised

The equation assumes a creatinine result traceable to isotope dilution mass spectrometry, reported in mg/dL. If your laboratory reports micromoles per litre, divide by 88.4 first.

THE EQUATION

eGFR = 142 x min(Scr/k, 1) raised to a x max(Scr/k, 1) raised to -1.200 × 0.9938 raised to age x 1.012 if female

Sex / k / a / Female multiplier table: Female | 0.7 | -0.241 | x 1.012 Male | 0.9 | -0.302 | none

Case: Female, Scr 0.7 or less — Expanded form: 142 x (Scr/0.7)^-0.241 × 0.9938^age x 1.012 — Result:

Case: Female, Scr over 0.7 — Expanded form: 142 x (Scr/0.7)^-1.200 × 0.9938^age x 1.012 — Result:

Case: Male, Scr 0.9 or less — Expanded form: 142 x (Scr/0.9)^-0.302 × 0.9938^age — Result:

Case: Male, Scr over 0.9 — Expanded form: 142 x (Scr/0.9)^-1.200 × 0.9938^age — Result:

Serum creatinine (mg/dL): _____ Date of sample: _____ dd / mm / yyyy

eGFR (mL/min/1.73 m2): _____ Previous eGFR and date: _____

CKD STAGING BY GFR

CKD GFR Stage table: G1 | 90 or above | Normal or high G2 | 60 to 89 | Mildly decreased G3a | 45 to 59 | Mildly to moderately decreased G3b | 30 to 44 | Moderately to severely decreased G4 | 15 to 29 | Severely decreased G5 | Under 15 | Kidney failure

Stage on albuminuria as well

A GFR category alone does not stage chronic kidney disease. Pair it with the urine albumin-to-creatinine ratio (A1 under 30, A2 30 to 300, A3 over 300 mg/g) to place the patient on the KDIGO heat map.

Urine ACR (mg/g): _____ Albuminuria category: _____

Combined KDIGO stage: _____ Review interval: _____

When creatinine is unreliable

Consider confirming with a cystatin C-based estimate where muscle mass is unusual: amputation, paralysis, severe malnutrition, very high muscle bulk, or a vegetarian diet.

Medication review for renally cleared drugs, and plan

Sources: Inker LA, Eneanya ND, Coresh J, et al. New creatinine- and cystatin C-based equations to estimate GFR without race. N Engl J Med. 2021;385(19):1737–1749. · NIDDK. GFR estimating equations for adults. National Institute of Diabetes and Digestive and Kidney Diseases. · KDIGO 2024 Clinical Practice Guideline for the Evaluation and Management of Chronic Kidney Disease.