

Assessment of GFR in Patients with Cancer: A Statement from the American Society of Onco-Nephrology.

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Centre Ljubljana, Ljubljana, Slovenija 16 Lahey Hospital and Medical Center, Burlington, Massachusetts 17 Division of Nephrology, Cooper University Hospital and Cooper Medical School of Rowan University, Camden, New Jersey 18 Division of Kidney Diseases and Hypertension, Glomerular Center at Northwell Health, Donald and Barbara Zucker School of Medicine at Hofstra/Northwell, Northwell Health, Great Neck, New York 19 Cancer Therapeutics Program, UPMC Hillman Cancer Center, Pittsburgh, Pennsylvania 20 Princess Margaret Cancer Centre and University Health Network, University of Toronto, Toronto, Ontario, Canada 21 Dalla Lana School of Public Health, University of Toronto, Toronto, Ontario, Canada 22 Division of Cancer Medicine, Department of Genitourinary Medical Oncology, University of Texas MD Anderson Cancer Center, Houston, Texas 23 Library and Information Services, University Health Network, Toronto, Ontario, Canada 24 Research Medical Library, The University of Texas MD Anderson Cancer Center, Houston, Texas Correspondence: Dr. Abhijat Kitchlu, email: abhijat.kitchlu@uhn.ca 8 2024 7 6 2024 19 8 468776 1061 1072 01 08 2025 01 08 2025 14 08 2024 11 04 2026 Copyright © 2024 by the American Society of Nephrology 2024 Assessment of GFR in Patients with Cancer Part 2 19 8 7 6 2024 1073 1077 Clinical Journal of the American Society of Nephrology : CJASN 10.2215/CJN.0000000000000509 PMC11321741 39316409 Accurate assessment of GFR is crucial to guiding drug eligibility, dosing of systemic therapy, and minimizing the risks of both undertreatment and toxicity in patients with cancer. Up to 32% of patients with cancer have baseline CKD, and both malignancy and treatment may cause kidney injury and subsequent CKD. To date, there has been lack of guidance to standardize approaches to GFR estimation in the cancer population. In this two-part statement from the American Society of Onco-Nephrology, we present key messages for estimation of GFR in patients with cancer, including the choice of GFR estimating equation, use of race and body surface area adjustment, and anticancer drug dose-adjustment in the setting of CKD. These key messages are based on a systematic review of studies assessing GFR estimating equations using serum creatinine and cystatin C in patients with cancer, against a measured GFR comparator. The preponderance of current data involving validated GFR estimating equations involves the CKD Epidemiology Collaboration (CKD-EPI) equations, with 2508 patients in whom CKD-EPI using serum creatinine and cystatin C was assessed (eight studies) and 15,349 in whom CKD-EPI with serum creatinine was assessed (22 studies). The former may have improved performance metrics and be less susceptible to shortfalls of eGFR using serum creatinine alone. Since included studies were moderate quality or lower, the American Society of Onco-Nephrology Position Committee rated the certainty of evidence as low. Additional studies are needed to assess the accuracy of other validated eGFR equations in patients with cancer. Given the importance of accurate and timely eGFR assessment, we advocate for the use of validated GFR estimating equations incorporating both serum creatinine and cystatin C in patients with cancer. Measurement of GFR via exogenous filtration markers should be considered in patients with cancer for whom eGFR results in borderline eligibility for therapies or clinical trials.