

Figure S1. Bias of 24-hour timed creatinine clearance ($CrCl_{24}$) versus weight-indexed 24-hour creatinine excretion.

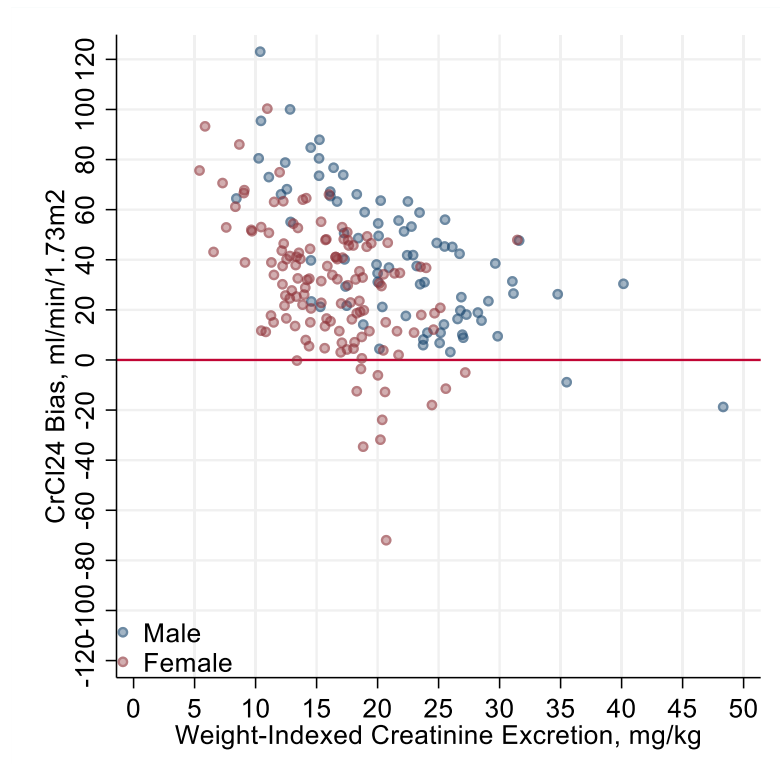
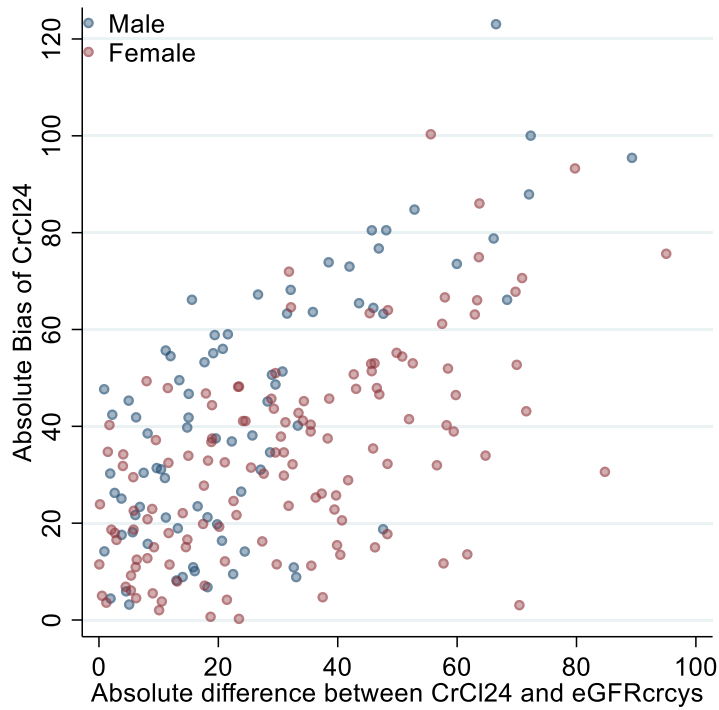


Figure S2. Absolute value of the bias of 24-hour timed creatinine clearance (CrCl_{24}) versus the absolute difference between the 24-hour timed creatinine clearance and the estimated glomerular filtration rate based on the 2021 CKD-EPI creatinine-cystatin C equation ($\text{eGFR}_{\text{CrCys}}$). The absolute bias of CrCl_{24} remained high even when CrCl_{24} and $\text{eGFR}_{\text{CrCys}}$ were similar, with a median bias of 22.1 among candidates with $\text{eGFR}_{\text{CrCys}}$ within 20 ml/min/1.73m² of CrCl_{24} .



Item S1. Supplementary Methods

We excluded 70 donors from the analysis: 31 donor candidates with no CrCl₂₄ performed, 2 candidates with biologically implausible CrCl₂₄ of 209 and 650 ml/min/1.73m², and 34 donor candidates without cystatin C measured. Informed consent was not required for this retrospective study. Analyses were performed using StataMP 17 (StataCorp, College Station, TX).

Kidney Function Assessment Referral

During the study period, all candidates evaluated for living kidney donation initially had their kidney function assessed using both 24-hour timed creatinine clearance (CrCl₂₄) and creatinine-based estimated glomerular filtration rate (eGFR) (calculated using the CKD-EPI 2009 equation at that time). Candidates with eGFR or CrCl₂₄ were <90mL/min/1.73m² were referred for further GFR assessment, which consisted of iothalamate clearance testing and measurement of serum creatinine and cystatin C to calculate eGFR_{crcys}.

Measured GFR assessment

Cold iothalamate clearance was calculated to determine "measured" GFR (mGFR). 1.5mL of iothalamate (Conray® 60; Guerbet) was administered intravenously, and the syringe was weighed before and after injection to determine the exact delivered dose. Serum iothalamate concentration was measured via high-performance liquid chromatography at 120, 180, 240, and 360 minutes after iothalamate injection.

Table S1. Reclassification of glomerular filtrate rate (GFR) based donor eligibility using measured GFR* versus timed creatinine clearance.*

<i>n (table %)</i>	Measured GFR <80	Measured GFR ≥80
Creatinine clearance <80	12 (6)	115 (54)
Creatinine clearance ≥80	4 (2)	81 (38)

*Kidney function assessment units are ml/min/1.73m²