

Supplementary Table 1. Subgroup analysis for performance of eGFR equations according to eGFR category

Equation	Intercept	Slope	Median bias (mL/min/1.73 m ²) ^a	Absolute bias (mL/min/1.73 m ²) ^b	Precision (SD) (mL/min/1.73 m ²) ^c	Accuracy (%) ^d		
						15%	30%	50%
≥90								
2009 CKD-EPIcr	96.23 (74.30 to 118.16)	0.13 (-0.09 to 0.35)	-4.53 (-28.41 to 7.05)	-13.22 (-22.71 to -3.74) [†]	26.52	100	100	100
2012 CKD-EPIcr-cys	93.45 (62.46 to 124.45)	0.13 (-0.14 to 0.41)	5.68 (-14.45 to 18.06)	2.29 (-6.09 to 10.67) [†]	21.54	100	100	100
2012 CKD-EPIcys	104.80 (65.81 to 143.79)	0.03 (-0.28 to 0.33)	20.55 (7.17 to 39.48)	18.84 (10.26 to 27.42) [†]	19.80	100	100	100
2021 CKD-EPIcr	96.54 (73.92 to 119.16)	0.12 (-0.10 to 0.34)	-1.35 (-25.54 to 9.97)	-10.10 (-19.65 to -0.55) [*]	26.55	100	100	100
2021 CKD-EPIcr-cys	93.69 (59.56 to 127.82)	0.13 (-0.17 to 0.42)	9.01 (-10.73 to 21.07)	5.87 (-2.27 to 14.02) [†]	20.18	100	100	100
≥60, <90								
2009 CKD-EPIcr	68.70 (62.65 to 74.76)	0.08 (0.01 to 0.16)	-0.08 (-13.64 to 16.02)	-1.39 (-7.89 to 5.11) [†]	27.64	100	100	100
2012 CKD-EPIcr-cys	63.85 (56.93 to 70.77)	0.13 (0.05 to 0.20)	13.25 (-3.86 to 28.43)	11.55 (5.55 to 17.54) [†]	26.67	100	100	100
2012 CKD-EPIcys	60.93 (54.40 to 67.47)	0.13 (0.07 to 0.19)	31.53 (13.45 to 53.80)	31.56 (24.35 to 38.77) [†]	32.95	100	100	100
2021 CKD-EPIcr	68.68 (62.49 to 74.86)	0.08 (0.01 to 0.16)	4.20 (-11.24 to 20.99)	1.87 (-4.77 to 8.50) [†]	28.19	100	100	100
2021 CKD-EPIcr-cys	63.07 (55.82 to 70.31)	0.13 (0.05 to 0.21)	19.55 (1.16 to 31.94)	15.93 (9.96 to 21.89) [†]	26.58	98.5	100	100
≥45, <60								
2009 CKD-EPIcr	49.92 (46.08 to 53.77)	0.05 (-0.01 to 0.11)	1.60 (-9.29 to 14.98)	3.71 (-3.43 to 10.86) [†]	23.43	94.9	94.9	97.4
2012 CKD-EPIcr-cys	47.55 (42.52 to 52.58)	0.08 (0.00 to 0.16)	5.85 (-0.10 to 16.94)	9.23 (3.72 to 14.74) [†]	18.51	97.4	97.4	97.4
2012 CKD-EPIcys	50.66 (46.13 to 55.18)	0.03 (-0.03 to 0.08)	17.11 (4.36 to 41.12)	21.94 (13.77 to 30.11) [†]	26.31	82.1	84.6	92.3
2021 CKD-EPIcr	49.89 (45.95 to 53.83)	0.05 (-0.02 to 0.11)	5.00 (-6.12 to 19.61)	7.06 (-0.31 to 14.44) [†]	24.17	92.3	94.9	94.9
2021 CKD-EPIcr-cys	47.32 (42.05 to 52.58)	0.08 (0.00 to 0.16)	12.48 (3.49 to 21.75)	13.55 (7.94 to 19.17) [†]	18.83	94.9	97.4	97.4
≥30, <45								
2009 CKD-EPIcr	36.23 (33.10 to 39.36)	0.03 (-0.03 to 0.09)	6.43 (-5.28 to 20.48)	10.49 (3.97 to 17.01) [†]	23.27	87.5	89.6	89.6
2012 CKD-EPIcr-cys	33.91 (30.17 to 37.65)	0.08 (0.01 to 0.16)	6.91 (-3.75 to 20.65)	9.43 (4.65 to 14.21) [†]	17.69	91.7	91.7	95.8
2012 CKD-EPIcys	33.14 (29.70 to 36.58)	0.09 (0.03 to 0.15)	12.61 (1.93 to 26.38)	15.00 (9.44 to 20.57) [†]	20.99	83.3	85.4	85.4
2021 CKD-EPIcr	36.24 (33.06 to 39.42)	0.03 (-0.03 to 0.09)	8.91 (-2.87 to 22.99)	13.17 (6.42 to 19.92) [*]	24.09	87.5	87.5	89.6
2021 CKD-EPIcr-cys	33.69 (29.88 to 37.50)	0.08 (0.01 to 0.15)	10.48 (-1.09 to 24.17)	12.10 (7.19 to 17.00) [†]	18.22	87.5	91.7	95.8
≥15, <30								
2009 CKD-EPIcr	23.53 (20.84 to 26.22)	-0.03 (-0.09 to 0.04)	6.80 (-2.85 to 21.39)	13.09 (6.38 to 19.81) [*]	21.38	65.1	65.1	79.1
2012 CKD-EPIcr-cys	21.56 (18.00 to 25.13)	0.03 (-0.08 to 0.14)	2.79 (-1.68 to 18.43)	7.58 (3.63 to 11.53) [*]	12.80	72.1	74.4	88.4
2012 CKD-EPIcys	20.81 (18.07 to 23.55)	0.05 (-0.02 to 0.13)	3.81 (-0.64 to 15.09)	9.27 (3.92 to 14.63) [*]	18.31	79.1	81.4	86.0
2021 CKD-EPIcr	23.53 (20.81 to 26.25)	-0.03 (-0.09 to 0.03)	8.53 (-1.72 to 24.36)	15.15 (8.17 to 22.13) [*]	22.30	62.8	65.1	74.4
2021 CKD-EPIcr-cys	21.34 (17.81 to 24.86)	0.04 (-0.07 to 0.14)	4.62 (-1.28 to 18.88)	8.96 (4.84 to 13.09) [*]	13.52	72.1	74.4	88.4
<15								
2009 CKD-EPIcr	10.97 (4.00 to 17.94)	-0.04 (-0.18 to 0.11)	24.57 (5.70 to 58.78)	31.11 (11.34 to 50.87) [†]	27.10	25.0	25.0	37.5
2012 CKD-EPIcr-cys	12.07 (5.87 to 18.27)	-0.08 (-0.24 to 0.08)	20.26 (5.15 to 28.23)	23.27 (5.15 to 41.39) [†]	23.84	25.0	25.0	37.5
2012 CKD-EPIcys	11.89 (6.75 to 17.03)	-0.07 (-0.19 to 0.04)	8.90 (3.35 to 34.36)	23.53 (0.52 to 46.54) [†]	30.65	25.0	25.0	37.5
2021 CKD-EPIcr	10.93 (3.96 to 17.90)	-0.03 (-0.17 to 0.10)	26.88 (6.70 to 63.71)	33.95 (12.87 to 55.02) [†]	29.03	25.0	25.0	37.5
2021 CKD-EPIcr-cys	11.97 (5.95 to 17.99)	-0.07 (-0.21 to 0.07)	19.84 (5.91 to 30.76)	25.01 (5.27 to 44.75)	26.21	25.0	25.0	37.5

Data are expressed as mean (95% confidence interval).

CKD-EPI, Chronic Kidney Disease Epidemiology Collaboration; cr, creatinine; cys, cystatin C; eGFR, estimated glomerular filtration rate; SD, standard deviation.

^aBias is calculated as eGFR - measured glomerular filtration rate (mGFR). ^bAbsolute bias is the difference of eGFR and mGFR. ^cPrecision is SD of the difference between mGFR and eGFR values. ^dAccuracy is the proportion of the eGFR within 15%, 30%, and 50% of mGFR, respectively.

^{*}The Wilcoxon signed-rank test with p < 0.05 between eGFR equations. [†]Paired t test with p < 0.05 compared with mGFR.