

**Table S2:** Comparison of bias of the CKD-EPI and MDRD Study equations by clinical characteristics subgroups

Group		Equation	Overall			eGFR<60			eGFR 60-90			eGFR >90		
			No.	Bias	CI	No.	Bias	CI	No.	Bias	CI	No.	Bias	CI
Overall		CKD-EPI	3896	2.2	(1.8,2.6)	1902	1.9	(1.4,2.2)	990	4.2	(3.2,5.5)	1004	0.9	(0.8,2.8)
		MDRD	3896	5.4	(5.0,5.9)	2100	3.4	(2.9,4.0)	1124	11.9	(11.0,13.0)	672	6.4	(4.4,9.0)
Age	<40	CKD-EPI	1136	2.1	(0.9,3.4)	256	1.6	(0.3,2.3)	260	4.9	(2.6,7.5)	620	0.9	(-1.2,4.4)
	40-65		2192	2.5	(2.0,3.1)	1170	2.2	(1.6,2.7)	645	4.5	(3.3,5.8)	377	1.0	(-1.2,2.8)
	>65		568	1.3	(0.6,2.0)	476	1.3	(0.6,2.0)	85	0.7	(-1.6,6.5)	7	0.6	(-33.4,15.7)
	<40	MDRD	1136	9.7	(8.3,10.8)	309	4.9	(3.7,6.0)	379	15.4	(13.2,18.5)	44	9.7	(6.8,11.4)
	40-65		2192	5.6	(5.0,6.3)	1310	4.2	(3.6,4.6)	665	11.2	(10.1,12.5)	217	2.2	(-2.6,4.8)
	>65		568	1.4	(0.5,2.0)	481	0.9	(0.2,1.8)	80	4.5	4.5 (1.9,7.9)	7	-16.3	(-36.3,6.2)
Female	Yes	CKD-EPI	1767	2.2	(1.5,3.0)	780	1.6	(1.0,2.1)	509	5.8	(3.8,8.0)	478	0.4	(-1.9,2.6)
	No		2129	2.2	(1.7,2.6)	1122	2.1	(1.5,2.4)	481	3.1	(1.6,4.6)	526	1.6	(-0.9,4.2)
	Yes	MDRD	1767	6.4	(5.6,7.7)	880	4.2	(3.3,4.6)	562	13.4	(11.8,15.8)	325	6.9	(4.1,9.3)
	No		2129	4.8	(4.1,5.3)	1220	2.9	(2.5,3.6)	562	10.8	(9.6,12.2)	347	6.0	(3.2,10.4)
Race	Black	CKD-EPI	384	-1.1	(-2.3,0.5)	220	0.5	(-0.9,1.9)	69	3.4	(-4.0,6.5)	95	-13.2	(-20.2,-7.6)
	White or other		3512	2.5	(2.1,2.9)	1682	2.0	(1.6,2.4)	921	4.4	(3.2,5.8)	909	2.4	(0.4,4.3)
	Black	MDRD	384	0.3	(-1.1,1.6)	222	0.2	(-1.1,1.5)	83	7.9	(4.1,10.8)	79	-8.3	(-15.5,-1.9)
	White or other		3512	6.0	(5.4,6.6)	1878	3.9	(3.4,4.3)	1041	12.2	(11.3,14.0)	593	8.8	(5.9,10.8)
Diabetes	Yes	CKD-EPI	1089	4.6	(3.9,5.5)	553	2.6	(1.9,3.8)	204	4.0	(1.9,5.9)	332	12.3	(10.9,14.5)
	No		2807	1.3	(0.9,1.9)	1349	1.6	(1.1,2.1)	786	4.4	(3.2,6.0)	672	-3.3	(-5.1,-2.1)
	Yes	MDRD	1089	8.1	(6.7,9.0)	601	4.6	(3.5,5.3)	235	15.3	(11.7,20.3)	253	19.1	(14.9,23.5)
	No		2807	4.6	(4.2,5.1)	1499	3.0	(2.5,3.6)	889	11.5	(10.6,12.6)	419	0.4	(-2.2,2.6)
Transplant	Yes	CKD-EPI	1134	1.5	(0.7,2.2)	731	2.6	(2.1,4.0)	311	-1.2	(-3.5,0.7)	92	-10.0	(-13.5,-3.7)
	No		2762	2.5	(2.0,3.0)	1171	1.4	(1.0,1.9)	679	7.6	(5.8,8.8)	912	2.2	(0.3,4.2)
	Yes	MDRD	1134	4.8	(3.9,5.5)	840	5.1	(4.2,6.0)	241	3.9	(0.6,6.1)	53	-5.6	(-14.3,3.4)
	No		2762	5.8	(5.2,6.4)	1260	2.6	(2.1,3.1)	883	14.5	(12.8,15.7)	619	7.2	(4.8,10.0)
BMI (kg/m <sup>2</sup> )	<20	CKD-EPI	249	-3.5	(-4.7,-1.6)	120	-1.7	(-4.1,0.0)	73	-1.2	(-4.3,3.4)	56	-16.6	(-22.9,-8.4)
	20-25		1357	2.2	(1.5,3.0)	589	1.7	(1.1,2.4)	341	4.5	(2.5,7.0)	427	1.5	(-1.2,4.5)
	26-30		1339	3.2	(2.4,3.9)	643	2.3	(1.7,3.0)	350	4.9	(3.6,7.2)	346	5.2	(0.9,8.1)
	>30		951	2.1	(1.1,2.8)	550	2.1	(1.1,2.8)	226	3.9	(1.2,5.7)	175	-0.9	(-4.0,2.1)
	<20	MDRD	249	0.6	(-1.5,2.1)	139	0.1	(-1.7,1.3)	74	7.4	(3.0,12.1)	36	-13.7	(-21.8,-8.4)
	20-25		1357	5.9	(5.2,6.5)	656	4.1	(3.1,4.6)	408	12.2	(9.7,15.1)	293	6.8	(3.4,11.0)
	26-30		1339	6.7	(5.7,7.8)	705	3.7	(2.9,4.5)	412	13.4	(11.9,15.5)	222	9.9	(5.8,12.6)
	>30		951	4.4	(3.6,5.3)	600	3.2	(2.2,4.2)	230	10.3	(8.1,12.6)	121	6.3	(-1.2,10.3)

Note: Bias is calculated as mGFR – eGFR, where mGFR is measured GFR. GFR expressed in ml/min/1.73 m<sup>2</sup>; factor for conversion to ml/s/1.73 m<sup>2</sup>, x0.01667. Abbreviations: BMI, Body mass index; CI, confidence interval; CKD-EPI, Chronic Kidney Disease Epidemiology Collaboration; eGFR, estimated glomerular filtration rate; MDRD, Modification of Diet in Renal Disease.