Supplementary Table 1. Summary of genome-wide and exome-wide association studies of kidney function traits and CKD

First author	PMID	Year	Study design	N	Replication	Functional study	Trait
Sinnott-Armstrong N	Currently in BioRxiv(1)	2019	GWAS	358,072	No	No	eGFR, urea, cysC, creatinine, MA
Wuttke M	31152163(2)	2019	GWAS meta-analysis	765,348	280,722	No	eGFR, CKD, BUN
Teumer A	31511532(3)	2019	GWAS meta-analysis	564,257	No	*Drosophila*	UACR
Tin A	31578528(4)	2019	GWAS meta-analysis	457,690	No	Human kidney embryonic cell line	Urate, gout
Hellwege J	31451708(5)	2019	GWAS	289,722	765,289	No	eGFR
Zanetti D	30910378(6)	2019	GWAS	218,759	109,530	No	UACR
Lin BM	31178898(7)	2019	GWAS	41,041	452,264	No	CKD, ESKD
Graham SE	31015462(8)	2019	GWAS meta-analysis	350,504	399,548	No	eGFR
Morris AP	30604766(9)	2019	GWAS meta-analysis	312,468	No	No	eGFR
Ahluwalia TS	30547231(10)	2019	Exome chip meta-analysis	13,226	20,759+2605	No	UACR, albumin excretion rate
Hishida A	29779033(11)	2019	GWAS	11,221	148,829	No	eGFR, creatinine
Lee J	29558500(12)	2019	GWAS	7064	No	No	eGFR, creatinine, BUN, urate
Haas M	30220432(13)	2018	GWAS, Mendelian randomization	382,500	No	No	UACR

Tin A	30315176(14)	2018	WES meta-analysis	19,517	No	Human kidney embryonic cell line	eGFR, urate, UACR
Kanai M	29403010(15)	2018	GWAS	162,255	No	No	eGFR, BUN, urate
Gorski M	28452372(16)	2017	GWAS meta-analysis	110,517	No	No	eGFR
Li M	27920155(17)	2017	Exome chip meta-analysis	111,666	No	Zebrafish (*D. rerio*)	eGFR
Mahajan A	27588450(18)	2016	GWAS meta-analysis	71,638	No	*Drosophila* and mouse model	eGFR, CKD
Pattaro C	26831199(19)	2016	GWAS meta-analysis	133,413	42,166	No	eGFR, CKD
Teumer A	26631737(20)	2016	GWAS meta-analysis	51,886	1,962	Rat	UACR
Gorski M	25493955(21)	2015	GWAS	45,530	18,028	No	eGFR decline
Pattaro C	22479191(22)	2012	GWAS	130,600	No	No	eGFR, CKD
Okada Y	22797727(23)	2012	GWAS	71,149	110,347	No	eGFR, BUN, urate, Scr
Chasman D	22962313(24)	2012	Integrative	44000	56246	No	eGFR
Boger CA	21355061(25)	2011	GWAS	63153	6981	No	UACR
Liu CT	21931561(26)	2011	GWAS	8,110	4,358	No	eGFR, UACR, CKD, MA
Kottgen A	20383146(27)	2010	GWAS	67,093	22,982	No	eGFR, CKD
Chamber J	20383145(28)	2010	GWAS	23,812	16,427	No	eGFR
Kottgen A	19430482(29)	2009	GWAS	19,877	21466	No	eGFR, CKD
Deghan A	18834626(30)	2008	GWAS	11847	EA: 11024, AA: 3843	No	Urate, gout

Search strategy: A PubMed search using broad criteria (search terms: “genome-wide association study” and “kidney” in any fields and filtered by human study and published since 2008, search date: February 10, 2020) was performed, yielding 685 publications. Within these, entries were

manually screened for publications reporting GWAS in the general population as the study design and kidney function traits as the outcome. The following publications were not found in the PubMed search and are included because they fit the criteria as population-based GWAS of kidney-related traits: Lin et al. 2019, Sinnott-Armstrong et al. 2019, Zanetti et al. 2019, Haas et al. 2018, Kanai et al. 2018. This search yielded a total of 30 publications in this table. The 16 manuscript that were published since 2016 and covered by this review are shown in **Table 1**. GWAS, genomic-wide association study; cysC, cystatin C; MA, microalbuminuria; UACR, urinary albumin-to-creatinine ratio; WES, whole-exome sequencing; Scr, serum creatinine; EA, European ancestry; AA, African American.

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