

Supplemental table 2: Glaucoma loci and associated genes

Loci	Gene	Polymorphism	Trait	Population	Studie	Size (n)	Year	Reference
1q24.3	GLC1A locus MYOC	D1S194 - D1S191	POAG	US	Linkage	1 family POAG: 22, C: 15	1993	Sheffield ¹
		rs121909193	POAG	US	C-C	POAG: 330, C: 471	1997	Stone ²
		rs74315328	POAG					
		rs74315329	POAG					
		21 mutations	POAG	Cau, Asian	Cases	POAG: 1703	1999	Fingert ³
2cen-q13	GLC1B locus	SNP third exon (85%)	POAG	Cau, Asian	Database	Not applicable	2008	Hewitt ⁴
		D2S2161 - D2S2264	POAG	UK	Linkage	POAG: 6 families	1996	Stoilova ⁵
		D2S1897 - D2S2269	POAG	Australia	Linkage	1 family POAG: 7, C: 8	2006	Charlesworth ⁶
		8 DS markers	-	US	Linkage	18 families POAG: 46, C:31	1998	Allingham ⁷
		D3S3637 - D3S1744	POAG	US	Linkage	1 family POAG: 12, C: 32	1997	Wirtz ⁸
3q21-q24	GLC1C locus	D3S3637 - D3S3694	POAG	US, Greece	Linkage	2 families POAG: 22, C: 72	2004	Samples ⁹
		rs367923973	POAG	US	Linkage	1 family POAG: 12, C: 32	2014	Keller ¹⁰
8q23	IL20RB	D8S1830 - D8S592	POAG	US	Linkage	1 family POAG: 8, C:12	1998	Trifan ¹¹
10p14-p15	GLC1E locus OPTN	D10S1729 - D10S1664	NTG	UK	Linkage	1 family NTG: 16, C: 23	1998	Sarfarazi ¹²
		rs28939688	NTG	Cau	Linkage	POAG: 54 families	2002	Rezaie ¹³
		rs11258194	NTG, POAG					
		rs28939688	NTG	Cau, Asian	C-C	POAG: 1048, C: 251	2003	Alward ¹⁴
		rs11258194	NTG	UK	C-C	HTG: 183, NTG: 132, C: 95	2003	Aung ¹⁵
		rs11258194	IOP	France, Morocco	C-C	POAG: 293, C: 170	2003	Melki ¹⁶
		rs11258194	POAG	India	Cases	HTG: 170, NTG: 50	2006	Sripriya ¹⁷
		D7S2442 - D7S483	POAG	US	Linkage	POAG: 12, C: 13	1999	Wirtz ¹⁸
		D7S1277i	NTG	Japan	C-C	NTG: 141, C: 101	2010	Murakami ¹⁹
		ASB10	exon 3 deletion	US	Linkage	POAG: 4, C: 1, Unr. C: 1	2012	Pasutto ²⁰
7q35-q36	GLC1F locus	26 polymorphisms	POAG	US, Germany	C-C	POAG: 1172, C: 461	2012	Pasutto ²⁰
		24 polymorphisms	POAG	Pakistan	C-C	POAG: 30 (family), 208, C: 151	2015	Micheal ²¹
		nonsynonymous	-	US	C-C	POAG: 158, C: 82	2012	Fingert ²²
		rs118204022	POAG	US	Linkage	POAG: 130 families, Unr. C: 676	2005	Monemi ²³
		rs35703638	POAG					
		rs116529882	POAG					
		rs34595252	POAG					
		11 mutations	NTG	Germany	cases	NTG: 112	2007	Weisschuh ²⁴
		8 mutations	POAG	Germany	C-C	POAG: 399, C: 376	2008	Pasutto ²⁵
		16 mutations	HTG	China	C-C	HTG: 82, NTG: 42, C: 77	2009	Fan ²⁶
5q22.1	WDR36	D5S2027	IOP	Mongolia	Linkage	C:1451 of 142 families	2010	Lee ²⁷
		rs10038177	HTG	India	C-C	HTG: 116, NTG: 207, C: 303	2011	Mookherjee ²⁸
		6 mutations	POAG	Italy	Linkage	POAG: 34 families	2011	Frezzotti ²⁹
		Haplotype H2	POAG	Spain	C-C	POAG: 479, C: 380	2011	Blanco-Marchite ³⁰
		26 variations	POAG	Taiwan	C-C	POAG: 61 C: 61	2017	Su ³¹
		D2S2352 - D2S2165	POAG	UK	Linkage	7 families POAG: 35, C: 32, U: 18	2007	Suriyapperuma ³²
		EFEMP1	rs756065296	AA	Linkage	1 family POAG: 5, C: 3	2015	Mackay ³³
15q11-q13	GLC1I	Centromere - D15S822	POAG	Cau, AA, Hispanic	Linkage	81 families POAG: 227, C: 143	2005	Allingham ³⁴
		Centromere - D15S822	POAG	Cau	Linkage	25 families POAG: 107, C: 60	2006	Woodroffe ³⁵

Supplemental table 2: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
9q22	GLC1J locus COL15A1	D9S1841 - D9S271	POAG	US	Linkage	25 families POAG: 105, C: 93	2004	Wiggs ³⁶
		rs2075662	POAG	Cau, AA	Linkage	15 families	2013	Wiggs ³⁷
		rs2075662	POAG	Cau, AA	Cases	401	2013	Wiggs ³⁷
		rs61999303	POAG	Cau, AA	Linkage	15 families	2013	Wiggs ³⁷
		rs10519	POAG					
20p12	GLC1K locus	D20S846 - D20S891	POAG	US	Linkage	25 families POAG: 105, C: 93	2004	Wiggs ³⁶
		D20S848 - rs6081603	POAG	US	Linkage	4 families POAG: 19, C: 25	2008	Sud ³⁸
3p21-p22	GLC1L locus	D3S1298 - D3S1289	POAG	Australia	Linkage	1 family POAG:24, C: 119	2005	Baird ³⁹
5q22.1-q32	GLC1M locus	D5S2051 - D5S2090	POAG	China	Linkage	1 family POAG: 9, C: 18	2006	Pang ⁴⁰
15q22-q24	GLC1N locus	D15S1036 - rs922693	POAG	China	Linkage	1 family POAG: 8, C: 17	2006	Wang ⁴¹
12q14	GLC1P locus TBK1	D12S1700	CODA	US	Linkage	CODA: 17	2007	Fingert ⁴²
		Duplication	NTG	AA	Linkage	NTG: 12	2011	Fingert ⁴³
		Duplication	NTG	US	C-C	HTG: 326, NTG: 152, C: 100	2011	Fingert ⁴³
		Duplication	NTG	Japan, US	C-C	NTG: 309, C: 202	2012	Kawase ⁴⁴
		Duplication	NTG	UK, US	C-C	NTG: 341, C: 414	2014	Ritch ⁴⁵
		Duplication	NTG	Australia	C-C	HTG: 1045, NTG: 334, C: 254	2015	Awedalla ⁴⁶
		rs13104825 - rs1425963	POAG	UK	Linkage	1 family POAG: 10, C: 1	2011	Porter ⁴⁷
		D2S2186 - D2S1346	PCG	US	Linkage	PCG: 5 families	1997	Stoilov ⁴⁸
		7 mutations	POAG	France	C-C	POAG: 236, C: 47	2004	Melki ⁴⁹
		6 mutations	POAG	India	C-C	POAG: 200, C: 100	2006	Acharya ⁵⁰
4q35.1-q35.2 2p22.2	GLC1Q locus CYP1B1	6 mutations	POAG	India	C-C	POAG: 134, C: 200	2007	Chakrabarti ⁵¹
		6 mutations	POAG	India	C-C	POAG: 264, C: 95	2008	Bhattacharjee ⁵²
		rs1056836	POAG	India	C-C	POAG: 264, C: 95	2008	Bhattacharjee ⁵²
		2 mutations	POAG	India	C-C	HTG: 198, NTG: 53, C: 100	2007	Kumar ⁵³
		7 mutations	POAG	Spain	C-C	POAG: 82, C: 93	2006	Lopez-Garrido ⁵⁴
		7 mutations	POAG	Germany	C-C	HTG: 270, NTG: 82, C: 376	2010	Pasutto ⁵⁵
		multiple mutations	POAG	New Zealand	cases	Glaucoma: 150	2012	Patel ⁵⁶
		rs180040	POAG	Cau, Asian	Meta	POAG: 2554, C: 4334	2015	Wang ⁵⁷
		8 mutations	POAG	Pakistan	C-C	POAG: 190, C: 40	2015	Micheal ⁵⁸
		any mutation	-	Germany	C-C	NTG: 285, C: 282	2009	Wolf ⁵⁹
		any mutation	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		any mutation	-	Cau, Asian	Meta	POAG: 2292, C: 1717	2012	Dong ⁶¹
		any mutation	-	Saudi-Arabia	C-C	POAG: 50, C:50	2018	Abu-Amero ⁶²
6q22.31	GJA1	c.791_792delAA	POAG	China	Linkage	1 family POAG:7 C:7	2015	Huang ⁶³
1q41	TP53BP2	c.109G > A	POAG	Netherlands	Linkage	family POAG: 8, C: 1	2017	Micheal ⁶⁴

Abbreviations: POAG= primary open-angle glaucoma; NTG= normal tension glaucoma; HTG= high tension glaucoma; IOP= intraocular pressure; CODA=cavitary optic disk anomalies; PCG=primary congenital glaucoma; UK= United Kingdom; Cau= Caucasian; US= United States; AA= African American; C-C= case control; Meta= meta-analysis; unr.= unrelated. (-) indicates that no significant association between the gene and any of the glaucoma traits was observed.

Supplemental table 3: Highly likely glaucoma risk genes

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
9q31.1	ABCA1	rs2472493	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs2472493	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs2472493	POAG	Australia, US	GWAS	(D) POAG: 1155, C: 1992 (R) POAG: 3558, C: 9496	2014	Gharahkhani ⁶⁶
		rs2472493	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs2472493	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
		rs2472493	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
		rs2472493	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
		rs2487032	POAG	China, Singapore	GWAS	(D) POAG: 1007, C: 1009 (R) POAG: 1899, C: 4965	2014	Chen ⁷⁰
		rs2164560	POAG					
		rs2472459	POAG					
		rs2472519	POAG					
		rs2487048	IOP	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs2487048	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	
		rs2472496	IOP, VCDR, CA	EU, Asian	Meta	37930	2017	
3q12.2	ABI3BP	rs9860250	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
9q34.2	ABO	rs8176693	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		Bloodgroup B	POAG	Pakistan	C-C	POAG: 220, C: 2046	2009	Khan ⁷³
		rs8176741	IOP, VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs8176672	CA					
5q12-q13	ADAMTS6	rs2307121	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
11q24.3	ADAMTS8	rs4936099	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs4936099	VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs55796939	IOP					
		rs56009602	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
			CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
16q23.1	ADAMTS18-NUDT7	Rs75828804	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
4p16.1	AFAP1	rs4619890	POAG	Australia, US	GWAS	(D) POAG: 1155, C: 1992 (R) POAG: 3558, C: 9496	2014	Gharahkhani ⁶⁶
		rs4478172	POAG					
		rs11732100	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs28795989	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Croquet ⁶⁸
		rs59521811	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
		rs9330348	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
15q24-q25	AKAP13	rs6496932	CCT	Croatia, Scotland	GWAS	(D): 1445, (R): 824	2010	Vitart ⁷⁷
		rs6496932	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸
		rs6496932	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs6496932	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs6496932	-	US-Cau	GWAS	(D): 1117, (D): 6470	2012	Ulmer ⁸⁰

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Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
15q24-q25	AKAP13	rs1828481	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs1828481	-	US-Cau	GWAS	(D): 1117, (D): 6470	2012	Ulmer ⁸⁰
		rs34896088	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs34896088	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
2p13.3	ANTXR1	rs6732795	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
19q13.2	APOE	rs429358	NTG	Japan	C-C	POAG: 310, C: 179	2005	Mabuchi 2005 ⁸¹
		rs429358	NTG	Japan	C-C	HTG: 294, NTG: 106, C: 281	2005	Fan ⁸²
		rs429358	NTG	China	C-C	HTG: 294, NTG: 106, C: 300	2006	Lam ⁸³
		rs429358	NTG	Arabic	C-C	POAG: 60, C: 130	2009	Al-dabbagh ⁸⁴
		rs429358	NTG	Australia	C-C	HTG: 72, NTG: 70, C: 51	2002	Vickers ⁸⁵
		rs429358	-	UK	C-C	POAG: 137, C: 75	2004	Ressiniotis ⁸⁶
		rs429358	-	Turkey	C-C	POAG: 75, C: 119	2009	Saglar ⁸⁷
		rs429358	-	Estonia	C-C	POAG: 242, C: 187	2007	Zetterberg ⁸⁸
		rs429358	-	UK	C-C	NTG: 155, C: 349	2004	Lake ⁸⁹
		rs7412	POAG	Japan	C-C	POAG: 310, C: 179	2005	Mabuchi ⁸¹
		rs7412	POAG	Japan	C-C	HTG: 294, NTG: 106, C: 281	2005	Fan ⁸²
		rs7412	POAG	China	C-C	HTG: 294, NTG: 106, C: 300	2006	Lam ⁸³
		rs7412	POAG	Arabic	C-C	POAG: 60, C: 130	2009	Al-dabbagh ⁸⁴
		rs7412	POAG	Australia	C-C	HTG: 72, NTG: 70, C: 51	2002	Vickers ⁸⁵
		rs7412	POAG	Poland	C-C	POAG: 183, C: 209	2015	Nowak ⁹⁰
		rs7412	POAG	Greece	C-C	POAG: 53, C: 107	2013	Chiras ⁹¹
		rs7412	-	UK	C-C	POAG: 137, C: 75	2004	Ressiniotis ⁸⁶
		rs7412	-	Turkey	C-C	POAG: 75, C: 119	2009	Saglar ⁸⁷
		rs7412	-	Estonia	C-C	POAG: 242, C: 187	2007	Zetterberg ⁸⁸
		rs7412	-	UK	C-C	NTG: 155, C: 349	2004	Lake ⁸⁹
		rs429358 + rs7412	POAG	Cau, Asian	Meta	POAG: 1971, C: 1756	2014	Liao ⁹²
11q23.1	ARHGAP20/POU2AF1	rs4938174	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
11q23.3	ARHGEF12	rs58073046	IOP	NL, Australia	GWAS	(D): 8105, (R): 7471	2015	Springelkamp ⁹³
		rs58073046	POAG, NTG	NL, Australia, NZ	C-C	POAG: 1225, C: 4117	2015	Springelkamp ⁹³
		11:120357425	IOP	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs12794618	IOP					
		Rs199800298	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
10q21.2	ARID5B	rs7090871	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs35809595	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs35809595	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
		rs5785510	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
2q37.1	ARL4C	rs13024279	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs13024279	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
15q26.3	ASB7	rs11247230	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs4299136	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs34222435	CA					

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
15q26.3	ASB7	rs60779155	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
10q21.3-q22.1	ATOH7	rs1900004	ODA	NL	Linkage	23000	2011	Axenovich ⁹⁴
		rs1900004	ODA	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs1900004	POAG	Eu	Meta	POAG: 3161, C: 42837	2011	Ramdas ⁹⁶
		rs1900004	NTG	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs1900004	VCDR, POAG	US-Cau	C-C	POAG: 539, C: 336	2011	Fan ⁹⁸
		rs1900004	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs1900004	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1900004	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
		rs1900005	VCDR					
		rs1900005	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs10998036	CA					
		rs7916410	ODA					
		rs3858145	ODA	Australia, UK	GWAS	(D): 1368, (R): 848	2010	Macgregor ¹⁰⁰
		rs3858145	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs7916697	ODA	Singapore, NL	GWAS	(D): 4445, (R): 9236	2011	Khor ¹⁰¹
		rs7916697	ODA	Australia, UK	PC	4224	2014	Venturini ¹⁰²
		rs7916697	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
		rs61854782	VCDR	China	C-C	HTG: 117, NTG: 25, C: 289	2012	Chen ¹⁰³
		rs56238729	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
12q24.12	ATXN2	rs7137828	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
13q12.11	AVGR8	rs1034200	CCT	Croatia, Scotland	GWAS	(D): 1445, (R): 824	2010	Vitart ⁷⁷
17q23	BCAS3	rs1034200	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs8068952	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs11651885	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs11867840	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
20p12.3	BMP2	rs6054374	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs6054383	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs6107845	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs6054375	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
14q22.1	BMP4	rs10130556	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
7q11.21	C7orf42	rs4718428	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs4718428	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
22q13.1	CARD10	rs9607469	ODA	Singapore, NL	GWAS	(D): 4445, (R): 9236	2011	Khor ¹⁰¹
		rs9607469	VCDR	India	C-C	POAG: 97, C: 371	2015	Philomenadin ¹⁰⁴
		rs9607469	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs5756813	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs5756813	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs2092172	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs56385951	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
7q31.1	CAV1/CAV2	rs4236601	POAG	Iceland, Cau, Asian	GWAS	(D) POAG: 1263, C: 34877 (R) POAG: 2474, C: 2644	2010	Thorleifsson ¹⁰⁵

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
7q31.1	CAV1/CAV2	rs4236601	POAG	US-Cau	C-C	HTG: 671, NTG: 329, C: 1183	2011	Wiggs ¹⁰⁶
		rs4236601	POAG	Spain	C-C	POAG: 391 C: 383	2017	Zanon-Moreno ¹⁰⁷
		rs4236601	-	Brazil	C-C	POAG: 310 C: 247	2018	Nunes ¹⁰⁸
		rs4236601	HTG	China, Japan	C-C	POAG: 848, C:1574	2016	Rong ¹⁰⁹
		rs7795356	POAG	Japan	GWAS	(D) POAG: 1394, C: 6599, (R) POAG: 1802, C: 7212	2012	Osman ¹¹⁰
		rs4136601	POAG	US-Cau	C-C	HTG: 671, NTG: 329, C: 1183	2011	Wiggs ¹⁰⁶
		rs1052990	POAG					
		rs1052990	HTG	China, Japan	C-C	POAG: 848, C:1574	2016	Rong ¹⁰⁹
		rs10258482	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs10258482	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs10262524	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs10262524	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs10281637	IOP	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs10281637	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
		rs6969706	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
1q42.13	CDC42BPA	rs6671926	ODA, CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷⁵
		1:227562773	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs11811982	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
1p22	CDC7/TGFBR3	rs1192415	ODA	NL	Linkage	23000	2011	Axenovich ⁹⁴
		rs1192415	ODA	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs1192415	ODA	Singapore, NL	GWAS	(D): 4445, (R): 9236	2011	Khor ¹⁰¹
		rs1192415	ODA	Australia	C-C	POAG: 876, C: 883	2012	Dimasi ¹¹¹
		rs1192415	POAG	Eu	Meta	POAG: 3161, C: 42837	2011	Ramdas ⁹⁶
		rs1192415	POAG	China	Cases	469	2015	Trikha ¹¹²
		rs1192415	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1192415	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs4658101	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs4658101	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs4658101	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
		6:36592986	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
6p21.2	CDKN1A	6:36592986	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
		rs6913530	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
9p21	CDKN2B(-AS)	rs1063192	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs1063192	VCDR	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs1063192	VCDR	Australia	C-C	POAG: 876, C: 883	2012	Dimasi ¹¹³
		rs1063192	POAG	Japan	GWAS	(D) POAG: 1394, C: 6599 (R) POAG: 1802, C: 7212	2012	Osman ¹¹⁰
		rs1063192	POAG	Eu	Meta	POAG: 3161, C: 42837	2011	Ramdas ⁹⁶
		rs1063192	POAG	US-Cau	C-C	POAG: 539, C: 336	2011	Fan ⁹⁸
		rs1063192	POAG	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs1063192	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
		rs1063192	POAG	EU, Asian	Meta	POAG: 11316, C: 24055	2017	Hu ¹¹⁵

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
9p21	CDKN2B(-AS)	rs1063192	-	Saudi-Arabia	C-C	POAG:87, C:94	2016	Abu-Amero ¹¹⁶
		rs523096	NTG	Japan	GWAS	(D) POAG: 286, C: 557 (R) POAG: 183, C: 514	2012	Takamoto ¹¹⁷
		rs523096	NTG	Japan	GWAS	(D) POAG: 1244, C: 975	2012	Nakano ¹¹⁸
		rs4977756	POAG	Australia, NZ	GWAS	(D) POAG: 590, C: 3956 (R) POAG: 892, C: 4582	2011	Burdon ¹¹⁹
		rs4977756	NTG	Cau	Meta	POAG: 3146, C: 3487	2012	Wiggs ¹²⁰
		rs7049105	NTG	Cau	Meta	POAG: 3146, C: 3487	2012	Wiggs ¹²⁰
		rs2157719	NTG,POAG					
		rs2157719	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs2157719	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
		rs2157719	POAG	Spain	C-C	POAG: 391 C: 383	2017	Zanon-Moreno ¹⁰⁷
		rs2157719	POAG	Brazil	C-C	POAG: 310 C: 247	2018	Nunes ¹⁰⁸
		rs2157719	POAG	Japan	C-C	POAG: 1172, C: 1559	2017	Shiga ¹²¹
		rs1360589	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs1360589	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
		rs10120688	POAG	Australia, NZ	GWAS	(D) POAG: 590, C: 3956 (R) POAG: 892, C: 4582	2011	Burdon ¹¹⁹
		rs10120688	POAG	UK	GWAS	(D) POAG: 387, C: 5380 (R) POAG: 294, C: 50	2012	Gibson ¹²²
		rs10811645	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
		rs7865618	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs7865618	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs7865618	VCDR	Latino	GWAS	(D): 3596, (R): 941	2017	Nannini ⁹⁹
		rs7866783	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs1333037	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
22q12.1	CHEK2	rs1547014	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs1547014	VCDR	Cau	Meta	POAG: 3146, C: 3487	2012	Wiggs ¹²⁰
		rs1547014	VCDR	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs1547014	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs1033667	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs5752773	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs738722	VCDR, CA, ODA					
		rs5762752	VCDR, CA, ODA					
15q26.3	CHSY1	rs4965359	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs752092	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
2q36-q37	COL4A3	rs7606754	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs62279163	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs143937055	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
		rs1536482	CCT	Croatia, Scotland	GWAS	(D): 1445, (R): 824	2010	Vitart ⁷⁷
9q34.2-q34.3	COL5A1/RXRA	rs1536482	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
9q34.2-q34.3	COL5A1/RXRA	rs1536482	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs1536482	CCT	Germany, NL	GWAS	(D): 3931, (R): 1418	2012	Hoehn ¹²³
		rs1536482	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs1536482	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs1536482	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
		rs7044529	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸
		rs7044529	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs3132306	CCT	Germany, NL	GWAS	(D): 3931, (R): 1418	2012	Hoehn ¹²³
		rs3132306	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs943423	CCT	Latino US	GWAS	(D): 1644, (R): 124	2013	Gao ¹²⁴
		rs3118515	CCT					
3q12.1	COL8A1	rs3118515	CCT	Latino	GWAS	(D): 3584 (R): 931	2016	Gao ¹²⁵
		rs2623325	VCDR	Cau, Asian	Meta	(D): 21094 and 6784	2014	Springelkamp ⁷⁵
		rs2623325	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs6804624	VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
1p34.2	COL8A2	rs1997404	ODA					
		rs96067	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸
		rs96067	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs96067	CCT	Cau	Cases	100	2010	Desronvil ¹²⁶
22q11.21	COMT	rs96067	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		Multiple SNP's (in women)	POAG	US	Meta	HTG: 1637, NTG: 717, C: 3430	2013	Pasquale ¹²⁷
8q21.13	CRISPLD1	rs117598310	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
10q21-22	CTNNA3	rs12220165	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
5q12.3	CWC27	rs10064391	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
10q23.33	CYP26A1/MYOF	rs66479974	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
8q21.3	DCAF4L2	rs9969524	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		8:88744441	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
13q13.3	DCLK1	rs1926320	NTG	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs1926320	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs9546434	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		13:36629905	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs7323428	CA					
12q21.33	DCN	rs7308752	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs7308752	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
14q21	DDHD1	rs2251069	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
7p21.2	DGKB	rs10274998	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
3q27.2-q27.3	DGKG	rs9853115	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
		rs9853115	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
1p36.21	DHRS3	rs3924048	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
2q35	DIRC3	rs1549733	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1367187	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
11p13	DNAJC24	rs542340	POAG	AA; Hispanic	GWAS	(D) POAG: 1702, C: 6067 (R) POAG: 489, C: 2685	2014	Hoffmann ¹²⁸
5q35.1	DUSP1	rs17658229	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs114503346	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs35084382	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
2p16.1	EFEMP1	rs1346786	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs3791679	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs7426380	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
11p13	ELP4	rs11031436	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs555091	POAG	AA; Hispanic	GWAS	(D) POAG: 1702, C: 6067	2014	Hoffmann ¹²⁸
		rs506227	POAG			(R) POAG: 489, C: 2685		
10q25.3	ENO4	rs1681739	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
6p25.3	EXOC2	rs17756712	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs2073006	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
1q24.2	F5	rs12406092	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs10753787	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs201655303	ODA					
6q14.1	FAM46A	rs1931656	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs1931656	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
16p13.3	FAM86A/RBFOX1	rs192917960	POAG	AA; Hispanic	GWAS	(D) POAG: 1702, C: 6067 (R) POAG: 489, C: 2685	2014	Hoffmann ¹²⁸
12q24.31	FAM101A	rs10846617	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs7311936	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs11613189	CA					
9q33.3	FAM125B	rs2286885	IOP	UK, EU	GWAS	(D): 2774, (R): 22789	2014	Nag ¹²⁹
15q26.3	FAM169B	rs6598351	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
5q21.3	FBXL17/FER	rs73220188	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
3p14.3	FLNB	rs6764184	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs6764184	CA, VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs12494328	CA					
		rs12494328	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
2q23.3	FMNL2	rs55692468	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
		rs56117902	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
3q25.31	FNDC3B	rs4894535	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs4894535	POAG	Cau	C-C	POAG: 2979, C: 7399	2013	Lu ⁷⁴
		rs6445055	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs6445055	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
				EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs7617946	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs7617946	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
		rs7635832	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
13q12.11	FGF9-SGCG	rs7327928	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
6p25.3	FOXC1	rs2745572	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
6p25.3	FOXC1	rs2745572	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
13q14.1	FOXO1	rs2721051	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs2755238	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs1161662	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
17p13.1	GAS7	rs11656696	IOP	NL, UK, Australia, NZ	GWAS	(D) 11927, (R) 7482	2012	Koolwijk van ¹³⁰
		rs11656696	POAG	NL	Meta	POAG: 1432, C: Unknown	2012	Koolwijk van ¹³⁰
		rs11656696	-	Saudi-Arabia	C-C	POAG: 92, C:95	2017	Kondkar ¹³¹
		rs9913911	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs9913911	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs9913911	IOP, VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs9913911	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷¹
		rs9913911	POAG	Japan	C-C	POAG: 1172, C: 1559	2017	Shiga ¹²¹
		rs9913911	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
		rs9913911	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
		rs9913911	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
		rs9897123	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
7p21	GLCC11/ICA1	rs59072263	IOP	Australia, UK	GWAS	(D): 2175, (R): 4866	2013	BMES ¹³²
12q23	GLT8D2	rs1564892	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs11111869	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs11111869	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
6p25.3	GMDS	rs3046543	POAG	Australia, US	GWAS	(D) POAG: 1155, C: 1992 (R) POAG: 3558, C: 9496	2014	Gharahkhani ⁶⁶
		rs11969985	POAG					
1p13.3	GSTM1	rs114096562	POAG					
		null>positive	POAG	Italy	C-C	POAG: 42, C: 45	2003	Izzotti ¹³³
		null>positive	POAG	Arabic	C-C	POAG: 153, C: 159	2005	Yildirim ¹³⁴
		null>positive	POAG	Turkey	C-C	POAG: 49, C: 120	2008	Abu-Amro ¹³⁵
		null>positive	POAG	Brazil	C-C	POAG: 87, C: 85	2011	Rocha ¹³⁶
		null>positive	POAG	Cau, Asian	Meta	POAG: 1339, C: 1412	2013	Huang ¹³⁷
		null>positive	POAG	Greece	C-C	POAG: 106, C: 120	2016	Lavaris ¹³⁸
		null>positive	-	Serbia	C-C	POAG: 102, C:202	2017	Stamenkovic ¹³⁹
		positive>null	POAG	Estonia	C-C	POAG: 250, C: 202	2000	Juronen ¹⁴⁰
		positive>null	POAG	Turkey	C-C	POAG: 144, C: 121	2007	Unal ¹⁴¹
		positive>null	POAG	Cau, Asian	meta	POAG: 1984 C: 1760	2017	Malik ¹⁴²
17p12	HS3ST3B1/PMP22	rs12940030	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs9900807	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs9900807	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
6q22.31	HSF2	rs1402538	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
6q22.31	HSF2	rs1402538	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs2684249	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
22q12.2	HORMAD2	rs2412970	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
6q14.1	IBTK	rs1538138	CCT	US-Cau	GWAS	(D): 1117	2012	Ulmer ⁸⁰
		rs1538138	CCT	Asian	GWAS	(D): 7711, @: 2681	2012	Cornes ⁷⁹
		rs1538138	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
	IBTK / FAM46A	rs2875087	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
11p13	IMMP1L	rs1223068	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
17q21.32	KPNB1	rs11870935	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
9q34.2-q34.3	LCN12/PTGDS	rs11145951	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
9q31.3	LPAR1	rs1007000	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs10817107	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
			CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
2q21.2-q22.2	LRP1B	rs2381190	ODA	NL	Linkage	23000	2011	Axenovich ⁹⁴
		rs491391	ODA	Australia, UK	GWAS	(D): 1368, (R): 848	2010	Macgregor ¹⁰⁰
15q26.3	LRRK1	rs930847	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs930847	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs930847	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
2p22-21	LTBP1	rs115781177	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs115179432	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
5q22.1	MIR548F3	rs596169	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
9p23	MPDZ/NF1B	rs1324183	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
11q22.2	MMP1	rs1799750	POAG	Poland	C-C	POAG 196, C: 253	2011	Majsterek ¹⁴³
		rs1799750	RNFLT, POAG	Cau	C-C	POAG: 255, C: 256	2013	Markiewicz ¹⁴⁴
		rs1799750	POAG	Pakistan	C-C	POAG: 112, C: 118	2013	Micheal ¹⁴⁵
		rs1799750	POAG	Cau,Asian	Meta	POAG: 1261, C: 1089	2016	He ¹⁴⁶
20q13.2	MMP9	rs3918249	POAG	Cau, Asian	Meta	POAG: 550, C: 794	2016	Zhang ¹⁴⁷
		rs3918249	RNFLT, VCDR	Cau	C-C	POAG: 255, C: 256	2013	Markiewicz ¹⁴⁴
		rs3918242	POAG	India	C-C	POAG: 224, C: 367	2018	Thakur ¹⁴⁸
		rs17576	-	Cau, Asian	Meta	POAG: 1357, C: 1432	2016	Zhang ¹⁴⁷
		rs2274755	NTG	South Korea	C-C	HTG: 146, HTG: 174, C: 380	2018	Suh 2017 ¹⁴⁹
5q11.2	MOCS2/FST	Rs4865762	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
2q21.2	NCKAP5	rs7588567	POAG	Japan	GWAS	(D) POAG: 1394, C: 6599, (R) POAG: 1802, C: 7212	2012	Osman ¹¹⁰
8q22.1	NDUFAF6	rs10429294	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
7q36	NOS3	rs3918226	POAG	Australia	C-C	POAG: 53, C: 60	1998	Tunny ¹⁵⁰
		rs3918226	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		Intron-4	POAG	Pakistan	C-C	POAG: 159, C: 166	2010	Ayub ¹⁵¹
		Intron-4	-	China	C-C	POAG: 66, C: 100	2005	Lin ¹⁵²
		rs2070744	POAG	Egypt	C-C	POAG: 160, C: 110	2014	Emam ¹⁵³
		rs2070744	POAG	Cau	C-C	POAG: 527, C: 1539	2011	Kang ¹⁵⁴
		rs2070744	POAG	Cau, Asian	Meta	POAG: 1156, C: 1879	2016	Xiang ¹⁵⁵
		rs2070744	NTG	Korea	C-C	NTG: 251, C: 245	2017	Jeoung ¹⁵⁶

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
7q36	NOS3	rs2070744	-	UK	C-C	HTG: 58, NTG: 76, C: 38	2005	Logan ¹⁵⁷
		rs2070744	-	China	C-C	POAG: 66, C: 100	2005	Lin ¹⁵²
		rs2070744	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs2070744	-	EU-Cau	Cases	HTG: 300, NTG: 127	2012	Weiss ¹⁵⁸
		rs3918188	POAG	US-Cau	C-C	POAG: 527, C: 1543	2010	Kang ¹⁵⁹
		rs3918188	POAG	Brazil	C-C	POAG: 90, C: 127	2012	Magalhaes da Silva ¹⁶⁰
		rs3918188	POAG	Cau	C-C	POAG: 374, C: 1085	2011	Kang ¹⁶¹
		rs3793342 + rs11771443	POAG	China	C-C	POAG: 102, C: 120	2011	Liao ¹⁶²
		rs2333227	-	China	C-C	POAG: 66, C: 100	2005	Lin ¹⁵²
		rs1799983	POAG	Cau, Asian	Meta	POAG: 1230, C: 2035	2016	Xiang ¹⁵⁵
		rs1799983	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs1799983	-	EU-Cau	Cases	HTG: 300, NTG: 127	2012	Weiss ¹⁵⁸
15q26.2	NR2F2	rs8034595	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
4q31	NR3C2	rs3931397	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
19q13.33	NTF4	c.20G > A	POAG	Germany, NL	GWAS	(D) HTG: 270, NTG: 82, C: 376	2009	Pasutto ¹⁶³
		rs61732310	POAG			(R) HTG: 338, NTG: 266, C: 1414		
		c.269G > A	POAG					
		rs121918427	POAG					
		rs121918428	POAG	China	C-C	POAG: 174, C: 91	2010	Vithana ¹⁶⁴
		c.338T > C	POAG			POAG: 720, C: 950	2012	Chen ¹⁶⁵
		c.470G > C	POAG	China	C-C			
		c.545C > T	POAG	Eu	C-C	POAG: 443, C: 533	2010	Liu ¹⁶⁶
		genewide	-			POAG: 141, C: 285	2010	Rao ¹⁶⁷
		genewide	-	India	C-C			
		rs747782	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs1681630	IOP					
		rs7946766	IOP					
3q28-q29	OPA1	rs166850	NTG	UK	C-C	NTG: 163, C: 186	2002	Aung ¹⁶⁸
		rs166850	NTG	UK	C-C	HTG: 67, NTG: 70, C: 75	2010	Yu-Wai-Man ¹⁶⁹
		rs166850	NTG	Cau, Asian	Meta	HTG: 1200, NTG: 713, C: 1935	2012	Guo ¹⁷⁰
		rs166850	-	Greece	C-C	POAG: 106, C: 120	2016	Lavaris ¹³⁸
		rs166850	-	Korea	C-C	NTG: 75, C: 101	2004	Woo ¹⁷¹
		rs166850	-	Germany	C-C	NTG: 285, C: 282	2009	Wolf ⁵⁹
		rs166850	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs10451941	NTG	UK	C-C	NTG: 163, C: 186	2002	Aung ¹⁶⁸
		rs10451941	NTG	UK	C-C	NTG: 61, C: 49	2003	Powell ¹⁷²
		rs10451941	NTG	Japan	C-C	HTG: 191, NTG: 194, C: 185	2007	Mabuchi ¹⁷³
		rs10451941	NTG	UK	C-C	HTG: 67, NTG: 70, C: 75	2010	Yu-Wai-Man ¹⁶⁹
		rs10451941	NTG	Cau, Asian	Meta	HTG: 1200, NTG: 713, C: 1935	2012	Guo ¹⁷⁰
		rs10451941	-	Korea	C-C	NTG: 75, C: 101	2004	Woo ¹⁷¹

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
3q28-q29	OPA1	rs10451941	-	Germany	C-C	NTG: 285, C: 282	2009	Wolf ⁵⁹
		rs10451941	-	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs10451941	-	Greece	C-C	POAG: 106, C: 120	2016	Lavaris ¹³⁸
11p13	PAX6	rs3026398	CCT	Au-Cau	PC	956	2010	Dimasi ¹¹¹
		rs7104512	ODA	NL	GWAS	(D): 5312, (R): 5933	2012	Gasten ¹⁷⁴
		rs10835818	ODA					
		rs7126851	ODA	NL	GWAS	(D): 5312, (R): 5933	2012	Gasten ¹⁷⁴
5p13.3	PDZD2	rs72759609	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
8q21.13	PKIA	rs78150043	IOP	Eu	Meta	29578	2017	Springelkamp ⁷¹
		8:78380944	IOP					
10q23.33	PLCE1	rs7072574	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		10:96008348	VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs2274224	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
10p12.31	PLXDC2	rs7081455	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C 448	2009	Nakano ¹⁷⁵
		rs7081455	-	China	C-C	POAG: 462, C: 577	2012	Chen ¹⁷⁶
		rs7081455	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs7081455	-	Saudi-Arabia	C-C	POAG: 188, C: 164	2018	Kondkar ¹⁷⁷
		rs7098387	POAG	Korea	C-C	POAG: 211, C: 904	2014	Kim ¹⁷⁸
16p13.2	PMM2	rs3785176	POAG	China	GWAS	(D) POAG: 1007, C: 1009 (R) POAG: 1899, C: 4965	2014	Chen ⁷⁰
		rs67792030	POAG					
17p13.1	POLR2A	17:7423981	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
1p36.32	PRDM16	rs199942561	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
9q34.2	PRR31	rs2386136	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
8q24.2	PSCA	rs2920293	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
7q11.21	RABGEF1	rs68168107	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs68168107	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
11p11.2	RAPSN	rs12419342	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs12419342	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs12419342	IOP	Norfolk island	Cases	Population: 330	2017	Matovinovic ¹⁷⁹
		rs79390637	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet
3p24.2	RARB	rs11129176	ODA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs11129176	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
14q11.2	RBM23	14:23388793	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
1p36.23	RERE	rs301801	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs301801	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs12015126	CA, VCDR	NL	Linkage	23000	2011	Axenovich ⁹⁴
		rs12015126	-	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs12015126	-	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs2252865	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
3p24.3	RFTN1	rs690037	CA	Australia, UK	GWAS	(D): 1368, (R): 848	2010	Macgregor ¹⁰⁰
		rs690037	CCT	China	C-C	HTG: 117, NTG: 25, C: 289	2012	Chen ¹⁰³
12q13.11	RPAP3	rs11168187	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
1p31	RPE65	rs1925953	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
6p25	RREB1	rs4960295	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
16q12.1	SALL1	rs1362756	ODA	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs1362756	POAG	EU	Meta	POAG: 3161, C: 42837	2011	Ramdas ⁹⁶
		rs1362756	ODA, CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1362756	-	Singapore, NL	GWAS	(D): 4445, (R): 9236	2011	Khor ¹⁰¹
		rs1362756	-	NL	GWAS	(D): 5312, (R): 5933	2012	Gasten ¹⁷⁴
		rs1345467	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs1345467	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
		rs11646917	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs11646917	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
		rs66983417	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
11q13.1	SCYL1	rs17146964	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs17146964	-	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
14p22-p23	SIX1/SIX6	rs10483727	VCDR	NL, UK	GWAS	(D): 7360, (R): 4455	2010	Ramdas ⁹⁵
		rs10483727	RNFLT	NL	Linkage	23000	2011	Axenovich ⁹⁴
		rs10483727	POAG	Eu	Meta	POAG: 3161, C: 42837	2011	Ramdas ⁹⁶
		rs10483727	VCDR, POAG	US-Cau	C-C	POAG: 539, C: 336	2011	Fan ⁹⁸
		rs10483727	POAG	Japan	GWAS	(D) POAG: 1394, C: 6599 (R) POAG: 1802, C: 7212	2012	Osman ¹¹⁰
		rs10483727	POAG	Cau	Meta	POAG: 3146, C: 3487	2012	Wiggs ¹²⁰
		rs10483727	VCDR, POAG	Australia	C-C	POAG: 876, C: 883	2012	Dimasi ¹¹³
		rs10483727	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs10483727	-	Japan	C-C	HTG: 212, NTG: 213, C: 191	2012	Mabuchi ⁹⁷
		rs10483727	-	UK	GWAS	(D) POAG: 387, C: 5380 (R) POAG: 294, C: 50	2012	Gibson ¹²²
		rs10483727	RNFLT	EU	Cases	231	2015	Kuo ¹⁸⁰
		rs10483727	VCDR	India	C-C	POAG: 97, C: 371	2015	Philomenadin ¹⁰⁴
		rs10483727	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs10483727	POAG	China	C-C	POAG: 866, C: 266	2016	Sang ¹⁸¹
		rs10483727	POAG	Saudi Arabia	C-C	POAG: 92, C: 94	2018	Kondkar ¹⁸²
		rs10483727	POAG	China, Japan	C-C	POAG: 1440, C: 1313	2018	Rong ¹⁸³
		rs4901977	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs33912345	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs33912345	POAG, NTG	China	C-C	POAG: 866, C: 266	2016	Sang ¹⁸¹
		rs33912345	POAG	Japan	C-C	POAG: 1172, C: 1559	2017	Shiga ¹²¹
		rs33912345	POAG	China, Japan	C-C	POAG: 1440, C: 1313	2018	Rong ¹⁸³
		rs8015152	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
		rs8015152	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷⁵
		rs4436712	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
		rs4436712	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷⁵
		rs34935520	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
14p22-p23	SIX1/SIX6	rs34935520	POAG	Cau, Asian	Meta	POAG: 6429, C: 41404	2017	Springelkamp ⁷⁵
		rs34935520	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
		rs12436579	POAG	China, Japan	C-C	POAG: 1440, C: 1313	2018	Rong ¹⁸³
		rs35155027	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
15q22.33	SMAD3	rs12913547	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs12912010	CCT	Europa	Meta	17803	2018	Iglesias
		rs12912010	CCT	Asia	Meta	8107	2018	Iglesias
		rs12912045	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
2p21	SRBD1	rs3213787	NTG	Japan	C-C	NTG: 305, C: 355	2010	Writing ¹⁸⁴
		rs3213787	POAG, NTG	Japan	C-C	HTG: 212, NTG: 158, C: 191	2011	Mabuchi ¹⁸⁵
		rs3213787	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs11884064	POAG	UK	GWAS	(D) POAG: 387, C: 5380 (R) POAG: 294, C: 50	2012	Gibson ¹²²
11q13.1	SSSCA1	rs1346	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs1346	CA, VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1346	VCDR, CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷⁵
3q22.3	STAG1	3:136138073	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
3q26.32	TBL1XR1/KCNMB2	rs7620503	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		3:177298094	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		3:177298094	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
18q21.2	TCF4	rs11659764	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
7q31.2	TFEC-TES	rs6968419	IOP	EU, Asia	GWAS	(D): 69756 (R): 37930	2017	Choquet ⁶⁸
3q25.31	TIPARP	rs9822953	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
15q13	TJP1	rs785422	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs785420	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
9q33.1	TLR4	rs2149356	POAG, NTG	Japan	C-C	POAG: 184, NTG: 365, C: 216	2012	Takano ¹⁸⁶
		rs2149356	POAG	Mexico	C-C	POAG: 187, C: 109	2016	Navarro-Partida ¹⁸⁷
		rs7037117	NTG	Japan	C-C	NTG: 250, C: 318	2008	Shibuya ¹⁸⁸
		rs7037117	POAG, NTG	Japan	C-C	POAG: 184, NTG: 365, C: 216	2012	Takano ¹⁸⁶
		rs7037117	POAG	China	C-C	POAG: 462, C: 577	2012	Chen ¹⁷⁶
		rs7037117	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs12377632	POAG	Mexico	C-C	POAG: 187, C: 109	2016	Navarro-Partida ¹⁸⁷
		rs1927911	POAG	Mexico	C-C	POAG: 187, C: 109	2016	Navarro-Partida ¹⁸⁷
		rs2149356	POAG	Mexico	C-C	POAG: 187, C: 109	2016	Navarro-Partida ¹⁸⁷
		rs4986790	POAG	Mexico	C-C	POAG: 187, C: 109	2017	Navarro-Partida ¹⁸⁹
		rs4986790	-	Saudi-Arabia	C-C	POAG: 85, C: 95	2016	Abu-Amero ¹⁹⁰
		rs4986791	POAG	Mexico	C-C	POAG: 187, C: 109	2017	Navarro-Partida ¹⁸⁹
		rs4986791	-	Saudi-Arabia	C-C	POAG: 85, C: 95	2016	Mousa ¹⁹¹
		genewide	-	Korea	C-C	NTG: 147, C: 380	2011	Suh ¹⁹²
		rs4656461	POAG	Australia, NZ	GWAS	(D) POAG: 590, C: 3956 (R) POAG: 892, C: 4582	2011	Burdon ¹¹⁹

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
1q24	TMCO1	rs4656461	POAG	Chinese	C-C	HTG: 870, NTG: 297, C: 934	2015	Chen ¹⁹³
		rs4656461	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs4656461	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs4656461	POAG	Spain	C-C	POAG: 391 C: 383	2017	Zanon-Moreno ¹⁰⁷
		rs4656461	-	Australia, NZ	Cases	1420	2012	Sharma ¹⁹⁴
		rs7518099	POAG	Australia, NZ	GWAS	(D) POAG: 590, C: 3956 (R) POAG: 892, C: 4582	2011	Burdon ¹¹⁹
		rs7518099	IOP	Cau	Meta	POAG: 2647, C: 3589	2014	Ozel ¹⁹⁵
		rs7518099	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs7518099	-	UK	GWAS	(D) POAG: 387, C: 5380 (R) POAG: 294, C: 50	2012	Gibson ¹²²
		rs7555523	IOP	NL, UK, Australia, NZ	GWAS	(D) 11927, (R) 7482	2012	Koolwijk van ¹³⁰
		rs7555523	POAG	NL	Meta	POAG: 1432	2012	Koolwijk van ¹³⁰
		rs7555523	IOP	Asian, EU	Meta	(D): 35296	2014	Hysi ⁶⁵
		rs7555523	POAG	Cau	Meta	POAG: 4284, C: 95560	2014	Hysi ⁶⁵
		rs7555523	POAG	Chinese	C-C	HTG: 870, NTG: 297, C: 934	2015	Chen ¹⁹³
		rs7555523	-	Saudi-Arabia	C-C	POAG: 87, C: 94	2016	Kondkar ¹⁹⁶
		rs10918274	IOP	Eu, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs7524755	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426 (R) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
		Rs2814471	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561 (R) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
		rs1913845	-	Japan	GWAS	(D) POAG: 1394, C: 6599	2012	Osman ¹¹⁰
		rs12723198	-			(R) POAG: 1802, C: 7212		
		rs10918271	-					
		rs7411708	-					
12q21.31	TMTC2	Rs6668108	IOP	EU, Asia	GWAS	(D): 69,756 (R): 37,930	2017	Croquet ⁶⁸
		rs7961953	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C 448	2009	Nakano ¹⁷⁵
		rs7961953	-	China	C-C	POAG: 462, C: 577	2012	Chen ¹⁷⁶
		rs7961953	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
		rs7961953	-	Korea	C-C	POAG: 211, C: 904	2014	Kim ¹⁷⁸
		rs7972528	CA	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs1511589	ODA					
		rs10862688	VCDR	Cau, Asian	Meta	(D) 21094 and 6784	2014	Springelkamp ⁷⁵
		rs324780	VCDR	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
		rs482507	CA					
		rs442376	ODA					
		rs324794	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
6p21.3	TNF	rs1800629	POAG	Turkey	C-C	POAG: 86, C: 193	2012	Bozkurt ¹⁹⁷
		rs1800629	POAG	China	C-C	POAG: 60, C: 103	2003	Lin ¹⁹⁸
		rs1800629	POAG	Iran	C-C	POAG: 223, C: 202	2009	Razeghinejad ¹⁹⁹

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
6p21.3	TNF	rs1800629	POAG	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs1800629	POAG	Cau, Asian	Meta	POAG: 1182, C: 3003	2013	Xin ²⁰⁰
		rs1800629	POAG	Egypt	C-C	POAG: 60, C: 26	2016	Hamid ²⁰¹
		rs1800629	POAG	Poland	C-C	POAG: 252 C:191	2017	Tikunova ²⁰²
17p13.1	TP53	rs1800629	-	Australia	C-C	POAG: 114, C: 228	2006	Mossbock ²⁰³
		rs1800629	-	Cau, Asian	Meta	POAG: 1798, C: 1683	2015	Lee ²⁰⁴
		rs1800630	POAG	China	C-C	POAG: 234, C: 230	2012	Wang ²⁰⁵
		rs4645836	POAG					
		rs361525	-	Australia	C-C	POAG: 114, C: 228	2006	Mossbock ²⁰³
		rs361525	-	Cau, Asian	Meta	POAG: 404, C: 625	2013	Xin ²⁰⁰
		rs361525	-	Eu, Turkey	Meta	POAG: 404, C: 625	2015	Lee ²⁰⁴
		rs1799724	-	Cau, Asian	Meta	POAG: 808, C: 1039	2013	Xin ²⁰⁰
		rs645836	-	Cau, Asian	Meta	POAG: 645, C: 666	2013	Xin ²⁰⁰
		rs1042522	POAG	China	C-C	HTG: 255, NTG: 100, C: 201	2010	Fan ⁶⁰
		rs1042522	POAG	Cau, Asian	C-C	POAG: 1930, C: 1463	2012	Guo ²⁰⁶
		rs1042522	RNFLT	Cau	C-C	POAG: 186, C: 188	2014	Nowak ²⁰⁷
		rs1042522	-	Turkey	C-C	POAG: 75, C: 119	2009	Saglar ⁸⁷
		rs1042522	-	India	C-C	POAG:139, C: 218	2018	Gupta ²⁰⁸
		rs1042522	-	Japan	C-C	HTG: 212, NTG: 213, C: 189	2012	Mabuchi ⁹⁷
		rs57958982	-					
2p24.3	TRIB2	rs2113818	CA,VCDR	EU, Asian	Meta	(D) 17248 and 6841	2015	Springelkamp ⁷²
		rs13016883	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
22q13.1	TRIOBP	rs1074407	CA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
22q11.21	TXNRD2	rs35934224	POAG	US, Australia, EU, Singapore, China	Meta	(D) POAG: 3853, C: 33480 (R) POAG: 3164, C: 9242	2016	Bailey ⁶⁷
		rs58714937	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
4q26	UGT8	rs10021731	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
1p31	U6/ GADD45A	rs787541	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
5q14.2-14.3	VCAN	rs7717697	VCDR, CA, ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
3p25.2	VGLL4	rs2443724	ODA	EU, Asian	Meta	37930	2017	Springelkamp ⁷¹
7q11.21	VKORC1L1	rs11763147	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
22q13	WNT7B	rs10453441	CCT	Latino	GWAS	(D): 3584 (R): 931	2016	Gao ¹²⁵
		rs9330813	CCT	India	GWAS	(D): 159, (R): 8844	2018	Fan ²⁰⁹
				Latino, EU	+ Meta	Total: 9003		
2q35	WNT10A	rs121908120	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
16q24	ZNF469	rs12447690	CCT	Croatia, Scotland	GWAS	(D): 1445, (R): 824	2010	Vitart ⁷⁷
		rs12447690	CCT	Australia, UK	GWAS	(D): 5058	2010	Lu ²¹⁰
		rs12447690	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸
		rs12447690	CCT	Germany, NL	GWAS	(D): 3931, (R): 1418	2012	Hoehn ¹²³
		rs12447690	CCT	Asian	GWAS	(D): 7711, (R): 2681	2012	Cornes ⁷⁹
		rs12447690	CCT, POAG	US-Cau	GWAS	(D): 1117, (D): 6470	2012	Ulmer ⁸⁰

Supplemental table 3: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
16q24	ZNF469	rs12447690	CCT	Latino	GWAS	(D): 3584 (R): 931	2016	Gao ¹²⁵
		rs12447690	-	Australia	C-C	POAG: 876, C: 883	2012	Dimasi ¹¹³
		rs9938149	CCT	Australia, UK	GWAS	(D): 5058	2010	Lu ²¹⁰
		rs9938149	CCT	Singapore	GWAS	(D): 5080	2011	Vithana ⁷⁸
		rs9938149	CCT	Germany, NL	GWAS	(D): 3931, (R): 1418	2012	Hoehn ¹²³
		rs9938149	CCT	Cau, Asian	Meta	20000	2013	Lu ⁷⁴
		rs9938149	CCT	Norfolk Island	Cases	330	2017	Matovinovic ¹⁷⁹
		rs9938149	-	Australia	C-C	POAG: 876, C: 883	2012	Dimasi ¹¹³
		rs35193497	CCT	Europa	Meta	17803	2018	Iglesias ⁷⁶
		rs35193497	CCT	Asia	Meta	8107	2018	Iglesias ⁷⁶
		rs12926024	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
		rs547984	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C: 448	2009	Nakano ¹⁷⁵
		rs547984	-	Africa	C-C	POAG: 272, C: 165	2012	Cao ¹¹⁴
1q43	ZP4	rs547984	-	Saudi-Arabia	C-C	POAG: 90, C: 95	2017	Azad ²¹¹
		rs540782	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C 448	2009	Nakano ¹⁷⁵
		rs540782	-	Saudi-Arabia	C-C	POAG: 92, C: 95	2017	Kondkar ²¹²
		rs693421	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C 448	2009	Nakano ¹⁷⁵
		rs693421	POAG	Korea	C-C	POAG: 211, C: 904	2014	Kim ¹⁷⁸
		rs693421	-	China	C-C	POAG: 462, C: 577	2012	Chen ¹⁷⁶
		rs2499601	POAG	Japan	GWAS	(D) POAG: 418, C:300 (R) POAG: 409, C 448	2009	Nakano ¹⁷⁵

Abbreviations: CA= cup area; CCT= central corneal thickness; HTG= high tension glaucoma; NTG= normal tension glaucoma; IOP= intraocular pressure; ODA= optic disc area; POAG= primary open angle glaucoma; RNFLT= retina nerve fiber layer thickness; VCDR= vertical cup disc ratio; AA= African American, Cau= Caucasian; NL= Netherlands NZ= New Zealand; UK= United Kingdom; US= United States; C-C= case control; Meta= meta-analysis. (D)= Discover®(R)= Replication (-) indicates that no significant association between the gene and any of the glaucoma traits was observed.

Supplemental table 4: Less likely glaucoma risk genes

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
7q21.12	ABCB1	rs2032582 rs1045642 rs1045642	POAG POAG IOP	China	C-C	POAG: 129, C: 121	2016	Liu ²¹³
15q26.3	ADAMTS17	rs72755233	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
12q12	ADAMTS20	rs7977237	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
10q25.3	ADRB1	rs1801253	NTG	Japan	C-C	HTG: 211, NTG: 294, C: 240	2006	Inagaki ²¹⁴
5q32	ADRB2	rs1042713 rs1042714	POAG IOP	Japan	C-C	HTG: 211, NTG: 294, C: 240	2006	Inagaki ²¹⁴
Xq23	AGTR2	rs11091046 rs11091046	NTG -	Japan Mexico	C-C C-C	HTG: 190, NTG: 268, C: 240 POAG: 118, C: 100	2005 2013	Hashizume ²¹⁵ Buentello-Volante ²¹⁶
8q23.1	ANGPT1	rs2514884 rs10105844	POAG IOP	Multi-ethnic Multi-ethnic	GWAS GWAS	(D) POAG: 7329 C: 169561 (D)69756	2018 2017	Choquet ⁶⁹ Choquet ⁶⁸
5p15.2	ANKH	rs76325372	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
14q11.2	APEX1	rs1130409	POAG	Poland	C-C	POAG: 150, C: 190	2013	Cuchra ²¹⁷
13q12.12	BASP1P1	rs9552680	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
11p14.1	BDNF	rs6265 rs2030324	RNFLT, POAG POAG, VCDR	Cau Poland	C-C C-C	POAG: 167, C: 193 POAG: 363, C: 406	2014 2015	Nowak ²¹⁸ Nowak ⁹⁰
2p22.3	BIRC6	rs2754511 rs2754511	POAG -	US-Cau Pakistan	C-C C-C	POAG: 678, C: 421 POAG: 471, C: 160	2011 2014	Carbone ²¹⁹ Ayub ²²⁰
6p22.2	BTN3A2	rs4712981 rs853676	CCT ODA	Norfolk Island Norfolk Island	Cases Cases	330 330	2018 2018	Kho ²²¹ Kho ²²¹
11p13	CAT	rs769217 rs1001179 rs1001179	POAG POAG -	China Poland Saudi Arabia	C-C C-C C-C	POAG: 416; C: 997 POAG: 209; C: 191 POAG: 225; C: 403	2017 2016 2013	Gong Malinowska Abu-Amoro
3p12.1	CADM2	Rs34201102	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
1p13.1	CD2	c.596A > G	POAG	China	Cases	3	2014	Liu ²²²
16q22.1	CDH1	rs1801026 rs1801026	POAG -	China China	C-C C-C	POAG: 60, C: 103 HTG: 255, NTG: 100, C: 201	2006 2010	Lin ²²³ Fan ⁶⁰
9p21.3	CDKN2A	rs3088440	POAG	Spain	C-C	POAG: 391 C: 383	2017	Zanon-Moreno ¹⁰⁷
3p26.3- p26.2	CNTN4	copy number	POAG	Indian, Cau	C-C	POAG: 971, C: 749	2014	Kaurani ²²⁴
MtDNA	mt-CO1	rs879053914	POAG	African American	C-C	POAG: 1339, C: 850	2018	Collins ²²⁵
mtDNA	mt-CO3	rs2248727	NTG	Korea	C-C	NTG: 196; C: 202	2014	Jeoung ²²⁶
21q22.3	COL6A1/COL6A2	rs2839082	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
2q37.3	COL6A3	rs7599762	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
21q22.3	COL18A1	rs144147445	POAG	Cau, AA	C-C	15 families	2013	Wiggs ³⁷
15q24.1	CYP1A1	rs4646903	POAG	Brazil	C-C	POAG: 152, C: 100	2014	Costa ²²⁷
14q32.1	CYP46A1	rs754203 rs754203 rs754203	POAG POAG -	France India Australia	C-C C-C C-C	POAG: 150, C: 118 POAG: 122, C: 112 POAG: 330, C: 251	2009 2016 2011	Fourgeux ²²⁸ Chandra ²²⁹ Mossbock ²³⁰
mtDNA	mt-CYB	m.14766C>T	NTG	Korea	C-C	NTG: 196; C: 202	2014	Jeoung ²²⁶
3p22.2	DCLK3	rs17197692	RNFLT	NL	Linkage	23000	2011	Axenovich ⁹⁴
11q14.1	DLG2	rs790357	IOP	Norfolk island	Cases	Population: 330	2017	Matovinovic ¹⁷⁹

Supplemental Table 4: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
4q31.22	EDNRA	rs5335	POAG	Japan	C-C	HTG: 176, NTG: 250, C:224	2005	Ishikawa ²³¹
		rs5335	POAG	Mexico	C-C	POAG: 118, C: 100	2013	Buentello-Volante ²¹⁶
7q11.23	ELN	rs149154973	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
6p12.1	ELOVL5	rs735860	NTG, POAG	Japan	C-C	NTG: 305, C: 355	2010	Writing ¹⁸⁴
		rs735860	POAG	Japan	C-C	HTG: 212, NTG: 158, C: 191	2011	Mabuchi ¹⁸⁵
		rs735860	NTG, POAG	Japan	C-C	HTG: 212, NTG: 213, C: 191	2015	Mabuchi ²³²
14q23.3	ESR2	rs1256031	POAG, IOP	Japan	C-C	HTG: 212, NTG: 213, C: 191	2010	Mabuchi ²³³
		rs4986938	POAG					
15q21.1	FBN1	rs17352842	CCT	Australia-Cau	PC	956	2010	Dimasi ¹¹¹
14q31.3	GALC	Heterozygous deletion	POAG	Cau	C-C	POAG: 1030, C: 2330	2011	Liu ²³⁴
		Heterozygous deletion	-	Korea	C-C	NTG: 276, C: 135	2016	Shin ²³⁵
9p24.2	GLIS3	rs2224492	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
7q35-36	GPDS1	D7S2462	NTG	Japan	C-C	NTG: 141, C: 101	2009	Nakamura ²³⁶
10p12.1	GPR158	rs11014632	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
3p21.31	GPX1	rs1050450	POAG	Poland	C-C	POAG: 209; C: 191	2016	Malinowska ²³⁷
22q11.2	GSTT1	null genotype	POAG	Turkey	C-C	POAG: 144, C: 121	2007	Unal ¹⁴¹
		null genotype	POAG	Brazil	C-C	POAG: 100, C: 53	2014	Silva ²³⁸
		active	POAG	Serbia	C-C	POAG: 102, C:202	2018	Stamenkovic ¹³⁹
		null genotype	-	Cau, Asian	Meta	POAG: 1306, C: 1114	2013	Lu ²³⁹
		null genotype	-	Cau, Asian	meta	POAG: 1591 C: 1337	2017	Malik ¹⁴²
17p13.3	HABP1	rs1805429	POAG	India	C-C	HTG: 116, NTG: 321, C: 96	2012	Basu ²⁴⁰
		rs2472614	POAG					
		rs8072363	POAG					
mtDNA	Haplogroups	non-L3 haplotype	POAG	African	C-C	POAG: 1919, C: 2162	2018	Gudiseva ²²⁵
8q24.12	HAS2	rs6651224	POAG	India	C-C	HTG: 116, NTG: 321, C: 96	2012	Basu ²⁴⁰
2p12	HK2	rs678350	POAG, NTG	Japan	C-C	HTG: 310, NTG: 407, C: 391	2013	Shi ²⁴¹
6p21.3	HSP70-1	rs1008438	POAG	Japan	C-C	HTG: 211, NTG: 290, C: 241	2007	Tosaka ²⁴²
	HSP70	rs1043618	-	Pakistan	C-C	POAG: 159, C: 166	2010	Ayub ¹⁵¹
		rs1043618	POAG	Cau	C-C	POAG: 167, C: 193	2014	Nowak ²¹⁸
		rs1043618	RFNLT	Poland	C-C	POAG: 363, C: 406	2015	Nowak ⁹⁰
1p34.2	HIVEP3	rs1866758	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
3p21.3	HYAL3	rs2285044	POAG	India	C-C	HTG: 116, NTG: 321, C: 96	2012	Basu ²⁴⁰
		rs3774753	POAG					
		rs1310073	POAG					
		rs1076872	POAG					
11p15.5	IGF2	rs680	POAG	China	C-C	POAG: 60, C: 104	2003	Tsai ²⁴³
2q34	IKZF2	rs56335522	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
2q14	IL1A	rs1800587	POAG	China	C-C	POAG: 156, C: 167	2006	Wang ²⁴⁴
		rs1800587	-	China	C-C	POAG 194, C: 79	2007	How ²⁴⁵
		rs1800587	NTG	India	C-C	HTG: 116, NTG: 199, C: 301	2010	Mookherjee ²⁸

Supplemental table 4: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
2q14	IL1A	rs1800587	-	Asian	Meta	POAG: 822 , C: 714	2017	Li 246
		rs1800587	-	Brazil	C-C	POAG: 214, C:187	2018	Oliveira 247
		rs17561	-					
2q14	IL1B	rs16944	POAG	India	C-C	HTG: 116, NTG: 199, C: 301	2010	Mookherjee 28
		rs16944	POAG	Cau	C-C	POAG: 255, C: 256	2013	Markiewicz 144
		rs16944	-	China	C-C	POAG: 60, C:103	2003	Lin 198
		rs16944	-	Asian/Cau	Meta	POAG:1053, C:986	2017	Li 246
		rs1143634	-					
		rs1143634	-	China	C-C	POAG 194, C: 79	2007	How 245
		rs1143634	POAG	Brazil	C-C	POAG: 214, C:187	2018	Oliveira 247
		rs16944	POAG					
		rs1134627	-					
17p13.2	INCA1	rs34629349	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet 68
9p23	LINC00583	rs1831902	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet 68
20q12	LINC01734	rs3918508	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet 68
9q33.3	LMX1B	rs7859156	POAG	UK	C-C	HTG: 272, NTG: 37, C: 276	2009	Park 248
		rs7854658	NTG					
		rs55770306	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet 69
15q24.1	LOXL1	rs1048661	POAG	Cau, Asain	Meta	POAG: 2611, C: 2682	2015	Wu 249
		rs3825942	POAG					
		rs2165241	POAG					
		rs2165241	POAG	Spain	C-C	POAG: 329, C: 329	2015	Zanon-Moreno 250
		rs2165241	-	Cau, Asian	Meta	POAG: 2098, C: 16473	2014	Sun 251
		rs1048661	-	Greece	C-C	POAG: 66, C: 93	2014	Anastapoulos 252
		rs1048661	-	Cau, Asian	Meta	POAG: 1795, C: 2916	2014	Sun 251
		rs1048661	-	Cau, Asian	Meta	POAG: 2223, C: 16664	2010	Chen 253
		rs1048661	-	Turkey	C-C	POAG: 100, C: 100	2013	Kasim 254
		rs1048661	-	Greece	C-C	POAG: 52, C: 107	2013	Chiras 91
		rs3825942	-					
		rs3825942	-	Greece	C-C	POAG: 66, C: 93	2014	Anastapoulos 252
		rs3825942	-	Cau, Asian	Meta	POAG: 2456, C: 2846	2014	Sun 251
		rs3825942	-	Cau, Asian	Meta	POAG: 2223, C: 16664	2010	Chen 253
		rs3825942	-	Turkey	C-C	POAG: 100, C: 100	2013	Kasim 254
		rs13076750	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet 68
8q22	LRP12/ZFPM12	rs284489	NTG	Cau	Meta	NTG: 720, C: 3443	2012	Wiggs 120
16q12.2	LPCAT2	rs1502007	ODA	Norfolk Island	Cases	330	2018	Kho 221
3q26.33	MFN1	rs2111534	NTG	Germany	C-C	POAG: 285, C:282	2009	Wolf 59
1p36.22	MFN2	rs873458	NTG	Germany	C-C	POAG: 285, C:282	2009	Wolf 59
		rs2295281	NTG	Germany				
		rs7916852	POAG	India	C-C	POAG: 746, C: 697	2016	Vishal 255
11q22.2	MPP7	rs10763643	POAG					
		rs10763644	POAG					

Supplemental table 4: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
16q12.2	MMP2	rs9923304 rs243865	ODA ODA	Poland	C-C	POAG: 271, C: 281	2013	Kaminska ²⁵⁶
11q22.2	MMP12	rs2276109	ODA	Cau	C-C	POAG: 255, C: 256	2013	Markiewicz ¹⁴⁴
11q13.1	MIR612	rs12803915	VCDR, CA	EU, Asain	GWAS	37930	2017	Ghanbari ²⁵⁷
20q13.33	MIR3196	rs113297757	POAG	Greece	C-C	POAG: 40, C:188	2018	Chatzikyriakidou ²⁵⁸
14q11.2	MIR4707	rs2273626	VCDR, CA	EU, Asian	meta	37930	2017	Ghanbari ²⁵⁷
1p36.22	MTHFR	rs1801133	POAG	Germany	C-C	POAG: 76, C: 71	2005	Jünemann ²⁵⁹
		rs1801133	POAG	India	C-C	POAG: 144, C: 173	2014	Gupta ²⁶⁰
		rs1801133	POAG	Saudi Arabia	C-C	POAG: 210, C: 280	2016	Al-Shahrani ²⁶¹
		rs1801133	-	Cau, Asian, Mexican	Meta	POAG: 1970, C: 1712	2015	Zhao ²⁶²
mtDNA	MT-ND2	m.4883C>T	NTG	Korea	C-C	NTG: 196; C: 202	2014	Jeoung ²²⁶
mtDNA	MT-ND5	m.12359C>G	POAG	Saudi Arabia	C-C	POAG: 27, C: 159	2006	Abu-Amro ²⁶³
		17 variants	POAG	India	C-C	POAG: 101, C: 71	2013	Banerjee ²⁶⁴
		4 variants	POAG	India, Ireland	C-C	POAG: 32, C: 110	2015	Sundaresan ²⁶⁵
2cen-q13	NCK2	D2S176 marker	NTG	Japan	C-C	POAG: 143, C: 103	2008	Akiyama ²⁶⁶
		rs2033008	NTG	Japan	C-C	HTG: 310, NTG: 407, C: 391	2013	Shi ²⁴¹
19p13.2	OLFM2	c.431G→A	POAG	Japan	C-C	HTG: 215, NTG: 277, C: 240	2006	Funayama ²⁶⁷
1q31	OPTC	rs553656496	POAG	India	C-C	POAG: 200, C: 100	2007	Acharya ²⁶⁸
		c.382T > C	POAG					
		rs559635109	POAG					
		Mutations	-	India	C-C	HTG: 198, NTG: 53, C: 100	2007	Kumar ⁵³
20p13	PANK2/RNF24	rs6037744	VCDR	NL	Linkage	23000	2011	Axenovich ⁹⁴
3q27.1	PARL	rs1000002	NTG	Germany	C-C	POAG: 285, C:282	2009	Wolf ⁵⁹
		rs1402003	NTG					
6q23.3	PDE7B	rs9494457	POAG, IOP	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
3q21.1	PDIA5	rs11720822	POAG	US-Cau	C-C	POAG: 678, C: 421	2011	Carbone ²¹⁹
		rs2241962	POAG					
4q25	PITX2-C4ORF32	Rs17527016	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
6p12.2	PKHD1	rs1396046	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
3p25.2	PPARG	rs1801282	POAG	India	C-C	POAG: 122, C: 112	2016	Chandra ²²⁹
7q21.3	PON1	rs3917594	IOP	Japan	C-C	POAG: 555, C: 284	2006	Inagaki ²⁶⁹
		rs662	POAG	China	C-C	POAG: 37, C: 100	2010	Zhou ²⁷⁰
9q33.3	PSMB7	rs479398	POAG	US-Cau	C-C	POAG: 207, C: 270	2011	Carbone ²¹⁹
5q21.2	RAB9BP1	copy number	IOP	EU, AU	GWAS	(D) 992; (R): 2087	2013	Nag ²⁷¹
6q21	RFPL4B	rs141917145	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
3p21.3	RHOA	rs974495	POAG	Turkey	C-C	POAG: 179, C: 182	2016	Saracaloglu ²⁷²
14q11.2	RPGRIP1	20 variants	NTG, POAG	Germany	C-C	(D) HTG: 270, NTG: 82, C: 376 (R) HTG: 79, NTG: 304, C: 104	2011	Fernandez-Martinez ²⁷³
12q13.2	RPS26	rs10876864	ODA	Norfolk Island	Cases	330	2018	Kho ²²¹
22q13.2	RRP7A	rs4822136	IOP	Norfolk Island	Cases	330	2018	Kho ²²¹
3q25.1	TSC22D2	rs11710845	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
22q12.2	SEC14L2/TAP	rs737723	POAG	Mediterranean	C-C	POAG: 250, C: 250	2013	Zanon-Moreno ²⁷⁴
7q21.11	SEMA3C-HGF	rs1509922	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸

Supplemental table 4: Continued

Loci	Gene	Polymorphism	Trait	Population	Study	Size (n)	Year	Reference
20p13	SIRPA	rs6034909	VCDR	NL	Linkage	23000	2011	Axenovich ⁹⁴
20p13	SLC23A2	rs1279683	POAG	Mediterranean	C-C	POAG: 250, C: 250	2013	Zanon-Moreno ²⁷⁴
17p13.3	SMG6	rs4790881	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
15q21.3	TCF12	rs2593221	POAG	Multi-ethnic	GWAS	(D) POAG: 4986 C: 58426	2018	Choquet ⁶⁹
7p21.3	THSD7A	rs12699251	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
12q23.3	TMEM119	rs74481774	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
11q23.3	TMEM136	rs12806740	POAG	Multi-ethnic	GWAS	(D) POAG: 7329 C: 169561	2018	Choquet ⁶⁹
2q11.2	TMEM182	rs869833	POAG	Japan	C-C	HTG: 310, NTG: 407, C: 391	2013	Shi ²⁴¹
2q35	TNS1	rs1035673	IOP	Multi-ethnic	GWAS	(D)69,756	2017	Choquet ⁶⁸
9q34.2	VAV2	rs2156323	POAG	Japan	C-C	POAG: 100, C: 100	2010	Fujikawa ²⁷⁵
1p13.3	VAV3	rs2801219	POAG	Japan	C-C	POAG: 100, C: 100	2010	Fujikawa ²⁷⁵
12q13.11	VDR	rs1544410	POAG	China	C-C	POAG: 73, C: 71	2016	Ly ²⁷⁶
		rs731236	POAG					
6p12	VEGF	- 460 gene polymorphism	POAG	China	C-C	POAG: 60, C: 78	2014	Lin ²⁷⁷
19q13.31	XRCC1	rs25487	POAG	Pakistan	C-C	POAG: 160, C: 193	2011	Yousaf ²⁷⁸
		rs25487	POAG, VCDR, ODA, RNFLT	Poland	C-C	POAG: 170, C: 193	2013	Szaflik ²⁷⁹
		rs25487	POAG	Poland	C-C	POAG: 412, C: 454	2015	Cuchra ²⁸⁰
		rs25487	-	Turkey	C-C	POAG: 144 , C: 121	2007	Güven ²⁸¹
19q13.32	XPD	rs13181	POAG	Pakistan	C-C	POAG: 160, C: 193	2011	Yousaf ²⁷⁸
		rs13181	-	Turkey	C-C	POAG: 144 , C: 121	2007	Güven ²⁸¹

Abbreviations: CCT= central corneal thickness; NTG= normal tension glaucoma; IOP= intraocular pressure; ODA= optic disc area; POAG= primary open angle glaucoma; RNFLT= retina nerve fiber layer thickness; VCDR= vertical cup disc ratio; AA= African American, Cau= Caucasian; NL= Netherlands; UK= United Kingdom; US= United States; C-C= case control; Meta= meta-analysis. (-) indicates that no significant association between the gene and any of the glaucoma traits was observe

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