

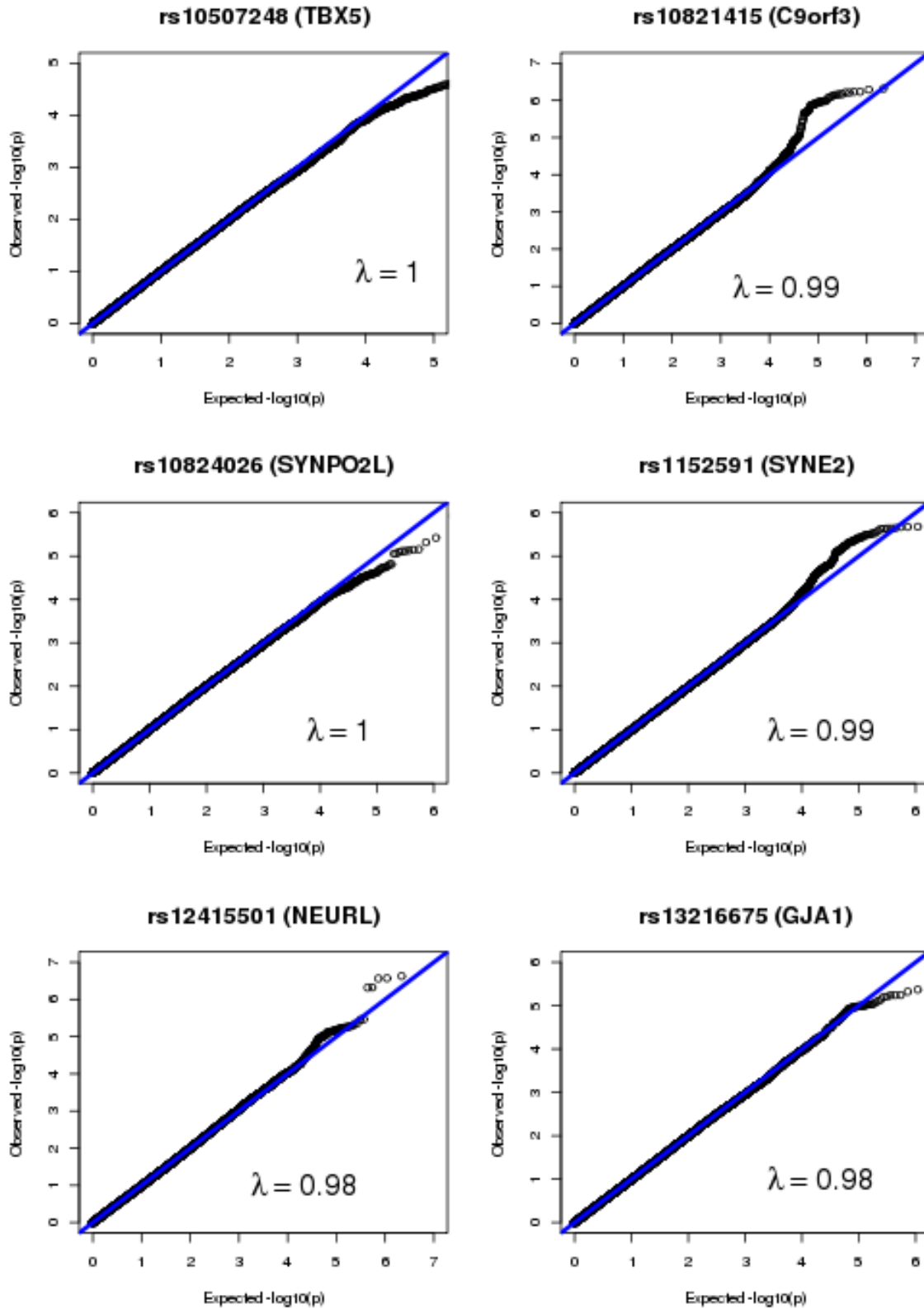
Gene-gene Interaction Analyses for Atrial Fibrillation

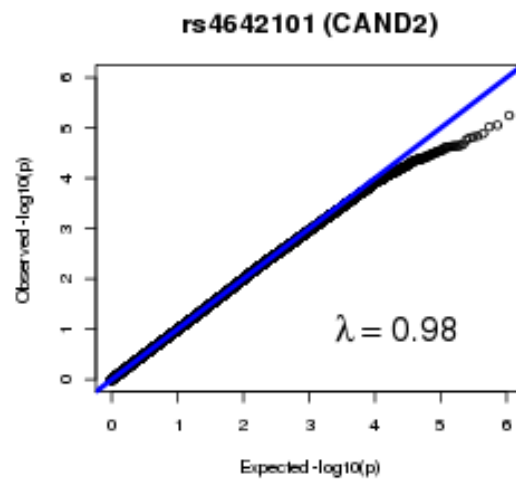
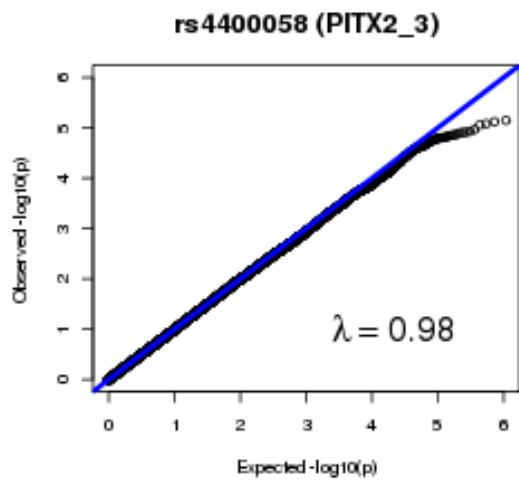
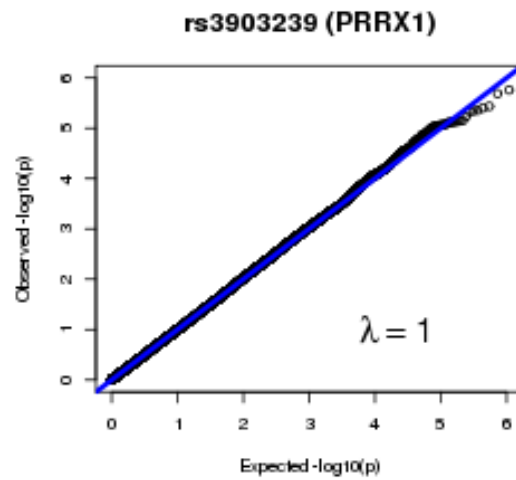
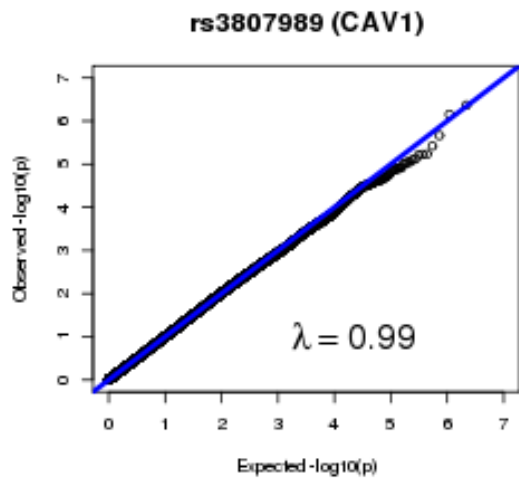
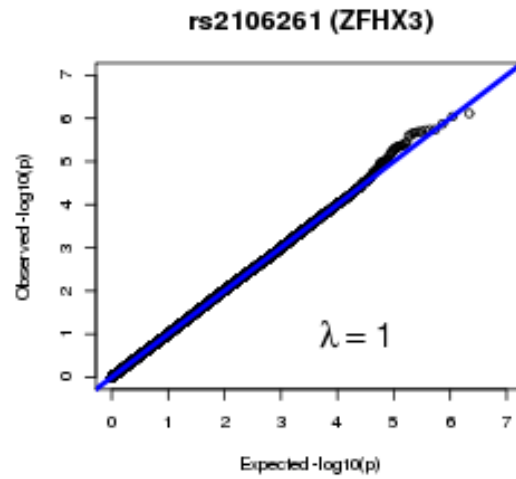
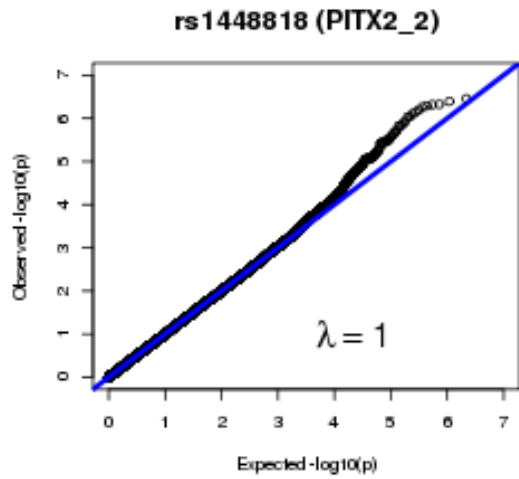
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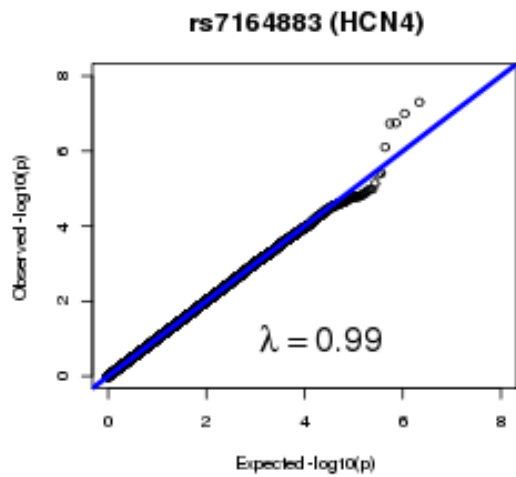
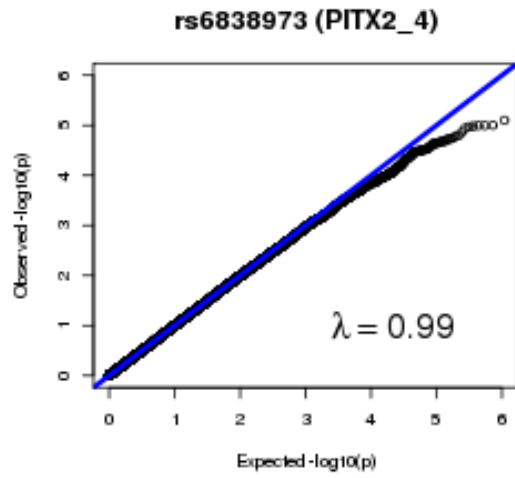
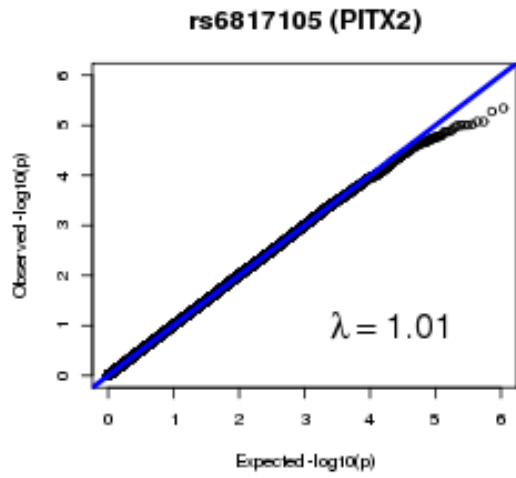
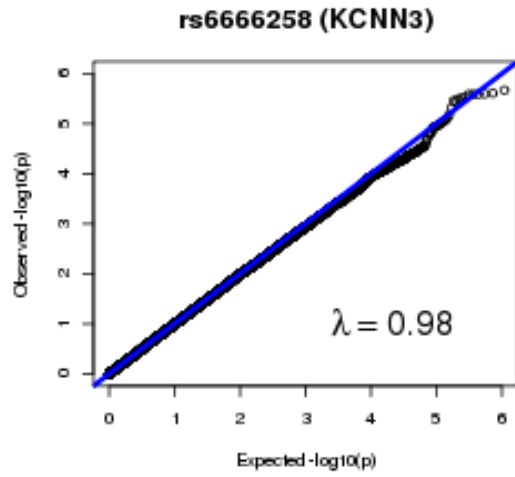
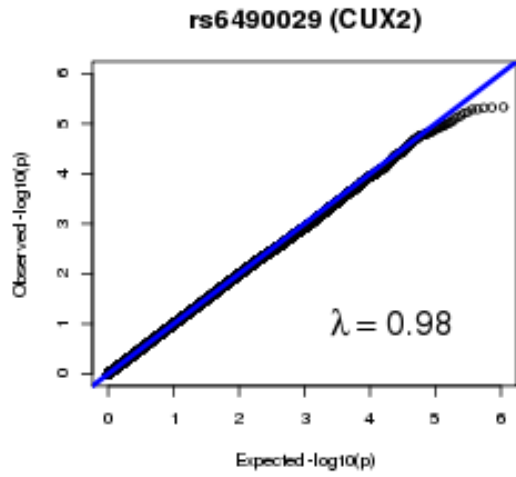
Table of Contents

Supplemental	Title	Page
S. Figure 1.	Q-Q plots of interactions with AF	3
S. Table 1.	Top 10 interactions for each AF SNP	6
Acknowledgement		11

Supplemental Figure 1. QQ plots of interaction with AF







Supplemental Table 1. Top 10 interactions for each AF SNP

AF SNP		Interacting SNP						Interaction effects		
SNP	Closest gene	SNP	Locus	Closest gene	Location	Coding allele	CAF	OR ⁺	95% CI [*]	P value
rs10507248	<i>TBX5</i>	rs10079502	5p14.1	<i>LOC340107</i>	Intergenic	T	0.94	1.50	1.26-1.80	8.2E-06
rs10507248	<i>TBX5</i>	rs2222738	2p16.3	<i>NRXN1</i>	Intergenic	A	0.70	0.87	0.82-0.93	1.3E-05
rs10507248	<i>TBX5</i>	rs1225886	20p12.1	<i>MACROD2</i>	Intron	T	0.41	1.14	1.07-1.20	1.3E-05
rs10507248	<i>TBX5</i>	rs1590042	2p16.3	<i>NRXN1</i>	Intergenic	A	0.16	1.19	1.10-1.28	1.4E-05
rs10507248	<i>TBX5</i>	rs10241686	7p21.1	<i>SNX13</i>	Intergenic	A	0.06	0.48	0.34-0.67	1.5E-05
rs10507248	<i>TBX5</i>	rs17683844	17q22	<i>TOM1L1</i>	Intergenic	T	0.81	1.19	1.10-1.28	1.5E-05
rs10507248	<i>TBX5</i>	rs1702510	18q23	<i>LOC339298</i>	Intergenic	T	0.80	1.17	1.09-1.25	2.0E-05
rs10507248	<i>TBX5</i>	rs1080669	19q13.33	<i>KLK13</i>	Intron	T	0.15	0.82	0.75-0.90	2.2E-05
rs10507248	<i>TBX5</i>	rs11770723	7p21.1	<i>SNX13</i>	Intergenic	T	0.94	2.04	1.47-2.84	2.3E-05
rs10507248	<i>TBX5</i>	rs4775500	15q22.2	<i>MGC15885</i>	Intergenic	T	0.23	1.15	1.08-1.22	2.3E-05
rs10821415	<i>C9orf3</i>	rs1492056	3p14.1	<i>MITF</i>	Intergenic	A	0.43	1.15	1.09-1.21	1.4E-07
rs10821415	<i>C9orf3</i>	rs6549264	3p14.1	<i>MITF</i>	Intergenic	A	0.55	0.88	0.83-0.92	4.8E-07
rs10821415	<i>C9orf3</i>	rs6480976	10q21.1	<i>MBL2</i>	Intergenic	A	0.57	0.87	0.83-0.92	5.1E-07
rs10821415	<i>C9orf3</i>	rs9839734	3p14.1	<i>MITF</i>	Intergenic	A	0.55	0.88	0.83-0.92	5.9E-07
rs10821415	<i>C9orf3</i>	rs9840397	3p14.1	<i>MITF</i>	Intergenic	A	0.55	0.88	0.83-0.92	5.9E-07
rs10821415	<i>C9orf3</i>	rs6772684	3p14.1	<i>MITF</i>	Intergenic	A	0.45	1.14	1.08-1.20	6.1E-07
rs10821415	<i>C9orf3</i>	rs9840590	3p14.1	<i>MITF</i>	Intergenic	A	0.55	0.88	0.83-0.92	6.2E-07
rs10821415	<i>C9orf3</i>	rs9834141	3p14.1	<i>MITF</i>	Intergenic	T	0.55	0.88	0.83-0.92	6.8E-07
rs10821415	<i>C9orf3</i>	rs7634340	3p14.1	<i>MITF</i>	Intergenic	A	0.46	1.14	1.08-1.20	6.8E-07
rs10821415	<i>C9orf3</i>	rs6549265	3p14.1	<i>MITF</i>	Intergenic	A	0.45	1.14	1.08-1.20	7.1E-07
rs10824026	<i>SYNPO2L</i>	rs7963529	12q12	<i>PRICKLE1</i>	Intergenic	A	0.89	1.36	1.21-1.54	8.3E-07
rs10824026	<i>SYNPO2L</i>	rs7302231	12q12	<i>PRICKLE1</i>	Intergenic	A	0.89	1.36	1.20-1.54	1.2E-06
rs10824026	<i>SYNPO2L</i>	rs8088466	18q12.3	<i>SLC14A2</i>	Intron	T	0.30	1.20	1.11-1.30	3.8E-06
rs10824026	<i>SYNPO2L</i>	rs6865647	5q11.2	<i>PDE4D</i>	Intron	A	0.87	0.79	0.71-0.87	4.8E-06
rs10824026	<i>SYNPO2L</i>	rs2054996	4p15.2	<i>PPARGC1A</i>	Intergenic	T	0.79	0.83	0.76-0.90	7.0E-06
rs10824026	<i>SYNPO2L</i>	rs6580059	5q33.2	<i>GALNT10</i>	Intron	T	0.85	1.28	1.15-1.43	7.2E-06
rs10824026	<i>SYNPO2L</i>	rs1950500	14q12	<i>NFATC4</i>	Intergenic	T	0.29	0.84	0.78-0.91	7.4E-06
rs10824026	<i>SYNPO2L</i>	rs12590407	14q12	<i>NFATC4</i>	Promoter	A	0.71	1.19	1.10-1.28	7.7E-06
rs10824026	<i>SYNPO2L</i>	rs2220642	4p15.2	<i>PPARGC1A</i>	Intergenic	A	0.79	0.83	0.76-0.90	7.7E-06
rs10824026	<i>SYNPO2L</i>	rs1511452	4p15.2	<i>PPARGC1A</i>	Intergenic	A	0.25	1.19	1.10-1.29	8.1E-06
rs1152591	<i>SYNE2</i>	rs11700857	21q22.3	<i>UZAF1</i>	Intergenic	T	0.84	0.84	0.79-0.90	1.8E-06
rs1152591	<i>SYNE2</i>	rs9812373	3q26.33	<i>USP13</i>	Intron	T	0.93	0.78	0.71-0.87	2.1E-06
rs1152591	<i>SYNE2</i>	rs17630775	7p12.3	<i>ABCA13</i>	Intron	A	0.06	0.72	0.63-0.83	2.1E-06
rs1152591	<i>SYNE2</i>	rs3852927	20q13.2	<i>CBLN4</i>	Intergenic	A	0.33	1.14	1.08-1.20	2.1E-06
rs1152591	<i>SYNE2</i>	rs9833938	3q26.33	<i>USP13</i>	Intron	T	0.93	0.79	0.71-0.87	2.1E-06
rs1152591	<i>SYNE2</i>	rs6069295	20q13.2	<i>CBLN4</i>	Intergenic	A	0.68	0.88	0.83-0.93	2.3E-06
rs1152591	<i>SYNE2</i>	rs13043784	20q13.2	<i>CBLN4</i>	Intergenic	T	0.66	0.88	0.84-0.93	2.3E-06
rs1152591	<i>SYNE2</i>	rs4785185	16q12.1	<i>ZNF423</i>	Intron	T	0.22	0.87	0.82-0.92	2.3E-06

AF SNP		Interacting SNP						Interaction effects		
SNP	Closest gene	SNP	Locus	Closest gene	Location	Coding allele	CAF	OR ⁺	95% CI ⁺	P value
rs1152591	<i>SYNE2</i>	rs8125772	20q13.2	<i>CBLN4</i>	Intergenic	A	0.68	0.88	0.83-0.93	2.4E-06
rs1152591	<i>SYNE2</i>	rs12481038	20q13.2	<i>CBLN4</i>	Intergenic	T	0.68	0.88	0.83-0.93	2.4E-06
rs12415501	<i>NEURL</i>	rs699801	1p31.1	<i>CRYZ</i>	Intergenic	T	0.45	1.19	1.12-1.27	1.9E-07
rs12415501	<i>NEURL</i>	rs3113980	1p31.1	<i>CRYZ</i>	Intergenic	T	0.45	1.19	1.11-1.27	2.4E-07
rs12415501	<i>NEURL</i>	rs1340985	1p31.1	<i>CRYZ</i>	Intergenic	A	0.55	0.84	0.79-0.90	2.7E-07
rs12415501	<i>NEURL</i>	rs3098953	1p31.1	<i>CRYZ</i>	Intergenic	T	0.55	0.84	0.79-0.90	2.7E-07
rs12415501	<i>NEURL</i>	rs7946907	11p15.2	<i>SPON1</i>	Intron	A	0.54	1.18	1.11-1.26	4.7E-07
rs12415501	<i>NEURL</i>	rs2303973	11p15.2	<i>SPON1</i>	Missense	A	0.54	1.18	1.11-1.26	4.8E-07
rs12415501	<i>NEURL</i>	rs11711838	3q28	<i>FGF12</i>	Intron	T	0.31	0.84	0.79-0.91	3.4E-06
rs12415501	<i>NEURL</i>	rs10164009	18p11.32	<i>METTL4</i>	Intergenic	T	0.93	0.69	0.59-0.81	3.5E-06
rs12415501	<i>NEURL</i>	rs10958142	8q21.13	<i>RALYL</i>	Intergenic	T	0.29	1.19	1.11-1.28	4.3E-06
rs12415501	<i>NEURL</i>	rs7833584	8q21.13	<i>RALYL</i>	Intergenic	T	0.29	1.19	1.11-1.28	4.4E-06
rs13216675	<i>GJA1</i>	rs1559765	11q24.3	<i>ETS1</i>	Intergenic	C	0.69	1.16	1.09-1.23	1.8E-06
rs13216675	<i>GJA1</i>	rs11221175	11q24.3	<i>ETS1</i>	Intergenic	C	0.69	1.16	1.09-1.23	2.8E-06
rs13216675	<i>GJA1</i>	rs4877276	9q21.33	<i>NTRK2</i>	Intergenic	T	0.45	1.14	1.08-1.21	4.3E-06
rs13216675	<i>GJA1</i>	rs17778070	4q31.23	<i>NR3C2</i>	Intergenic	T	0.80	0.85	0.80-0.91	4.8E-06
rs13216675	<i>GJA1</i>	rs11221187	11q24.3	<i>ETS1</i>	Intergenic	A	0.70	1.15	1.08-1.22	5.7E-06
rs13216675	<i>GJA1</i>	rs12567590	1q42.13	<i>PRSS38</i>	Intergenic	A	0.91	0.76	0.68-0.86	5.7E-06
rs13216675	<i>GJA1</i>	rs12562786	1q42.13	<i>PRSS38</i>	Intergenic	C	0.91	0.77	0.68-0.86	5.8E-06
rs13216675	<i>GJA1</i>	rs10269328	7p15.3	<i>RAPGEF5</i>	Intergenic	T	0.81	0.85	0.79-0.91	6.2E-06
rs13216675	<i>GJA1</i>	rs1940365	11q24.3	<i>ETS1</i>	Intergenic	A	0.53	1.14	1.07-1.20	6.3E-06
rs13216675	<i>GJA1</i>	rs11221163	11q24.3	<i>ETS1</i>	Intergenic	A	0.53	1.13	1.07-1.20	7.3E-06
rs1448818	<i>PITX2_2</i>	rs693832	8p21.1	<i>MIR3622B</i>	Intergenic	T	0.89	0.79	0.72-0.86	3.1E-07
rs1448818	<i>PITX2_2</i>	rs17469423	8p21.1	<i>MIR3622A</i>	Intergenic	A	0.11	1.27	1.16-1.39	3.5E-07
rs1448818	<i>PITX2_2</i>	rs10216643	8p21.1	<i>CCDC25</i>	Intergenic	A	0.90	0.79	0.72-0.87	4.0E-07
rs1448818	<i>PITX2_2</i>	rs2328452	20p11.23	<i>RIN2</i>	Intergenic	A	0.12	0.80	0.73-0.87	4.7E-07
rs1448818	<i>PITX2_2</i>	rs9653629	20p11.23	<i>RIN2</i>	Intergenic	A	0.12	0.80	0.74-0.87	4.8E-07
rs1448818	<i>PITX2_2</i>	rs11984514	8p21.1	<i>CCDC25</i>	Intergenic	T	0.10	1.26	1.15-1.38	5.2E-07
rs1448818	<i>PITX2_2</i>	rs17385257	8p21.1	<i>CCDC25</i>	Intergenic	T	0.10	1.26	1.15-1.38	5.5E-07
rs1448818	<i>PITX2_2</i>	rs17370440	20p11.23	<i>RIN2</i>	Intergenic	A	0.09	0.78	0.71-0.86	6.4E-07
rs1448818	<i>PITX2_2</i>	rs17298185	20p11.23	<i>RIN2</i>	Intergenic	A	0.09	0.78	0.71-0.86	7.3E-07
rs1448818	<i>PITX2_2</i>	rs805559	20q11.23	<i>RALGAPB</i>	Intron	A	0.17	1.21	1.12-1.30	7.9E-07
rs2106261	<i>ZFH3</i>	rs12652090	5q34	<i>TENM2</i>	Intergenic	A	0.11	1.31	1.18-1.45	2.1E-07
rs2106261	<i>ZFH3</i>	rs11640649	16q23.2	<i>CMIP</i>	Intron	T	0.06	1.54	1.30-1.83	7.7E-07
rs2106261	<i>ZFH3</i>	rs16952029	16q23.2	<i>MAF</i>	Intergenic	A	0.18	1.26	1.15-1.38	9.1E-07
rs2106261	<i>ZFH3</i>	rs4677777	3q29	<i>XXYL1</i>	Intergenic	A	0.27	1.19	1.11-1.28	1.4E-06
rs2106261	<i>ZFH3</i>	rs2160523	12p13.2	<i>BCL2L14</i>	Intron	T	0.50	0.86	0.81-0.91	1.8E-06
rs2106261	<i>ZFH3</i>	rs12497228	3q29	<i>XXYL1</i>	Intergenic	C	0.73	0.84	0.79-0.90	1.8E-06
rs2106261	<i>ZFH3</i>	rs4677772	3q29	<i>XXYL1</i>	Intergenic	A	0.74	0.84	0.78-0.90	1.9E-06
rs2106261	<i>ZFH3</i>	rs2285117	22q13.31	<i>ARHGAP8</i>	Intron	T	0.25	0.83	0.77-0.90	2.0E-06

AF SNP		Interacting SNP						Interaction effects		
SNP	Closest gene	SNP	Locus	Closest gene	Location	Coding allele	CAF	OR ⁺	95% CI ⁺	P value
rs2106261	ZFHX3	rs2043264	3q29	XXYLT1	Intergenic	T	0.27	1.19	1.11-1.27	2.0E-06
rs2106261	ZFHX3	rs6874869	5q34	TENM2	Intergenic	T	0.90	0.78	0.70-0.86	2.2E-06
rs3807989	CAV1	rs3802477	9q22.33	GABBR2	Intron	T	0.95	0.74	0.66-0.83	3.6E-07
rs3807989	CAV1	rs2327995	6p22.3	ATXN1	Intron	T	0.73	0.87	0.82-0.92	4.3E-07
rs3807989	CAV1	rs17669102	6p22.3	ATXN1	Intron	T	0.26	1.15	1.09-1.21	7.0E-07
rs3807989	CAV1	rs17669356	6p22.3	ATXN1	Intron	T	0.79	0.87	0.82-0.92	2.2E-06
rs3807989	CAV1	rs3793100	6p22.3	ATXN1	Intron	A	0.21	1.15	1.09-1.22	3.8E-06
rs3807989	CAV1	rs4841108	8p23.1	PPP1R3B	Intergenic	A	0.33	1.15	1.08-1.23	5.9E-06
rs3807989	CAV1	rs447656	21q22.3	ADARB1	Intron	T	0.10	1.21	1.11-1.31	6.0E-06
rs3807989	CAV1	rs12916788	15q22.31	MEGF11	Intron	T	0.68	1.13	1.07-1.20	6.1E-06
rs3807989	CAV1	rs11631331	15q22.31	MEGF11	Intron	C	0.63	1.12	1.07-1.18	7.6E-06
rs3807989	CAV1	rs12903154	15q22.31	MEGF11	Intron	T	0.37	0.89	0.85-0.94	8.0E-06
rs3903239	PRRX1	rs288451	10q22.3	LINC00595	Intergenic	T	0.07	1.33	1.19-1.49	9.0E-07
rs3903239	PRRX1	rs7910940	10p14	GATA3	Intergenic	T	0.37	1.13	1.07-1.19	1.7E-06
rs3903239	PRRX1	rs7082115	10p14	GATA3	Intergenic	C	0.63	0.89	0.84-0.93	1.7E-06
rs3903239	PRRX1	rs10905431	10p14	GATA3	Intergenic	T	0.37	1.13	1.07-1.19	2.1E-06
rs3903239	PRRX1	rs4738374	8q21.11	STAU2	Intron	T	0.52	0.89	0.85-0.94	3.7E-06
rs3903239	PRRX1	rs4737384	8q21.11	STAU2	Intron	A	0.48	1.12	1.07-1.18	4.0E-06
rs3903239	PRRX1	rs13271172	8q21.11	STAU2	Intron	C	0.48	1.12	1.07-1.18	4.4E-06
rs3903239	PRRX1	rs844429	10q22.3	LINC00595	Intergenic	T	0.92	0.81	0.74-0.89	4.5E-06
rs3903239	PRRX1	rs149624	10q22.3	LINC00595	Intergenic	A	0.08	1.23	1.13-1.35	4.6E-06
rs3903239	PRRX1	rs6472783	8q21.11	STAU2	Intron	T	0.58	0.89	0.85-0.94	5.8E-06
rs4400058	PITX2_3	rs733804	17p13.1	GAS7	Intron	A	0.35	1.22	1.12-1.33	3.0E-06
rs4400058	PITX2_3	rs9380704	6p21.2	ZFAND3	Intergenic	T	0.27	1.22	1.12-1.33	5.7E-06
rs4400058	PITX2_3	rs4142102	6p21.2	ZFAND3	Intergenic	A	0.27	1.22	1.12-1.33	7.1E-06
rs4400058	PITX2_3	rs259693	6p21.2	ZFAND3	Intron	C	0.72	0.82	0.75-0.89	7.5E-06
rs4400058	PITX2_3	rs12523829	6p21.2	ZFAND3	Intergenic	A	0.26	1.22	1.12-1.33	8.3E-06
rs4400058	PITX2_3	rs9349051	6p21.2	ZFAND3	Intergenic	A	0.26	1.22	1.12-1.33	8.8E-06
rs4400058	PITX2_3	rs6697414	1p32.3	SSBP3	Intron	A	0.26	0.78	0.70-0.87	1.1E-05
rs4400058	PITX2_3	rs6484478	11p14.1	ARL14EP	Intergenic	A	0.30	1.22	1.12-1.33	1.2E-05
rs4400058	PITX2_3	rs9470723	6p21.2	ZFAND3	Intron	T	0.28	1.21	1.11-1.32	1.2E-05
rs4400058	PITX2_3	rs4711522	6p21.2	ZFAND3	Intron	A	0.73	0.83	0.76-0.90	1.2E-05
rs4642101	CAND2	rs10868854	9q21.11	TRPM3	Intron	A	0.54	0.88	0.84-0.93	3.7E-06
rs4642101	CAND2	rs10780951	9q21.11	TRPM3	Intron	T	0.46	1.13	1.07-1.19	4.6E-06
rs4642101	CAND2	rs2189325	7q31.1	IMMP2L	Intron	A	0.07	0.78	0.70-0.87	5.7E-06
rs4642101	CAND2	rs11657095	17q22	MSI2	Intron	A	0.15	1.18	1.10-1.27	8.8E-06
rs4642101	CAND2	rs17834063	17q22	MSI2	Intron	A	0.85	0.84	0.78-0.91	9.6E-06
rs4642101	CAND2	rs1374110	2q22.1	THSD7B	Intergenic	T	0.83	1.18	1.10-1.28	1.3E-05
rs4642101	CAND2	rs2079916	4q12	LOC255130	Promoter	A	0.35	1.13	1.07-1.19	1.4E-05
rs4642101	CAND2	rs2090174	7p21.3	PER4	Intergenic	A	0.26	0.86	0.80-0.92	1.5E-05

AF SNP		Interacting SNP						Interaction effects		
SNP	Closest gene	SNP	Locus	Closest gene	Location	Coding allele	CAF	OR ⁺	95% CI ⁺	P value
rs4642101	CAND2	rs6554438	4q12	LOC255130	Intergenic	A	0.35	1.13	1.07-1.19	1.6E-05
rs4642101	CAND2	rs913030	10q26.11	NANOS1	Intergenic	C	0.55	0.89	0.84-0.94	1.7E-05
rs6490029	CUX2	rs9874287	3p26.2	LRRN1	Intergenic	T	0.32	0.86	0.81-0.92	3.2E-06
rs6490029	CUX2	rs6011263	20q13.33	LINC00659	Promoter	T	0.86	0.82	0.76-0.89	4.0E-06
rs6490029	CUX2	rs2642099	14q21.3	RPL10L	Intergenic	T	0.09	1.26	1.14-1.39	4.7E-06
rs6490029	CUX2	rs6011258	20q13.33	LINC00659	Intergenic	A	0.86	0.82	0.76-0.89	4.8E-06
rs6490029	CUX2	rs4234126	2q37.3	ANKMY1	Intron	T	0.73	0.86	0.80-0.91	4.8E-06
rs6490029	CUX2	rs6011255	20q13.33	LINC00659	Intergenic	T	0.14	1.21	1.12-1.32	5.1E-06
rs6490029	CUX2	rs856945	20q13.33	LINC00659	3_UTR	A	0.86	0.83	0.76-0.90	5.2E-06
rs6490029	CUX2	rs856954	20q13.33	LINC00659	Intron	T	0.86	0.83	0.76-0.90	5.9E-06
rs6490029	CUX2	rs10198074	2q37.3	ANKMY1	Intron	T	0.73	0.86	0.80-0.92	6.2E-06
rs6490029	CUX2	rs13083844	3p26.2	LRRN1	Intergenic	T	0.68	1.16	1.09-1.24	7.0E-06
rs6666258	KCNN3	rs4895671	6q24.3	EPM2A	Intergenic	A	0.94	0.77	0.69-0.86	2.0E-06
rs6666258	KCNN3	rs1972364	6q24.3	EPM2A	Intergenic	A	0.06	1.30	1.17-1.45	2.0E-06
rs6666258	KCNN3	rs1972365	6q24.3	EPM2A	Intergenic	A	0.06	1.30	1.17-1.44	2.1E-06
rs6666258	KCNN3	rs4896791	6q24.3	EPM2A	Intergenic	T	0.94	0.77	0.69-0.86	2.5E-06
rs6666258	KCNN3	rs4895672	6q24.3	EPM2A	Intergenic	A	0.06	1.29	1.16-1.44	2.5E-06
rs6666258	KCNN3	rs1890200	6q24.3	EPM2A	Intergenic	A	0.06	1.30	1.16-1.44	2.6E-06
rs6666258	KCNN3	rs2048236	6q24.3	EPM2A	Intergenic	A	0.06	1.31	1.17-1.47	2.6E-06
rs6666258	KCNN3	rs4492209	6q24.3	EPM2A	Intergenic	T	0.06	1.29	1.16-1.44	2.6E-06
rs6666258	KCNN3	rs7751268	6q24.3	EPM2A	Intergenic	A	0.94	0.77	0.69-0.86	2.9E-06
rs6666258	KCNN3	rs7773601	6q24.3	EPM2A	Intergenic	A	0.06	1.31	1.17-1.47	3.1E-06
rs6817105	PITX2	rs4747672	10p11.23	SVIL	Intron	A	0.84	0.81	0.73-0.88	3.3E-06
rs6817105	PITX2	rs11597820	10p11.23	SVIL	Intron	A	0.84	0.81	0.74-0.89	4.5E-06
rs6817105	PITX2	rs10965244	9p21.3	CDKN2B	Intergenic	A	0.78	0.78	0.70-0.86	4.5E-06
rs6817105	PITX2	rs4747675	10p11.23	SVIL	Intron	C	0.79	0.82	0.75-0.89	5.3E-06
rs6817105	PITX2	rs7031458	9q21.32	RASEF	Intergenic	T	0.32	1.18	1.10-1.27	8.4E-06
rs6817105	PITX2	rs7676960	4p15.33	LOC152742	Intergenic	T	0.45	0.86	0.80-0.92	8.4E-06
rs6817105	PITX2	rs7694051	4p15.33	LOC152742	Intergenic	T	0.55	1.17	1.09-1.25	9.6E-06
rs6817105	PITX2	rs7901774	10p11.23	SVIL	Intron	T	0.17	1.22	1.12-1.34	9.9E-06
rs6817105	PITX2	rs2012160	2q37.3	ANO7	Intron	T	0.72	0.83	0.76-0.90	9.9E-06
rs6817105	PITX2	rs967559	2q37.3	ANO7	Intron	C	0.28	1.21	1.11-1.31	1.0E-05
rs6838973	PITX2_4	rs2634073	4q25	PITX2	Intergenic	T	0.19	0.86	0.81-0.92	3.0E-06
rs6838973	PITX2_4	rs2634071	4q25	PITX2	Intergenic	T	0.19	0.87	0.81-0.92	3.8E-06
rs6838973	PITX2_4	rs2231224	3q27.1	AP2M1	Synonymous	A	0.19	0.86	0.81-0.92	7.9E-06
rs6838973	PITX2_4	rs7614381	3q27.1	ABCF3	Intron	T	0.20	0.86	0.81-0.92	1.0E-05
rs6838973	PITX2_4	rs8478	3q27.1	AP2M1	Synonymous	T	0.19	0.87	0.81-0.92	1.0E-05
rs6838973	PITX2_4	rs136769	22q13.32	C22orf34	Intergenic	T	0.10	1.32	1.17-1.49	1.0E-05
rs6838973	PITX2_4	rs17741418	14q31.3	GALC	Intergenic	A	0.05	0.75	0.67-0.86	1.0E-05
rs6838973	PITX2_4	rs10867910	9q21.32	RASEF	Intergenic	T	0.33	0.88	0.83-0.93	1.1E-05

AF SNP		Interacting SNP						Interaction effects		
SNP	Closest gene	SNP	Locus	Closest gene	Location	Coding allele	CAF	OR ⁺	95% CI ⁺	P value
rs6838973	<i>PITX2_4</i>	rs10867909	9q21.32	<i>RASEF</i>	Intergenic	A	0.67	1.13	1.07-1.20	1.1E-05
rs6838973	<i>PITX2_4</i>	rs2723300	4q25	<i>PITX2</i>	Intergenic	A	0.32	0.89	0.84-0.94	1.4E-05
rs7164883	<i>HCN4</i>	rs4980345	15q25.3	<i>SLC28A1</i>	Intron	T	0.06	1.44	1.27-1.65	4.3E-08
rs7164883	<i>HCN4</i>	rs12591784	15q25.3	<i>SLC28A1</i>	Intron	A	0.94	0.69	0.61-0.79	5.0E-08
rs7164883	<i>HCN4</i>	rs16974622	15q25.3	<i>SLC28A1</i>	Intron	A	0.94	0.70	0.61-0.80	1.0E-07
rs7164883	<i>HCN4</i>	rs12438877	15q25.3	<i>SLC28A1</i>	Intron	A	0.06	1.46	1.26-1.68	1.8E-07
rs7164883	<i>HCN4</i>	rs12440771	15q25.3	<i>SLC28A1</i>	Intron	T	0.94	0.69	0.60-0.79	1.9E-07
rs7164883	<i>HCN4</i>	rs11728305	4q12	<i>SRD5A3</i>	Intergenic	T	0.71	0.82	0.76-0.89	7.9E-07
rs7164883	<i>HCN4</i>	rs7341756	9q31.2	<i>KLF4</i>	Intergenic	A	0.09	1.36	1.20-1.56	3.9E-06
rs7164883	<i>HCN4</i>	rs12554275	9q31.2	<i>KLF4</i>	Intergenic	C	0.90	0.74	0.65-0.84	4.2E-06
rs7164883	<i>HCN4</i>	rs11887070	2q36.1	<i>KCNE4</i>	Intergenic	T	0.88	0.79	0.71-0.87	7.4E-06
rs7164883	<i>HCN4</i>	rs11914048	22q13.31	<i>PARVB</i>	Intron	T	0.77	0.82	0.74-0.89	1.0E-05

Acknowledgement

The study was supported by the German Federal Ministry of Education and Research (BMBF) in the context of the German National Genome Research Network (NGFN), the German National Competence network on atrial fibrillation (AFNET), the Leducq Foundation (07-CVD 03), the D.W. Reynolds Foundation Clinical Cardiovascular Research Center at Johns Hopkins University, and the Bioinformatics for the Functional Analysis of Mammalian Genomes program (BFAM) by grants to Stefan Kääh (01GS0499, 01GI0204, 01GS0838). The KORA study was initiated and financed by the Helmholtz Zentrum München – German Research Center for Environmental Health, which is funded by the German Federal Ministry of Education and Research (BMBF) and by the State of Bavaria. Furthermore, KORA research was supported within the Munich Center of Health Sciences (MC-Health), Ludwig-Maximilians-Universität, as part of LMUinnovativ. Dr. Sinner is supported by the German Heart Foundation.

The Atherosclerosis Risk in Communities Study is carried out as a collaborative study supported by National Heart, Lung, and Blood Institute contracts (HHSN268201100005C, HHSN268201100006C, HHSN268201100007C, HHSN268201100008C, HHSN268201100009C, HHSN268201100010C, HHSN268201100011C, and HHSN268201100012C,), R01HL087641, R01HL59367, R01HL086694, and R01HL111314; National Human Genome Research Institute contract U01HG004402; and National Institutes of Health contract HHSN268200625226C. The authors thank the staff and participants of the ARIC study for their important contributions. Infrastructure was partly supported by Grant Number UL1RR025005, a component of the National Institutes of Health and NIH Roadmap for Medical Research.

This CHS research was supported by NHLBI contracts N01-HC-85239, N01-HC-85079, N01-HC-85080, N01-HC-85081, N01-HC-85082, N01-HC-85083, N01-HC-85084, N01-HC-85085, N01-HC-85086; N01-HC-35129, N01 HC-15103, N01 HC-55222, N01-HC-75150, N01-HC-45133, HHSN268200800007C,

HHSN268201200036C and NHLBI grants HL080295, HL087652, HL103612, HL105756, HL120393 with additional contribution from NINDS. Additional support was provided through AG-023629, AG-15928, AG-20098, and AG-027058 from the NIA. See also <http://www.chs-nhlbi.org/pi.htm>.

The Cleveland Clinic AF study was supported by NIH grants to Drs. Chung, Barnard, Smith, and Van Wagoner (R01HL090620, R01HL111314), an NIH/NCRR CTSA grant (1UL-RR024989), Heart and Vascular Institute Philanthropic grant, Department of Cardiovascular Medicine, Cleveland Clinic (Chung), and a Leducq Fondation grant 07-CVD-03 (Van Wagoner).

The Framingham Heart Study is conducted and supported by the NHLBI in collaboration with Boston University (Contract No. N01-HC-25195; HHSN268201500001I). This project also was supported by NIH grants to Drs. Ellinor, Benjamin, and Lunetta (1R01HL092577) and Benjamin and Ellinor (1R01HL128914).

LURIC was supported by the 7th Framework Program (AtheroRemo, grant agreement number 201668 and RiskyCAD, grant agreement number 305739) of the EU.

The PREVEND study is supported by the Dutch Kidney Foundation (grant E0.13), the National Institutes of Health (grant 2R01LM010098), The Netherlands organization for health research and development (NWO-Groot grant 175.010.2007.006, ZonMw grant 90.700.441), and the Dutch Inter University Cardiology Institute Netherlands (ICIN), and the Netherlands Heart Foundation (grant NHS2010B280). Dr. M. Rienstra is supported by a grant from the Netherlands Organization for Scientific Research (Veni grant 016.136.055). There are no relations with industry.

The PROSPER study was supported by an investigator initiated grant obtained from Bristol-Myers Squibb. Prof. Dr. J. W. Jukema is an Established Clinical Investigator of the Netherlands Heart Foundation (grant 2001 D 032). Support for genotyping was provided by the seventh framework program of the European commission (grant 223004) and by the Netherlands Genomics Initiative (Netherlands Consortium for Healthy Aging grant 050-060-810).

SHIP is part of the Community Medicine Research net of the University of Greifswald, Germany, which is funded by the Federal Ministry of Education and Research (grants no. 01ZZ9603, 01ZZ0103, and 01ZZ0403), the Ministry of Cultural Affairs as well as the Social Ministry of the Federal State of Mecklenburg-West Pomerania, and the network 'Greifswald Approach to Individualized Medicine (GANI_MED)' funded by the Federal Ministry of Education and Research (grant 03IS2061A). Genome-wide data have been supported by the Federal Ministry of Education and Research (grant no. 03ZIK012) and a joint grant from Siemens Healthcare, Erlangen, Germany and the Federal State of Mecklenburg-West Pomerania. The University of Greifswald is a member of the 'Center of Knowledge Interchange' program of the Siemens AG and the Caché Campus program of the InterSystems GmbH.

The generation and management of GWAS genotype data for the Rotterdam Study is supported by the Netherlands Organisation of Scientific Research NWO Investments (nr. 175.010.2005.011, 911-03-012). This study is funded by the Research Institute for Diseases in the Elderly (014-93-015; RIDE2), the Netherlands Genomics Initiative (NGI)/Netherlands Organisation for Scientific Research (NWO) project nr. 050-060-810. The Rotterdam Study is supported by the Erasmus MC and Erasmus University Rotterdam; the Netherlands Organisation for Scientific Research (NWO); the Netherlands Organisation for Health Research and Development (ZonMw); the Research Institute for Diseases in the Elderly (RIDE);

the Netherlands Genomics Initiative (NGI); the Ministry of Education, Culture and Science; the Ministry of Health Welfare and Sport; the European Commission (DG XII); and the Municipality of Rotterdam.

Dr. Ellinor is supported by grants from the National Institutes of Health (HL104156, HL105780, HL065962). Dr. Ellinor is also supported by an Established Investigator Award from the American Heart Association (13EIA14220013) and by support from the Fondation Leducq (14CVD01). Dr. Lubitz is supported by NIH grants K23HL114724, and a Doris Duke Charitable Foundation Clinical Scientist Development Award 2014105.