2C_CLUSTER population AF concordance

2C_CLUSTER allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
rs12777823 variant (A)	0.25	0.129	0.305	0.15	0.12	0.32	0.25	0.14	0.312	0.151	0.095	0.334	0.999

ABCG2 population AF concordance

ABCG2 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
rs2231142 reference (G)	0.969	0.834	0.681	0.893	0.951	0.875	0.965	0.8	0.693	0.896	0.935	0.907	1.0
rs2231142 variant (T)	0.031	0.166	0.319	0.107	0.049	0.125	0.035	0.2	0.307	0.104	0.065	0.093	0.992

CACNA1S population AF concordance

CACNA1S allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
c.3257G>A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.988
c.520C>T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.912

CFTR population AF concordance

CFTR allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
D1152H	0.0	0.001	0.0	0.001	0.001	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.766
D1270N	0.014	0.004	0.0	0.0	0.001	0.0	0.012	0.002	0.0	0.0	0.0	0.0	0.995
D579G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
E56K	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
F1052V	0.0	0.001	0.0	0.001	0.002	0.0	0.0	0.001	0.0	0.0	0.003	0.0	0.96
F1074L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.997
G1069R	0.0	0.0	0.001	0.0	0.001	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.972

CFTR allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
G1244E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.215
2789+5G->A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.291
G178R	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
G551D	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.996
G551S	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.08
L206W	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.999
P67L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.899
R1070Q	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.005	0.996
R1070W	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.137
3272-26A->G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.907
R117C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.347
R117H	0.0	0.001	0.0	0.003	0.001	0.0	0.0	0.001	0.0	0.003	0.0	0.0	0.931
R347H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.824
R352Q	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.973
R74W	0.013	0.004	0.0	0.0	0.002	0.001	0.013	0.002	0.0	0.0	0.002	0.001	0.993
S1251N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.681
S1255P	0.0	0.0	0.0	0.0	0.0	0.0	nan	nan	nan	nan	nan	nan	0.0
S549N	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.89
S549R(A>C)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
S549R(T>G)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.899
3849+10kbC->T	0.0	0.0	0.0	0.0	0.0	0.0	nan	nan	nan	nan	nan	nan	0.0
S945L	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.77
S977F	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.038

CFTR allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
A1067T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
A455E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.993
D110E	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
D110H	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.996

CYP2B6 population AF concordance

CYP2B6 allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.475	0.653	0.568	0.477	0.5	0.413	0.64	0.491	0.476	0.608	0.992
*2	0.037	0.047	0.048	0.096	0.038	0.031	0.046	0.049	0.039	0.041	0.915
*3	0.0	0.0	0.002	0.008	0.002	0.002	0.0	0.002	0.0	0.002	0.248
*4	0.005	0.062	0.022	0.018	0.034	0.01	0.084	0.041	0.104	0.099	0.869
*5	0.016	0.006	0.087	0.04	0.045	0.062	0.011	0.115	0.024	0.0	0.842
*6	0.348	0.221	0.21	0.289	0.329	0.317	0.174	0.233	0.231	0.185	0.978
*7	0.01	0.002	0.029	0.016	0.029	0.0	0.0	0.025	0.024	0.0	0.707
*8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*9	0.003	0.001	0.0	0.0	0.001	0.046	0.034	0.015	0.102	0.059	0.626
*11	0.001	0.0	0.004	0.008	0.002	0.002	0.0	0.003	0.0	0.002	0.415
*12	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.828
*14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.003	0.093
*15	0.002	0.0	0.008	0.0	0.001	0.0	0.0	0.007	0.0	0.0	0.965
*18	0.068	0.0	0.0	0.003	0.001	0.033	0.0	0.0	0.0	0.0	0.999
*19	0.003	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*20	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CYP2B6 allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*22	0.027	0.003	0.011	0.029	0.014	0.011	0.0	0.014	0.0	0.0	0.577
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1.0
*27	0.001	0.0	0.0	0.001	0.001	0.0	0.008	0.0	0.0	0.0	0.0
*28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CYP2C19 population AF concordance

CYP2C19 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.508	0.693	0.584	0.559	0.606	0.413	0.547	0.792	0.596	0.625	0.672	0.544	0.998
*2	0.176	0.119	0.302	0.143	0.11	0.31	0.181	0.121	0.284	0.147	0.12	0.27	0.997
*3	0.0	0.0	0.061	0.0	0.001	0.011	0.003	0.0	0.072	0.002	0.016	0.016	0.977
*4	0.0	0.003	0.001	0.003	0.001	0.001	0.0	0.0	0.0	0.002	0.0	0.0	0.653
*5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.982
*6	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.405
*7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*8	0.0	0.001	0.0	0.003	0.0	0.001	0.001	0.0	0.0	0.003	0.0	0.0	0.851
*9	0.013	0.001	0.0	0.0	0.0	0.0	0.014	0.0	0.0	0.001	0.0	0.0	0.993
*10	0.003	0.001	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.972
*11	0.001	0.001	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*12	0.001	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.992
*13	0.016	0.002	0.0	0.0	0.001	0.0	0.012	0.0	0.0	0.002	0.0	0.0	0.975

CYP2C19 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*15	0.008	0.001	0.0	0.001	0.006	0.0	0.014	0.0	0.001	0.002	0.0	0.0	0.755
*16	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*17	0.22	0.129	0.014	0.217	0.197	0.157	0.207	0.086	0.021	0.215	0.191	0.171	0.994
*18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.02	0.0	0.0	0.0	0.641
*22	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	1.0
*24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*31	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*34	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*35	0.02	0.003	0.0	0.0	0.006	0.0	0.016	0.0	0.0	0.0	0.0	0.0	0.943

CYP2C9 population AF concordance

CYP2C9 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.789	0.847	0.953	0.795	0.796	0.841	0.871	0.912	0.915	0.793	0.782	0.772	0.998
*2	0.025	0.086	0.003	0.128	0.115	0.049	0.022	0.033	0.002	0.127	0.13	0.114	0.922
*3	0.014	0.044	0.032	0.068	0.069	0.088	0.014	0.03	0.038	0.076	0.083	0.11	0.99
*4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.999
*5	0.01	0.001	0.0	0.0	0.001	0.0	0.012	0.001	0.0	0.0	0.001	0.0	1.0
*6	0.011	0.001	0.0	0.0	0.001	0.0	0.009	0.0	0.0	0.0	0.0	0.0	0.991

CYP2C9 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*8	0.055	0.005	0.0	0.001	0.002	0.001	0.059	0.02	0.004	0.002	0.001	0.001	0.97
*9	0.072	0.007	0.0	0.0	0.005	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*11	0.018	0.003	0.0	0.002	0.005	0.003	0.014	0.003	0.0	0.002	0.0	0.001	0.961
*12	0.0	0.001	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.006
*13	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.998
*14	0.0	0.0	0.0	0.0	0.001	0.013	0.0	0.0	0.0	0.0	0.001	0.0	0.079
*16	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.997
*19	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.958
*20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.375
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*27	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1.0
*29	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.989
*30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1.0
*31	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.47
*33	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.001	0.0	0.62
*34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.947
*36	0.002	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*41	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*42	0.0	0.0	0.001	0.0	0.001	0.0	0.0	0.0	0.01	0.0	0.001	0.0	0.669
*43	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.894

CYP2C9 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*44	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*45	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.165
*47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*55	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	1.0
*56	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*60	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*62	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.307
*63	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.993
*67	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.994
*72	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*73	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.544
*75	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

CYP2D6 population AF concordance

CYP2D6 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.29	0.45	0.269	0.338	0.335	0.355	0.211	0.501	0.258	0.285	0.249	0.293	0.987
*2	0.128	0.166	0.092	0.148	0.167	0.2	0.155	0.217	0.119	0.185	0.19	0.274	0.998
*3	0.003	0.006	0.0	0.015	0.003	0.003	0.003	0.001	0.0	0.016	0.004	0.001	0.93
*4	0.036	0.088	0.007	0.132	0.058	0.073	0.048	0.102	0.005	0.185	0.114	0.09	0.987
*5	0.055	0.028	0.041	0.03	0.02	0.03	0.054	0.016	0.048	0.029	0.018	0.042	0.981
*6	0.002	0.005	0.0	0.011	0.003	0.001	0.003	0.003	0.0	0.011	0.005	0.0	0.95
*7	0.0	0.0	0.0	0.001	0.002	0.005	0.0	0.003	0.0	0.001	0.003	0.007	0.941

CYP2D6 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.073
*9	0.005	0.015	0.0	0.024	0.001	0.005	0.004	0.007	0.002	0.028	0.004	0.002	0.945
*10	0.032	0.012	0.14	0.015	0.021	0.047	0.038	0.015	0.428	0.016	0.068	0.076	0.979
*11	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.497
*12	0.001	0.0	0.0	0.0	0.0	0.0	0.001	0.006	0.0	0.0	0.0	0.0	0.193
*13	0.001	0.002	0.0	0.003	0.002	0.001	0.001	0.001	0.001	0.001	0.0	0.001	0.732
*14	0.0	0.0	0.012	0.0	0.0	0.001	0.0	0.0	0.005	0.0	0.0	0.0	0.998
*15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.61
*17	0.154	0.015	0.0	0.003	0.03	0.003	0.169	0.005	0.0	0.004	0.031	0.0	0.998
*19	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028
*21	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.997
*22	0.001	0.001	0.0	0.002	0.0	0.002	0.0	0.003	0.0	0.003	0.0	0.0	0.807
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*27	0.001	0.001	0.0	0.0	0.006	0.0	0.003	0.003	0.001	0.0	0.007	0.0	0.922
*28	0.001	0.005	0.0	0.003	0.001	0.0	0.0	0.002	0.0	0.004	0.0	0.0	0.848
*29	0.083	0.009	0.0	0.001	0.006	0.001	0.087	0.002	0.0	0.001	0.008	0.002	0.997
*30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*31	0.0	0.001	0.0	0.0	0.002	0.0	0.0	0.006	0.0	0.001	0.0	0.0	0.497
*32	0.0	0.001	0.0	0.001	0.006	0.001	0.0	0.003	0.0	0.003	0.0	0.002	0.291
*33	0.002	0.003	0.0	0.011	0.003	0.005	0.0	0.002	0.0	0.01	0.0	0.002	0.946

CYP2D6 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*34	0.0	0.001	0.0	0.0	0.001	0.0	0.0	0.0	0.009	0.011	0.0	0.0	0.217
*35	0.009	0.027	0.003	0.055	0.038	0.011	0.009	0.011	0.001	0.055	0.022	0.008	0.962
*36	0.003	0.0	0.002	0.0	0.0	0.0	0.005	0.0	0.011	0.0	0.0	0.0	0.798
*39	0.001	0.001	0.001	0.001	0.003	0.002	0.02	0.001	0.006	0.014	0.027	0.003	0.889
*40	0.007	0.001	0.0	0.0	0.001	0.0	0.005	0.0	0.0	0.001	0.0	0.0	0.967
*41	0.023	0.052	0.035	0.099	0.142	0.117	0.037	0.027	0.023	0.092	0.154	0.119	0.989
*42	0.0	0.0	0.0	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.0	0.001	0.978
*43	0.008	0.001	0.0	0.0	0.003	0.004	0.006	0.001	0.0	0.001	0.003	0.01	0.863
*45	0.032	0.003	0.0	0.0	0.004	0.0	0.05	0.003	0.0	0.0	0.0	0.0	0.989
*46	0.006	0.001	0.0	0.0	0.0	0.0	0.011	0.001	0.0	0.0	0.003	0.0	0.963
*47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*48	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*49	0.0	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.997
*50	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*51	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*52	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	1.0
*53	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.045
*54	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*56	0.001	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.001	0.0	0.0	0.901
*58	0.002	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.999
*59	0.001	0.001	0.0	0.004	0.0	0.001	0.0	0.001	0.0	0.004	0.0	0.0	0.967
*65	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.03	0.0	0.0	0.0	0.813
*68	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.123

CYP2D6 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*69	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.01	0.001	0.0	0.002	0.001
*70	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*71	0.0	0.0	0.006	0.0	0.0	0.002	0.0	0.0	0.001	0.0	0.0	0.0	0.957
*73	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*74	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*75	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.885
*82	0.0	0.006	0.0	0.0	0.0	0.0	0.0	0.006	0.0	0.0	0.0	0.001	0.99
*84	0.003	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.995
*86	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.021	1.0
*99	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.002	1.0
*101	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.358
*102	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0
*106	0.009	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*108	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.003	0.0	0.003	0.0	0.0	0.849
*111	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.004	0.0	0.004	0.0	0.008	0.816
*112	0.0	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.0	0.0	0.002	0.98
*113	0.0	0.0	0.0	0.0	0.0	0.005	0.0	0.0	0.0	0.0	0.0	0.008	1.0
*114	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	1.0
*117	0.0	0.001	0.0	0.001	0.0	0.0	0.0	0.004	0.0	0.004	0.0	0.0	0.907
*119	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*121	0.0	0.0	0.0	0.0	0.001	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.095
*122	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.222
*125	0.002	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.991

CYP2D6 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*139	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0

CYP3A5 population AF concordance

CYP3A5 allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.465	0.278	0.067	0.097	0.25	0.453	0.254	0.074	0.122	0.327	0.991
*3	0.31	0.721	0.931	0.875	0.746	0.316	0.746	0.924	0.836	0.673	0.999
*6	0.124	0.0	0.001	0.026	0.002	0.111	0.001	0.002	0.038	0.0	0.993
*7	0.101	0.0	0.0	0.002	0.001	0.12	0.0	0.0	0.004	0.0	1.0

CYP4F2 population AF concordance

CYP4F2 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.679	0.65	0.705	0.583	0.476	0.537	0.924	0.589	0.684	0.566	0.438	0.428	0.983
*2	0.212	0.105	0.064	0.121	0.134	0.099	nan	nan	0.084	0.16	0.211	0.169	0.67
*3	0.08	0.194	0.196	0.223	0.266	0.272	0.076	0.411	0.232	0.275	0.351	0.403	0.979

DPYD population AF concordance

DPYD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
c.1024G>A	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.998
c.1108A>G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.1129-5923C>G, c.1236G>A (HapB3)	0.003	0.001	0.02	0.017	0.003	0.0	0.024	0.02	0.999
c.1180C>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.0
c.1181G>T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.013

DPYD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
c.1218G>A	0.072	0.0	0.001	0.001	0.064	0.0	0.0	0.0	1.0
c.1260T>A	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.0	1.0
c.1278G>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.1294G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.0
c.1314T>G	0.0	0.001	0.0	0.0	0.0	0.001	0.0	0.0	0.973
c.1349C>T	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.1358C>G	0.001	0.0	0.0	0.0	0.003	0.0	0.0	0.0	1.0
c.1371C>T	0.026	0.0	0.0	0.0	0.016	0.0	0.0	0.0	1.0
c.1475C>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.781
c.1519G>A	0.0	0.0	0.0	0.001	nan	0.0	0.0	0.0	0.0
c.1543G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.326
c.1577C>G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.1601G>A (*4)	0.004	0.001	0.021	0.008	0.01	0.0	0.02	0.009	0.966
c.1615G>A	0.002	0.0	0.0	0.0	0.003	0.0	0.0	0.0	1.0
c.1627A>G (*5)	0.156	0.248	0.199	0.121	0.14	0.255	0.195	0.094	0.997
c.1679T>G (*13)	0.0	0.0	0.001	0.0	0.0	0.0	0.001	0.0	0.954
c.1682G>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.136
c.1774C>T	0.0	0.001	0.0	0.0	0.0	0.002	0.0	0.0	0.969
c.1775G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.0
c.1777G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.1796T>C	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.754
c.1896T>C	0.022	0.128	0.042	0.043	0.032	0.124	0.038	0.036	0.996
c.1905+1G>A (*2A)	0.001	0.0	0.004	0.005	0.003	0.0	0.008	0.005	0.943

DPYD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
c.1905C>G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.944
c.1906A>C	0.002	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.0
c.1990G>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.0
c.2161G>A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.882
c.2186C>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.2194G>A (*6)	0.022	0.018	0.049	0.08	0.016	0.018	0.045	0.095	0.992
c.2195T>G	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.2279C>T	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.006	1.0
c.2303C>A	0.0	0.004	0.0	0.001	0.0	0.002	0.0	0.0	0.987
c.2336C>A	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	1.0
c.2482G>A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.642
c.2623A>C	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.913
c.2639G>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.001	1.0
c.2656C>T	0.0	0.0	0.0	0.001	nan	0.0	0.0	0.001	0.948
c.2657G>A (*9B)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.888
c.2846A>T	0.001	0.0	0.005	0.001	0.003	0.0	0.004	0.001	0.897
c.2872A>G	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.2915A>G	0.001	0.0	0.0	0.0	0.009	0.0	0.0	0.0	1.0
c.2977C>T	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.2978T>G	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.3049G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.177
c.3061G>C	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.654
c.3067C>A	0.03	0.0	0.0	0.001	0.045	0.0	0.0	0.0	1.0

DPYD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
c.313G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.343A>G	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.209
c.451A>G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.535
c.496A>G	0.029	0.016	0.091	0.075	0.032	0.016	0.11	0.085	0.999
c.525G>A	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.028
c.557A>G	0.015	0.0	0.0	0.0	0.012	0.0	0.0	0.0	1.0
c.601A>C	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.874
c.62G>A	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.632A>G	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.703C>T (*8)	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.401
c.775A>G	0.001	0.0	0.008	0.003	0.003	0.0	0.015	0.007	0.997
c.85T>C (*9A)	0.272	0.065	0.137	0.166	0.427	0.076	0.227	0.255	0.999
c.868A>G	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
c.929T>C	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	0.907
c.934C>T	0.0	0.0	0.0	0.0	nan	0.0	0.0	0.0	1.0
c.967G>A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.866

G6PD population AF concordance

G6PD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
A	0.149	0.0	0.001	0.002	0.318	0.0	0.001	0.001	1.0
A- 968C_376G	0.003	0.0	0.0	0.0	0.005	0.0	0.0	0.0	1.0
Andalus	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Asahi	0.0	0.0	0.0	0.0	0.116	0.0	0.0	0.0	1.0

G6PD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
Aures	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
B (reference)	0.541	0.793	0.799	0.731	0.557	0.974	0.995	0.956	0.998
Cairo	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Canton, Taiwan-Hakka, Gifu-like, Agrigento-like	0.0	0.002	0.0	0.0	0.0	0.011	0.0	0.0	0.984
Chatham	0.0	0.001	0.0	0.001	0.0	0.0	0.0	0.001	0.664
Chinese-5	0.0	0.001	0.0	0.0	0.0	0.002	0.0	0.0	1.0
Coimbra Shunde	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.998
Dagua	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Gaohe	0.0	0.002	0.0	0.0	0.0	0.002	0.0	0.0	0.998
Gond	0.0	0.0	0.0	0.004	0.0	0.0	0.0	0.009	1.0
Ilesha	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.783
Kaiping, Anant, Dhon, Sapporo-like, Wosera	0.0	0.003	0.0	0.0	0.0	0.007	0.0	0.0	0.997
Kalyan-Kerala, Jamnaga, Rohini	0.0	0.0	0.0	0.01	0.0	0.0	0.0	0.011	1.0
Lagosanto	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.474
Mahidol	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.914
Malaga	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.002
Mediterranean, Dallas, Panama, Sassari, Cagliari, Birmingham	0.0	0.0	0.001	0.007	0.0	0.0	0.001	0.017	0.995
Mexico City	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.983
Mira d'Aire	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Montalbano	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.335
Montpellier	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Murcia Oristano	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Namouru	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.981

G6PD allele	afr.aou	eas.aou	eur.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
Nankang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Nanning	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.489
Neapolis	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Orissa	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.002	0.999
Salerno Pyrgos	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sao Borja	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
Seattle, Lodi, Modena, Ferrara II, Athens-like	0.0	0.0	0.001	0.0	0.0	0.0	0.001	0.001	0.87
Sibari	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.27
Sierra Leone	0.0	0.0	0.0	0.0	0.0	0.0	0.003	0.0	0.061
Surabaya	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Taipei, Chinese-3	0.0	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.942
Ube Konan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.625
Union,Maewo, Chinese-2, Kalo	0.0	0.003	0.0	0.001	0.0	0.001	0.0	0.0	0.835
Vanua Lava	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Viangchan, Jammu	0.0	0.006	0.0	0.002	0.0	0.003	0.0	0.0	0.981

NUDT15 population AF concordance

NUDT15 allele	eas.aou	eur.aou	sas.aou	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
*1	0.884	0.992	0.936	0.879	0.993	0.93	1.0
*2	0.037	0.0	0.003	0.035	0.0	0.0	0.996
*3	0.058	0.003	0.055	0.06	0.002	0.067	0.997
*4	0.001	0.0	0.0	0.001	0.0	0.0	0.957
*5	0.009	0.0	0.001	0.011	0.0	0.0	0.998

NUDT15 allele	eas.aou	eur.aou	sas.aou	eas.cpic	eur.cpic	sas.cpic	cosine_similarity
*6	0.011	0.003	0.003	0.013	0.003	0.002	0.997
*7	0.0	0.0	0.0	0.001	0.0	0.0	1.0
*9	0.0	0.002	0.001	0.0	0.002	0.0	0.988

RYR1 population AF concordance

RYR1 allele	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
c.103T>C	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	1.0
c.1201C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.95
c.14545G>A	0.0	0.0	0.0	0.0	0.0	nan	nan	nan	nan	nan	0.0
c.1589G>A	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.317
c.1597C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	nan	nan	nan	0.0
c.1598G>A	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.826
c.1840C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.962
c.6617C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.989
c.7063C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	nan	nan	0.0	0.0
c.7282G>A	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.119
c.7300G>A	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	1.0
c.7360C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	1.0
c.7372C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	0.013
c.742G>C	0.0	0.0	0.0	0.0	0.0	nan	0.0	nan	nan	nan	0.0
c.982C>T	0.0	0.0	0.0	0.0	0.0	nan	nan	0.0	nan	nan	1.0

SLCO1B1 population AF concordance

SLCO1B1 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.203	0.525	0.25	0.56	0.464	0.456	0.23	0.37	0.255	0.403	0.49	0.47	0.982
*5	0.002	0.012	0.0	0.023	0.015	0.004	0.0	0.0	0.001	0.02	0.05	0.004	0.754
*6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*14	0.05	0.088	0.004	0.154	0.122	0.048	0.0	0.0	0.0	0.136	0.0	0.0	0.68
*15	0.029	0.104	0.126	0.13	0.159	0.064	0.01	0.24	0.125	0.15	0.15	0.065	0.93
*16	0.0	0.0	0.005	0.0	0.0	0.001	0.0	0.0	0.005	0.001	0.0	0.0	0.975
*20	0.064	0.038	0.003	0.05	0.067	0.028	0.0	0.0	0.0	0.037	0.0	0.0	0.432
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.681
*26	0.0	0.0	0.0	0.0	0.003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.066
*27	0.045	0.004	0.0	0.0	0.003	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*36	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*37	0.49	0.208	0.605	0.064	0.124	0.351	0.76	0.39	0.615	0.253	0.31	0.46	0.962
*41	0.03	0.004	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.007

TPMT population AF concordance

TPMT allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.895	0.977	0.954	0.984	0.978	0.923	0.98	0.953	0.966	0.981	1.0
*2	0.001	0.0	0.003	0.001	0.0	0.005	0.0	0.002	0.007	0.0	0.54
*4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.989
*5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*6	0.0	0.002	0.0	0.0	0.0	0.0	0.002	0.0	0.0	0.0	0.992
*8	0.024	0.0	0.0	0.001	0.0	0.006	0.0	0.0	0.0	0.0	1.0

TPMT allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*9	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.974
*12	0.0	0.0	0.0	0.001	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.969
*16	0.0	0.0	0.0	0.0	0.001	0.0	0.0	0.001	0.0	0.001	0.506
*17	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*18	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.937
*20	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.076
*21	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.996
*22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
*23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*24	0.023	0.0	0.0	0.002	0.0	0.033	0.0	0.0	0.0	0.0	0.996
*25	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*26	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*29	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*30	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.06
*32	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.032
*33	0.002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.024
*34	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.001	0.998
*37	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0
*38	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.489
*39	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.998
*40	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.937

UGT1A1 population AF concordance

UGT1A1 allele	afr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
*1	0.481	0.711	0.666	0.641	0.581	0.031	0.706	0.361	0.68	0.541	0.922
*6	0.001	0.132	0.002	0.001	0.025	0.004	0.146	0.008	0.0	0.045	0.993
*28	0.001	0.002	0.001	0.007	0.0	0.373	0.148	0.316	0.308	0.414	0.587
*36	0.07	0.0	0.002	0.002	0.001	0.084	0.0	0.0	0.008	0.0	0.997
*80	0.0	0.0	0.0	0.0	0.0	0.45	0.0	0.314	0.0	0.0	0.708

VKORC1 population AF concordance

VKORC1 allele	afr.aou	amr.aou	eas.aou	eur.aou	mid.aou	sas.aou	afr.cpic	amr.cpic	eas.cpic	eur.cpic	mid.cpic	sas.cpic	cosine_similarity
rs9923231 reference (C)	0.896	0.578	0.138	0.61	0.522	0.734	0.899	0.384	0.134	0.587	0.546	0.844	0.989
rs9923231 variant (T)	0.104	0.422	0.862	0.39	0.478	0.266	0.101	0.616	0.866	0.413	0.454	0.156	0.984