

Supplementary Table S3: Association between rs13387042 and rs7696175 and breast cancer risk, stratified by risk factor* and Indigenous American (IA) genetic ancestry in Hispanic women from the Breast Cancer Health Disparities Study

SNP rs number	Variable Categories	IA Ancestry	N	OR	P	95%CI	P Interaction**
rs13387042 & Postmenopausal Hormone therapy use							
rs13387042		Low IA anc	N=324	1.07	0.679	0.78-1.44	0.055
rs13387042		Intermediate IA anc	N=1793	1.19	0.014	1.03-1.36	
rs13387042		High IA anc	N=591	1.46	0.013	1.08-1.97	
rs13387042	Hormone therapy: current		N=575	0.94	0.644	0.74-1.20	0.002
rs13387042	Hormone therapy: former		N=592	1.20	0.134	0.94-1.53	
rs13387042	Hormone therapy: never		N=1521	1.49	<0.001	1.28-1.75	
Model with both Hormone therapy use*SNP and Ancestry*SNP interaction terms							
rs13387042	Hormone therapy: current	Low IA anc	N=113	1.10	0.733	0.64-1.87	Hormone therapy*SNP = 0.013 Ancestry*SNP = 0.353
rs13387042		Intermediate IA anc	N=439	0.90	0.473	0.67-1.20	
rs13387042		High IA anc	N=22	0.05	0.128	0.00-2.41	
rs13387042	Hormone therapy: former	Low IA anc	N=80	0.57	0.144	0.27-1.21	
rs13387042		Intermediate IA anc	N=407	1.24	0.156	0.92-1.67	
rs13387042		High IA anc	N=101	1.39	0.413	0.63-3.02	
rs13387042	Hormone therapy: never	Low IA anc	N=127	1.64	0.060	0.97-2.73	
rs13387042		Intermediate IA anc	N=929	1.29	0.015	1.05-1.57	
rs13387042		High IA anc	N=465	1.72	0.002	1.21-2.42	
rs13387042 & months breastfeeding							
rs13387042		Low IA anc	N=557	1.10	0.441	0.87-1.39	0.051
rs13387042		Intermediate IA anc	N=3098	1.17	0.003	1.06-1.30	
rs13387042		High IA anc	N=1078	1.47	0.001	1.17-1.83	
rs13387042	Never		N=1081	1.14	0.136	0.96-1.36	0.06
rs13387042	≤12 months		N=2037	1.20	0.007	1.05-1.37	
rs13387042	>12 months		N=1177	1.43	<0.001	1.20-1.70	
Model with both months breastfeeding*SNP and Ancestry*SNP interaction terms							
rs13387042	Never	Low IA anc	N=149	0.89	0.618	0.56-1.41	Breastfeeding*SNP = 0.093 Ancestry*SNP = 0.103
rs13387042		Intermediate IA anc	N=799	1.14	0.215	0.93-1.40	
rs13387042		High IA anc	N=130	1.15	0.678	0.60-2.21	
rs13387042	≤12 months	Low IA anc	N=199	1.01	0.95	0.67-1.54	
rs13387042		Intermediate IA anc	N=1231	1.06	0.467	0.90-1.26	
rs13387042		High IA anc	N=607	1.41	0.021	1.05-1.90	
rs13387042	>12 months	Low IA anc	N=135	1.38	0.199	0.84-2.26	
rs13387042		Intermediate IA anc	N=790	1.38	0.004	1.11-1.71	
rs13387042		High IA anc	N=252	1.65	0.057	0.98-2.75	
Pre-menopausal							
rs13387042		Low IA anc	N=195	1.23	0.333	0.81-1.87	0.339
rs13387042		Intermediate IA anc	N=1195	1.18	0.052	1.00-1.40	
rs13387042		High IA anc	N=473	1.50	0.023	1.07-2.13	
rs13387042	Never		N=324	1.01	0.96	0.72-1.42	0.014
rs13387042	≤12 months		N=923	1.19	0.076	0.98-1.45	
rs13387042	>12 months		N=424	1.69	<0.001	1.26-2.26	
Model with both months breastfeeding*SNP and Ancestry*SNP interaction terms							
rs13387042	Never	Low IA anc	N=25	0.85	0.799	0.24-2.96	Breastfeeding*SNP = 0.013 Ancestry*SNP = 0.176
rs13387042		Intermediate IA anc	N=241	1.03	0.89	0.69-1.52	
rs13387042		High IA anc	N=56	1.44	0.56	0.43-4.84	
rs13387042	≤12 months	Low IA anc	N=88	0.87	0.692	0.44-1.73	
rs13387042		Intermediate IA anc	N=542	1.1	0.463	0.86-1.41	
rs13387042		High IA anc	N=293	1.38	0.13	0.91-2.11	
rs13387042	>12 months	Low IA anc	N=47	1.52	0.377	0.60-3.82	
rs13387042		Intermediate IA anc	N=292	1.69	0.003	1.20-2.38	
rs13387042		High IA anc	N=83	2.22	0.122	0.81-6.10	
Post-menopausal							
rs13387042	Never		N=720	1.22	0.057	0.99-1.51	0.554
rs13387042	≤12 months		N=1058	1.20	0.047	1.00-1.45	
rs13387042	>12 months		N=726	1.33	0.016	1.05-1.67	
Model with both months breastfeeding*SNP and Ancestry*SNP interaction terms							
rs13387042	Never	Low IA anc	N=113	0.96	0.863	0.57-1.61	Breastfeeding*SNP = 0.727 Ancestry*SNP = 0.172
rs13387042		Intermediate IA anc	N=534	1.22	0.117	0.95-1.56	
rs13387042		High IA anc	N=70	0.88	0.786	0.36-2.16	
rs13387042	≤12 months	Low IA anc	N=103	1.27	0.42	0.71-2.30	
rs13387042		Intermediate IA anc	N=645	1.04	0.755	0.82-1.31	
rs13387042		High IA anc	N=310	1.40	0.116	0.92-2.13	
rs13387042	>12 months	Low IA anc	N=79	1.38	0.347	0.71-2.70	
rs13387042		Intermediate IA anc	N=480	1.23	0.169	0.92-1.64	
rs13387042		High IA anc	N=164	1.78	0.083	0.93-3.43	
rs13387042 & Family History of Breast Cancer (BC)							
rs13387042	No family history BC		N=4144	1.30	<0.001	0.19-1.42	0.114
rs13387042	Family history BC		N=460	1.07	0.627	0.82-1.39	
Model with both Family History*SNP and Ancestry*SNP interaction terms							

rs13387042	No family history BC	Low IA anc	N=435	1.07	0.624	0.82-1.40	Family History*SNP = 0.208
rs13387042		Intermediate IA anc	N=2681	1.21	0.001	1.08-1.35	Ancestry*SNP = 0.126
rs13387042		High IA anc	N=1028	1.48	0.001	1.17-1.86	
rs13387042	Family history BC	Low IA anc	N=91	1.34	0.350	0.73-2.47	
rs13387042		Intermediate IA anc	N=325	0.96	0.806	0.69-1.33	
rs13387042		High IA anc	N=31	0.23	0.189	0.03-2.05	
rs7696175 & Smoking							
rs7696175		Low IA anc	N=557	0.95	0.696	0.73-1.23	0.086
rs7696175		Intermediate IA anc	N=3096	1.17	0.003	1.06-1.30	
rs7696175		High IA anc	N=1077	1.21	0.036	1.01-1.45	
rs7696175	Never smoked		N=2922	1.24	<0.001	1.11-1.38	0.096
rs7696175	Ever smoked		N=1196	1.04	0.638	0.88-1.24	
Model with both Smoking*SNP and Ancestry*SNP interaction terms							
rs7696175	Never smoked	Low IA anc	N=254	0.99	0.98	0.67-1.47	Smoking*SNP = 0.135
rs7696175		Intermediate IA anc	N=1839	1.28	<0.001	1.12-1.46	Ancestry*SNP = 0.206
rs7696175		High IA anc	N=829	1.27	0.022	1.04-1.55	
rs7696175	Ever smoked	Low IA anc	N=184	0.98	0.909	0.63-1.50	
rs7696175		Intermediate IA anc	N=810	1.00	0.984	0.81-1.23	
rs7696175		High IA anc	N=202	1.24	0.373	0.77-2.00	
rs7696175 & Age at Menarche							
rs7696175	<11		N=1056	1.01	0.925	0.85-1.20	0.149
rs7696175	11 to 13		N=2198	1.17	0.013	1.03-1.32	
rs7696175	>13		N=1411	1.21	0.017	1.03-1.42	
Model with both Age at menarche*SNP and Ancestry*SNP interaction terms							
rs7696175	<11	Low IA anc	N=149	0.62	0.074	0.37-1.05	Age at menarche*SNP = 0.179
rs7696175		Intermediate IA anc	N=701	1.12	0.297	0.90-1.39	Ancestry*SNP = 0.136
rs7696175		High IA anc	N=206	0.97	0.891	0.65-1.45	
rs7696175	11 to 13	Low IA anc	N=265	0.97	0.879	0.67-1.41	
rs7696175		Intermediate IA anc	N=1421	1.18	0.030	1.02-1.38	
rs7696175		High IA anc	N=512	1.24	0.100	0.96-1.60	
rs7696175	>13	Low IA anc	N=137	1.26	0.450	0.69-2.30	
rs7696175		Intermediate IA anc	N=937	1.19	0.077	0.98-1.44	
rs7696175		High IA anc	N=337	1.30	0.139	0.92-1.83	
rs7696175 & Age at Menopause							
rs7696175	<50		N=1642	1.19	0.016	1.03-1.38	0.159
rs7696175	≥50		N=844	1.02	0.873	0.84-1.24	
Model with both Age at Menopause*SNP and Ancestry*SNP interaction terms							
rs7696175	<50	Low IA anc	N=175	1.10	0.703	0.68-1.77	Age at menop.*SNP = 0.157
rs7696175		Intermediate IA anc	N=1083	1.20	0.042	1.01-1.43	Ancestry*SNP = 0.076
rs7696175		High IA anc	N=383	1.42	0.029	1.04-1.94	
rs7696175	≥50	Low IA anc	N=119	0.65	0.155	0.36-1.18	
rs7696175		Intermediate IA anc	N=551	1.01	0.942	0.79-1.29	
rs7696175		High IA anc	N=173	1.34	0.183	0.87-2.07	

*We only analyzed risk factors that showed SNP-risk factor interactions that were suggestive (P< 0.15) or statistically significant (P<0.02) for the three SNPs with previously reported SNP by ancestry interactions.

**All models were adjusted for study, age at diagnosis/interview and models that include ancestry categories were also adjusted for continuous indigenous american ancestry