

SUPPLEMENTARY DATA

Table 1s. Genotype distribution of rs4644 in breast cancer patients

Sample ID	Race	Diagnose	Allelic variation at position 64
10173 A1	Asian	Invasive Ductal Carcinoma	H/H
10181 A1	Asian	Invasive Ductal Carcinoma	H/H
10195 A1	Asian	Invasive Ductal Carcinoma	H/H
10207 A1	Asian	Invasive Ductal Carcinoma	H/H
10212 A1	Asian	Invasive Ductal Carcinoma	H/H
107 A1	Asian	Invasive Ductal Carcinoma	H/H
114 A1	Asian	Invasive Ductal Carcinoma	H/H
11767 A1	Asian	Invasive small lobular carcinoma	H/H
154 A1	Asian	Infiltrating ductal carcinoma	H/H
163 A1	Asian	Interstitial Sarcoma of the breast	H/H
165 A1	Asian	Invasive ductal carcinoma	H/H
170 A1	Asian	Invasive ductal carcinoma	H/H
176 A1	Asian	Invasive ductal carcinoma	H/H
267 A1	Asian	Invasive ductal carcinoma	H/H
311 A1	Asian	Invasive ductal carcinoma	H/H
342 A1	Asian	Comedocarcinoma	H/H
3489 A1	Asian	Infiltrating ductal carcinoma	H/H
3490 A1	Asian	Infiltrating ductal carcinoma	H/H
3495 A1	Asian	Invasive ductal carcinoma	H/H
3512 A1	Asian	Invasive small lobe carcinoma	H/H
3569 A1	Asian	Carcinoma simplex of breast	H/H
3631 A1	Asian	Carcinoma simplex of breast	H/H
3635 A1	Asian	Breast cancer	H/H
3811 A1	Asian	Breast cancer	H/H
3821 A1	Asian	Breast cancer	H/H
3822 A1	Asian	Invasive ductal carcinoma	H/H
3831 A1	Asian	Invasive ductal carcinoma	H/H
3871 B1	Asian	Simplex carcinoma	H/H
3900 A1	Asian	Carcinoma simplex of breast	H/H
4241 A1	Asian	Breast cancer	H/H
452 A1	Asian	Breast cancer	H/H
4703 A1	Asian	Invasive ductal carcinoma	H/H
6873 A1	Asian	Breast cancer	H/H
6879 A1	Asian	Invasive ductal carcinoma	H/H
6884 A1	Asian	Invasive ductal carcinoma	H/H
7350 B1	Asian	Carcinoma simplex	H/H
7746 B1	Asian	Scirrhus carcinoma	H/H
9361 A1	Asian	Infiltrating ductal carcinoma	H/H
9578 A1	Asian	Invasive ductal carcinoma	H/H
9579 A1	Asian	Infiltrating ductal carcinoma	H/H

9611 A1	Asian	Invasive ductal carcinoma	H/H
9626 A1	Asian	Invasive ductal carcinoma	H/H
9776 B1	Asian	Invasive ductal carcinoma	H/H
22B	Asian	Invasive ductal carcinoma	H/P
343	Asian	Invasive ductal carcinoma	H/P
9612	Asian	Invasive ductal carcinoma	H/P
4678	Asian	Invasive ductal carcinoma	H/P
10	Asian	Invasive ductal carcinoma	H/P
3866	Asian	Invasive ductal carcinoma	P/P
10201	Asian	Invasive ductal carcinoma	P/P
10167 A1	Asian	Invasive ductal carcinoma	P/P
10172 A1	Asian	Invasive ductal carcinoma	P/P
3823	Asian	Invasive ductal carcinoma	P/P
4899	Caucasian	Lobular carcinoma	H/H
7181	Caucasian	Ductal carcinoma	H/H
11466 B1	Caucasian	Ductal carcinoma	H/H
11678 A1	Caucasian	Infiltrating duct breast carcinoma	H/H
14894 A1	Caucasian	Lobular carcinoma	H/H
1731 B1	Caucasian	Infiltrating ductal carcinoma	H/H
1772 A1	Caucasian	Infiltrating ductal carcinoma	H/H
1778 B1	Caucasian	Infiltrating ductal carcinoma	H/H
199 A1	Caucasian	Infiltrating ductal carcinoma	H/H
336 A1	Caucasian	Infiltrating ductal carcinoma	H/H
4047 A1	Caucasian	Infiltrating ductal carcinoma	H/H
4526 B1	Caucasian	Lobular carcinoma	H/H
4541 B1	Caucasian	Lobular carcinoma	H/H
4607 A1	Caucasian	Infiltrating ductal carcinoma	H/H
5470 B1	Caucasian	Lobular carcinoma	H/H
5521 B1	Caucasian	Infiltrating ductal carcinoma	H/H
5860 A1	Caucasian	Infiltrating ductal carcinoma	H/H
6617 A1	Caucasian	Lobular breast carcinoma	H/H
6660 A1	Caucasian	Infiltrating ductal carcinoma	H/H
6699 B1	Caucasian	Infiltrating lobular carcinoma	H/H
6711 A1	Caucasian	Infiltrating ductal carcinoma	H/H
6713 A1	Caucasian	Infiltrating ductal carcinoma	H/H
6716 A1	Caucasian	Lobular carcinoma	H/H
6731 A1	Caucasian	Infiltrating ductal carcinoma	H/H
69 A1	Caucasian	Infiltrating ductal carcinoma	H/H
7328 B1	Caucasian	Lobular carcinoma	H/H
7331 B1	Caucasian	Infiltrating duct carcinoma	H/H
7354 B1	Caucasian	Lobular carcinoma	H/H
7376 B1	Caucasian	Lobular carcinoma	H/H
7391 B1	Caucasian	Infiltrating ductal carcinoma	H/H
7409 B1	Caucasian	Lobular carcinoma	H/H
7411 B1	Caucasian	Lobular carcinoma	H/H
7415 B1	Caucasian	Infiltrating Ductal Carcinoma	H/H

8276 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
8301 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9293 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9307 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9329 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9352 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9390 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
9895 B1	Caucasian	Infiltrating Ductal Carcinoma	H/H
12	Caucasian	Lobular carcinoma	H/H
14	Caucasian	Infiltrating Ductal Carcinoma	H/H
42	Caucasian	Infiltrating Ductal Carcinoma	H/H
51	Caucasian	Infiltrating Ductal Carcinoma	H/H
60	Caucasian	Infiltrating Ductal Carcinoma	H/H
85	Caucasian	Infiltrating Ductal Carcinoma	H/H
91	Caucasian	Infiltrating Ductal Carcinoma	H/H
1AD	Caucasian	Infiltrating Ductal Carcinoma	H/H
20AD	Caucasian	Infiltrating Ductal Carcinoma	H/H
3AD	Caucasian	Infiltrating Ductal Carcinoma	H/H
5AD	Caucasian	Infiltrating Ductal Carcinoma	H/H
7AD	Caucasian	Infiltrating Ductal Carcinoma	H/H
4067 A1	Caucasian	Breast cancer	H/H
4108 A1	Caucasian	Infiltrating Ductal Carcinoma	H/H
4153 A1	Caucasian	Infiltrating Ductal Carcinoma	H/P
83	Caucasian	Breast cancer	H/P
4069	Caucasian	Infiltrating Ductal Carcinoma	H/P
6713	Caucasian	Infiltrating Ductal Carcinoma	H/P
7852	Caucasian	Infiltrating Ductal Carcinoma	H/P
9394	Caucasian	Infiltrating Ductal Carcinoma	H/P
4	Caucasian	Breast cancer	H/P
5	Caucasian	Breast cancer	H/P
6	Caucasian	Breast cancer	H/P
9	Caucasian	Breast cancer	H/P
15	Caucasian	Breast cancer	H/P
19	Caucasian	Breast cancer	H/P
29	Caucasian	Breast cancer	H/P
36	Caucasian	Breast cancer	H/P
41	Caucasian	Breast cancer	H/P
43	Caucasian	Breast cancer	H/P
44	Caucasian	Breast cancer	H/P
52	Caucasian	Breast cancer	H/P
56	Caucasian	Breast cancer	H/P
57	Caucasian	Breast cancer	H/P
59	Caucasian	Breast cancer	H/P
61	Caucasian	Breast cancer	H/P
62	Caucasian	Breast cancer	H/P
64	Caucasian	Breast cancer	H/P

70	Caucasian	Breast cancer	H/P
71	Caucasian	Breast cancer	H/P
75	Caucasian	Breast cancer	H/P
80	Caucasian	Breast cancer	H/P
82	Caucasian	Breast cancer	H/P
86	Caucasian	Breast cancer	H/P
87	Caucasian	Breast cancer	H/P
89	Caucasian	Breast cancer	H/P
90	Caucasian	Breast cancer	H/P
94	Caucasian	Breast cancer	H/P
99	Caucasian	Breast cancer	H/P
100	Caucasian	Breast cancer	H/P
18AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
10AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
11AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
12AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
15AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
17AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
18AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
19AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
4AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
9AD	Caucasian	Infiltrating Ductal Carcinoma	H/P
2633	Caucasian	Infiltrating ductal carcinoma	H/P
3133	Caucasian	Infiltrating ductal carcinoma	H/P
3879	Caucasian	Infiltrating ductal carcinoma	H/P
4097	Caucasian	Lobular carcinoma	H/P
4235	Caucasian	Lobular carcinoma	H/P
5041	Caucasian	Infiltrating ductal carcinoma	H/P
14067 B1	Caucasian	Lobular carcinoma	H/P
17370 B1	Caucasian	Infiltrating ductal carcinoma	H/P
40869 A1	Caucasian	Infiltrating ductal carcinoma	H/P
40979 B1	Caucasian	Lobular breast carcinoma	H/P
4465 A1	Caucasian	Infiltrating ductal carcinoma	H/P
5550 B1	Caucasian	Infiltrating lobular carcinoma	H/P
6661 B1	Caucasian	Infiltrating ductal carcinoma	H/P
6712 A1	Caucasian	Infiltrating ductal carcinoma	H/P
9185 B1	Caucasian	Lobular carcinoma	H/P
9904 B1	Caucasian	Infiltrating ductal carcinoma	H/P
2943	Caucasian	Infiltrating ductal carcinoma	P/P
39	Caucasian	Breast cancer	P/P
4123	Caucasian	Infiltrating ductal carcinoma	P/P
6AD	Caucasian	Infiltrating ductal carcinoma	P/P
2974	Caucasian	Infiltrating ductal carcinoma	P/P
3556	Caucasian	Infiltrating ductal carcinoma	P/P
4496	Caucasian	Infiltrating ductal carcinoma	P/P
4566	Caucasian	Infiltrating ductal carcinoma	P/P

4870	Caucasian	Infiltrating ductal carcinoma	P/P
7092	Caucasian	Infiltrating ductal carcinoma	P/P
7145	Caucasian	Infiltrating ductal carcinoma	P/P
4472 A1	Caucasian	Infiltrating ductal carcinoma	P/P
9892	Caucasian	Infiltrating ductal carcinoma	P/P
1	Caucasian	Breast cancer	P/P
3	Caucasian	Breast cancer	P/P
7	Caucasian	Breast cancer	P/P
8	Caucasian	Breast cancer	P/P
11	Caucasian	Breast cancer	P/P
20	Caucasian	Breast cancer	P/P
22	Caucasian	Breast cancer	P/P
23	Caucasian	Breast cancer	P/P
26	Caucasian	Breast cancer	P/P
27	Caucasian	Breast cancer	P/P
30	Caucasian	Breast cancer	P/P
32	Caucasian	Breast cancer	P/P
34	Caucasian	Breast cancer	P/P
37	Caucasian	Breast cancer	P/P
38	Caucasian	Breast cancer	P/P
40	Caucasian	Breast cancer	P/P
47	Caucasian	Breast cancer	P/P
48	Caucasian	Breast cancer	P/P
49	Caucasian	Breast cancer	P/P
54	Caucasian	Breast cancer	P/P
55	Caucasian	Breast cancer	P/P
58	Caucasian	Breast cancer	P/P
67	Caucasian	Breast cancer	P/P
69	Caucasian	Breast cancer	P/P
73	Caucasian	Breast cancer	P/P
74	Caucasian	Breast cancer	P/P
81	Caucasian	Breast cancer	P/P
84	Caucasian	Breast cancer	P/P
95	Caucasian	Breast cancer	P/P
96	Caucasian	Breast cancer	P/P
97	Caucasian	Breast cancer	P/P
98	Caucasian	Breast cancer	P/P
13AD	Caucasian	Infiltrating ductal carcinoma	P/P
14AD	Caucasian	Infiltrating ductal carcinoma	P/P
16AD	Caucasian	Infiltrating ductal carcinoma	P/P
8AD	Caucasian	Infiltrating ductal carcinoma	P/P
2AD	Caucasian	Infiltrating ductal carcinoma	P/P

Table 2s: Genotype distribution of rs4644 in breast cancer versus surrounding normal tissue and blood

Race	DNA Blood	DNA Normal	DNA Cancer	RNA cancer	RNA Normal
Caucasian	NA	H/P	H/P	NA	NA
Caucasian	NA	H	H	NA	NA
Caucasian	NA	H/P	H/P	NA	NA
Caucasian	NA	H	H	NA	NA
Caucasian	NA	H/P	H/P	NA	NA
Caucasian	NA	H	H	NA	NA
Caucasian	NA	H/P	H/P	NA	NA
Caucasian	NA	H	H	NA	NA
Caucasian	NA	H/P	H/P	NA	NA
Caucasian	NA	H	H	NA	NA
Caucasian	H/H	H/H	H/H	H/H	H/H
Caucasian	P/P	P/P	P/P	P/P	P/P
Caucasian	H/H	H/H	H/H	H/H	NA
Caucasian	H/H	H/H	H/H	H/H	H/H
Caucasian	H/H	H/H	H/H	H/H	H/H
Caucasian	P/P	P/P	P/P	P/P	NA
Caucasian	H/P	H/P	H/P	H/P	NA
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	P/P	P/P	P/P	NA	NA
Caucasian	P/P	P/P	P/P	P/P	P/P
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	P/P	P/P	P/P	P/P	NA
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	H/P	H/P	H/P	H/P	H/P
Caucasian	H/H	H/H	H/H	H/H	H/H
Asian	H/P	H/P	H/P	NA	NA
Asian	H	H	H	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H	H	H	NA	NA
Asian	H	H	H	NA	NA
Asian	H	H	H	NA	NA
Asian	H	H	H	NA	NA
Asian	H	H	H	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H	H	H	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H/P	H/P	H/P	NA	NA
Asian	H/P	H/P	H/P	NA	NA

NA-Not Available