

Supplementary Table 1. Summary of the 15 breast cancer studies used in the validation survival analyses*

Study [abbreviation], Reference(s)	General setting and study type	Case selection [†]	Information source for overall survival information	No. of patients with invasive cancer and follow-up data	Age range of included case patients, y	Genotyping platform [‡]	Ethnicity or race
Bavarian Breast Cancer Cases and Controls [BBCC], (10, 20)	Germany; case-control study hospital-based case patients; population-based control subjects	Consecutive, unselected cases with invasive breast cancer recruited at the University Breast Centre, Franconia in Northern Bavaria during 2002-2006.	Overall survival was obtained from the German Death Registry matched with the hospital-based cancer registry. Data coverage was >98%.	1,198	25-96	Taqman	E
Copenhagen Breast Cancer Study and General Population Study [CGPS], (21, 22)	Denmark (Copenhagen); population-based case-control study	Consecutive, incident cases from 1 hospital with centralized care for a population of 400,000 women from 2001 to the present.	National Danish Cancer Registry National Danish Civil Registration System	1,909	27-95	Taqman	E
Spanish National Cancer Centre Breast Cancer Study [CNIO-BCS], (23)	Spain; hospital-based case-control study	Two groups of cases: 1) 574 consecutive breast cancer patients, unselected for family history, from 3 public hospitals, 2 in Madrid and one in Oviedo, from 2000 to 2005. 2) 291 cases with at least one first degree relative also affected with breast cancer, recruited through the CNIO family cancer clinic in Madrid from 2000 to 2004.	Active follow-up of the medical records	210	36-84	Taqman	E

Genetic Epidemiology Study of Breast Cancer by Age 50 [GESBC], (24)	Germany; population-based case-control study	All incident cases diagnosed <50 years of age in 1992-5 in two regions: Rhein-Neckar-Odenwald and Freiburg, by surveying the 38 clinics serving these regions	Active follow-up through local population registries and death certificates from health offices	548	24-50	Taqman	E
Helinski Breast Cancer Study [HEBCS], (17, 25, 26)	Finland; hospital-based case-control study plus additional familial case patients	1) Consecutive cases (883) from the Department of Oncology, Helsinki University Central Hospital 1997-8 and 2000, 2) Consecutive cases (986) from the Department of Surgery, Helsinki University Central Hospital 2001 – 2004, (3) Familial breast cancer patients (536) from the Helsinki University Central Hospital, Departments of Oncology and Clinical Genetics (1995-present)	Active follow up of the medical records for 5 years and annual linkage to the nationwide Finnish Cancer Registry	2,207	22-96	Taqman	E
Karolinska Breast Cancer Study [KARBAC], (27)	Sweden; case-control study, population-based case patients; geographically matched control subjects	1) Familial cases from Department of Clinical Genetics, Karolinska University Hospital, Stockholm. 2) Consecutive cases from Department of Oncology, Huddinge & Söder Hospital, Stockholm 1998-2000	Active follow-up of medical records	475	27-88	Taqman	E

Kuopio Breast Cancer Project [KBCP], (28, 29)	Finland; hospital-based prospective clinical cohort	Women seen at Kuopio University Hospital between 1990 and 1995 because of breast lump, mammographic abnormality, or other breast symptom who were found to have breast cancer	Active follow-up of the medical records (last update December 2006) and linkage to the Finnish Cancer Registry	449	23-92	Taqman	E
Kathleen Cuningham Foundation Consortium for Familial Breast Cancer [kConFab] and Australian Ovarian Cancer Study [AOCS], (30, 31)	Australia and New Zealand case-control study; clinic-based recruitment of familial breast cancer patients	Cases were from multiple-case breast and breast-ovarian families recruited through family cancer clinics from across Australia and New Zealand from 1998 to the present. Cases were selected for inclusion in BCAC studies if 1) family was negative for mutations in BRCA1 and BRCA2, 2) case was the index for the family, defined as youngest breast cancer affected family member.	Passive follow-up through annual contact with families, matching to the death index, and requests for updated information through biennial newsletters to all participants	260	25-78	Sequenom iPLEX	E
Mayo Clinic Breast Cancer Study [MCBCS], (32)	US; clinic-based case-control study	Incident cases residing in 6 states (MN, WI, IA, IL, ND, SD) seen at the Mayo Clinic in Rochester, MN from 2002-5	Active follow-up of medical records	958	22-89	Taqman	E

Melbourne Collaborative Cohort Study [MCCS], (33)	Australia; population-based prospective cohort study	Incident cases diagnosed within the Melbourne Collaborative Cohort Study during the follow-up from baseline (1990-1994) to 2008 of the 24469 participating women	Population cancer registry, which receives all death registrations for state of Victoria on a monthly basis and performs annual links to NDI. Linkage to electoral register tracks subjects who move interstate.	665	41-80	Taqman	E
Leiden University Medical Centre Breast Cancer Study [ORIGO], (34, 35)	Netherlands (Leiden and Rotterdam); hospital-based case-control study	Consecutive cases diagnosed 1996-2006 in 2 hospitals of South-West Netherlands (Leiden & Rotterdam). No selection for family history; Rotterdam cases selected for diagnosis aged <70. Cases with in situ carcinomas eligible.	Active follow-up of medical records	485	27-88	Taqman	E
NCI Polish Breast Cancer Study [PBCS], (36)	Poland, Warsaw and Lodz; population-based case-control study	Incident cases from 2000-2003 identified through a rapid identification system in participating hospitals covering ~90% of all eligible cases, and cancer registries in Warsaw and Łódź covering 100% of all eligible cases	Active follow-up through review of medical records every 5 years	1,769	27-74	Taqman	E
Singapore and Sweden Breast Cancer Study [SASBAC], (37)	Sweden; population-based case-control study	Incident cases from October 1993 to March 1995 identified via the 6 regional cancer registries in Sweden, to which reporting is mandatory.	Active follow-up of the medical records (last update 2001) and linkage to the nationwide Swedish Cause of Death registry	1,227	50-75	Taqman, Sequenom iPLEX	E

Sheffield Breast Cancer Study [SBCS], (38, 39)	England; hospital-based case-control study	Women with pathologically confirmed breast cancer recruited from surgical outpatient clinics at the Royal Hallamshire Hospital, Sheffield, 1998 – 2005; cases are a mixture of prevalent and incident disease	Active follow-up by review of medical records and death registration data every 5 years	667	29-93	Taqman	E
UCI Breast Cancer Study [UCIBCS], (40, 41)	US; population-based case-control study	All cases diagnosed in Orange County, California, during one-year period beginning March 1, 1994. Ascertained through the population-based Cancer Surveillance Program of Orange County California (CSPOC)	Active follow-up by contacting study participants and family members, as well as data linkage with medical records and death records	1,069	24-90	Taqman	86.8% E 4.2% A 9.0% O

*NDI = National death index; E = European; A = Asian; O = Other.

†Only case patients, per study design, were used in these survival analyses

‡All genotyping assays were performed blinded to patient outcome (all-cause mortality).