

Supplementary Table 1. Summary of studies contributing to the all ER-negative breast cancers analysis.

Abbreviation	Study	Country	Study design	n	nevent	Years to entry	Years to status	Age	Ethical approval committee
ABCFS	Australian Breast Cancer Family Study	Australia	Population-based case-control study	218	43	0.8 (0.0, 3.1)	11.9 (1.1, 15.0)	38.6 (6.5)	The University of Melbourne Health Sciences Human Ethics Sub-Committee (HESC)
ABCS	Amsterdam Breast Cancer Study	Netherlands	Hospital-based consecutive cases; population-based controls	76	9	0.7 (0.0, 6.6)	3.2 (0.6, 10.3)	41.2 (9.4)	Leiden University Medical Center (LUMC) Commissie Medische Ethiek and Protocol Toetsingscommissie van het Nederlands Kanker Instituut/Antoni van Leeuwenhoek Ziekenhuis
BBC	Bavarian Breast Cancer Cases and Controls	Germany	Hospital based cases; population based controls	40	2	0.0 (0.0, 6.2)	4.1 (0.0, 12.3)	57.4 (15.8)	Friedrich-Alexander-Universitat Erlangen-Nurnberg Medizinische Fakultat Ethik-Commission
HEBCS	Helsinki Breast Cancer Study	Finland	Hospital-based case-control study and additional familial cases	213	2	0.0 (0.0, 10.6)	6.0 (0.3, 15.0)	55.0 (13.8)	Helsingin ja uudenmaan sairaanhoitopiiri (Helsinki University Central Hospital Ethics Committee)
KARBAC	Karolinska Breast Cancer Study	Sweden	Population and hospital-based cases; geographically matched controls	61	15	0.0 (0.0, 0.0)	7.3 (1.1, 11.1)	57.0 (11.1)	Lokala Forskningsetikkommitten Nord
KBCP	Kuopio Breast Cancer Project	Finland	Population-based prospective clinical cohort	89	29	0.0 (0.0, 0.0)	11.2 (0.8, 15.0)	55.7 (14.5)	Pohjois-Savon Sairraanhoitopiirin Kuntayhtyma Tutkimuseettinen Toimikunta
KConFab	Kathleen Cuningham Foundation Consortium for research into Familial Breast Cancer	Australia and New Zeland	Clinic-based recruitment of familial breast cancer patients	46	3	3.4 (0.0, 14.6)	8.4 (1.5, 15.0)	42.8 (8.4)	The Queensland Institute of Medical Research Human Research Ethics Committee (QIMR-HREC)
LMBC	Leuven Multidisciplinary Breast Centre	Belgium	Hospital-based case-control study	376	16	0.0 (0.0, 14.3)	3.0 (0.1, 15.0)	54.2 (12.8)	Commissie Medische Ethiek van de Universitaire Ziekenhuizen Kuleuven
MARIE	Mammary Carcinoma Risk Factor Investigation	Germany	Population-based case-control study	369	61	0.2 (0.0, 4.4)	5.7 (0.2, 9.0)	61.1 (6.7)	Ruprecht-Karls-Universitat Medizinische Fakultat Heidelberg Ethikkommission
MCCS	Melbourne Collaborative Cohort Study	Australia	Population-based prospective cohort study	111	12	0.0 (0.0, 13.6)	8.9 (0.1, 15.0)	62.0 (8.4)	The Cancer Council Victoria Human Research Ethics Committee
MEC	Multi-ethnic Cohort	USA	Prospective cohort study: nested case-control	85	11	1.4 (0.0, 9.7)	8.2 (1.2, 15.0)	63.8 (9.5)	Institutional Review Boards of the University of Hawaii and University of Southern California
NBCS	Norwegian Breast Cancer Study	Norway	Hospital-based case-control study	17	6	0.0 (0.0, 0.2)	9.8 (2.7, 14.2)	56.6 (15.4)	Regional Komite for Medisinsk Forskningsetikk (Helseregion III Universitetet I Bergen, Universitetet I Oslo, Helseregion Sor, Helseregion II, and Ost-Norge)
OBCS	Oulu Breast Cancer Study	Finland	Hospital-based case-control study	97	10	0.0 (0.0, 2.4)	2.4 (0.1, 8.1)	55.7 (12.7)	Ethical Committee of the Medical Faculty of University of Oulu and Northern Ostrobothnia Hospital District Ethical Committee
OFBCR	Ontario Familial Breast Cancer Registry	Canada	Population-based familial case-control study	243	34	1.7 (0.1, 12.7)	7.5 (0.4, 15.0)	50.9 (10.6)	Mount Sinai Hospital Research Ethics Board
ORIGO	Leiden University Medical Centre Breast Cancer Study	Netherlands	Hospital-based prospective cohort study	68	15	0.5 (0.0, 3.7)	5.1 (0.5, 11.3)	52.4 (9.7)	Medical ethics committee of the Leiden University Medical Centre
pKARMA	Karolinska Mammography Project for Risk Prediction of Breast Cancer - prevalent cases	Sweden	Case-control study	663	11	4.9 (1.3, 8.4)	5.7 (2.0, 10.0)	56.3 (10.9)	Regionala Etikprovningnamnden i Stockholm (Regional Ethical Review Board in Stockholm)
RBCS	Rotterdam Breast Cancer Study	Netherlands	Hospital based case-control study, Rotterdam area	113	29	0.2 (0.0, 9.7)	5.3 (0.7, 15.0)	42.5 (10.9)	Medische Ethische Toetsings Commissie Erasmus Medisch Centrum
SASBAC	Singapore and Sweden Breast Cancer Study	Sweden	Population-based case-control study	144	11	5.0 (3.4, 6.5)	12.5 (4.3, 15.0)	61.3 (6.5)	Regionala Etikprovningnamnden i Stockholm (Regional Ethical Review Board in Stockholm)
SEARCH	Study of Epidemiology and Risk factors in Cancer Heredity	UK	Population-based case-control study	1153	199	1.3 (0.0, 11.1)	5.4 (0.7, 15.0)	52.2 (9.5)	Multi Centre Research Ethics Committee (MREC)
SKKDKFZS	Städtisches Klinikum Karlsruhe Deutsches Krebsforschungszentrum Study	Germany	Hospital-based breast cancer cohort	119	18	0.0 (0.0, 0.4)	4.0 (0.2, 10.0)	57.5 (12.0)	Ethics Committee of the Medical Faculty of Heidelberg

Summary of 20 studies with all estrogen-receptor negative breast cancer cases (including studies missing information on chemotherapy) with at least one death due to breast cancer in a 15-year follow-up. nevent: Number of deaths due to breast cancer; Years to entry: Years to study entry, median (min, max); Years to last follow-up: Years to last follow-up truncated at 15 years, median (min, max); Age: Age of diagnosis of index cancer in years (mean, standard deviation)

Supplementary Table 2. Summary of studies contributing to the subset of ER-negative breast cancers treated with chemotherapy.

Abbreviation	Study	Country	Study design	n	nevent	Years to entry	Years to status	Age
ABCFS	Australian Breast Cancer Family Study	Australia	Population-based case-control study	149	32	0.7 (0.1, 2.7)	11.9 (1.1, 15.0)	38.4 (6.1)
ABCS	Amsterdam Breast Cancer Study	Netherlands	Hospital-based consecutive cases; population-based controls	66	9	0.7 (0.0, 6.6)	2.5 (0.6, 9.9)	39.8 (8.0)
BBC	Bavarian Breast Cancer Cases and Controls	Germany	Hospital based cases; population based controls	33	2	0.0 (0.0, 4.1)	4.1 (0.0, 6.7)	57.2 (15.2)
HEBCS	Helsinki Breast Cancer Study	Finland	Hospital-based case-control study + additional familial cases	115	1	0.0 (0.0, 4.3)	5.3 (0.3, 11.8)	50.7 (11.8)
KARBAC	Karolinska Breast Cancer Study	Sweden	Population and hospital-based cases; geographically matched controls	35	8	0.0 (0.0, 0.0)	8.2 (1.1, 11.1)	50.2 (6.1)
KBCP	Kuopio Breast Cancer Project	Finland	Population-based prospective clinical cohort	28	11	0.0 (0.0, 0.0)	12.4 (1.3, 15.0)	43.6 (7.5)
LMBC	Leuven Multidisciplinary Breast Centre	Belgium	Hospital-based case-control study	301	9	0.0 (0.0, 14.3)	3.0 (0.1, 15.0)	51.8 (11.2)
MARIE	Mammary Carcinoma Risk Factor Investigation	Germany	Population-based case-control study	279	53	0.2 (0.0, 4.3)	5.5 (0.3, 9.0)	60.3 (6.5)
NBCS	Norwegian Breast Cancer Study	Norway	Hospital-based case-control study	4	2	0.0 (0.0, 0.0)	10.1 (6.8, 14.2)	47.6 (13.9)
OFBCR	Ontario Familial Breast Cancer Registry	Canada	Population-based familial case-control study	101	10	1.4 (0.1, 5.2)	7.9 (2.1, 13.2)	49.5 (8.5)
RBCS	Rotterdam Breast Cancer Study	Netherlands	Hospital based case-control study, Rotterdam area	76	18	0.2 (0.0, 8.2)	4.8 (0.9, 15.0)	40.8 (8.2)
SASBAC	Singapore and Sweden Breast Cancer Study	Sweden	Population-based case-control study	34	3	4.8 (3.5, 6.3)	12.3 (4.3, 15.0)	57.7 (4.8)
SEARCH	Study of Epidemiology and Risk factors in Cancer Heredity	UK	Population-based case-control study	505	107	1.1 (0.2, 4.7)	5.8 (0.7, 15.0)	49.6 (9.3)
SKKDKFZS	Städtisches Klinikum Karlsruhe Deutsches Krebsforschungszentrum Study	Germany	Hospital-based breast cancer cohort	78	14	0.0 (0.0, 0.4)	3.6 (0.2, 10.0)	53.6 (11.6)

Summary of 14 studies with estrogen-receptor negative breast cancer cases treated with chemotherapy and at least one death due to breast cancer in a 15-year follow-up. nevent: Number of deaths due to breast cancer; Years to entry: Years to study entry, median (min, max); Years to last follow-up: Years to last follow-up truncated at 15 years, median (min, max); Age: Age of diagnosis of index cancer in years (mean, standard deviation)

Supplementary Table 3. Summary of Asian replication studies.

Abbreviation	Study	Country	Study design	n	nevent	Years to entry	Years to status	Age	Ethical approval committee
HERPACC	Hospital-based Epidemiologic Research Program at Aichi Cancer Center	Japan	Hospital-based case-controls study	76	13	0.0 (0.0, 0.0)	7.2 (0.4, 9.8)	51.8 (10.2)	Institutional Ethical Committee at the Aichi Cancer Center
MYBRCA	Malaysian Breast Cancer Genetic Study	Malaysia	Hospital-based case-control study	177	34	1.0 (0.0, 11.4)	4.5 (0.3, 14.9)	48.1 (9.8)	University Malaya Medical Centre Ethics Committee
SEBCS	Seoul Breast Cancer Study	Korea	Hospital-based case-control study	157	4	0.0 (0.0, 0.3)	4.0 (0.6, 5.2)	48.6 (9.7)	Seoul National University College of Medicine/Seoul National University Hospital IRB
TWBCS	Taiwanese Breast Cancer Study	Taiwan	Hospital-based case-control study	112	2	0.0 (0.0, 0.0)	1.4 (0.1, 7.7)	51.7 (10.0)	Human Subject Research Ethics Committee/IRB Academia Sinica

Summary of four Asian studies with estrogen-receptor negative breast cancer cases treated with chemotherapy and at least one death due to breast cancer in a 15-year follow-up. nevent: Number of deaths due to breast cancer; Years to entry: Years to study entry, median (min, max); Years to last follow-up: Years to last follow-up truncated at 15 years, median (min, max); Age: Age of diagnosis of index cancer in years (mean, standard deviation)