Supplemental Table 1. Participating studies					
Study	Study Name		Recruitment base		
Acronym	[Reference]	Country	Cases	Controls	
STUDIES (	OF WHITE EUROPEAN	WOMEN			
ABCFS	Australian Breast Cancer Family Study [1]	Australia	Cancer registries in Victoria and New South Wales (1992-1999): all cases from Melbourne and Sydney diagnosed before age 40 plus a random sample of those diagnosed at ages 40-59	Identified betwen 1992-1999 from the electoral rolls in Melbourne and Sydney (enrolling to vote is compulsory); frequency matched to cases by age in- 5 year categories	
ABCS	Amsterdam Breast Cancer Study [2]	Netherlands	All cases aged <50 and diagnosed from 1974-1994 in 4 Dutch hospitals.	Randomly selected women from population-based prospective cohort studies, aged <50 at baseline (1987-1991 and 1993-1997) and from the same areas as cases.	
BBCC	Bavarian Breast Cancer Cases and Controls [3]	Germany	Consecutive, unselected cases with invasive breast cancer recruited at the University Breast Centre, Franconia in Northern Bavaria from 2002-2006	Healthy women aged 55 or older with no diagnosis of cancer. Invited by a newspaper advertisement in Northern Bavaria between 2002-2006	
BBCS	British Breast Cancer Study [4]	U.K.	<ul> <li>(i) English &amp; Scottish Cancer Registries: all breast cancer cases who developed a first primary before age 66 in 1971 or later and who subsequently developed a second primary cancer</li> <li>(ii) Breast Cancer Clinics: all breast cancer cases who developed a first primary before age 71 in 1967 or later and who either subsequently developed a second primary or had at least two affected female first-degree relatives.</li> <li>All recruited from 2001-2008.</li> </ul>	A friend, sister-in-law, daughter-in-law or other non-blood relative of cases, recruited from 2001- 2008	
BIGGS	Breast Cancer in Galway Genetic Study [5]	Ireland	Unselected cases recruited from University College Hospital Galway and surrounding hospitals in the West of Ireland since 2001	Women > 60 years with no personal history of any cancer and no family history of breast or ovarian cancer identified from retirement groups in the West of Ireland between 2001-2008.	
BSUCH	Breast Cancer Study of the University Clinic Heidelberg [6]	Germany	All cases diagnosed with breast cancer in 2007-2009 at the University Women's Clinic Heidelberg	Female blood donors recruited in 2007- 2009 at the Institute of Transfusion Medicine & Immunology, Mannheim.	

CGPS	Copenhagen General Population Study [7]	Denmark	Consecutive, incident cases from one hospital with centralized care for a population of 400,000 women in Copenhagen (2001-present)	Women with no history of breast cancer residing in the same region as cases identified from the Copenhagen General Population Study (2003-2007)
CNIO-BCS	Spanish National Cancer Centre Breast Cancer Study [8]	Spain	<ul> <li>(i) consecutive breast cancer patients from three public hospitals, two in Madrid and one in Oviedo;</li> <li>(ii) cases with at least one affected first degree relative recruited through the CNIO family cancer clinic in Madrid (2000-2005)</li> </ul>	Women attending the Menopause Research Centre, Madrid and female members of the College of Lawyers attending a free, targeted medical check-up in Madrid, all free of breast cancer and all in Madrid between 2000-2005
ESTHER	ESTHER Breast Cancer Study [9]	Germany	Breast cancer cases in all hospitals in the state of Saarland, from 2001-2003 (ESTHER) and 1996- 1998 (VERDI)	Random sample of women a routine health check- up in Saarland, in 2000-2002; frequency matched to cases by age in-5 year categories
FBCS	ICR Familial Breast Cancer Study [10]	U.K.	Index patients with breast cancer and at least 2 relatives affected with breast cancer, recruited throughout the UK in 1995-2005	Selected from the 1958 Birth Cohort Collection
GC-HBOC	German Familial Breast Cancer Study [11]	Germany	Index patients from German breast cancer families; BRCA1/2 mutation free, collected 1996-2007 via Institute of Human Genetics, University Heidelberg Department of Gynaecology & Obstetrics, Cologne & Department of Gynaecology and Obstetrics at the Ludwig-Maximilians-University, Munich	Female blood donors recruited in 2004 & 2007 at the Institute of Transfusion Medicine & Immunology, Mannheim.
GENICA	Gene Environment Interaction & Breast Cancer in Germany [12, 13]	Germany	Incident breast cancer cases enrolled at hospitals in the Greater Bonn area between 2000-2004	Random address sample selected in 2001-2004 from 31 population registries in the greater Bonn area; frequency matched to cases on year of birth in 5- year categories
GESBC	Genetic Epidemiology Study of Breast Cancer by Age 50 [14]	Germany	Incident cases diagnosed before age 50 years at all clinics in two regions: Rhein-Neckar-Odenwald and Freiburg	Randomly selected from population registries covering the same regions; matched by age and region.
HABCS	Hannover Breast Cancer Study [15]	Germany	Cases who received radiotherapy for breast cancer at Hannover Medical School between 1997-2003	Female blood bank donors at Hannover Medical School, collected in 2005
HMBCS	Hannover-Minsk Breast Cancer Study [16]	Belarus	Cases from the Byelorussian Institute for Oncology and Medical Radiology Aleksandrov N.N. in Minsk or at one of 5 regional oncology centers in Gomel, Mogilev, Grodno, Brest or Vitebsk (2002-2008)	Women attending general medical examination at gynecology clinics in Gomel, Mogilev, Grodno, Brest or Vitebsk; women attending the Institute for Inherited Diseases in Minsk; female blood donors in Minsk; healthy relatives of cases (2002-2008)

HUBCS	Hannover-Ufa Breast Cancer Study [16]	Russia	Consecutive cancer patients diagnosed at two participating oncological centers in Bashkorstostan and Siberia between 2000-2008	Healthy volunteers selected from poulation studies in the same geographical regions during 2002-2008.
КВСР	Kuopio Breast Cancer Project [17]	Finland	Women seen at Kuopio University Hospital between 1990-1995 because of a breast lump, mammographic abnormality, or other breast symptom and who were found to have breast cancer	Selected from the National Population Register between 1990-1995; age and long-term area-of- residence matched to cases
kConFab/ AOCS	Kathleen Cuningham Foundation Consortium for Research into Familial Breast Cancer / Australian Ovarian Cancer Study [18]	Australia	Index (youngest affected) cases from <i>BRCA1</i> - and <i>BRCA2</i> -mutation-negative multiple-case breast and breast-ovarian families recruited though family cancer clinics from across Australia and New Zealand from 1998-present	Identified from the electoral rolls from across Australia as part of the Australian Ovarian Cancer Study in 2002-2006
LMBC	Leuven Multidisciplinary Breast Centre [19]	Belgium	All patients diagnosed with breast cancer and seen in the Multidisciplinary Breast Center in Leuven (Gashuisberg) since June 2007 plus retrospective collection of cases diagnosed since 2000	Blood donors at Gasthuisberg Hospital (200-2008)
MARIE	Mammary Carcinoma Risk Factor Investigation [20]	Germany	Incident and prevalent cases diagnosed in the Hamburg and Rhein-Neckar-Karlsruhe regions since 2001	Random selection from population registries; frequency matched to cases on birth year and study region (2002-2006)
MBCSG	Milan Breast Cancer Study Group [21]	Italy	Familial and/or early onset breast cancer patients (aged 22-87) negative for mutations in <i>BRCA1</i> and <i>BRCA2</i> , ascertained atn two large cancer centres in Milan from 2000-present	Female blood donors recruted at two centres in Milan from 2004-present and 2007-present
MCBCS	Mayo Clinic Breast Cancer Study [22]	U.S.A.	Incident cases residing in 6 states (MN, WI, IA, IL, ND, SD) seen at the Mayo Clinic in Rochester, MN from 2002-2005	Women presenting for general medical examination at the Mayo Clinic from 2002-2005; frequency matched to cases on age, ethnicity and county/state
MCCS	Melbourne Collaborative Cohort Study [23]	Australia	Incident cases from the cohort of 24,469 women, diagnosed during the follow-up from baseline (1990-1994) to 2008	Random sample of the initial cohort
NBCS	Norwegian Breast Cancer Study [24]	Norway	Incidence cases from three different hospitals: Ullevål Univ. Hospital 1990-94, Norwegian Radium Hospital 1975-1986 and 1995-1998, Haukeland Univ. Hospital	Women residing in Tromsø and Bergen who attended the Norwegian Breast Cancer Screening Program.

Northern California Breast Cancer Family Registry [25]	U.S.A.	Incident cases aged <65 years identified through the SEER cancer registry of the Greater San Francisco Bay Area from 1995-2003. All cases likely at increased genetic risk were selected; 2.5% of white cases not meeting these criteria were randomly sampled	Identified through random digit dialing conducted in the same geographic region from 1999-2000; frequency matched to cases diagnosed from 1995- 1998 on 5-year age group and race/ethnicity
Nurses Health Study [26]	U.S.A.	Incident cases diagnosed before 01/07/2000 from the sub-cohort of 32,826 cohort members who gave a blood specimen in 1989-1990	Women in this sub-cohort who were not diagnosed with breast cancer; matched to cases on age, postmenopausal status and postmenopausal hormone use.
Oulu Breast Cancer Study [27]	Finland	Consecutive incident cases diagnosed at the Oulu University Hospital between 2000-2004	Female blood donors recruited in 2002 from the same geographical region in Northern Finland
Ontario Familial Breast Cancer Registry [25]	Canada	Invasive cases aged 20-54 years identified from the Ontario Cancer Registry from 1996-1998. All those at high genetic risk were eligible; random samples of women not meeting these criteria were also asked to participate.	Identified by calling randomly selected residential telephone numbers in the same geographical region from 1998-2001; frequency matched to cases by age in 5 year categories
NCI Polish Breast Cancer Study [28]	Poland	Incident cases 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 (2000-2003)	Randomly selected from population lists of all residents of Poland from 2000-2003, stratified and frequency matched to cases on city and age in 5-year categories
Rotterdam Breast Cancer Study [29]	Netherlands	Familial breast cancer patients selected from the clinical genetics center at Erasmus Medical Center between 1994-2005	Spouses or mutation-negative siblings of heterozygous Cystic Fibrosis mutation carriers selected from the clinical genetics center at Erasmus Medical Center between 1996-2006
Sheffield Breast Cancer Study [30]	U.K.	Women with breast cancer recruited in 1998-2005 at surgical outpatient clinics at the Royal Hallamshire Hospital, Sheffield	Unselected women attending the Sheffield Mammography Screening Service in 2000-2004 with no evidence of a breast lesion
Study of Epidemiology & Risk Factors in Cancer Heredity [31]	U.K.	Identified through the East Anglian Cancer Registry: (i) 1991-1996: alive, prevalent cases diagnosed before age 55; (ii) since 1996: incident cases diagnosed before age 70 diagnosed after 1996	(a) Women from the same geographic region selected from the EPIC-Norfolk cohort study, 1992- 1994 (b) women attending GP practices, frequency matched to cases by age and geographic region (2003-present)
	Breast Cancer Family Registry [25] Nurses Health Study [26] Oulu Breast Cancer Study [27] Ontario Familial Breast Cancer Registry [25] NCI Polish Breast Cancer Study [28] Rotterdam Breast Cancer Study [29] Sheffield Breast Cancer Study [30] Study of Epidemiology & Risk Factors in	Breast Cancer Family Registry [25]U.S.A.Nurses Health Study [26]U.S.A.Oulu Breast Cancer Study [27]FinlandOntario Familial Breast Cancer Registry [25]CanadaNCI Polish Breast Cancer Study [28]PolandRotterdam Breast Cancer Study [29]NetherlandsSheffield Breast Cancer Study [30]U.K.Study of Epidemiology & Risk Factors inU.K.	Northern California Breast Cancer Family Registry [25]U.S.A.SEER cancer registry of the Greater San Francisco Bay Area from 1995-2003. All cases likely at increased genetic risk were selected; 2.5% of white cases not meeting these criteria were randomly sampledNurses Health Study [26]U.S.A.Incident cases diagnosed before 01/07/2000 from the sub-cohort of 32,826 cohort members who gave a blood specimen in 1989-1990Oulu Breast Cancer Study [27]FinlandConsecutive incident cases diagnosed at the Oulu University Hospital between 2000-2004Ontario Familial Breast Cancer Registry [25]CanadaConsecutive incident cases diagnosed at the Oulu University Hospital between 2000-2004NCI Polish Breast Cancer Study [28]PolandIncident cases identified from the Ontario Cancer Registry from 1996-1998. All those at high genetic risk were eligible; random samples of women not meeting these criteria were also asked to participate. Incident cases 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 (2000-2003)Rotterdam Breast Cancer Study [29]U.K.Women with breast cancer patients selected from the clinical genetics center at Erasmus Medical Center between 1994-2005Sheffield Breast Cancer Study [30]U.K.Women with breast cancer recruited in 1998-2005 at surgical outpatient clinics at the Royal Hallamshire Hospital, SheffieldStudy of Epidemiology & Risk Factors in Cancer study [31]U.K.Identified through the East Anglian Cancer Registry: (i) 1991-1996: alive, prevalent cases diagnosed before age 55;

SZBCS	IHCC-Szczecin Breast Cancer Study [32]	Poland	Prospectively ascertained cases of invasive breast cancer patients diagnosed at the Regional Oncology Hospital (2002-2003 and 2006-2007) or the University Hospital (2002-2007), both in Szczecin, West Pomerania, Poland.	Selected from a population-based study of the 1.3 million inhabitants of West Pomerania (2003-2004); matched to cases for year of birth, sex and region
UCIBCS	UCI Breast Cancer Study [33]	U.S.A.	All cases diagnosed in Orange County, California from 1994-1995; ascertained through the population-based Cancer Surveillance Program of Orange County California (CSPOC)	Recruited from 1998-2003 using random digit dialing among Orange County residents; frequency matched to cases by age and race/ethnicity

## STUDIES OF ASIAN WOMEN

SEBCS	Seoul Breast Cancer Study [34]	South Korea	Consecutive, incident, cases from 2 hospitals in Seoul recruited between 2001-2005	Women from same catchment area and participating in annual health check-up (2001-2005)
TBCS	IARC-Thai Breast Cancer Study [35]	Thailand	Incident cases diagnosed at the National Cancer Institute (NCI) in Bangkok and Khon Kaen Hospital during 2002-2004.	Randomly selected women visiting hospital patients with diseases other than breast or ovarian cancer at NCI Bangkok and Khon Kaen Hospital during 2002- 2004)
TWBCS	Taiwanese Breast Cancer Study [36]	Taiwan	Incident cases diagnosed & treated at 2 major teaching hospitals in Taiwan between 2002-2005	Randomly selected women attending a health examination at same hospitals between 2002-2005

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