eTable 1. List of 43 eligible publications excluded from the meta-analysis and corresponding reason for exclusion

First Author, year	Study design	Reason of exclusion
Akinyemiju, 2017 [1]	CO	Included in Ordonez-Mena, 2016 [2]
Ambrosone, 1996 [3]	CC	Included in Ambrosone, 2008 [4]
Bjerkaas, 2015 [5]	CO	Included in Bjerkaas, 2013 [6]
Breast Cancer Family, 2008 [7]	CC	Included in Li, 2020 [8] and Zeinomar, 2019 [9]
Britton, 2002 [10]	CC	Included in Gammon, 1998 [11]
Butler, 2016 [12]	CC	Included in Mechanic, 2006 [13]
Chang-Claude, 2002 [14]	CC	Included in Ambrosone, 2008 [4]
Cox, 2011 [15]	PCC	Singles cohorts already included with more information available
Cui, 2006 [16]	CO	Included in Catsburg, 2015 [17]
Dianatinasab, 2017 [18]	CC	Included in Dianatinasab, 2019 [19]
Duell, 2001 [20]	CC	Included in Mechanic, 2006 [13]
Egan, 2002 [21]	CO	Included in Xue, 2011 [22]
Egan, 2003 [23]	CC	Included in Ambrosone, 2008 [4]
Ewertz, 1993 [24]	CC	Included in Ewertz, 1990 [25]
Fararouei, 2019 [26]	CC	Included in Dianatinasab, 2019 [19]
Garcia-Closas, 1999 [27]	NCC	Included in Xue, 2011 [22]
Ghadirian, 2004 [28]	CC	Included in Ginsburg, 2009 [29]
Gram, 2016 [30]	CO	Included in Gaudet, 2017 [31]
Heberg, 2019 [32]	CO	Included in Andersen, 2017 [33]
Ishibe, 1998 [34]	NCC	Included in Xue, 2011 [22]
Key, 2009 [35]	CO	Included in Ordonez-Mena, 2016 [2] and Dossus, 2014 [36]
Lemogne, 2013 [37]	CO	Included in Lemogne, 2013 [38]
Li, 2004 [39]	CC	Included in Mechanic, 2006 [13]
Marcus, 2000 [40]	CC	Included in Mechanic, 2006 [13]
McKenzie, 2015 [41]	CO	Included in Ordonez-Mena, 2016 [2] and Dossus, 2014 [36]
Metsola, 2005 [42]	CC	Included in Sillanpaa, 2005 [43]
Millikan, 1998 [44]	CC	Included in Ambrosone, 2008 [4]
Millikan, 2004 [45]	CC	Included in Mechanic, 2006 [13]
Mitrunen, 2001 [46]	CC	Included in Sillanpaa, 2005 [43]
Mullooly, 2017 [47]	CO	Included in Ordonez-Mena, 2016 [2]
Pachkowski, 2006 [48]	CC	Included in Mechanic, 2006 [13]
Park, 2016 [49]	PCC	Singles cohorts already included with more information available
Schechter, 1985 [50]	CC	Included in Catsburg, 2015 [17]
Schechter, 1989 [51]	CC	Included in Catsburg, 2015 [17]
Shankar, 2008 [52]	CO	Included in Gaudet, 2017 [31]
Shen, 2005 [53]	CC	Included in Mordukhovich, 2010 [54]
Shen, 2005 [55]	CC	Included in Mordukhovich, 2010 [54]

First Author, year	Study design	Reason of exclusion
Shen, 2006 [56]	CC	Included in Mordukhovich, 2010 [54]
Tamimi, 2004 [57]	NCC	Included in Xue, 2011 [22]
Terry, 2002 [58]	CO	Included in Catsburg, 2015 [17]
Van Ryswyk, 2016 [59]	CC	Included in Johnson, 2000 [60]
White, 2016 [61]	CC	Included in Mordukhovich, 2010 [54]
Williams, 2019 [62]	CC	Included in Mechanic, 2006 [13]

CC, case-control study; CO, cohort study; CI, confidence interval; NCC, nested case-control study; NOS, non-original study; PCC, pooled case-control study; RR, relative-risk.

eTable 2. Main characteristics of the 115 case-control studies on the association between cigarette smoking and breast cancer risk included in the review, and corresponding information contributing to the meta-analysis

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Adami, 1988 [63]	Sweden, Norway	P	422	527			X		X		X			
Ahern, 2009 [64]	USA	P	557	432										Menop
Alberg, 2004 [65]	USA	P	110	113	X	X	O						NAT2	
Alim, 2016 [66]	Turkey	P	40	40			X							
Alsolami, 2019 [67]	Saudi Arabia	P	214	218			X							
Ambrosone, 2008 [4]	USA, Europe[a]	H/P	5,201	5,829			O				O		NAT2	
Andonova, 2010 [68]	Germany	P	1,143	1,155	X	X	O							
Band, 2002 [69]	Canada	P	1,018	1,025			O		O		O			Menop
Bano, 2016 [70]	Pakistan	P	1,238	1,008			X							
Baron, 1986 [71]	USA	H	1,741	2,128			O							
Baron, 1996 [72]	USA	P	6,888	9,529	X	X	O		X		X	O		Menop
Bennicke, 1995 [73]	Denmark	H	230	3,010			O				X			
Berrandou, 2019 [74]	France	P	1,125	1,172	X	X	O		X		X	X		Menop
Bowlin, 1997 [75]	USA	P	1,214	1,214			X							
Braga, 1996 [76]	Italy	H	2,569	2,588	X	X	X		X		X	O		Menop
Brinton, 1986 [77]	USA	P	1,547	1,930	X	X	X		X		X			Menop
Brown, 2010 [78]	USA	P	597	966	X	X	X		X		X	O		
Brownson, 1988 [79]	USA	P	456	1,693	X	X	O		O		O			
Brunet, 1998 [80]	USA, Canada	H	186	186			X		X				BRCA	
Catsburg, 2014 [81]	Canada	P	1,096	3,314	X	X	X		X		X			Menop

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Cerne, 2011 [82]	Slovenia	H	784	709			O		X					
Chu, 1990 [83]	USA	P	4,720	4,682	X	X	X		X		X			Menop
Colilla, 2006 [84]	USA, Canada	H	176	140			X						BRCA1	
Conlon, 2010 [85]	Canada	P	347	775	X	X	X		X		X	O	NAT2	
Connor, 2016 [86]	USA, Mexico	P	3,780	4,137	X	X	O		X		X			Menop
Cooper, 1989 [87]	Australia	P	451	451										ER
Cotterchio, 2003 [88]	Canada	P	3,746	3,691			O							ER, Menop
Croghan, 2009 [89]	USA	H	1,225	6,872			X							
Delfino, 2000 [90]	USA	H	113	278	X	X	O		X		X		NAT2	
Dianatinasab, 2019 [19]	Iran	H	1,009	1,009			X							
Ellingjord-Dale, 2017 [91]	Norway	P	4,402	24,760				X						ER
Ellingjord-Dale, 2018 [92]	Norway	P	4,402	24,760	X	X	O							ER
Ewertz, 1990 [25]	Denmark	P	1,694	1,705	X	X	O		X		X			Menop
Field, 1992 [93]	USA	P	1,617	1,617			X				X			
Furberg, 2002 [94]	USA	P	683	790									p53	
Gammon, 1998 [11]	USA	P	2,199	2,009	X	X	X	X		X		O		ER
Gammon, 1999 [95]	USA	P	509	462									p53	
Gammon, 2004 [96]	USA	P	1,356	1,383										ER, Menop
Gao, 2013 [97]	China	P	669	682			X							
Gaudet, 2005 [98]	USA	P	1,034	1,084				O		O				
Gibson, 2010 [99]	Philippines	P	123	978			X							
Ginsburg, 2009 [29]	Multiple countries	H	2,538	2,538	O	O	X						BRCA	

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Godinho-Mota, 2019 [100]	Brazil	P	197	344	X	X	O							
Gronwald, 2006 [101]	Poland	H	348	348			X						BRCA1	
Hamajima, 2002 [102]	Multiple countries	H/P	58,515	95,067	X	X	X							
Hara, 2017 [103]	Japan	H	511	527	X	X	X				X		NAT2	Menop
Hiatt, 1988 [104]	USA	P	303	5,800	O	X	O	X						
Hsieh, 2014 [105]	Taiwan	H/P	737	719			X							
Huang, 1999 [106]	Taiwan	P	150	150			X							
Huang, 2000 [107]	USA	P	862	790										ER, Menop
Hunter, 1997 [108]	USA	P	466	466									NAT2	
Ilic, 2014 [109]	Serbia	H	191	191	X	X	X		X		X	O		
Johnson, 2000 [60]	Canada	P	2,317	2,438	O	O	O							Menop
Kato, 1992 [110]	Japan	H	908	908			X							
Krajinovic, 2001 [111]	Canada	P	149	70			O						NAT2	
Kropp, 2002 [112]	Germany	P	468	1,093	X	X						O		
Kruk, 2007 [113]	Poland	H	858	1,085			O		O					Menop
Lash, 1999 [114]	USA	P	265	765			X		X		X			
Lash, 2002 [115]	USA	P	666	615			X		X		X			
Li, 2005 [116]	USA	P	975	1,005	X	X	X		X		X	O		ER
Li, 2020[b] [8]	Multiple countries[a]	P					X		X				BRCA	
Lilla, 2005 [117]	Germany	P	419	884					O				NAT2	
Lissowska, 2006 [118]	Poland	P	2,386	2,502	X	X			X				NAT2	ER
Magnusson, 2007 [119]	Sweden	P	3,345	3,454	X	X	O	X		X				
Manjer, 2004 [120]	Sweden	P	260	514	X	X	X	X			X	O		

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Martin-Moreno, 1993 [121]	Spain	P	762	988			X							
McCredie, 1998 [122]	Australia	P	467	408			X							
McTiernan, 1986 [123]	USA	P	329	332										ER
Meara, 1989 [124]	UK	H/P	1,116	1,116	O	X	O	X						
Mechanic, 2006 [13]	USA	P	2,311	2,022	O	O	O		O		O	O		
Millikan, 2000 [125]	USA	P	688	663									GSTM1	
Morabia, 1996 [126]	Switzerland	P	244	1,032	O	O		X	X					
Morabia, 1998 [127]	Switzerland	P	242	1,059										ER, Menop
Morabia, 2000 [128]	Switzerland	P	177	170									NAT2	
Mordukhovich, 2010 [54]	USA	P	1,508	1,556	O	O	O						p53	
Nishino, 2014 [129]	Japan	H	1,263	3,160	O	O	O		O		O			ER, Menop
O'Connell, 1987 [130]	USA	P	276	1,519	O	X	O	X						
Ozmen, 2009 [131]	Turkey	H	1,492	2,167			X							
Palmer, 1991 [132]	Canada, USA	H/P	2,562	2,019	X	X	X		X					
Pawlega, 1992 [133]	Poland	P	127	250			O				O			
Pieta, 2012 [134]	Poland	H	138	1,144			O							
Pimhanam, 2014 [135]	Thailand	P	444	444			O							
Plagens-Rotman, 2017 [136]	Poland	H	79	683			X		X					
Pongsavee, 2018 [137]	Thailand	P	155	122			X							
Prescott, 2007 [138]	USA	P	1,728	441	X	X	X		X		X			
Rabstein, 2010 [139]	Germany	P	1,020	1,047									NAT2	ER
Rajaei, 2015 [140]	Iran	P	607	438			X							

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Ranstam, 1995 [141]	Sweden	P	393	449			O		O					Menop
Rautalahti, 1993 [142]	Finland	P	67	157			X		X		X			Menop
Richardson, 1989 [143]	France	H	349	459			X							
Roddam, 2007 [144]	UK	P	639	640	X	X	O							
Rohan, 1989 [145]	Australia	P	451	451	X	X	O	X						Menop
Rollison, 2008 [146]	USA	P	287	311			X		X		X			
Ruszczyk, 2016 [147]	USA	P	831	1,620			O							
Shore, 2008 [148]	USA	P	612	612			O							
Sillanpaa, 2005 [43]	Finland	P	483	482	X	X							NAT2	
Slattery, 2008 [149]	USA	P	2,556	2,606	O	O	O							Menop
Smith, 1994 [150]	UK	P	755	755			X		X		X			
Stanford, 1987 [151]	USA	P	458	568										ER
Trivers, 2009 [152]	USA	P	831	913	O	O	O							ER
Tung, 1999 [153]	Japan	H	376	430	X	X	O							Menop
Ueji, 1998 [154]	Japan	P	148	303			X							Menop
van der Hel, 2003 [155]	Netherland	P	229	264					X				NAT2, GSTM1	Menop
van der Hel, 2005 [156]	Netherland	P	676	669	O	X		X					NAT2, GSTM1	
Viladiu, 1996 [157]	Spain	P	330	346			X							
Wakai, 1994 [158]	Japan	H	300	900	X	X	O							Menop
Wang, 2011 [159]	China	P	400	400			X							Menop
White, 1994 [160]	USA	P	747	961	X	X	O							

First author, year	Country	Type of controls	Number of Cases	Number of Controls	Cigarette smoking								Genetic factor	Strata
					Status			Intensity		Duration		TSQ		
					Current	Former	Ever	Current	Ever	Current	Ever	Former		
Yang, 1997 [161]	Taiwan	H	224	450			X							Menop
Yoo, 1997 [162]	Japan	H	1,154	21,714			X							ER
Young, 2009 [163]	Canada[a]	P	6,235	6,533			X							
Yuan, 1988 [164]	China	P	534	534			X							
Zheng, 1999 [165]	USA	P	273	657									NAT1	
Zheng, 2002 [166]	USA	H	338	345	X	X	X		X		X		GSTM1	Menop
Zheng, 2011 [167]	China	P	1,541	1,598			X							
Total (1986–2020)			181,415	313,384	46	46	92	11	36	3	31	11	25	40

H, hospital; Menop, Menopausal status; O symbol indicates that estimates were derived from the information provided in the original study publication; P, population; TSQ, time-since-quitting; X symbol indicates that estimates were provided in the original study publication.

[a]Pooled-analysis

[b]This article includes both a case-control study and a cohort study

eTable 3. Main characteristics of the 54 cohort studies on the association between cigarette smoking and breast cancer risk included in the review, and corresponding information contributing to the meta-analysis

First author, year	Country (study acronym)	Endpoint	Number of Cases	Cigarette smoking								Genetic factors	Strata
				Status			Intensity		Duration		TSQ		
				Current	Former	Ever	Current	Ever	Current	Ever	Former		
Akiba, 1990 [168]	Japan (6 prefectures) [a]	m	204	X			X						
Al-Delaimy, 2004 [169]	USA (NHSII)	i	1,009	X	X	O	X			X			ER
Andersen, 2017 [33]	Denmark (DNC)	i	1,162	X	X	X		X		X			ER, Menop
Arthur, 2018 [170]	USA (WHI)	i	8,168	O	O	O	X						
Arthur, 2020 [171]	UK (UK Biobank)	i	3,422	O	O	O							Menop
Bjerkaas, 2013 [6]	Norway (NNHSS)	i	7,490	X	X	X		X		X			
Blakely, 2013 [172]	New Zealand (NZCR)	i	12,384	X	X	O							
Calle, 1994 [173]	USA, Puerto Rico (CPS-II)	m	880	X	X	X	X		X				
Carter, 2015 [174]	USA (multiple cohorts)[b]	m	2,022	X									
Catsburg, 2015 [17]	Canada (NBSS)	i	6,549	X	X	X		X		X	X		
Coleman, 2020 [175]	USA (NHIS)	m	2,099	X	X	O							
Dossus, 2014 [36]	Europe (EPIC)	i	9,822	X	X	X	X		X		X		ER, Menop
Engeland, 1996 [176]	Norway (MS)	i	603	X	X	O							
Gaudet, 2013 [177]	USA (CPS-II)	i	3,721	X	X	O	X		X				ER
Gaudet, 2017 [31]	Multiple countries[b]	i	36,060	X	X	O	X		X				ER, Menop
Goodman, 1997 [178]	Japan (RERF-LSS)	i	161	X	X	X							
Gram, 2005 [179]	Norway, Sweden (NSCS)	i	1,240	X	X	X	X		X				
Gram, 2015 [180]	USA (MEC)	i	4,484	X	X	X		X		X			
Gram, 2019 [181]	USA (MEC)	i	4,230										ER
Hanaoka, 2005 [182]	Japan (JPHC)	i	180	X	X	O							Menop

First author, year	Country (study acronym)	Endpoint	Number of Cases	Cigarette smoking								Genetic factors	Strata
				Status			Intensity		Duration		TSQ		
				Current	Former	Ever	Current	Ever	Current	Ever	Former		
Hiatt, 1986 [183]	USA (KPMCP)	i	1,363	O	X	O	X						Menop
Jacob, 2018 [184]	UK (UKGP)	i	8,924	X									
Jee, 2004 [185]	Korea (KCPS)	m	205	X	X	O							
Jones, 2017 [186]	UK (GSC)	i	1,815	X	X	X		X		X			ER
Ko, 2018 [187]	Multiple countries (MLC_BRCA)	i	428	X	X	X		X		X		BRCA	
Land, 2014 [188]	USA (NSABP P-1)	i	395	X	X	O	X	X	X	X			
Lemogne, 2013 [38]	France (GAZEL)	i	138	O	O	O							
Li, 2020[d] [8]	Multiple countries[b]	i				X		X				BRCA	
Lin, 2008 [189]	Japan (JACC)	i	208	X	X	O	X						
London, 1989 [190]	USA (NHS)	i	1,788										ER, Menop
Luo, 2011 [191]	USA (WHI)	i	3,520							X			ER
Manjer, 2000 [192]	Sweden (DPM)	i	416	X	X	O	X						Menop
Manjer, 2001 [193]	Sweden (DPM)	i	268										ER
Meyer, 2015 [194]	Switzerland (multiple cohorts)[b]	m	204	O	X	O	X						
Nordlund, 1997 [195]	Sweden (SCR)	i	996	X	X	O	X						
Nyante, 2014 [196]	USA (NIH-AARP)	i	7,481										ER
Olson, 2005 [197]	USA (IWHS)	i	2,017	X	X	O				X			
Ordonez-Mena, 2016 [2]	Multiple countries (CHANCES)[b]	i/m	15,085/ 2,568	X	X	O		X		X	X		
Ozasa, 2007 [198]	Japan (JACC)	m	93	X	X		X		X				
Park, 2020 [199]	Korea (NBCSP)	i	55,538			X							Menop
Pirie, 2013 [200]	UK (MWS)	m	3,207	X			X						
Reynolds, 2004 [201]	USA (CTS)	i	2,005	X	X	O		X		X			Menop
Rosenberg, 2013 [202]	USA (BWHS)	i	1,377	X	X	X							Menop

First author, year	Country (study acronym)	Endpoint	Number of Cases	Cigarette smoking								Genetic factors	Strata
				Status			Intensity		Duration		TSQ		
				Current	Former	Ever	Current	Ever	Current	Ever	Former		
Schatzkin, 1989 [203]	USA (FHS)	i	143			O		X					
Swift, 2008 [204]	USA, Canada (ATPF)	i	77			O							
Taghizadeh, 2016 [205]	Netherland (VVS)	m	117	O	X	O	X						
Tverdal, 1993 [206]	Norway (5 areas)[c]	m	70	X	X	O	X						
van den Brandt, 2017 [207]	Netherland (NLCS)	i	2,526	X	X	X		X		X	X		
Viner, 2019 [208]	USA (ATP)	i	483	O	O	O							Menop
Wada, 2015 [209]	Japan (TS)	i	166	X	X	O							
White, 2017 [210]	USA, Puerto Rico (NIEHS)	i	1,843	X	X	X	X		X	X	O		
Xue, 2011 [22]	USA (NHS)	i	8,772	X	X	X	X			X	O		
Zeinomar, 2019 [9]	Multiple countries (ProF-SC)[b]	i	1,009	X	X	O							ER
Zheng, 2014 [211]	Asia (ACC)[b]	m	1,108			O							
Total (1986–2020)			229,675	44	40	44	20	12	8	15	6	2	20

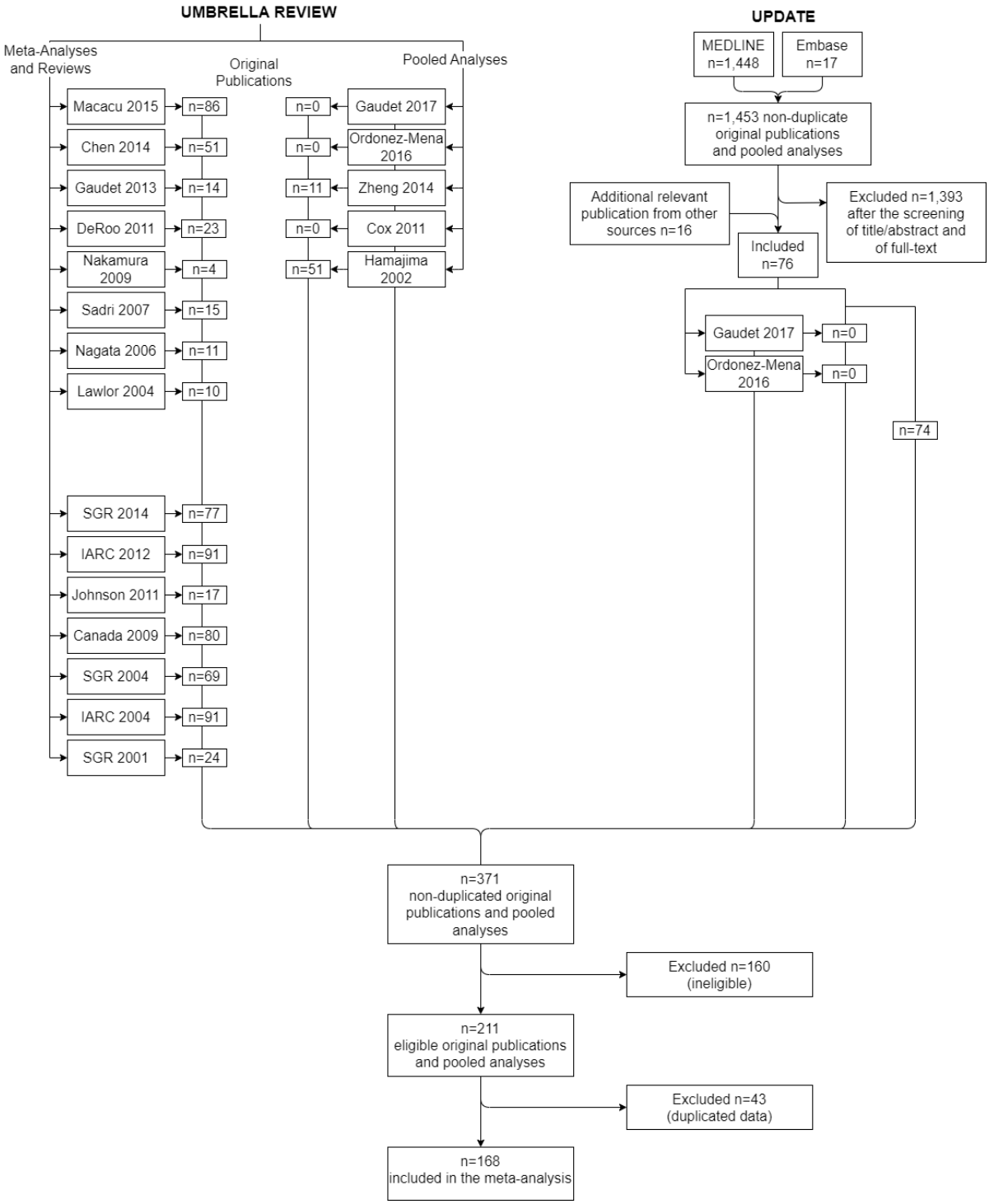
ACC, Asia Cohort Consortium; ATP, Alberta's Tomorrow Project; ATPF, A-T patients and their families; BWHS, Black Women Health Study; CHANCES, Consortium on Health and Aging: Network of Cohorts in Europe and the United States; CPS-II, Cancer Prevention Study II; CTS, California teacher Study; DNC, Danish Nurse Cohort; DPM, Department of Preventive Medicine in Malmö; EPIC, European Prospective Investigation into Cancer and Nutrition cohort study; FHS, Framingham Heart Study; GAZEL, Gaz et Electricité cohort; GSC, Generations Study cohort; i, incidence; IWHS, Iowa Women's Health Study; JACC, Japan Collaborative Cohort Study for Evaluation of Cancer; JPHC, Japan Public Health Center; KCPS, Korean Cancer Prevention Study; KPMCP, Kaiser Permanente Medical Care Program; MEC, Multiethnic Cohort Study; m, mortality; MLC_BRCA, Multicenter longitudinal cohort of BRCA mutation carriers; MS, Multiple sites in the USA and Canada; MWS, Million Women Study; NBCSP, National breast cancer screening program; NBSS, National Breast Screening Study; NHIS, National Health Interview Survey; NHS, Nurses' Health Study; NHSII, Nurses' Health Study II; NIEHS, National Institute of Environmental Health Sciences; NIH-AARP, National Institutes of Health-AARP Diet and Health Study; NLCS, Netherlands Cohort Study; NNHSS, Norwegian National Health Screening Service; NSABP P-1, National Surgical Adjuvant Breast and Bowel Project Breast Cancer Prevention Trial; NSCS, Norwegian Swedish Cohort Study; NZCR, New Zealand Cancer Registry; O symbol indicates that estimates were derived from the information provided in the original study publication; ProF-SC, Prospective Family Study Cohort; RERF-LSS, Radiation Effects Research Foundation's extended Life Span Study; SCR, Swedish Cancer Registry; TS, Takayama Study; UKGP, UK general practitioners; VVS, Vlagtwedde-Vlaardingen study; WHI, Women's Health Initiative; X symbol indicates that estimates were provided in the original study publication.

[a]Six-prefecture Cohort Study
[b]Pooled-analysis
[c]Five areas in Norway
[d]This article includes both a case-control study and a cohort study

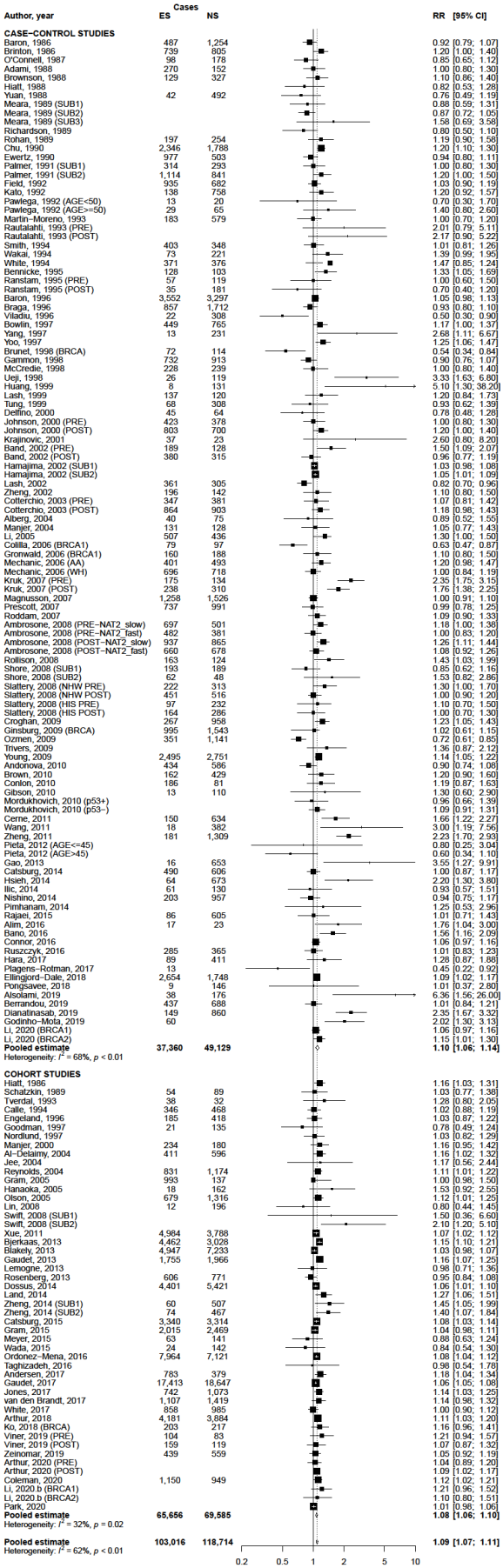
eTable 4. List of publications for which data have been partially excluded from the meta-analysis and reason for exclusion

First author, year	Excluded estimate	Reason of exclusion
Ellingjord-Dale, 2017 [91]	Status (current, former)	Included in Ellingjord-Dale, 2018 [92]
Gammon, 2004 [96]	Status (ever)	Included in Mordukhovich, 2010 [54]
Gram, 2019 [181]	Status (current, former, ever), intensity (ever), duration (ever)	Included in Gram, 2015 [180]
Hunter, 1997 [108]	Status (former), intensity (current)	Included in Xue, 2011 [22]
Kropp, 2002 [112]	Duration (ever)	Included in Ambrosone, 2008 [4]
Lissowska, 2006 [118]	Status (ever), duration (ever)	Included in Ambrosone, 2008 [4]
London, 1989 [190]	Status (current), intensity (current)	Included in Xue, 2011 [22]
Luo, 2011 [191]	Status (current, former), intensity (ever)	Included in Arthur, 2018 [170]
Manjer, 2001 [193]	Status (current, former), intensity (current)	Included in Manjer, 2000 [192]
Morabia, 1998 [127]	Intensity (ever)	Included in Morabia, 1996 [126]
Morabia, 2000 [128]	Status (former, ever), intensity (current)	Included in Morabia, 1996 [126] and Ambrosone, 2008 [4]
Nyante, 2014 [196]	Status (current, former), intensity (current, former)	Included in Ordonez-Mena, 2016 [2]
Rabstein, 2010 [139]	Status (current, former)	Included in Andonova, 2010 [68]
van der Hel, 2003 [155]	Duration (ever)	Included in Ambrosone, 2008 [4]
Zheng, 1999 [165]	Status (ever)	Included in Olson, 2005 [197]

eFigure 1. Flowchart for the selection of the original studies on the association between cigarette smoking and breast cancer risk included in the review and meta-analysis

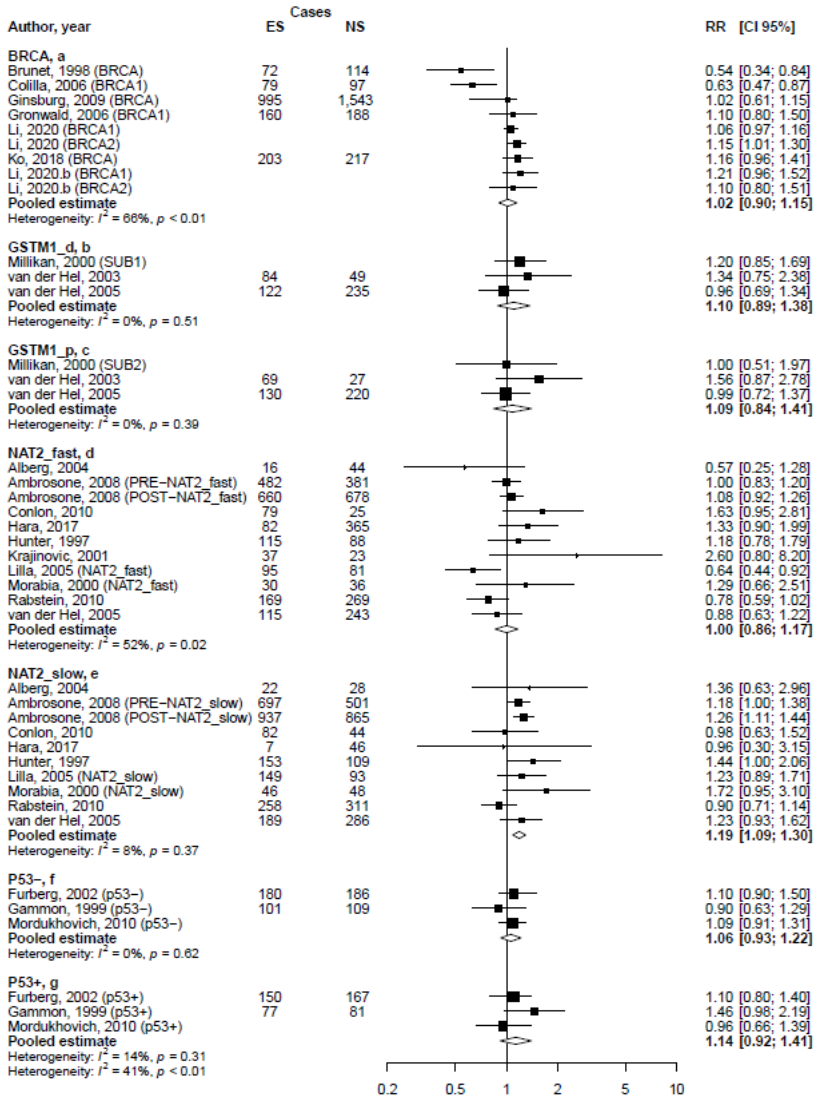


eFigure 2. Forest plot of study-specific and pooled relative risk (RR) of breast cancer for ever cigarette smokers (ES) versus never smokers (NS)



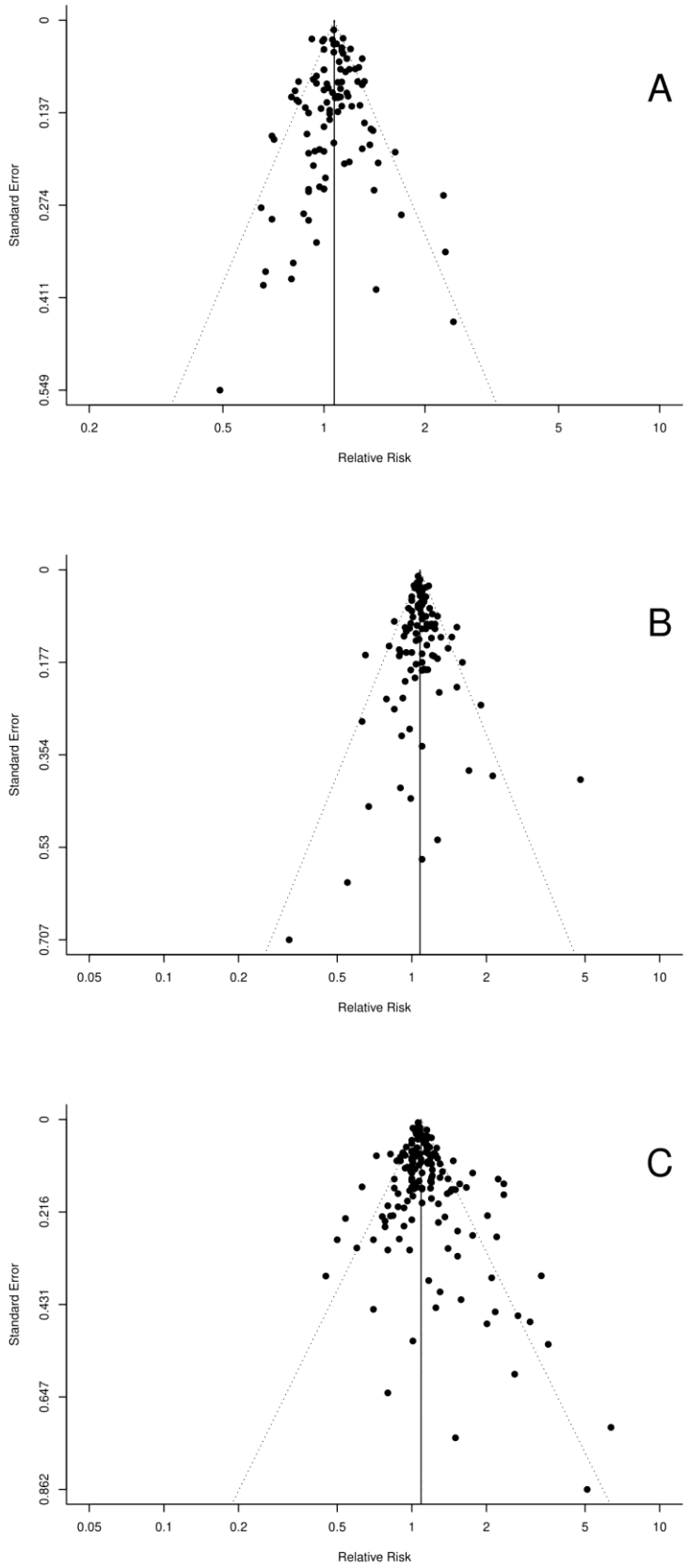
AA, African-American ethnicity; BRCA, BRCA mutation; BRCA1, BRCA1 mutation; BRCA2, BRCA2 mutation; CI, confidence interval; HIS, Hispanic ethnicity; NAT2_fast, NAT2 fast ploymorphism; NAT2_slow, NAT2 slow polymorphism; NHW, non-Hispanic Caucasian ethnicity; p53-, p53 negative; p53+, p53 positive; POST, post-menopausal women; PRE, pre-menopausal women; SUB1, first subgroup; SUB2, second subgroup; SUB3, third subgroup; WH, white ethnicity.

eFigure 3. Forest plot of study-specific and pooled relative risk (RR) of breast cancer for ever cigarette smokers (ES) versus never smokers (NS) in women with selected genetic factors



BRCA, BRCA mutation; BRCA1, BRCA1 mutation; BRCA2, BRCA2 mutation; CI, confidence interval; GSTM1_d, GSTM1 null genotype; GSTM1_p, GSTM1 present genotype; NAT2_fast, NAT2 fast ploymorphism; NAT2_slow, NAT2 slow polymorphism; p53-, p53 negative; p53+, p53 positive; POST, post-menopausal women; PRE, pre-menopausal women; SUB1, first subgroup; SUB2, second subgroup.

eFigure 4. Funnel plot of studies on the association between current (panel A), former (panel B), and ever (panel C) cigarette smokers versus never smokers and breast cancer risk



eMaterial 1. Literature search strings for the update of the last available comprehensive review used in PubMed/MEDLINE and Embase

Source	Date	Search string	N
PubMed	9/6/2020	(breast) AND (cancer OR neoplasm OR carcinoma OR adenocarcinoma OR Neoplasms [MeSH Terms]) AND (cigarette OR cigarettes OR tobacco OR smoking OR smokers OR smoking [MeSH Terms]) AND (English[Language]) AND ("2015"[Date - Publication]: "2020"[Date - Publication])	1448
Embase	9/6/2020	cigarette:ti OR cigarettes:ti OR tobacco:ti OR smoking:ti OR smokers:ti AND (breast:ab,ti) AND (cancer:ab,ti OR neoplasm:ab,ti OR carcinoma:ab,ti OR adenocarcinoma:ab,ti) AND (article:it OR review:it) AND [english]/lim AND [2015-2020]/py NOT [medline]/lim	17
		Duplicates	12
TOT	9/6/2020	-	1453 non duplicates

eMaterial 2. Functions of the linear models used to estimate the associations between smoking intensity (current vs. never smokers), duration (current vs. never smokers) and time since quitting (former vs. current smokers) and the risk of breast cancer

Smoking intensity (cigarettes/day) $f(x) = 0.0057740x$
Smoking duration (years) $f(x) = 0.0026293x$
Time since quitting (years) $f(x) = -0.0013354x$

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