	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Incidence									
Choi SY et al. (1992) [20]	1986-1990	Hospital-based (Korea Cancer Center Hospital)	Cases: newly diagnosed histologically cases Controls: cancer-free	Oral cavity & Pharynx*			Never Former Current	1.00 0.87 (0.45-1.66) 2.01 (1.30-3.10)	
			patients at the same hospital	Esophagus	139	417	Never Former	1.00 1.11 (0.49-2.53)	Adjusted for age, marital status, education and
		noopital	Mean age	57.2	57.6	Current	1.93 (1.12-2.84)	alcohol use	
			Stomach	238	714	Never Former	1.00 0.89 (0.48-1.65)	Adjusted for age, marital status, education, diet	
			Mean age	50.8	49.7	Current	1.34 (0.88-2.03)	and alcohol use	
				Rectum	67	201	Never Former	1.00 1.35 (0.53-2.28)	Adjusted for age, marital status, education, diet
			Mean age	52.6	52.4	Current	0.71 (0.35-1.45)	and alcohol use	
				Larynx	94	282	Never Former	1.00 2.24 (0.60-8.43)	Adjusted for alcohol use
				Mean age	58.4	58.8	Current	5.41 (2.06-14.27)	
				Lung	280	840	Never Former	1.00 2.06 (0.98-4.31)	Adjusted for alcohol use
				Mean age	55	53.3	Current	5.78 (3.07-10.89)	
Jee SH et al.	1993-2001	National Health	Cohort	Oral cavity &	12		Never	1.0	Adjusted for age and
(2004) [21] Re-analysis using updated		Insurance Corporation (NHIC)	758,193 men	Pharynx** 30 ≤ age ≤95	17 77		Former Current	1.3 (0.6-2.7) 2.6 (1.4-4.8)	alcohol
data		(11110)	Cohort	Esophagus**	155		Never	1.0	Adjusted for age and
			758,193 men	30 ≤ age ≤95	220 1,045		Former Current	1.2 (0.9-1.4) 2.3 (2.0-2.8)	alcohol
			Cohort 758,193 men	Stomach**	2,184 3,046		Never Former	1.0 1.3 (1.2-1.4)	Adjusted for age, alcohol and diet
				30 ≤ age ≤95	8,850		Current	1.5 (1.5-16)	

* From meta-analysis on oral cavity and pharynx.
 ** Additional analysis results on RR from updated dataset were obtained through personal communication with the author

	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Jee SH et al.	1993-2001	National Health	Cohort	Colon	342		Never	1.0	Adjusted for age
(2004) [21]		Insurance	830,139 men		509		Former	1.1 (1.0-1.3)	
Re-analysis using updated		Corporation (NHIC)		30 ≤ age ≤95	782		Current	0.8 (0.7-1.0)	
data			Cohort	Liver*	963		Never	1.0	Adjusted for age, alcoho
			441,883 men		1,131		Former	1.2 (1.1-1.3)	and HBV
			30 ≤ age ≤95	3,520		Current	1.4 (1.3-1.5)		
			Cohort	Pancreas*	299		Never	1.0	Adjusted for age and
			758,193 men		385		Former	1.2 (1.0-1.4)	alcohol
			30 ≤ age ≤95	1,126		Current	1.5 (1.3-1.7)		
			Cohort	Larynx*	58		Never	1.0	Adjusted for age and
			758,193 men		137		Former	2.0 (1.5-2.8)	alcohol
				30 ≤ age ≤95	722		Current	4.6 (3.6-6.1)	
			Cohort	Lung*	758		Never	1.0	Adjusted for age and
			758,193 men		1,332		Former	1.6 (1.4-1.7)	alcohol
				30 ≤ age ≤95	6,657		Current	3.7 (3.4-4.0)	
			Cohort	Kidney*	270		Never	1.0	Adjusted for age and
			758,193 men		302		Former	1.1 (0.9-1.2)	alcohol
				30 ≤ age ≤95	769		Current	1.1 (0.9-1.2)	
			Cohort	Bladder*	275		Never	1.0	Adjusted for age and
			758,193 men		442		Former	1.5 (1.3-1.7)	alcohol
				30 ≤ age ≤95	1,348		Current	2.0 (1.7-2.3)	
Kimm H et al.	1993-2006	Korean Cancer	Cohort	Esophagus	150		Never	1.0	Adjusted for age, age ² ,
2010) [26]		Prevention	782,632 men		224		Former	1.2 (1.0-1.4)	alcohol intake, aspartat
		Study (KCPS)		30 ≤ age ≤93	1,009		Current	2.2 (1.8-2.5)	aminotransferase(GOT) body mass index and
									exercise

	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Kim J et al. (2012) [23]	2003-2007	Hospital-based (National Cancer Center)	Cases: patients with noncardia gastric cancer	Stomach	183 108 204	208 158 129	Never Former Current	1.00 0.78 (0.56-1.08) 1.80 (1.32-2.45)	Matched by age(±5) and sex
			Controls: healthy controls who underwent upper endoscopy for gastric cancer screening and were without significant gastrointestinal symptoms	Mean age	54.9±8.4	54.3±7.4			
Yang JJ et al. (2009) [34]	2002	Center Cancer	Cases: patients signed a consent form and	Stomach	26 21	141 82	Never Former	1.0 1.4 (0.8-2.6)	Matched by age(±5), sex, residential district
(2009) [34] C	Cohort completed a detai (KMCC) standardized inter	completed a detailed standardized interview- based questionnaire	40 ≤ age ≤83	37	111	Current	1.8 (1.0-3.2)	and enrollment year Adjusted for H.pylori infection, CagA seropositivity, age and sex	
Lee JK et al.	1990-1991	Hospital-based	Cases: patients	Stomach	82	107	Never	1.0	Matched by age(±2) and
(1995) [28]		(Hanyang University Hospital, Asan	hospitalized in the surgical wards of two teaching hospitals	25 ≤ age ≤65	49 82	42 63	Former Current	3.0 (1.4-6.2) 3.4 (1.7-6.8)	sex Adjusted for age, sex,
		Medical Center)	Controls: hospitalized patients with wide range of problems						education, economic status and residence

	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Kim J et al. (2009) [24]	2001-2004	Hospital-based (Two university hospitals)	Cases: reconfirmed from both pathology report and chart review	Colorectum 30 ≤ age ≤79	86 100 176	84 80 106	Never Former Current	1.00 1.22 (0.78-1.90) 1.62 (1.08-2.43)	Matched by age
		Controls: had been hospitalized during the same period for a wide spectrum of non- neoplastic conditions							
Shin A et al.	1996-1997	Korean national	Cohort	Colorectum*			Never	1.00	
(2011) [33]		Health System (KNHS)	869,725 men	30 ≤ age ≤80			Former Current	1.18 (0.96-1.44) 0.98 (0.90-1.07)	
Park JY et al. (2002) [30]	1997-2000	Hospital-based (Kyungpook National	Cases: diagnosed with lung cancer	Lung	2 6 184	3 37 95	Never Former Current	1.00 0.24 (0.02-3.62) 2.91 (0.33-35.19)	Matched by age(±5)
		University Hospital)	Controls: randomly selected from a pool of healthy volunteers	Mean age	61.2±8.4	60.7±8.4			
Choi JE et al.	2001-2002	Hospital-based	Cases: lung cancer	Lung	141	198	Never	1.00	Matched by age(±5) and
2009) [19]		(Kyungpook	patients	-	116	191	Former	0.85 (0.61-1.18)	sex
		National University	Controls: randomly		463	331	Current	1.96 (1.51-2.56)	
		Hospital)	selected from a pool of healthy volunteers	Mean age	61.3±8.8	60.6±9.3			
Kim JS et al.	2001-2004	Hospital-based	Cases: lung cancer	Lung**			Never	1.00	
2010) [25]		(Kyungpook	patients				Former	0.51 (0.12-2.09)	
		National University Hospital)	Controls: healthy volunteers who visited the general health check-up center	Mean age: Stage1 Stage2	61.5±10.9 60.9±8.5	61.5±11.3 60.5±9.0	Current	1.83 (1.37-2.44)	

* Meta-analysis of RRs for proximal colon, distal colon, and rectum ** Meta-analysis of R

	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Yoon KA et al. (2007) [36]	2002-2003	Hospital-based (National Cancer Center)	Cases: patients with histologically confirmed lung cancer	Lung	116 75 143	139 103 86	Never Former Current	1.00 0.87 (0.58-1.31) 1.99 (1.36-2.91)	Matched by age(±3) and sex
			Controls: without a prior history of cancer were recruited form the visitors for cancer- screening program	age range	25≤age≤70	28≤age≤73			
Park SK et al. *	1997-1998	Korean	Cases: histologically	Lung	104	101	Never	1.00	Matched by age(≤44,
(2010) [31]		Academy of	confirmed incident lung		158	90	Former	1.72 (1.18-2.51)	45-69, and ≥70 years
Re-analysis		Tuberculosis and Respiratory Diseases (KATRD) Korean Multi- Center Cancer Cohort (KMCC)	cancer cases	44 ≤ age ≤70	619	261	Current	2.31 (1.70-3.16)	old)
			diagnosed in 1997 were registered in the KATRD						Adjusted for age
			Controls: cancer free when registered in 1997 in Chungju, a site of the KMCC						
Mortality									
Jee SH et al.	1993-2001	National Health	Cohort	Oral cavity &	1		Never	1.0	Adjusted for age and
(2004) [21]		Insurance	758,193 men	Pharynx**	1		Former	0.8 (0.1-13.5)	alcohol
Re-analysis		Corporation			10		Current	3.3 (0.5-34.6)	
using updated		(NHIC)	Ochod	30 ≤ age ≤95			N	4.0	
data			Cohort 758,193 men	Esophagus**	80 140		Never Former	1.0 1.4 (1.1-1.8)	Adjusted for age and alcohol
			730,193 men	30 ≤ age ≤95	630		Current	2.8 (2.2-3.5)	alconor
				-				· · ·	
			Cohort	Stomach**	830		Never	1.0	Adjusted for age,
			758,193 men	20 < 000 <05	1,201 3,305		Former	1.3 (1.2-1.4)	alcohol and diet
				30 ≤ age ≤95	3,305		Current	1.6 (1.5-1.7)	
			Cohort	Colon	91		Never	1.0	Adjusted for age
			830,139 men		139		Former	1.1 (0.9-1.4)	, ,
				30 ≤ age ≤95	281		Current	1.1 (0.8-1.4)	

* Additional analysis results on RR from dataset were obtained through personal communication with the author ** Additional analysis results on RR from updated dataset were obtained through personal communication with the author

	Study	Study subjects					_ Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Jee SH et al.	1993-2001	National Health	Cohort	Liver*	573		Never	1.0	Adjusted for age, alcohol
(2004) [21]		Insurance	441,883 men		672		Former	1.2 (1.0-1.3)	and HBV
Re-analysis using updated		Corporation (NHIC)		30 ≤ age ≤95	2,162		Current	1.4 (1.3-1.6)	
data			Cohort	Pancreas*	221		Never	1.0	Adjusted for age and
			758,193 men		281		Former	1.1 (0.9-1.3)	alcohol
			30 ≤ age ≤95	816		Current	1.5 (1.3-1.7)		
			Cohort	Larynx*	20		Never	1.0	Adjusted for age and
			758,193 men		41		Former	1.7 (1.0-2.9)	alcohol
				30 ≤ age ≤95	228		Current	4.5 (2.8-7.1)	
			Cohort	Lung*	423		Never	1.0	Adjusted for age and
			758,193 men		871		Former	1.8 (1.6-2.0)	alcohol
				30 ≤ age ≤95	4,381		Current	4.4 (4.0-4.9)	
			Cohort	Kidney*	52		Never	1.0	Adjusted for age and
			758,193 men		58		Former	1.0 (0.7-1.4)	alcohol
				30 ≤ age ≤95	146		Current	1.1 (0.8-1.5)	
			Cohort	Bladder*	39		Never	1.0	Adjusted for age and
			758,193 men		58		Former	1.3 (0.9-1.9)	alcohol
				30 ≤ age ≤95	176		Current	2.1 (1.4-2.9)	
Kimm H et al.	1993-2006	Korean Cancer	Cohort	Esophagus	92		Never	1.0	Adjusted for age, age ² ,
(2010) [26]		Prevention	782,632 men		183		Former	1.5 (1.2-2.0)	alcohol intake, aspartate
		Study (KCPS)		30 ≤ age ≤93	721		Current	2.5 (2.0-3.1)	aminotransferase(GOT), body mass index and exercise

	Study	Study subjects					Category of	OR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
_ee EH et al. *	1993-2004	Korean Multi-	Cohort	Stomach		6	Never	1.00	Adjusted for age, body
2010) [27]		Center Cancer	5,287 men		2	2	Former	3.10 (1.25-7.66)	mass index and alcohol
Re-analysis		Cohort (KMCC)		40 ≤ age	4	2	Current	2.41 (1.02-5.70)	consumption amount
			Cohort	Pancreas		2	Never	1.00	Adjusted for age, body
			5,287 men			6	Former	2.44 (0.49-12.26)	mass index and alcohol
				40 ≤ age		6	Current	1.21 (0.24-6.12)	consumption amount
			Cohort	Lung		5	Never	1.00	Adjusted for age, body
			5,287 men	Ŭ	2	1	Former	3.54 (1.33-9.41)	mass index and alcohol
			-,	40 ≤ age	6		Current	4.48 (1.80-11.19)	consumption amount

	Study	Study subjects					- Category of	RR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Incidence									
Choi SY et al. (1992) [20]	1986-1990	Hospital-based (Korea Cancer	Cases: newly diagnosed and	Cervix	271	813	Never Former	1.00 2.52 (0.84-7.62)	Adjusted for marital status and alcohol use
,		Center Hospital)	histologically confirmed cases	Mean age	46.8	46.6	Current	0.77 (0.45-1.31)	
		Controls: cancer-free patients at the same hospital							
Jee SH et al. *	1993-2001	National Health	Cohort	Oral cavity &	8		Never	1.0	Adjusted for age and
2004) [21]		Insurance	434,145 women	Pharynx	0		Former	-	alcohol
Re-analysis		Corporation			2		Current	6.7 (1.1-39.4)	
using updated	updated (NHIC)	(NHIC)		30 ≤ age ≤95					
lata		Cohort	Esophagus	69		Never	1.0	Adjusted for age and	
			434,145 women		4		Former	1.1 (0.4-3.1)	alcohol
				30 ≤ age ≤95	11		Current	1.6 (0.8-3.1)	
			Cohort	Liver	223		Never	1.0	Adjusted for age, alcoho
			121,822 women		1		Former	0.8 (0.1-5.6)	and HBV
				30 ≤ age ≤95	5		Current	2.5 (1.0-6.3)	
			Cohort	Pancreas	678		Never	1.0	Adjusted for age and
			434,145 women		27		Former	0.8 (0.5-1.1)	alcohol
				30 ≤ age ≤95	75		Current	1.2 (0.9-1.5)	
			Cohort	Larynx	28		Never	1.0	Adjusted for age and
			434,145 women		1		Former	0.9 (0.1-6.8)	alcohol
				30 ≤ age ≤95	19		Current	9.1 (4.6-17.8)	
			Cohort	Lung	1,709		Never	1.0	Adjusted for age and
			434,145 women		119		Former	1.6 (1.3-1.9)	alcohol
				30 ≤ age ≤95	317		Current	2.3 (2.0-2.6)	
			Cohort	Cervix	2,117		Never	1.0	Adjusted for age and
			434,145 women		42		Former	1.0 (0.7-1.3)	alcohol
				30 ≤ age ≤95	100		Current	1.1 (0.9-1.4)	

	Study	Study subjects					- Category of	RR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Jee SH et al. * (2004) [21] Re-analysis using updated	1993- 2001	National Health Insurance Corporation (NHIC)	Cohort 434,145 women	Kidney 30 ≤ age ≤95	307 10 16		Never Former Current	1.0 1.1 (0.6-2.1) 1.0 (0.6-1.6)	Adjusted for age and alcohol
data (Cohort 434,145 women	Bladder 30 ≤ age ≤95	253 9 35		Never Former Current	1.0 0.8 (0.4-1.7) 1.8 (1.2-2.6)	Adjusted for age and alcohol	
Kim J et al. (2009) [24]	2001- 2004	Hospital-based (Two university hospitals)	Cases: reconfirmed from both pathology report and chart review Controls: had been hospitalized during the same period for a wide spectrum of non- neoplastic conditions	Colorectum 30 ≤ age ≤79	216 12 7	229 6 4	Never Former Current	1.00 2.12 (0.72-7.00) 1.86 (0.46-8.75)	Matched by age
Shin A et al. (2011) [33]	1996- 1997	Korean national Health System (KNHS)	Cohort 395,501 women	Colorectum** 30 ≤ age ≤80			Never Former Current	1.00 0.96 (0.61-1.51) 0.96 (0.75-1.23)	
Park SK et al. * (2010) [31] Re-analysis	1997- 1998	Korean Academy of Tuberculosis and Respiratory Diseases (KATRD) Korean Multi- Center Cancer Cohort (KMCC)	Cases: histologically confirmed incident lung cancer cases diagnosed in 1997 were registered in the KATRD Controls: cancer free when registered in 1997 in Chungju, a site of the KMCC	Lung 44 ≤ age ≤70	499 20 101	564 8 39	Never Former Current	1.00 2.96 (1.29-6.81) 3.06 (2.06-4.55)	Matched by age(≤44, 45- 69, and ≥70 years old) Adjusted for age

* Additional analysis results on RR from updated dataset were obtained through personal communication with the author ** Meta-analysis of RRs for proximal colon, distal colon, and rectum

	Study	Study subjects					Category of	RR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Cho H et al. (2009) [18]	2006-2007	Hospital-based (six academic medical centers)	Cases: invasive cervical cancer patients Controls: healthy	Cervix	140 6 14	343 12 23	Never Former Current	1.00 1.23 (0.37-3.61) 1.49 (0.69-3.12)	
	womer history Pap sr Pap sr	women who had no history of an abnormal Pap smear and normal Pap smear on the day of recruitment	Mean age	51.5±12.2	46.8±10.1				
Yoo KY et al.*	1992-1995	Seoul National	Cases: Histologically	Cervix	167	738	Never	1.00	
(1997) [35] <i>Re-analysis</i>		University	confirmed cases of invasive cervical cancer		7 10	8 22	Former Current	2.78 (0.93-8.36) 2.21 (0.99-4.95)	
using updated data		Hospital	were selected from the Department of Gynecology, Seoul National University Hospital					()	
			Controls: Women with normal pap smear tests and women free of past history of any Malignancies						
	2009- ongoing	Korea Epithelial Ovarian Cancer Study (Ko-Eve)	Cases: newly diagnosed histologically epithelial ovarian cancer	Ovary	892 7 2	165 5 3	Never Former Current	1.00 2.68 (0.49-14.56) 0.96 (0.18-5.02)	Adjusted for all variables
			cases Controls: ovarian cancer-free population lived in the community						

Supplementary Table 2	. Studies included in the meta-	analysis for tobacco smoki	ng in Korean women (continued)

	Study	Study subjects					 Category of 	RR	Confounding variables
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered
Jordan et al. (2006) [22]	1966-2005	Systematic literature review	Eight population-based case-control studies	Ovary			Never Former Current	1.0 1.0 (0.9-1.2) 2.1 (1.7-2.7)	
Seo HS et al. (2005) [32]	1993-2002	Korean Medical Insurance Corporation (KMIC)'s dependents	Cohort 263,915 women	Bladder Mean age Never: 54.4±9.0 Former: 64.3±8 Current: 62.2±8	.6		Never Former Current	1.0 1.1 (0.5-2.6) 1.6 (0.9-2.7)	Adjusted for age, sex, Rohrer's index, blood pressure, cholesterol level, blood glucose level, blood pigment, hypertension, diabetes etc.
Mortality									
Jee SH et al. *	1993-2001	National Health	Cohort	Esophagus	2		Never	1.0	Adjusted for age and
(2004) [21] Re-analysis using updated		Insurance Corporation (NHIC)	434,145 women	30 ≤ age ≤95		4 4	Former Current	1.6 (0.6-5.1) 0.9 (0.3-2.7)	alcohol
data		(141110)	Cohort	Stomach	1,32	2	Never	1.0	Adjusted for age, alcoho
			434,145 women		7		Former	1.0 (0.8-1.2)	and diet
				30 ≤ age ≤95	14	0	Current	1.0 (0.8-1.2)	
			Cohort	Liver	8	4	Never	1.0	Adjusted for age, alcoho
			121,822 women			1	Former	1.9 (0.3-14.2)	and HBV
				30 ≤ age ≤95	:	2	Current	2.6 (0.6-11.0)	
			Cohort	Pancreas	50	3	Never	1.0	Adjusted for age and
			434,145 women		2		Former	0.9 (0.5-1.2)	alcohol
				30 ≤ age ≤95	5		Current	1.1 (0.8-1.4)	
			Cohort	Larynx	1	3	Never	1.0	Adjusted for age and
			434,145 women	2		1	Former	0.9 (0.1-6.9)	alcohol
				30 ≤ age ≤95		7	Current	3.6 (1.3-9.7)	
			Cohort	Lung	83	4	Never	1.0	Adjusted for age and
			434,145 women	J	7		Former	1.9 (1.5-2.4)	alcohol
				30 ≤ age ≤95	23	4	Current	3.2 (2.7-3.7)	

11	/	.	,		•			1		
	Study	Study subjects					 Category of 	RR	Confounding variables	
Author (year)	period	Type and source	Definition	Cancer site	No. of cases	No. of controls	smoking	(95% CI)	considered	
ee SH et al. *	1993-2001	National Health	Cohort	Cervix	176		Never	1.0	Adjusted for age and	
(2004) [21]		Insurance	434,145 women		9		Former	1.2 (0.6-2.4)	alcohol	
Re-analysis Ising updated		Corporation (NHIC)		30 ≤ age ≤95	24		Current	1.8 (1.1-2.8)		
lata		. ,	Cohort	Kidney	37		Never	1.0	Adjusted for age and	
			434,145 women	•	5		Former	2.3 (0.9-6.3)	alcohol	
				30 ≤ age ≤95	6		Current	1.5 (0.6-3.9)		
			Cohort	Bladder	48		Never	1.0	Adjusted for age and	
			434,145 women		3		Former	0.7 (0.2-2.2)	alcohol	
				30 ≤ age ≤95	15		Current	2.0 (1.1-3.8)		
ee EH et al. *	1993-2004	Korean Multi-	Cohort	Stomach	14		Never	1.00	Adjusted for age, body	
2010) [27]		Center Cancer	8,874women		1		Former	2.85 (0.36-	mass index and alcoh	
Re-analysis		Cohort (KMCC)		40 ≤ age	5		Current	•	consumption amount	

		Study	Study subjects					OR		
Cancer site	Author (year)	period	Type and source	Definition	No. of cases		No. of controls	(95% CI)	Confounding variables considered	
Lung	Exposure to smo	oking at hom	ne, Incidence							
	Tse LA et al. (2009) [52]	2004-2006	Population-based case-referent	Cases: nonsmoker with newly diagnosed primary lung cancer Controls: nonsmoking community referents		132	536	0.90 (0.57-1.41)	Adjusted for age, place of birth, alcohol drinking, residential radon exposure, past history of lung diseases, any cancer in first- degree relatives, intakes of meat, exposure to known or suspected lung carcinogens, and adoption of dust control	
	Akiba S et al. (1986) [37]	1971-1980	Radiation Effects Research Foundation (RERF)	Cases: non-smoking men with newly diagnosed cases of primary lung cancer among cohort members Controls: non-smoking men among cohort members without lung cancer		19	110	2.10 (0.33-9.63)	Individually matched for year of birth, city of residence, sex, and whether or not they were among the 20% of the cohort participating in the program of biennial medical examinations given at RERF, and vital status.	
	Wang L et al. (2000) [53]	1994-1998	Hospital-based with community control	Cases: diagnosed lung cancer among never- smokers Controls: randomly selected from 1990 census lists 30 ≤ age ≤75		33	114	1.22 (0.5-3.3)	Frequency matched for age, sex, and prefecture of current residence	
-	Exposure to smo	oking at hom	ne, Mortality							
-	McGhee SM et al. (2005) [48]	1998	Death registries	Cases: death from lung cancer among never smoker Controls: never smoking controls		145	418	1.34 (0.82-2.17)	Adjusted for age, education	
-	Exposure to smoking at wor		kplace, Incidence	!						
	Tse LA et al. (2009) [52]	2004-2006	Population-based case-referent	Cases: nonsmoker with newly diagnosed primary lung cancer Controls: nonsmoking community referents		132	536	1.15 (0.74-1.77)	Adjusted for age, place of birth, alcohol drinking, residential radon exposure, past history of lung diseases, any cancer in first- degree relatives, intakes of meat, exposure to known or suspected lung carcinogens, and adoption of dust control	

Supplementary	/ Table 3.	Studies	included i	n the	meta-analy	vsis for	passive	smoking in me	en

		Study	Study subjects				_ OR	Confounding variables	
Cancer site	Author (year)	period	Type and source	Definition	No. of cases	No. of controls	(95% CI)	considered	
Lung	Exposure to smo	oking at hor	ne, Incidence						
	Jee SH et al. (1999) [40]	1992-1997	Korea Medical Insurance Corporation (KMIC)	Cohort 157,436 non-smoking wives 40 ≤ age ≤83	75)	1.63 (1.01-2.63)	Adjusted for the age of husbands and wives, socioeconomic status, residency, husband's vegetable consumption, and husband's occupation.	
	Kurahashi N et al. (2008) [42]	1990-1993	Japan Health Center-based Prospective study (JPHC Study)	Prospective cohort 28,414 non-smoking 40 ≤ age ≤69	109	9	1.24 (0.85-1.81)	Adjusted for age, study area, alcohol consumption, family history of lung cancer and menopausal status.	
	Wen W et al. (2006) [56]	1997-2002	Shanghai Women's Health Study (SWHS)	Prospective cohort 72,829 non-smoking women	106	5	1.09 (0.74-1.61)	Adjusted for education, occupation, family income, physical activity, body mass index, and intake of meat, vegetables, and fruit.	
	Nishino Y et al. (2001) [49]	1984-1992	Population-based	Prospective cohort 9,675 lifelong nonsmoking women	24	4	1.9 (0.81-4.4)	Adjusted for age	
	Lee CH et al. (2000) [44]	1992-1998	Hospital-based	Cases: non-smoking female lung cancer patients Controls: non-smoking women at the same hospital with conditions unrelated to tobacco use	268	3 44	5 2.2 (1.5-3.3)	Matched for age. Adjusted for residential area, education, occupation, tuberculosis, cooking fuels and fume extractor.	
	Zhong L et al. (1999) [58]	1992-1994	Population-based Shanghai Residential Registry	Cases: non-smoker diagnosed with primary lung cancer Controls: non-smoker selected randomly from the Shanghai Residential Registry	504	4 60 [.]	1.1 (0.8-1.5)	Adjusted for age, income, intake of vitamin C, respondent status, smokiness of the kitchen during cooking, family history of lung cancer, and potentially high-risk occupations.	

Supplementary Table 4. Studies included in the meta-analysis for passive smoking in women

		Study	Study subjects				OR	Confounding variables considered Adjusted for age, residence and religion. Matched for age, sex Adjusted for education, occupation, and living area
Cancer site	Author (year)	period	Type and source	Definition	No. of cases	No. of controls	(95% CI)	Confounding variables considered
Lung	Exposure to smo	king at hor	ne, Incidence					
	Rapiti E et al. (1999) [50]	1991- 1992	Hospital-based	Cases: non-smoker with newly diagnosed primary lung cancers Controls: non-smoker among patients admitted to the hospital and the patient's visitors	41	67	1.2 (0.5-2.9)	
	Wu-Williams AH et al. (1990) [57]	1985- 1987	Cancer registries with community control	Cases: non-smoker with newly diagnosed primary lung cancers in cancer registries of Harbin and Shenyang Controls: non-smoker with randomly selected from the general populations of Harbin and Shenyang $50 \le age$	417	602	0.79 (0.61-1.02)	
	Wang TJ et al. (1996) [55]	1992- 1994	Hospital-based with community control	Cases: non-smoker with newly diagnosed of primary lung cancer in 18 hospitals of Shenyang Controls: non-smoker with randomly selected from the general population located in urban areas of Shenyang	135	135	1.11 (0.65-1.88)	Matched for age, sex
	Liu Q et al. (1993) [46]	1983- 1984	Hospital-based	Cases: newly diagnosed cases of primary lung cancer from 8 hospitals Controls: individually matched hospital controls 40 ≤ age ≤70	38	69	1.49 (0.37-5.97)	

Supplementary Table 4. Studies included in the meta-analysis for passive smoking in women (continued)

	Author (voor)	Study .	Study subjects				OR	Confounding variables	
Cancer site	Author (year)	period	Type and source	Definition	No. of cases	No. of controls	(95% CI)	considered	
Lung	Exposure to smo	king at hom	e, Incidence						
	Akiba S et al. (1986) [37]	1971-1980	Radiation Effects Research Foundation (RERF)	Cases: non-smoker with newly diagnosed cases of primary lung cancer among cohort members Controls: non-smoker among cohort members without lung cancer	94	270	1.51 (0.85-2.77)	Matched for year of birth, city of residence, sex, and whether or not they were among the 20% of the cohort participating in the program of biennial medical examinations given at RERF, and vital status.	
	Hirayama T (1984) [39]	1965-1981	Census- population-based	Prospective cohort 91,540 nonsmoking wives	200		1.59 (1.24-2.05)	Adjusted for age	
	Lam TH et al. (1987) [43]	1983-1986	Hospital-based	Cases: non-smoking lung cancer patients Controls: non-smoking healthy neighborhood controls matched for age	199	335	1.65 (1.16-2.35)	Matched for age	
	Liu ZY et al. (1991) [47]		Population-based	Cases: newly-diagnosed lung cancer patients Controls:	110 (total)	426 (total)	0.77 (0.30-1.96)	Matched for age, sex, occupation, and village of residence	
	Fang J et al. (2006) [38]	2001-2004	Hospital-based	Cases: no-smoking female patients with the primary lung cancer from hospitals in Beijing, Shanghai and Chengdu Controls: one hospital control and one population control			1.77 (1.07-2.92)	Matched for age, sex and no- smoking. Adjusted for consumption of internal organ, consumption of vegetables, taking vitamins often, average month income, and the first procreation age	
	Wang L et al. (2000) [53]	1994-1998	Hospital-based with community control	Cases: diagnosed lung cancer among never- smokers Controls: randomly selected from 1990 census lists	200	407	1.15 (0.6-2.1)	Frequency matched for age, sex, and prefecture of current residence	

Supplementary Table 4. Studies included in the meta-analysis for passive smoking in women (continued)

		Study	Study subjects						OR	Confounding variables considered Matched hospital, age, date of admission Adjusted for age, number of live births, schooling, years since exposure to cigarette smoke ceased in the home or workplace Matched for sex, age, year of death, and residence Adjusted for age, education	
Cancer site	Author (year)	period	Type and source	Definition	No. of cases		No. of controls		(95% CI)		
Lung	Exposure to smo	oking at hon	ne, Incidence								
	Shimizu H et al. (1988) [51]	1982-1985	Hospital-based	Cases: nonsmoking lung cancer patients Controls: in-patients other than those with lung cancer 30 ≤ age		90		163	1.08 (0.64-1.82)		
	Koo et al. (1987) [41]	1981-1983	Hospital-based with community control	Cases: never-smoked female lung cancer patients Controls: never-smoked district controls		86		136	1.64 (0.87-3.09)	births, schooling, years since exposure to cigarette smoke ceased in the home or	
	Exposure to smoking at home, Mortality										
	Lei YX et al. (1996) [45]	1986	Population-based	Cases: lung cancer deaths in non-smoker Controls: non-tumor deaths in non-smoker		75		128	1.19 (0.66-2.16)		
	McGhee SM et al. (2005) [48]	1998	Death registries	Cases: deaths from lung cancer among never smoker Controls: deaths among never smoking without lung cancer		179		345	1.38 (0.94-2.04)	Adjusted for age, education	

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•		Study	Study subjects					OR	Confounding variables	
Cancer site	Author (year)	period	Type and source	Definition	No. of cases	No. of controls		(95% CI)	considered	
Lung	Exposure to smo	king at wor	kplace, Incidence							
	Kurahashi N et al. (2008) [42]	1990-1993	Japan Health Center-based Prospective study (JPHC Study)	Prospective cohort 28,414 non-smoking	1	09		1.32 (0.85-2.04)	Adjusted for age, study area, alcohol consumption, family history of lung cancer and menopausal status.	
	Wen W et al. (2006) [56]	1997-2002	Shanghai Women's Health Study (SWHS)	Prospective cohort 72,829 non-smoking women	1	06		1.79 (1.09-2.93)	Adjusted for education, occupation, family income, physical activity, body mass index, and intake of meat, vegetables, and fruit.	
	Lee CH et al. (2000) [44]	1992-1998	Hospital-based	Cases: non-smoking female lung cancer patients Controls: non-smoking women at the same hospital with conditions unrelated to tobacco use	2	68	445	1.2 (0.5-2.4)	Matched for age. Adjusted for residential area, education, occupation, tuberculosis, cooking fuels and fume extractor.	
	Zhong L et al. (1999) [58]	1992-1994	Population-based Shanghai Residential Registry	Cases: non-smoking women diagnosed with primary lung cancer Controls: non-smoking women selected randomly from the Shanghai Residential Registry	5	04	601	1.7 (1.3-2.3)	Adjusted for age, income, intake of vitamin C, respondent status, smokiness of the kitchen during cooking, family history of lung cancer, potentially high-risk occupations, and domestic exposure to environmental tobacco smoke.	
	Wu-Williams AH et al. (1990) [57]	1985-1987	Cancer registries with community control	Cases: non-smoker with newly diagnosed primary lung cancers in cancer registries of Harbin and Shenyang Controls: non-smoker with randomly selected from the general populations of Harbin and Shenyang	4	15	602	1.21 (0.94-1.58)		

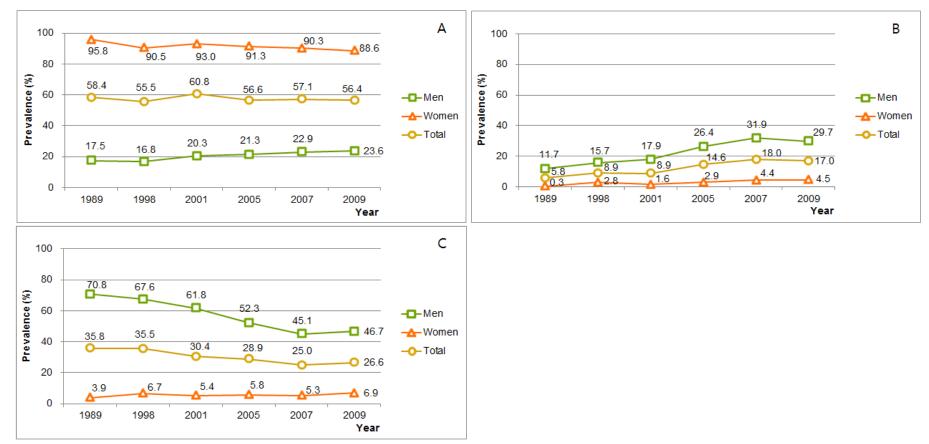
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		Study	Study subjects						OR	Confounding variables considered Matched for age, sex
Cancer site	Author (year)	thor (year) period		Definition	No. of cases		No. of controls		(95% CI)	
Lung	Exposure to smo	oking at worl	kplace, Incidence							
	Wang TJ et al. (1996) [55]	1992-1994	Hospital-based with community control	Cases: nonsmoker with newly diagnosed of primary lung cancer in 18 hospitals of Shenyang Controls: non-smoker with randomly selected from the general population located in urban areas of Shenyang		135		135	0.89 (0.45-1.77)	Matched for age, sex
	Shimizu H et al. (1988) [51]	1982-1985	Hospital-based	Cases: nonsmoking lung cancer patients Controls: in-patients other than those with lung cancer		90		163	1.20 (0.70-2.04)	Matched hospital, age, date of admission

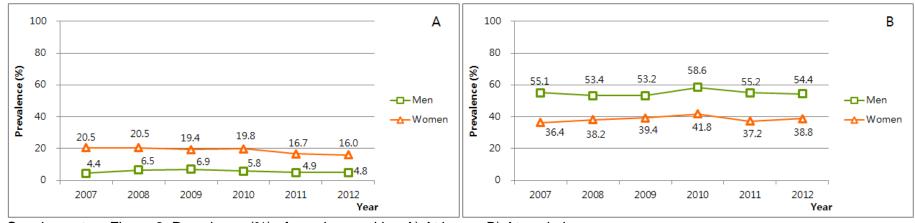
Supplementary Table 4. Studies included in the meta-analysis for passive smoking in women (continued)

Supplementary Table 5. Estimation of cancer incident cases and deaths attributable to passive smoking among non-smokers

	<u> </u>	Lung ca		Lung cancer mortality	
		Men	Women	Men	Women
	Prevalence of tobacco smoking				
	% Current smokers	70.8	3.9	70.8	3.9
	% Former smokers	11.7	0.3	11.7	0.3
(A)	% Never-smokers	17.5	95.8	17.5	95.8
	AF estimate for secondhand smoking among never-smokers				
	Exposure to smoking at home				
	% Never-smokers exposed to smoking at home	14.8	60.1	14.8	60.1
	RR for lung cancer	1.00	1.32	1.34	1.32
(B)	PAF (%)	0.0	16.3	4.8	16.1
	Exposure to smoking at workplace				
	% Never-smokers exposed to smoking at workplace	42.2	14.7	42.2	14.7
	RR for lung cancer	1.15	1.37	1.15	1.37
(C)	PAF (%)	5.9	5.2	5.9	5.2
	Exposure to smoking at home or workplace				
(D)	PAF (%), (D)=(B)+(C)-(B)*(C)	5.9	20.7	10.5	20.5
	Number of cases attributable to secondhand smoking				
(E)	Total number of lung cancer cases in 2009	13,580	5,298	10,892	4,025
(F)	Lung cancer cases in smokers attributable to smoking	7,244	278	7,783	327
(G)	Lung cancer cases not attributable to smoking, (G)=(E)-(F)	6,336	5,020	3,109	3,698
(H)	Lung cancer cases among never-smokers, (H)=(G)*(A)/100	1,109	4,809	544	3,543
(I)	Lung cancer cases attributable to secondhand smoking at home, (I)=(H)*(B)/100	0	783	26	571
(J)	Lung cancer cases attributable to secondhand smoking at workplace,	66	251	32	185
(K)	$(J)=(H)^{*}(C)/100$ Lung cancer cases attributable to secondhand smoking at home or workplace, $(K)=(H)^{*}(D)/100$	66	994	57	726
(L)	Total number of all cancer cases in 2009	96,826	91,068	43,658	25,773
()					
	Exposure to smoking at home				
	% of lung cancer, (I)/(E) *100	0.0	14.8	0.2	14.2
	% of all cancers, (I)/(L) *100	0.0	0.9	0.1	2.2
	Exposure to smoking at workplace				
	% of lung cancer, (J)/(E) *100	0.5	4.7	0.3	4.6
	% of all cancers, (J)/(L) *100	0.1	0.3	0.1	0.7
	Exposure to smoking at home or workplace				
	% of lung cancer, (K)/(E) *100	0.5	18.8	0.5	18.0
	% of all cancers, (K)/(L) *100	0.1	1.1	0.1	2.8



Supplementary Figure 1. Prevalence (%) of tobacco smoking. A) Never smoker, B) Former smoker, C) Current smoker

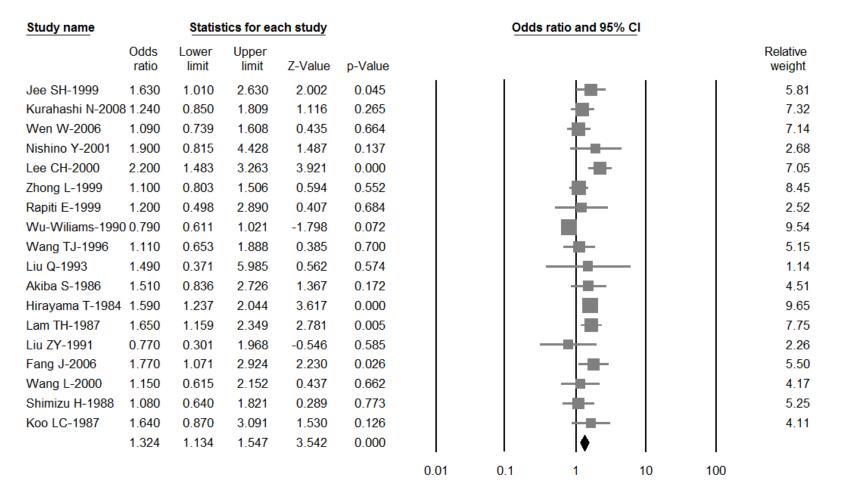


Supplementary Figure 2. Prevalence (%) of passive smoking A) At home, B) At workplace

Study name		Statis	tics for ea	ch study		Odds ratio and 95% Cl						
	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						Relative weight	
Tse LA-2009	0.900	0.572	1.415	-0.456	0.648						76.78	
Akiba S-1986	2.100	0.389	11.343	0.862	0.389						5.53	
Wang L-2000	1.220	0.475	3.134	0.413	0.679						17.69	
	0.995	0.669	1.480	-0.023	0.982			-				
						0.01	0.1	1	10	100		

<u>Footnote</u> Heterogeneity: χ^2 = 1.12 (d.f. = 2) p = 0.571; I² = 0.0%; Fixed effect estimate was selected.

Supplementary Figure 3. Meta-analysis on passive smoking at home and lung cancer incidence in men.



Footnote

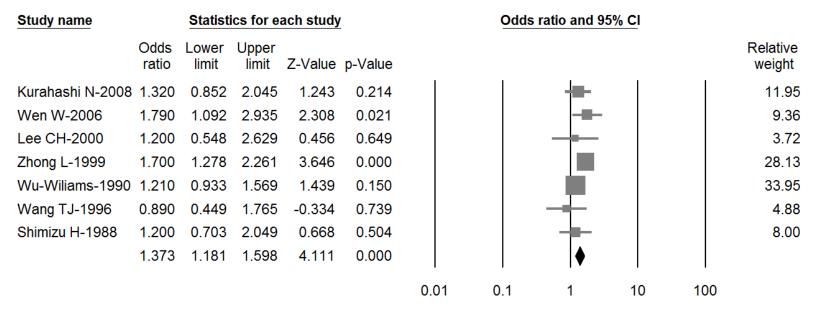
Heterogeneity: $\chi^2 = 33.50$ (d.f. = 17) p = 0.010; l² = 49.2%; Random effect estimate was selected.

Supplementary Figure 4. Meta-analysis on passive smoking at home and lung cancer incidence in women.

Study name		Statisti	cs for e	ach stud	<u>y</u>		Odds	ratio and 95			
	Odds ratio	Lower limit	Upper limit	Z-Value	p-Value						Relative weight
Lei YX-1996 Mcghee SM-2005	1.190 1.380 1.320	0.937	2.153 2.033 1.826	0.575 1.629 1.678	0.565 0.103 0.093	0.01	0.1		10	100	29.93 70.07

<u>Footnote</u> Heterogeneity: $\chi^2 = 0.17$ (d.f. = 1) p = 0.682; l² = 0.0%; Fixed effect estimate was selected.

Supplementary Figure 5. Meta-analysis on passive smoking at home and lung cancer mortality in women.



Footnote

Heterogeneity: $\chi^2 = 6.10$ (d.f. = 6) p = 0.412; l² = 1.6 %; Fixed effect estimate was selected.

Supplementary Figure 6. Meta-analysis on passive smoking at workplace and lung cancer incidence in women.