Appendix 16

Fuller details of the analyses relating lung cancer risk to the number of cigarettes smoked by the husband – adjusted for different confounders and corrected for misclassification

APPENDIX 16

ETS and Lung Cancer - Meta-Analysis of Dose Response Exposure (or nearest equivalent), 08-SEP-06

Female (Husband's smoking) - Number cigarettes smoked

CORRECTED FOR NO CONFOUNDERS (BACK CORRECTED FOR FRUIT, VEG, FAT, EDUCATION) AND MISCLASSIFICATION

RANDOM-EFFECTS META-ANALYSES

Confounder Differences based on Weighted Regression

Misclassification: Additive, Concordance: 3.0, MissP: US:0.025, EU:0.025, ASIA:0.1

Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	61.9865	(66)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0387	0.0206	(+)	1.0394	0.9983	1.0822

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	35.9205	(36)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0059	0.0186	N.S.	1.0059	0.9699	1.0432

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	23.6538	(29)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0851	0.0385	+	1.0888	1.0096	1.1742

CORRECTED FOR FRUIT AND MISCLASSIFICATION

RANDOM-EFFECTS META-ANALYSES

	Deviance	(DF)				
Model 1	61.9212	(66)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0541	0.0205	+	1.0556	1.0140	1.0989

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	35.9748	(36)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0200	0.0184	N.S.	1.0202	0.9840	1.0577

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	23.6088	(29)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.1015	0.0383	+	1.1068	1.0268	1.1930

ALL STUDIES
EXPOSURE GROUPS BASED ON ISSNZ, MODIFIED FOR USA, EXPOSURE IN 10 CIGS/DAY
GENG DATA REPLACED WITH PNL ESTIMATES
WEIGHT ON (1/se*se), Variance set at 1

APPENDIX 16

ETS and Lung Cancer - Meta-Analysis of Dose Response Exposure (or nearest equivalent), 08-SEP-06

Female (Husband's smoking) - Number cigarettes smoked

CORRECTED FOR VEGETABLES AND MISCLASSIFICATION
RANDOM-EFFECTS META-ANALYSES
Confounder Differences based on Weighted Regression
Misclassification: Additive, Concordance: 3.0, MissP: US:0.025, EU:0.025, ASIA:0.1

Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	61.9275	(66)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0560	0.0205	++	1.0576	1.0160	1.1009

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	35.8843	(36)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0217	0.0184	N.S.	1.0219	0.9857	1.0595

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	23.6125	(29)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.1035	0.0382	+	1.1090	1.0290	1.1954

CORRECTED FOR DIETARY FAT AND MISCLASSIFICATION
RANDOM-EFFECTS META-ANALYSES

	Deviance	(DF)				
Model 1	61.9243	(66)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0462	0.0206	+	1.0473	1.0059	1.0904

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	35.9042	(36)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0128	0.0186	N.S.	1.0129	0.9766	1.0505

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)				
Model 1	23.6216	(29)				
	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0930	0.0384	+	1.0974	1.0179	1.1832

ALL STUDIES
EXPOSURE GROUPS BASED ON ISSNZ, MODIFIED FOR USA, EXPOSURE IN 10 CIGS/DAY
GENG DATA REPLACED WITH PNL ESTIMATES
WEIGHT ON (1/se*se), Variance set at 1

APPENDIX 16

ETS and Lung Cancer - Meta-Analysis of Dose Response Exposure (or nearest equivalent), 08-SEP-06

Female (Husband's smoking) - Number cigarettes smoked

CORRECTED FOR YEARS OF EDUCATION AND MISCLASSIFICATION
RANDOM-EFFECTS META-ANALYSES
Confounder Differences based on Weighted Regression
Misclassification: Additive, Concordance: 3.0, MissP: US:0.025, EU:0.025, ASIA:0.1

Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	61.9724	(66)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0343	0.0208	N.S.	1.0349	0.9937	1.0779

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	35.6723	(36)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0020	0.0191	N.S.	1.0021	0.9652	1.0403

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	23.6647	(29)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0804	0.0388	+	1.0837	1.0044	1.1692

CORRECTED FOR TEA AND MISCLASSIFICATION
RANDOM-EFFECTS META-ANALYSES

	Deviance	(DF)
Model 1	61.9061	(66)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0486	0.0205	+	1.0498	1.0085	1.0929

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	35.9790	(36)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0150	0.0184	N.S.	1.0151	0.9791	1.0525

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	23.6183	(29)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0955	0.0383	+	1.1002	1.0207	1.1859

ALL STUDIES
EXPOSURE GROUPS BASED ON ISSNZ, MODIFIED FOR USA, EXPOSURE IN 10 CIGS/DAY
GENG DATA REPLACED WITH PNL ESTIMATES
WEIGHT ON (1/se*se), Variance set at 1

APPENDIX 16

ETS and Lung Cancer - Meta-Analysis of Dose Response Exposure (or nearest equivalent), 08-SEP-06

Female (Husband's smoking) - Number cigarettes smoked

CORRECTED FOR ALL CONFOUNDERS (FRUIT, VEG, FAT, EDUCATION, TEA) AND MISCLASSIFICATION
RANDOM-EFFECTS META-ANALYSES
Confounder Differences based on Weighted Regression
Misclassification: Additive, Concordance: 3.0, MissP: US:0.025, EU:0.025, ASIA:0.1

Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	61.8920	(66)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0053	0.0209	N.S.	1.0054	0.9650	1.0474

SEPARATE RANDOM-EFFECTS META-ANALYSES BY REGION

NORTH AMERICA AND EUROPE
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	35.4644	(36)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	-0.0243	0.0196	N.S.	0.9760	0.9392	1.0143

ASIA
Dose Response (Beta)
WEIGHTED on Beta Weights

	Deviance	(DF)
Model 1	23.6828	(29)

	Estimate	S.E.	P	RR	95%CIl	95%CIu
Constant	0.0490	0.0391	N.S.	1.0502	0.9728	1.1337

ALL STUDIES
EXPOSURE GROUPS BASED ON ISSNZ, MODIFIED FOR USA, EXPOSURE IN 10 CIGS/DAY
GENG DATA REPLACED WITH PNL ESTIMATES
WEIGHT ON (1/se*se), Variance set at 1