

Appendix Table B1 -

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose Lifetime Asthma

This analysis is restricted to results for:

- 1) Lifetime asthma
- 2) Biochemical, total, household (overall), or parental exposure
- 3) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 4) Results for low amount of exposure
- 5) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 6) EXPOS : biochemical, total, household, parent
 - 7) BIOMEA : saliva, blood, urine
 - 8) MEASEX : number of cigarettes, number of persons, other
 - 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
 - 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
 - 11) UNEXSO : not specific parent, neither parent, none in household, none
 - 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
 - 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
 - 14) RACE : all in study or nearest available, otherwise by race
 - 15) ONSET : yes, no (prevalence)
 - 16) For overlapping studies: principal rather than subsidiary studies
- Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B1 - 1

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Adjusted

REF NRR SEX AGEL AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrc EXP-time UNEXTI MEAS LO HI
CHEN2 38 b 6 17 all NAmer 1993 1996 CS 6 AnyHh NoHhMemb current non cigs 1 9	
DOLD 18 b 9 11 all Eu:Ger 1989 1992 CS 1 AnyHh NoHhMemb unspec non cigs 1 10	
ECE 4 b 6 15 all Eu:est 1999 2001 CS 0 AnyHh NoHhMemb current non cigs 1 10	
EHRLI2 6 b 3 14 all NAmer 1988 1992 CC 0 Bio-urine Low - - other 3 7	
FERGUS 16 b 0 6 all Auslia 1977 1985 Pr 1 Mother NotMothr in life non cigs 1 10	
LAM1 5 b 12 15 all As:FE 1994 1998 CS 4 AnyHh NoHhMemb unspec non persn 1 1	
LISTER 7 b 0 4 all Auslia 1989 1998 CS 8 Mother NotMothr current non cigs 1 14	
MAIER 2 b 5 9 all NAmer 1994 1997 CS 0 TotETS None current non other 1 1	
NHANE3 26 b 4 16 w+b NAmer 1988 2001 CS 6 Bio-urine Low - - other 0 3	
RATAGE 6 b 5 15 all As:cen 1996 2000 CC 0 AnyHh NoHhMemb unspec non cigs 1 9	
RONCH1 1 m 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39	
RONCH1 4 f 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39	
RONCH2 1 b 6 14 all Eu:Ita 1992 2001 CS 0 AnyHh Low current non cigs 20 39	
RONCH3 1 b 6 14 all Eu:Ita 1998 2001 CS 0 AnyHh Low current non cigs 20 39	
VENNER 4 m 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29	
VENNER 1 f 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29	

Appendix Table B1 - 2

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
CHEN2	38	b	6	8	-	61	-	1.62	(0.68- 3.85)
DOLD	18	b	1	119	-	295	-	1.13	(0.90- 1.42)
ECE	4	b	0	217	1294	132	906	1.15	(0.91- 1.45)
EHRLI2	6	b	0	19	24	19	24	1.00	(0.43- 2.34)
*FERGUS	16	b	1	24	-	87	-	0.85	(0.54- 1.34)
LAM1	5	b	4	118	-	201	-	0.89	(0.69- 1.12)
LISTER	7	b	8	-	-	-	-	1.33	(0.98- 1.81)
MAIER	2	b	0	25	102	73	674	2.26	(1.37- 3.73)
NHANE3	26	b	6	198	-	175	-	1.10	(0.70- 1.70)
RATAGE	6	b	0	20	22	58	30	0.47	(0.22- 0.99)
RONCH1	1	m	0	14	177	48	790	1.30	(0.70- 2.41)
RONCH1	4	f	0	12	170	35	764	1.54	(0.78- 3.03)
Subtotal RONCH1								1.41	(0.89- 2.22)
RONCH2	1	b	0	44	266	93	726	1.29	(0.88- 1.90)
RONCH3	1	b	0	28	240	91	696	0.89	(0.57- 1.40)
VENNER	4	m	0	179	424	48	116	1.02	(0.70- 1.49)
VENNER	1	f	0	185	429	50	130	1.12	(0.78- 1.62)
Subtotal VENNER								1.07	(0.82- 1.39)
Partial Totals				1210	3148	1466	4856		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
CHEN2	38	b	6	0.48	5.11	0.73	0.2754
DOLD	18	b	1	0.12	73.89	0.02	0.2935
ECE	4	b	0	0.14	71.12	0.09	0.2356
EHRLI2	6	b	0	0.00	5.30	0.06	1.0000
*FERGUS	16	b	1	-0.16	18.60	1.33	0.4833
LAM1	5	b	4	-0.12	65.49	3.21	0.3457
LISTER	7	b	8	0.29	40.82	1.33	0.0684
MAIER	2	b	0	0.82	15.39	7.79	0.0014
NHANE3	26	b	6	0.10	19.52	0.00	0.6737
RATAGE	6	b	0	-0.75	6.85	5.06	0.0483
RONCH1	1	m	0	0.26	10.08	0.25	0.4023
RONCH1	4	f	0	0.43	8.40	0.90	0.2103
Subtotal RONCH1				0.49	18.48	1.15	
RONCH2	1	b	0	0.26	25.90	0.59	0.1933
RONCH3	1	b	0	-0.11	19.12	0.92	0.6183
VENNER	4	m	0	0.02	26.74	0.19	0.9175
VENNER	1	f	0	0.11	28.23	0.00	0.5433
Subtotal VENNER				-0.08	54.96	0.20	

RR data

N	16
NS	14
Wt	440.55
Het Chi	22.48
Het df	15
Het P	(*)
Fixed RR	1.11
RR1	1.01
RRu	1.22
P	+
Random RR	1.12
RR1	0.99
RRu	1.27
P	(+)
Asymm P	N.S.

Appendix Table B1 - 3

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Adjusted

RR data

N	16			
NS	14			
Wt	440.55			
Het Chi	22.48			
Het df	15			
Het P	(*)			
Fixed RR	1.11			
RRl	1.01			
RRu	1.22			
P	+			
Random RR	1.12			
RRl	0.99			
RRu	1.27			
P	(+)			
Asymm P	N.S.			
<u>Sex</u>				
	both	male	female	Total
N	12	2	2	16
NS	12	2	2	16
Wt	367.10	36.82	36.62	440.55
Het Chi	21.11	0.43	0.65	22.48
Het df	11	1	1	15
Het P	*	N.S.	N.S.	(*)
Fixed RR	1.10	1.09	1.21	1.11
RRl	1.00	0.79	0.87	1.01
RRu	1.22	1.51	1.67	1.22
P	(+)	N.S.	N.S.	+
Random RR	1.11	1.09	1.21	1.12
RRl	0.95	0.79	0.87	0.99
RRu	1.30	1.51	1.67	1.27
P	N.S.	N.S.	N.S.	(+)
Between Chi				0.28
Between df				2
Between P				N.S.
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	12	1	3	16
NS	10	1	3	14
Wt	334.85	65.49	40.21	440.55
Het Chi	11.35	0.00	5.26	22.48
Het df	11	0	2	15
Het P	N.S.	N.S.	(*)	(*)
Fixed RR	1.13	0.89	1.43	1.11
RRl	1.01	0.70	1.05	1.01
RRu	1.25	1.13	1.95	1.22
P	+	N.S.	+	+
Random RR	1.12	0.89	1.41	1.12
RRl	1.01	0.70	0.82	0.99
RRu	1.25	1.13	2.40	1.27
P	+	N.S.	N.S.	(+)
Between Chi				5.86
Between df				2
Between P				(*)

Appendix Table B1 - 4

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Unadjusted

REF	NRR	X	SEX	AGEL	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrce	EXP-time	UNEXTI	MEAS	LO	HI
CHEN2	12	x	b	6	17	all	NAmer	1993	1996	CS	0	AnyHh	NoHhMemb	current	non	cigs	1	9
DOLD	14	x	b	9	11	all	Eu:Ger	1989	1992	CS	0	AnyHh	NoHhMemb	unspec	non	cigs	1	10
ECE	4		b	6	15	all	Eu:est	1999	2001	CS	0	AnyHh	NoHhMemb	current	non	cigs	1	10
EHRLI2	6		b	3	14	all	NAmer	1988	1992	CC	0	Bio-urine	Low	-	-	other	3	7
FERGUS	14	x	b	0	6	all	Auslia	1977	1985	Pr	0	Mother	NotMothr	in life	non	cigs	1	10
LAM1	1	x	b	12	15	all	As:FE	1994	1998	CS	0	AnyHh	NoHhMemb	unspec	non	persn	1	1
LISTER	5	x	b	0	4	all	Auslia	1989	1998	CS	0	Mother	NotMothr	current	non	cigs	1	14
MAIER	2		b	5	9	all	NAmer	1994	1997	CS	0	TotETS	None	current	non	other	1	1
NHANE3	35	x	b	4	16	w+b	NAmer	1988	2001	CS	0	Bio-urine	Low	-	-	other	0	3
RATAGE	6		b	5	15	all	As:cen	1996	2000	CC	0	AnyHh	NoHhMemb	unspec	non	cigs	1	9
RONCH1	1		m	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	20	39
RONCH1	4		f	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	20	39
RONCH2	1		b	6	14	all	Eu:Ita	1992	2001	CS	0	AnyHh	Low	current	non	cigs	20	39
RONCH3	1		b	6	14	all	Eu:Ita	1998	2001	CS	0	AnyHh	Low	current	non	cigs	20	39
VENNER	4		m	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	1	29
VENNER	1		f	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	1	29

Appendix Table B1 - 5

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
CHEN2	12	b	0	8	89	61	548	0.81	(0.37- 1.74)
DOLD	14	b	0	119	1248	295	3613	1.17	(0.93- 1.46)
ECE	4	b	0	217	1294	132	906	1.15	(0.91- 1.45)
EHRLI2	6	b	0	19	24	19	24	1.00	(0.43- 2.34)
*FERGUS	14	b	0	24	188	87	639	0.94	(0.62- 1.43)
LAM1	1	b	0	118	1461	201	2162	0.87	(0.69- 1.10)
LISTER	5	b	0	-	-	-	-	1.26	(0.95- 1.68)
MAIER	2	b	0	25	102	73	674	2.26	(1.37- 3.73)
NHANE3	35	b	0	198	1729	175	1457	0.95	(0.77- 1.18)
RATAGE	6	b	0	20	22	58	30	0.47	(0.22- 0.99)
RONCH1	1	m	0	14	177	48	790	1.30	(0.70- 2.41)
RONCH1	4	f	0	12	170	35	764	1.54	(0.78- 3.03)
Subtotal RONCH1								1.41	(0.89- 2.22)
RONCH2	1	b	0	44	266	93	726	1.29	(0.88- 1.90)
RONCH3	1	b	0	28	240	91	696	0.89	(0.57- 1.40)
VENNER	4	m	0	179	424	48	116	1.02	(0.70- 1.49)
VENNER	1	f	0	185	429	50	130	1.12	(0.78- 1.62)
Subtotal VENNER								1.07	(0.82- 1.39)
Partial Totals				1210	7863	1466	13275		
*prospective study									

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
CHEN2	12	b	0	-0.21	6.47	0.54	0.5864
DOLD	14	b	0	0.16	77.69	0.51	0.1715
ECE	4	b	0	0.14	71.12	0.32	0.2356
EHRLI2	6	b	0	0.00	5.30	0.03	1.0000
*FERGUS	14	b	0	-0.06	21.61	0.41	0.7647
LAM1	1	b	0	-0.14	68.51	3.15	0.2442
LISTER	5	b	0	0.23	47.28	1.17	0.1120
MAIER	2	b	0	0.82	15.39	8.49	0.0014
NHANE3	35	b	0	-0.05	83.13	1.23	0.6637
RATAGE	6	b	0	-0.75	6.85	4.70	0.0483
RONCH1	1	m	0	0.26	10.08	0.36	0.4023
RONCH1	4	f	0	0.43	8.40	1.08	0.2103
Subtotal RONCH1				0.55	18.48	1.44	
RONCH2	1	b	0	0.26	25.90	0.86	0.1933
RONCH3	1	b	0	-0.11	19.12	0.67	0.6183
VENNER	4	m	0	0.02	26.74	0.08	0.9175
VENNER	1	f	0	0.11	28.23	0.05	0.5433
Subtotal VENNER				-0.01	54.96	0.12	

RR data

N	16
NS	14
Wt	521.81
Het Chi	23.65
Het df	15
Het P	(*)
Fixed RR	1.08
RR1	0.99
RRu	1.17
P	(+)
Random RR	1.09
RR1	0.97
RRu	1.22
P	N.S.
Asymm P	N.S.

Appendix Table B1 - 6

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Unadjusted

RR data

N	16			
NS	14			
Wt	521.81			
Het Chi	23.65			
Het df	15			
Het P	(*)			
Fixed RR	1.08			
RRl	0.99			
RRu	1.17			
P	(+)			
Random RR	1.09			
RRl	0.97			
RRu	1.22			
P	N.S.			
Asymm P	N.S.			
<u>Sex</u>				
	both	male	female	Total
N	12	2	2	16
NS	12	2	2	16
Wt	448.37	36.82	36.62	521.81
Het Chi	22.03	0.43	0.65	23.65
Het df	11	1	1	15
Het P	*	N.S.	N.S.	(*)
Fixed RR	1.07	1.09	1.21	1.08
RRl	0.97	0.79	0.87	0.99
RRu	1.17	1.51	1.67	1.17
P	N.S.	N.S.	N.S.	(+)
Random RR	1.07	1.09	1.21	1.09
RRl	0.92	0.79	0.87	0.97
RRu	1.23	1.51	1.67	1.22
P	N.S.	N.S.	N.S.	N.S.
Between Chi				0.53
Between df				2
Between P				N.S.
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	12	1	3	16
NS	10	1	3	14
Wt	349.48	68.51	103.82	521.81
Het Chi	10.21	0.00	9.74	23.65
Het df	11	0	2	15
Het P	N.S.	N.S.	**	(*)
Fixed RR	1.12	0.87	1.09	1.08
RRl	1.01	0.69	0.90	0.99
RRu	1.24	1.10	1.32	1.17
P	+	N.S.	N.S.	(+)
Random RR	1.12	0.87	1.30	1.09
RRl	1.01	0.69	0.70	0.97
RRu	1.24	1.10	2.40	1.22
P	+	N.S.	N.S.	N.S.
Between Chi				3.70
Between df				2
Between P				N.S.

Appendix Table B1 - 7

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma
Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ADDOYO	AGABI1	AGABI2	ARSHAD	AZIZI	BALL	BERGMA	CALL	CHHABR	CHINN	CLARK	CSONKA	CUNNI1	DAIGLE	DEKKER	DEKOK
	DIJKST	DOTTER	EHRLI1	FAGBUL	FORSB1	FORSB2	FORSB3	FUJI	GUPTA	HABY	HJERN1	HJERN2	HOST	HUGHES	INFANT	JAAKKO
	JONES	KALYOZ	KARUNA	KNIGHT	LAU	LEE1	LEE2	LEEN	LILLJE	LINDFO	LOPEZC	MELIA	MELSM	MOHAME	MOUSSA	MUMCUO
3	NITTA	OHARA	OLIVET	PALMIE	PETERS	PIC	RIBEIR	SARRAZ	SCHMIT	SHOHAT	SOMERV	SOTOQU	STERN1	STODDA	STRACH	TARIQ
4	TOMINA	WANG	WEITZ2	WILLE1	WILLE2	YANG	ZHENG									
	CUNNI2	KAPLAN	KELLY	NYSTAD	TAYLOR	WEITZ1	XU									
5	AKCAKA	ALBA	ALDAWO	ALFRA1	ALFRA2	ANDRAE	ANNESE	BARRET	BECKET	BENER	BRABIN	BURCHF	BURR	BUTZ	CHEN1	DEBENE
	DELL	DODGE	FARBE1	FARBE2	FARBE3	FAROOQ	FIELDE	FLYNN1	FLYNN2	FORAST	GILLIL	GOLD	GOREN1	GOREN2	GOREN3	GOREN4
	GOREN5	GOREN6	GORTM1	GORTM2	GURKAN	HAJNAL	HU1	HU2	JENKIN	KALYO1	KAY	KEARNE	KENDIR	KERSHA	KIVITY	KUEHR
	KUHR	LEEDER	LEROUX	LIS	MARTIN	MCCON1	MCCON2	MCKEEV	MONTEF	MOYES1	MOYES2	MURRAY	NILSSO	OCONNE	ODDY	POKHAR
	PONSON	RASANE	RENNIE	RONMAR	ROSASV	RUDNIK	SANZOR	SCHENK	SELCUK	SENNHA	SHAMSS	SHERMA	SIGURS	SOYSET	SPIKE	SQUILL
	STANHO	STAZI	STERN2	TIMONE	TSIMOY	ULRIK	VARELA	VAVILI	VERHOE	VOLKME	WONMAF	WITHER	WOLF03	ZEIGER	ZEJDA	
	LAM2	WOLF01	WOLF02													

Appendix Table B1 - 8

Adjusted - insufficient data for metaanalysis																
REF NRR SEX AGE AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI	MEAS	LO	HI	RR SIG											
LAM2	3 b 8 13 all As:FE 1995 1999	CS 4	AnyHh	NoHhMemb	unspec	non persn	1	1	0.91	?						
WOLF01	3 b 8 8 all Eu:Ger 1977 1995	CS 7	AnyHh	NoHhMemb	current	non cigs	1	10	0.94	?						
WOLF02	3 b 10 10 all Eu:Ger 1979 1995	CS 7	AnyHh	NoHhMemb	current	non cigs	1	10	0.99	?						

Appendix Table B2 -

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose Lifetime Asthma

This analysis is restricted to results for:

- 1) Lifetime asthma
- 2) Biochemical, total, household (overall), or parental exposure
- 3) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 4) Results for high amount of exposure
- 5) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 6) EXPOS : biochemical, total, household, parent
- 7) BIOMEA : saliva, blood, urine
- 8) MEASEX : number of cigarettes, number of persons, other
- 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
- 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
- 11) UNEXSO : not specific parent, neither parent, none in household, none
- 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
- 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
- 14) RACE : all in study or nearest available, otherwise by race
- 15) ONSET : yes, no (prevalence)
- 16) For overlapping studies: principal rather than subsidiary studies

Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3
and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which
actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying
results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary),
and any results which would have been included in preference except that they had data not complete enough
for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B2 - 1

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma
Adjusted

REF	NRR	SEX	AGEL	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrc	EXP-time	UNEXTI	MEAS	LO	HI
CHEN2	39	b	6	17	all	NAmer	1993	1996	CS	6	AnyHh	NoHhMemb	current	non	cigs	10	999
DOLD	20	b	9	11	all	Eu:Ger	1989	1992	CS	1	AnyHh	NoHhMemb	unspec	non	cigs	21	999
ECE	5	b	6	15	all	Eu:est	1999	2001	CS	0	AnyHh	NoHhMemb	current	non	cigs	11	999
EHRLI2	9	b	3	14	all	NAmer	1988	1992	CC	0	Bio-urine	Low	-	-	other	36	999
FERGUS	17	b	0	6	all	Auslia	1977	1985	Pr	1	Mother	NotMothr	in life	non	cigs	11	999
LAM1	7	b	12	15	all	As:FE	1994	1998	CS	4	AnyHh	NoHhMemb	unspec	non	persn	3	999
LISTER	8	b	0	4	all	Auslia	1989	1998	CS	8	Mother	NotMothr	current	non	cigs	15	999
MAIER	3	b	5	9	all	NAmer	1994	1997	CS	0	TotETS	None	current	non	other	2	999
NHANE3	27	b	4	16	w+b	NAmer	1988	2001	CS	6	Bio-urine	Low	-	-	other	3	113
RATAGE	7	b	5	15	all	As:cen	1996	2000	CC	0	AnyHh	NoHhMemb	unspec	non	cigs	10	999
RONCH1	2	m	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	40	999
RONCH1	5	f	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	40	999
RONCH2	2	b	6	14	all	Eu:Ita	1992	2001	CS	0	AnyHh	Low	current	non	cigs	40	999
RONCH3	2	b	6	14	all	Eu:Ita	1998	2001	CS	0	AnyHh	Low	current	non	cigs	40	999
VENNER	5	m	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	30	999
VENNER	2	f	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	30	999

Appendix Table B2 - 2

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
CHEN2	39	b	6	24	-	61	-	1.72	(0.93- 3.17)
DOLD	20	b	1	23	-	295	-	1.00	(0.64- 1.57)
ECE	5	b	0	81	410	132	906	1.36	(1.00- 1.83)
EHRLI2	9	b	0	35	23	19	24	1.92	(0.86- 4.28)
*FERGUS	17	b	1	22	-	87	-	0.73	(0.45- 1.17)
LAM1	7	b	4	13	-	201	-	1.49	(0.81- 2.71)
LISTER	8	b	8	-	-	-	-	1.76	(1.30- 2.37)
MAIER	3	b	0	8	43	73	674	1.72	(0.78- 3.79)
NHANE3	27	b	6	226	-	175	-	1.30	(0.80- 2.20)
RATAGE	7	b	0	42	8	58	30	2.72	(1.13- 6.52)
RONCH1	2	m	0	9	58	48	790	2.55	(1.19- 5.46)
RONCH1	5	f	0	5	56	35	764	1.95	(0.73- 5.17)
Subtotal RONCH1								2.31	(1.27- 4.20)
RONCH2	2	b	0	16	85	93	726	1.47	(0.83- 2.61)
RONCH3	2	b	0	12	72	91	696	1.27	(0.67- 2.44)
VENNER	5	m	0	38	53	48	116	1.73	(1.01- 2.96)
VENNER	2	f	0	29	37	50	130	2.04	(1.13- 3.66)
Subtotal VENNER								1.87	(1.26- 2.77)
Partial Totals				583	845	1466	4856		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
CHEN2	39	b	6	0.54	10.22	0.25	0.0830
DOLD	20	b	1	0.00	19.08	2.83	1.0000
ECE	5	b	0	0.30	42.62	0.28	0.0468
EHRLI2	9	b	0	0.65	6.01	0.43	0.1091
*FERGUS	17	b	1	-0.31	16.83	8.25	0.1967
LAM1	7	b	4	0.40	10.54	0.00	0.1955
LISTER	8	b	8	0.57	42.61	1.38	0.0002
MAIER	3	b	0	0.54	6.12	0.15	0.1808
NHANE3	27	b	6	0.26	15.02	0.23	0.3093
RATAGE	7	b	0	1.00	5.02	1.89	0.0253
RONCH1	2	m	0	0.94	6.65	2.03	0.0156
RONCH1	5	f	0	0.67	4.04	0.32	0.1800
Subtotal RONCH1				0.83	10.68	2.35	
RONCH2	2	b	0	0.38	11.57	0.00	0.1904
RONCH3	2	b	0	0.24	9.12	0.19	0.4635
VENNER	5	m	0	0.55	13.40	0.36	0.0442
VENNER	2	f	0	0.71	11.21	1.20	0.0171
Subtotal VENNER				0.49	24.61	1.56	

RR data

N	16
NS	14
Wt	230.04
Het Chi	19.78
Het df	15
Het P	N.S.
Fixed RR	1.47
RR1	1.29
RRu	1.67
P	+++
Random RR	1.48
RR1	1.27
RRu	1.73
P	+++
Asymm P	N.S.

Appendix Table B2 - 3

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma
Adjusted

RR data

N	16			
NS	14			
Wt	230.04			
Het Chi	19.78			
Het df	15			
Het P	N.S.			
Fixed RR	1.47			
RRl	1.29			
RRu	1.67			
P	+++			
Random RR	1.48			
RRl	1.27			
RRu	1.73			
P	+++			
Asymm P	N.S.			
 <u>Sex</u>				
both		male	female	Total
N	12	2	2	16
NS	12	2	2	16
Wt	194.75	20.04	15.25	230.04
Het Chi	15.29	0.67	0.01	19.78
Het df	11	1	1	15
Het P	N.S.	N.S.	N.S.	N.S.
Fixed RR	1.39	1.97	2.01	1.47
RRl	1.21	1.27	1.22	1.29
RRu	1.60	3.05	3.33	1.67
P	+++	++	++	+++
Random RR	1.39	1.97	2.01	1.48
RRl	1.16	1.27	1.22	1.27
RRu	1.65	3.05	3.33	1.73
P	+++	++	++	+++
Between Chi				3.82
Between df				2
Between P				N.S.
 <u>Measure of exposure</u>				
cigs	12	1	3	16
persn	10	1	3	14
other				
Total				
N	12	1	3	16
NS	10	1	3	14
Wt	192.36	10.54	27.15	230.04
Het Chi	18.97	0.00	0.79	19.78
Het df	11	0	2	15
Het P	(*)	N.S.	N.S.	N.S.
Fixed RR	1.46	1.49	1.51	1.47
RRl	1.27	0.81	1.04	1.29
RRu	1.69	2.73	2.20	1.67
P	+++	N.S.	+	+++
Random RR	1.49	1.49	1.51	1.48
RRl	1.22	0.81	1.04	1.27
RRu	1.82	2.73	2.20	1.73
P	+++	N.S.	+	+++
Between Chi				0.02
Between df				2
Between P				N.S.

Appendix Table B2 - 4

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma
Unadjusted

REF NRR X SEX AGEL AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
CHEN2 13 x b 6 17 all NAmer 1993 1996 CS 0 AnyHh NoHhMemb current non cigs 10 999	
DOLD 16 x b 9 11 all Eu:Ger 1989 1992 CS 0 AnyHh NoHhMemb unspec non cigs 21 999	
ECE 5 b 6 15 all Eu:est 1999 2001 CS 0 AnyHh NoHhMemb current non cigs 11 999	
EHRLI2 9 b 3 14 all NAmer 1988 1992 CC 0 Bio-urine Low - - other 36 999	
FERGUS 15 x b 0 6 all Auslia 1977 1985 Pr 0 Mother NotMothr in life non cigs 11 999	
LAM1 3 x b 12 15 all As:FE 1994 1998 CS 0 AnyHh NoHhMemb unspec non persn 3 999	
LISTER 6 x b 0 4 all Auslia 1989 1998 CS 0 Mother NotMothr current non cigs 15 999	
MAIER 3 b 5 9 all NAmer 1994 1997 CS 0 TotETS None current non other 2 999	
NHANE3 36 x b 4 16 w+b NAmer 1988 2001 CS 0 Bio-urine Low - - other 3 113	
RATAGE 7 b 5 15 all As:cen 1996 2000 CC 0 AnyHh NoHhMemb unspec non cigs 10 999	
RONCH1 2 m 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH1 5 f 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH2 2 b 6 14 all Eu:Ita 1992 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH3 2 b 6 14 all Eu:Ita 1998 2001 CS 0 AnyHh Low current non cigs 40 999	
VENNER 5 m 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 30 999	
VENNER 2 f 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 30 999	

Appendix Table B2 - 5

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
 Lifetime Asthma
 Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
CHEN2	13	b	0	24	162	61	548	1.33	(0.80- 2.20)
DOLD	16	b	0	23	257	295	3613	1.10	(0.70- 1.71)
ECE	5	b	0	81	410	132	906	1.36	(1.00- 1.83)
EHRLI2	9	b	0	35	23	19	24	1.92	(0.86- 4.28)
*FERGUS	15	b	0	22	205	87	639	0.79	(0.51- 1.22)
LAM1	3	b	0	13	101	201	2162	1.38	(0.76- 2.51)
LISTER	6	b	0	-	-	-	-	1.75	(1.33- 2.29)
MAIER	3	b	0	8	43	73	674	1.72	(0.78- 3.79)
NHANE3	36	b	0	226	1615	175	1457	1.17	(0.94- 1.44)
RATAGE	7	b	0	42	8	58	30	2.72	(1.13- 6.52)
RONCH1	2	m	0	9	58	48	790	2.55	(1.19- 5.46)
RONCH1	5	f	0	5	56	35	764	1.95	(0.73- 5.17)
Subtotal RONCH1								2.31	(1.27- 4.20)
RONCH2	2	b	0	16	85	93	726	1.47	(0.83- 2.61)
RONCH3	2	b	0	12	72	91	696	1.27	(0.67- 2.44)
VENNER	5	m	0	38	53	48	116	1.73	(1.01- 2.96)
VENNER	2	f	0	29	37	50	130	2.04	(1.13- 3.66)
Subtotal VENNER								1.87	(1.26- 2.77)
Partial Totals				583	3185	1466	13275		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
CHEN2	13	b	0	0.29	15.14	0.02	0.2660
DOLD	16	b	0	0.09	19.59	1.05	0.6847
ECE	5	b	0	0.30	42.62	0.01	0.0468
EHRLI2	9	b	0	0.65	6.01	0.66	0.1091
*FERGUS	15	b	0	-0.24	19.80	6.23	0.2896
LAM1	3	b	0	0.33	10.84	0.00	0.2842
LISTER	6	b	0	0.56	52.04	2.91	0.0001
MAIER	3	b	0	0.54	6.12	0.29	0.1808
NHANE3	36	b	0	0.15	87.38	2.54	0.1532
RATAGE	7	b	0	1.00	5.02	2.29	0.0253
RONCH1	2	m	0	0.94	6.65	2.51	0.0156
RONCH1	5	f	0	0.67	4.04	0.48	0.1800
Subtotal RONCH1				0.96	10.68	2.99	
RONCH2	2	b	0	0.38	11.57	0.04	0.1904
RONCH3	2	b	0	0.24	9.12	0.06	0.4635
VENNER	5	m	0	0.55	13.40	0.69	0.0442
VENNER	2	f	0	0.71	11.21	1.69	0.0171
Subtotal VENNER				0.62	24.61	2.38	

RR data

N	16
NS	14

Wt	320.54
Het Chi	21.47
Het df	15
Het P	N.S.
Fixed RR	1.38
RR1	1.24
RRu	1.54
P	+++
Random RR	1.43
RR1	1.23
RRu	1.65
P	+++
Asymm P	(*)

Appendix Table B2 - 6

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma
Unadjusted

RR data

N	16			
NS	14			
Wt	320.54			
Het Chi	21.47			
Het df	15			
Het P	N.S.			
Fixed RR	1.38			
RRl	1.24			
RRu	1.54			
P	+++			
Random RR	1.43			
RRl	1.23			
RRu	1.65			
P	+++			
Asymm P	(*)			
<u>Sex</u>				
	both	male	female	Total
N	12	2	2	16
NS	12	2	2	16
Wt	285.25	20.04	15.25	320.54
Het Chi	15.52	0.67	0.01	21.47
Het df	11	1	1	15
Het P	N.S.	N.S.	N.S.	N.S.
Fixed RR	1.32	1.97	2.01	1.38
RRl	1.18	1.27	1.22	1.24
RRu	1.48	3.05	3.33	1.54
P	+++	++	++	+++
Random RR	1.34	1.97	2.01	1.43
RRl	1.15	1.27	1.22	1.23
RRu	1.56	3.05	3.33	1.65
P	+++	++	++	+++
Between Chi				5.28
Between df				2
Between P				(*)
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	12	1	3	16
NS	10	1	3	14
Wt	210.19	10.84	99.51	320.54
Het Chi	17.36	0.00	2.14	21.47
Het df	11	0	2	15
Het P	(*)	N.S.	N.S.	N.S.
Fixed RR	1.46	1.38	1.23	1.38
RRl	1.27	0.76	1.01	1.24
RRu	1.67	2.51	1.50	1.54
P	+++	N.S.	+	+++
Random RR	1.47	1.38	1.26	1.43
RRl	1.22	0.76	0.99	1.23
RRu	1.76	2.51	1.59	1.65
P	+++	N.S.	(+)	+++
Between Chi				1.98
Between df				2
Between P				N.S.

Appendix Table B2 - 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	ADDOYO AGABI1 AGABI2 ARSHAD AZIZI BALL BERGMA CALL CHHABR CHINN CLARK CSONKA CUNNI1 DAIGLE DEKKER DEKOK DIJKST DOTTER EHLRI1 FAGBUL FORSB1 FORSB2 FORSB3 FUJI GUPTA HABY HJERN1 HJERN2 HOST HUGHES INFANT JAAKKO JONES KALYOZ KARUNA KNIGHT LAU LEE1 LEE2 LEEN LILLJE LINDFO LOPEZC MELIA MELSON MOHAME MOUSSA MUMCUO NITTA OHARA OLIVET PALMIE PETERS PIC RIBEIR SARRAZ SCHMIT SHOHAT SOMERV SOTOQU STERN1 STODDA STRACH TARIQ TOMINA WANG WEITZ2 WILLE1 WILLE2 YANG ZHENG															
3	CUNNI2 KAPLAN KELLY NYSTAD TAYLOR WEITZ1 XU															
4	AKCAKA ALBA ALDAWO ALFRA1 ALFRA2 ANDRAE ANNESI BARRET BECKET BENER BRABIN BURCHF BURR BUTZ CHEN1 DEBENE DELL DODGE FARBE1 FARBE2 FARBE3 FAROOQ FIELDE FLYNN1 FLYNN2 FORAST GILLIL GOLD GOREN1 GOREN2 GOREN3 GOREN4 GOREN5 GOREN6 GORTM1 GORTM2 GURKAN HAJNAL HU1 HU2 JENKIN KALYO1 KAY KEARNE KENDIR KERSHA KIVITY KUEHR KUHR LEEDER LEROUX LIS MARTIN MCCON1 MCCON2 MCKEEV MONTEF MOYES1 MOYES2 MURRAY NILSSO OCONNE ODDY POKHAR PONSON RASANE RENNIE RONMAR ROSAV RUDNIK SANZOR SCHENK SELCUK SENNHA SHAMSS SHERMA SIGURS SOYSET SPIKE SQUILL STANHO STAIZI STERN2 TIMONE TSIMOV ULRIK VARELA VAVILI VERHOE VOLKME VONMAF WITHER WOLFO3 ZEIGER ZEJDA															
5	LAM2 WOLF01 WOLF02															

Appendix Table B2 - 8

Adjusted - insufficient data for metaanalysis

REF NRR SEX AGE AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI	RR SIG
LAM2 5 b 8 13 all As:FE 1995 1999 CS 4 AnyHh NoHhMemb unspec non persn 3 999	0.71 ?	
WOLF01 5 b 8 8 all Eu:Ger 1977 1995 CS 7 AnyHh NoHhMemb current non cigs 21 999	0.40 ?	
WOLF02 5 b 10 10 all Eu:Ger 1979 1995 CS 7 AnyHh NoHhMemb current non cigs 21 999	0.63 ?	

Appendix Table B3 -

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose Current Asthma

This analysis is restricted to results for:

- 1) Current asthma
- 2) Biochemical, total, household (overall), or parental exposure
- 3) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 4) Results for low amount of exposure
- 5) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 6) EXPOS : biochemical, total, household, parent
- 7) BIOMEA : saliva, blood, urine
- 8) MEASEX : number of cigarettes, number of persons, other
- 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
- 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
- 11) UNEXSO : not specific parent, neither parent, none in household, none
- 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
- 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
- 14) RACE : all in study or nearest available, otherwise by race
- 15) For overlapping studies: principal rather than subsidiary studies, and for prospective studies, most recent follow-up

Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3
and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which
actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying
results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary),
and any results which would have been included in preference except that they had data not complete enough
for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B3 - 1

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

Current Asthma															
Adjusted															

REF NRR SEX AGEL AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
AGABI1 29 b 6 7 all Eu:Ita 1994 1999 CC 11 Mother NotMothr current non cigs 1 10	
AGABI2 29 b 13 14 all Eu:Ita 1994 1999 CC 12 Mother NotMothr current non cigs 1 10	
CHEN2 51 b 6 17 all NAmer 1993 1996 CS 1 AnyHh NoHhMemb current non cigs 1 9	
DEKKER 4 b 5 8 all NAmer 1988 1991 CC 9 AnyHh NoHhMemb unspec non persn 1 1	
GILLIL 40 b 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 1 1	
GOLD 8 b 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 1 19	
HJERN1 14 b 3 15 all Eu:Sca 1996 2001 CS 9 Mother NotMothr current non cigs 1 14	
HJERN2 14 b 3 15 all Eu:Sca 1996 2001 CS 9 Father NotFathr current non cigs 1 14	
INFANT 8 b 3 4 all NAmer 1988 1993 CC 19 Mother NotMothr in life non cigs 1 20	
LAM1 13 b 12 15 all As:FE 1994 1998 CS 4 AnyHh NoHhMemb unspec non persn 1 1	
MELSON 1 b 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 1 1	
MUMCUO 4 b 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 1 30	
NHANE3 59 b 4 16 w+b NAmer 1988 2001 CS 6 Bio-urine Low - - other 0 3	
PALMIE 1 b 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 1 19	
PETERS 4 b 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 1 1	
STRACH 7 b 13 18 all Eu:UK 1993 1995 CC 4 Mother NotMothr current non cigs 1 10	
WILLE1 12 b 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 20 29	
ZHENG 20 b 6 10 all As:FE 1999 2002 CC 6 AnyHh NoHhMemb in life non persn 1 1	

Appendix Table B3 - 2

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

		Current Asthma		Adjusted	
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REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	29	b	11	200	-	573	-	1.22	(1.03- 1.45)
AGABI2	29	b	12	233	-	816	-	1.14	(0.97- 1.33)
CHEN2	51	b	1	7	-	50	-	1.14	(0.47- 2.76)
DEKKER	4	b	9	196	-	249	-	1.40	(1.13- 1.73)
GILLIL	40	b	8	-	-	-	-	0.90	(0.60- 1.30)
GOLD	8	b	11	-	-	-	-	1.20	(0.93- 1.55)
HJERN1	14	b	9	20	-	88	-	0.92	(0.56- 1.50)
HJERN2	14	b	9	5	-	34	-	1.00	(0.43- 2.35)
INFANT	8	b	19	138	-	273	-	1.16	(0.77- 1.76)
LAM1	13	b	4	13	-	35	-	0.48	(0.25- 0.93)
MELSON	1	b	0	35	51	44	49	0.76	(0.42- 1.38)
MUMCUO	4	b	0	74	46	119	38	0.51	(0.31- 0.86)
NHANE3	59	b	6	139	-	126	-	1.10	(0.60- 1.90)
PALMIE	1	b	0	90	133	67	96	0.97	(0.64- 1.46)
PETERS	4	b	6	-	-	-	-	0.76	(0.55- 1.07)
STRACH	7	b	4	82	-	364	-	1.13	(0.73- 1.74)
WILLE1	12	b	0	11	6	30	67	4.09	(1.39- 12.10)
ZHENG	20	b	6	126	-	118	-	1.30	(1.00- 1.80)
Partial Totals				1369	236	2986	250		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	29	b	11	0.20	131.37	0.97	0.0227
AGABI2	29	b	12	0.13	154.23	0.05	0.1037
CHEN2	51	b	1	0.13	4.90	0.00	0.7717
DEKKER	4	b	9	0.34	84.71	4.23	0.0020
GILLIL	40	b	8	-0.11	25.70	1.22	0.5932
GOLD	8	b	11	0.18	58.89	0.28	0.1618
HJERN1	14	b	9	-0.08	15.83	0.61	0.7401
HJERN2	14	b	9	0.00	5.33	0.07	1.0000
INFANT	8	b	19	0.15	22.48	0.03	0.4816
LAM1	13	b	4	-0.73	8.90	6.39	0.0285
MELSON	1	b	0	-0.27	10.95	1.60	0.3736
MUMCUO	4	b	0	-0.67	14.29	8.67	0.0118
NHANE3	59	b	6	0.10	11.56	0.00	0.7458
PALMIE	1	b	0	-0.03	22.74	0.47	0.8829
PETERS	4	b	6	-0.27	34.69	5.21	0.1060
STRACH	7	b	4	0.12	20.37	0.00	0.5812
WILLE1	12	b	0	1.41	3.27	5.50	0.0108
ZHENG	20	b	6	0.26	44.48	0.99	0.0802

RR data

N	18
NS	18
Wt	674.70
Het Chi	36.30
Het df	17
Het P	**
Fixed RR	1.12
RR1	1.04
RRu	1.21
P	++
Random RR	1.05
RR1	0.93
RRu	1.20
P	N.S.
Asymm P	N.S.

Appendix Table B3 - 3

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

	Current Asthma
	Adjusted

RR data

N	18			
NS	18			
Wt	674.70			
Het Chi	36.30			
Het df	17			
Het P	**			
Fixed RR	1.12			
RRl	1.04			
RRu	1.21			
P	++			
Random RR	1.05			
RRl	0.93			
RRu	1.20			
P	N.S.			
Asymm P	N.S.			
<u>Sex</u>				
both		male	female	Total
N	18			18
NS	18			18
Wt	674.70			674.70
Het Chi	36.30			36.30
Het df	17			17
Het P	**			**
Fixed RR	1.12			1.12
RRl	1.04			1.04
RRu	1.21			1.21
P	++			++
Random RR	1.05			1.05
RRl	0.93			0.93
RRu	1.20			1.20
P	N.S.			N.S.
Between Chi				
Between df				
Between P				N.S.
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	10	6	2	18
NS	10	6	2	18
Wt	450.43	209.44	14.83	674.70
Het Chi	11.15	19.51	4.40	36.30
Het df	9	5	1	17
Het P	N.S.	**	*	**
Fixed RR	1.12	1.09	1.47	1.12
RRl	1.02	0.95	0.88	1.04
RRu	1.23	1.25	2.44	1.21
P	+	N.S.	N.S.	++
Random RR	1.10	0.94	1.95	1.05
RRl	0.98	0.70	0.54	0.93
RRu	1.24	1.27	7.00	1.20
P	N.S.	N.S.	N.S.	N.S.
Between Chi				1.23
Between df				2
Between P				N.S.

Appendix Table B3 - 4

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

Current Asthma																
Unadjusted																

REF	NRR	X	SEX	AGEI	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrce	EXP-time	UNEXTI	MEAS	LO	HI
AGABI1	21	x	b	6	7	all	Eu:Ita	1994	1999	CC	0	Mother	NotMothr	current	non	cigs	1	10
AGABI2	21	x	b	13	14	all	Eu:Ita	1994	1999	CC	0	Mother	NotMothr	current	non	cigs	1	10
CHEN2	25	x	b	6	17	all	NAmer	1993	1996	CS	0	AnyHh	NoHhMemb	current	non	cigs	1	9
DEKKER	1	x	b	5	8	all	NAmer	1988	1991	CC	0	AnyHh	NoHhMemb	unspec	non	persn	1	1
GILLIL	40		b	7	19	all	NAmer	1993	2001	CS	8	AnyHh	NoHhMemb	current	non	persn	1	1
GOLD	8		b	6	14	all	NAmer	1974	1993	Pr	11	Mother	NotMothr	current	non	cigs	1	19
HJERN1	6	x	b	3	15	all	Eu:Sca	1996	2001	CS	0	Mother	NotMothr	current	non	cigs	1	14
HJERN2	6	x	b	3	15	all	Eu:Sca	1996	2001	CS	0	Father	NotFathr	current	non	cigs	1	14
INFANT	1	x	b	3	4	all	NAmer	1988	1993	CC	0	Mother	NotMothr	in life	non	cigs	1	20
LAM1	9	x	b	12	15	all	As:FE	1994	1998	CS	0	AnyHh	NoHhMemb	unspec	non	persn	1	1
MELSON	1		b	11	17	all	As:cen	1997	2001	CC	0	AnyHh	NoHhMemb	unspec	non	persn	1	1
MUMCUO	4		b	3	15	all	As:ME	1986	1994	CC	0	AnyHh	NoHhMemb	unspec	non	cigs	1	30
NHANE3	47	x	b	4	16	w+b	NAmer	1988	2001	CS	0	Bio-urine	Low	-	-	other	0	3
PALMIE	1		b	1	12	all	Eu:Ita	*	1990	CC	0	AnyPar	NoParent	unspec	non	cigs	1	19
PETERS	4		b	9	14	all	As:FE	1989	1996	Pr	6	AnyHh	NoHhMemb	current	non	persn	1	1
STRACH	1	x	b	13	18	all	Eu:UK	1993	1995	CC	0	Mother	NotMothr	current	non	cigs	1	10
WILLE1	12		b	3	15	all	Eu:Sca	1988	1991	CC	0	Bio-urine	Low	-	-	other	20	29
ZHENG	8	x	b	6	10	all	As:FE	1999	2002	CC	0	AnyHh	NoHhMemb	in life	non	persn	1	1

Appendix Table B3 - 5

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

		Current Asthma	
		Unadjusted	

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	21	b	0	200	2829	573	9614	1.19	(1.00- 1.40)
AGABI2	21	b	0	233	2585	816	10166	1.12	(0.96- 1.31)
CHEN2	25	b	0	7	90	50	559	0.87	(0.38- 1.98)
DEKKER	1	b	0	196	2550	249	4585	1.42	(1.17- 1.72)
GILLIL	40	b	8	-	-	-	-	0.90	(0.60- 1.30)
GOLD	8	b	11	-	-	-	-	1.20	(0.93- 1.55)
HJERN1	6	b	0	20	363	88	1804	1.13	(0.69- 1.86)
HJERN2	6	b	0	5	108	66	1552	1.09	(0.43- 2.76)
INFANT	1	b	0	138	135	273	289	1.08	(0.81- 1.45)
LAM1	9	b	0	13	1566	35	2328	0.55	(0.29- 1.05)
MELSON	1	b	0	35	51	44	49	0.76	(0.42- 1.38)
MUMCUO	4	b	0	74	46	119	38	0.51	(0.31- 0.86)
NHANE3	47	b	0	139	1788	126	1506	0.93	(0.72- 1.19)
PALMIE	1	b	0	90	133	67	96	0.97	(0.64- 1.46)
PETERS	4	b	6	-	-	-	-	0.76	(0.55- 1.07)
STRACH	1	b	0	82	64	364	382	1.34	(0.94- 1.92)
WILLE1	12	b	0	11	6	30	67	4.09	(1.39- 12.10)
ZHENG	8	b	0	126	248	118	305	1.31	(0.97- 1.78)
Partial Totals				1369	12562	3018	33340		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	21	b	0	0.17	138.84	0.58	0.0443
AGABI2	21	b	0	0.12	166.60	0.02	0.1345
CHEN2	25	b	0	-0.14	5.69	0.34	0.7388
DEKKER	1	b	0	0.35	102.79	5.99	0.0004
GILLIL	40	b	8	-0.11	25.70	1.15	0.5932
GOLD	8	b	11	0.18	58.89	0.34	0.1618
HJERN1	6	b	0	0.12	15.46	0.00	0.6321
HJERN2	6	b	0	0.08	4.44	0.00	0.8579
INFANT	1	b	0	0.08	45.92	0.03	0.5927
LAM1	9	b	0	-0.59	9.38	4.60	0.0689
MELSON	1	b	0	-0.27	10.95	1.54	0.3736
MUMCUO	4	b	0	-0.67	14.29	8.52	0.0118
NHANE3	47	b	0	-0.07	61.15	1.97	0.5657
PALMIE	1	b	0	-0.03	22.74	0.43	0.8829
PETERS	4	b	6	-0.27	34.69	5.02	0.1060
STRACH	1	b	0	0.30	30.13	1.09	0.1041
WILLE1	12	b	0	1.41	3.27	5.56	0.0108
ZHENG	8	b	0	0.27	42.15	1.17	0.0769

RR data

N	18
NS	18
Wt	793.10
Het Chi	38.35
Het df	17
Het P	**
Fixed RR	1.11
RR1	1.04
RRu	1.19
P	++
Random RR	1.06
RR1	0.94
RRu	1.19
P	N.S.
Asymm P	N.S.

Appendix Table B3 - 6

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose

Current Asthma
Unadjusted

RR data

N	18			
NS	18			
Wt	793.10			
Het Chi	38.35			
Het df	17			
Het P	**			
Fixed RR	1.11			
RRl	1.04			
RRu	1.19			
P	++			
Random RR	1.06			
RRl	0.94			
RRu	1.19			
P	N.S.			
Asymm P	N.S.			
<u>Sex</u>				
both	male	female	Total	
N	18		18	
NS	18		18	
Wt	793.10		793.10	
Het Chi	38.35		38.35	
Het df	17		17	
Het P	**		**	
Fixed RR	1.11		1.11	
RRl	1.04		1.04	
RRu	1.19		1.19	
P	++		++	
Random RR	1.06		1.06	
RRl	0.94		0.94	
RRu	1.19		1.19	
P	N.S.		N.S.	
Between Chi				
Between df				
Between P			N.S.	
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	10	6	2	18
NS	10	6	2	18
Wt	503.00	225.68	64.42	793.10
Het Chi	11.32	19.43	6.83	38.35
Het df	9	5	1	17
Het P	N.S.	**	**	**
Fixed RR	1.12	1.12	1.00	1.11
RRl	1.03	0.99	0.78	1.04
RRu	1.22	1.28	1.28	1.19
P	+	(+)	N.S.	++
Random RR	1.11	0.96	1.77	1.06
RRl	0.99	0.72	0.42	0.94
RRu	1.24	1.29	7.47	1.19
P	(+)	N.S.	N.S.	N.S.
Between Chi			0.76	
Between df			2	
Between P			N.S.	

Appendix Table B3 - 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1	AKCAKA	ALBA	ALDAWO	ALFRA1	ALFRA2	ANDRAE	ANNESI	BARRET	BECKET	BENER	BRABIN	BURCHF	BURR	BUTZ	CHEN1	CUNNI2
	DEBENE	DELL	DODGE	DOLD	ECE	EHRLI2	FARBE1	FARBE2	FARBE3	FAROOQ	FERGUS	FLYNN1	FLYNN2	FORAST	GOREN1	GOREN2
	GOREN3	GOREN4	GOREN5	GOREN6	GORTM1	GORTM2	GURKAN	HAJNAL	JENKIN	KAPLAN	KAY	KEARNE	KELLY	KENDIR	KERSHA	KIVITY
3	KUEHR	KUHR	LEEDER	LEROUX	LIS	LISTER	MAIER	MARTIN	MCCON1	MCKEEV	MONTEF	MOYES1	MOYES2	MURRAY	NILSSO	NYSTAD
4	OCONNE	ODDY	POKHAR	PONSON	RASANE	RATAGE	RENNIE	RONCH1	RONCH2	RONCH3	ROSASV	RUDNIK	SANZOR	SCHENK	SENNHA	SHAMSS
	SHERMA	SIGURS	SOYSET	SPIEKE	SQUILL	STAZI	TAYLOR	TIMONE	TSIMOV	ULRIK	VARELA	VAVILI	VENNER	VERHOE	VOLKME	VONMAF
	WITHER	XU	ZEIGER	ZEJDA												
5	EHRLI1	OLIVET	WEITZ1	WEITZ2												
	ADDOYO	ARSHAD	AZIZI	BALL	BERGMA	CALL	CHHABR	CHINN	CLARK	CSONKA	DAIGLE	DEKOK	DIJKST	DOTTER	FAGBUL	FIELDE
	FORSB1	FORSB2	FORSB3	FUJI	GUPTA	HABY	HOST	HUI1	HU2	HUGHES	JAAKKO	JONES	KALYO1	KALYO2	KARUNA	KNIGHT
	LAU	LEE1	LEE2	LEEN	LILLJE	LINDFO	LOPEZC	MCCON2	MELIA	MOHAME	MOUSSA	NITTA	OHARA	PIC	RIBEIR	RONMAR
	SARRAZ	SCHMIT	SELCUK	SHOHAT	SOMERV	SOTOQU	STANHO	STERN1	STERN2	STODDA	TARIQ	TOMINA	WANG	WILLE2	WOLFO1	WOLFC3
	YANG															
	CUNNI1		LAM2	WOLFO2												

Appendix Table B3 - 8

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Current Asthma
Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP	Adjusted - insufficient data for metaanalysis															RR SIG
GILLIL GILLIL	1	MCCON1/GILLIL																	
HJERN1 HJERN1	1	HJERN1/HJERN2																	
HJERN2 HJERN2	1	HJERN1/HJERN2																	
REF NRR SEX AGEL AGEH RACE LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI RR SIG																			
CUNN11	7	b	8	11	all	NAmer	1988	1996	CS	9	AnyHh	NoHhMemb	current	non	cigs	1	9	1.12	?
LAM2	6	b	8	13	all	As:FE	1995	1999	CS	4	AnyHh	NoHhMemb	unspec	non	persn	1	1	0.72	?
STRACH	13	b	13	18	all	Eu:UK	1993	1995	CC	0	Mother	NotMothr	<1m	non	cigs	1	10	*	n
WOLFO2	6	b	10	10	all	Eu:Ger	1979	1995	CS	7	AnyHh	NoHhMemb	current	non	cigs	1	10	0.77	?

Appendix Table B4 -

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose Current Asthma

This analysis is restricted to results for:

- 1) Current asthma
- 2) Biochemical, total, household (overall), or parental exposure
- 3) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 4) Results for high amount of exposure
- 5) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 6) EXPOS : biochemical, total, household, parent
- 7) BIOMEA : saliva, blood, urine
- 8) MEASEX : number of cigarettes, number of persons, other
- 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
- 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
- 11) UNEXSO : not specific parent, neither parent, none in household, none
- 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
- 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
- 14) RACE : all in study or nearest available, otherwise by race
- 15) For overlapping studies: principal rather than subsidiary studies, and for prospective studies, most recent follow-up

Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3
and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which
actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying
results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary),
and any results which would have been included in preference except that they had data not complete enough
for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B4 - 1

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

Current Asthma															
Adjusted															

REF NRR SEX AGEL AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrc EXP-time UNEXTI MEAS LO HI
AGABI1 30 b 6 7 all Eu:Ita 1994 1999 CC 11 Mother NotMothr current non cigs 11 999	
AGABI2 30 b 13 14 all Eu:Ita 1994 1999 CC 12 Mother NotMothr current non cigs 11 999	
CHEN2 52 b 6 17 all NAmer 1993 1996 CS 1 AnyHh NoHhMemb current non cigs 10 999	
DEKKER 5 b 5 8 all NAmer 1988 1991 CC 9 AnyHh NoHhMemb unspec non persn 2 999	
GILLIL 41 b 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 2 999	
GOLD 10 b 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 30 999	
HJERN1 15 b 3 15 all Eu:Sca 1996 2001 CS 9 Mother NotMothr current non cigs 15 999	
HJERN2 15 b 3 15 all Eu:Sca 1996 2001 CS 9 Father NotFathr current non cigs 15 999	
INFANT 9 b 3 4 all NAmer 1988 1993 CC 19 Mother NotMothr in life non cigs 21 999	
LAM1 15 b 12 15 all As:FE 1994 1998 CS 4 AnyHh NoHhMemb unspec non persn 3 999	
MELSON 2 b 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 2 999	
MUMCUO 5 b 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 31 999	
NHANE3 60 b 4 16 w+b NAmer 1988 2001 CS 6 Bio-urine Low - - other 3 113	
PALMIE 2 b 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 20 999	
PETERS 5 b 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 2 999	
STRACH 8 b 13 18 all Eu:UK 1993 1995 CC 4 Mother NotMothr current non cigs 11 999	
WILLE1 13 b 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 30 999	
ZHENG 22 b 6 10 all As:FE 1999 2002 CC 6 AnyHh NoHhMemb in life non persn 4 999	

Appendix Table B4 - 2

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

		Current Asthma		Adjusted	
--	--	----------------	--	----------	--

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	30	b	11	150	-	573	-	1.25	(1.03- 1.51)
AGABI2	30	b	12	214	-	816	-	1.23	(1.04- 1.45)
CHEN2	52	b	1	17	-	50	-	1.15	(0.61- 2.15)
DEKKER	5	b	9	190	-	249	-	1.59	(1.28- 1.98)
GILLIL	41	b	8	-	-	-	-	1.70	(1.10- 2.50)
GOLD	10	b	11	-	-	-	-	1.07	(0.79- 1.44)
HJERN1	15	b	9	11	-	88	-	0.80	(0.43- 1.48)
HJERN2	15	b	9	7	-	66	-	0.70	(0.32- 1.53)
INFANT	9	b	19	45	-	273	-	2.77	(1.35- 5.66)
LAM1	15	b	4	5	-	35	-	2.86	(1.09- 7.49)
MELSON	2	b	0	39	24	44	49	1.81	(0.94- 3.47)
MUMCUO	5	b	0	107	16	119	38	2.14	(1.13- 4.05)
NHANE3	60	b	6	182	-	126	-	1.50	(0.80- 2.70)
PALMIE	2	b	0	145	204	67	96	1.02	(0.70- 1.49)
PETERS	5	b	6	-	-	-	-	1.22	(0.78- 1.92)
STRACH	8	b	4	40	-	364	-	1.49	(0.80- 2.77)
WILLE1	13	b	0	8	4	30	67	4.47	(1.25- 15.99)
ZHENG	22	b	6	36	-	118	-	2.60	(1.50- 4.40)
Partial Totals				1196	248	3018	250		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	30	b	11	0.22	105.00	0.51	0.0222
AGABI2	30	b	12	0.21	139.12	1.02	0.0146
CHEN2	52	b	1	0.14	9.68	0.23	0.6636
DEKKER	5	b	9	0.46	80.74	2.36	0.0000
GILLIL	41	b	8	0.53	22.80	1.29	0.0113
GOLD	10	b	11	0.07	42.63	2.16	0.6587
HJERN1	15	b	9	-0.22	10.06	2.68	0.4791
HJERN2	15	b	9	-0.36	6.28	2.65	0.3716
INFANT	9	b	19	1.02	7.48	3.94	0.0053
LAM1	15	b	4	1.05	4.14	2.38	0.0326
MELSON	2	b	0	0.59	9.05	0.82	0.0743
MUMCUO	5	b	0	0.76	9.38	2.04	0.0201
NHANE3	60	b	6	0.41	10.38	0.13	0.1913
PALMIE	2	b	0	0.02	26.92	2.03	0.9245
PETERS	5	b	6	0.20	18.94	0.17	0.3869
STRACH	8	b	4	0.40	9.96	0.11	0.2082
WILLE1	13	b	0	1.50	2.36	3.42	0.0214
ZHENG	22	b	6	0.96	13.27	5.83	0.0005

RR data

N	18
NS	18
Wt	528.20
Het Chi	33.76
Het df	17
Het P	**
Fixed RR	1.34
RR1	1.23
RRu	1.46
P	+++
Random RR	1.40
RR1	1.22
RRu	1.62
P	+++
Asymm P	N.S.

Appendix Table B4 - 3

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

Current Asthma
Adjusted

RR data

N	18			
NS	18			
Wt	528.20			
Het Chi	33.76			
Het df	17			
Het P	**			
Fixed RR	1.34			
RRl	1.23			
RRu	1.46			
P	+++			
Random RR	1.40			
RRl	1.22			
RRu	1.62			
P	+++			
Asymm P	N.S.			
		<u>Sex</u>		
	both	male	female	Total
N	18			18
NS	18			18
Wt	528.20			528.20
Het Chi	33.76			33.76
Het df	17			17
Het P	**			**
Fixed RR	1.34			1.34
RRl	1.23			1.23
RRu	1.46			1.46
P	+++			+++
Random RR	1.40			1.40
RRl	1.22			1.22
RRu	1.62			1.62
P	+++			+++
Between Chi				
Between df				
Between P				N.S.
		<u>Measure of exposure</u>		
	cigs	persn	other	Total
N	10	6	2	18
NS	10	6	2	18
Wt	366.51	148.94	12.75	528.20
Het Chi	13.81	5.92	2.29	33.76
Het df	9	5	1	17
Het P	N.S.	N.S.	N.S.	**
Fixed RR	1.21	1.66	1.84	1.34
RRl	1.10	1.42	1.06	1.23
RRu	1.35	1.95	3.18	1.46
P	+++	+++	+	+++
Random RR	1.21	1.69	2.23	1.40
RRl	1.04	1.39	0.80	1.22
RRu	1.41	2.04	6.23	1.62
P	+	+++	N.S.	+++
Between Chi				11.74
Between df				2
Between P				**

Appendix Table B4 - 4

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

Current Asthma															
Unadjusted															

REF NRR X SEX AGEL AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
AGABI1 22 x b 6 7 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 11 999	
AGABI2 22 x b 13 14 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 11 999	
CHEN2 26 x b 6 17 all NAmer 1993 1996 CS 0 AnyHh NoHhMemb current non cigs 10 999	
DEKKER 2 x b 5 8 all NAmer 1988 1991 CC 0 AnyHh NoHhMemb unspec non persn 2 999	
GILLIL 41 b 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 2 999	
GOLD 10 b 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 30 999	
HJERN1 7 x b 3 15 all Eu:Sca 1996 2001 CS 0 Mother NotMothr current non cigs 14 999	
HJERN2 7 x b 3 15 all Eu:Sca 1996 2001 CS 0 Father NotFathr current non cigs 14 999	
INFANT 2 x b 3 4 all NAmer 1988 1993 CC 0 Mother NotMothr in life non cigs 21 999	
LAM1 11 x b 12 15 all As:FE 1994 1998 CS 0 AnyHh NoHhMemb unspec non persn 3 999	
MELSON 2 b 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 2 999	
MUMCUO 5 b 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 31 999	
NHANE3 48 x b 4 16 w+b NAmer 1988 2001 CS 0 Bio-urine Low - - other 3 113	
PALMIE 2 b 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 20 999	
PETERS 5 b 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 2 999	
STRACH 2 x b 13 18 all Eu:UK 1993 1995 CC 0 Mother NotMothr current non cigs 11 999	
WILLE1 13 b 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 30 999	
ZHENG 10 x b 6 10 all As:FE 1999 2002 CC 0 AnyHh NoHhMemb in life non persn 4 999	

Appendix Table B4 - 5

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

Current Asthma							
Unadjusted							

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed	
				Case	Cont	Case	Cont
AGABI1	22	b	0	150	1982	573	9614
AGABI2	22	b	0	214	1984	816	10166
CHEN2	26	b	0	17	169	50	559
DEKKER	2	b	0	190	2072	249	4585
GILLIL	41	b	8	-	-	-	-
GOLD	10	b	11	-	-	-	-
HJERN1	7	b	0	11	257	88	1804
HJERN2	7	b	0	7	201	66	1552
INFANT	2	b	0	45	32	273	289
LAM1	11	b	0	5	109	35	2328
MELSON	2	b	0	39	24	44	49
MUMCUO	5	b	0	107	16	119	38
NHANE3	48	b	0	182	1659	126	1506
PALMIE	2	b	0	145	204	67	96
PETERS	5	b	6	-	-	-	-
STRACH	2	b	0	40	29	364	382
WILLE1	13	b	0	8	4	30	67
ZHENG	10	b	0	36	33	118	305
Partial Totals				1196	8775	3018	33340

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	22	b	0	0.24	110.86	0.82	0.0119
AGABI2	22	b	0	0.30	153.83	0.13	0.0002
CHEN2	26	b	0	0.12	11.56	0.50	0.6897
DEKKER	2	b	0	0.52	100.20	3.96	0.0000
GILLIL	41	b	8	0.53	22.80	0.96	0.0113
GOLD	10	b	11	0.07	42.63	2.82	0.6587
HJERN1	7	b	0	-0.13	9.37	1.95	0.6890
HJERN2	7	b	0	-0.20	6.11	1.68	0.6214
INFANT	2	b	0	0.40	16.50	0.09	0.1060
LAM1	11	b	0	1.12	4.20	2.62	0.0223
MELSON	2	b	0	0.59	9.05	0.65	0.0743
MUMCUO	5	b	0	0.76	9.38	1.76	0.0201
NHANE3	48	b	0	0.27	68.04	0.20	0.0254
PALMIE	2	b	0	0.02	26.92	2.53	0.9245
PETERS	5	b	6	0.20	18.94	0.30	0.3869
STRACH	2	b	0	0.37	15.42	0.03	0.1464
WILLE1	13	b	0	1.50	2.36	3.24	0.0214
ZHENG	10	b	0	1.04	14.32	7.25	0.0001

RR data

N	18
NS	18
Wt	642.50
Het Chi	31.52
Het df	17
Het P	*
Fixed RR	1.38
RR1	1.28
RRu	1.50
P	+++
Random RR	1.40
RR1	1.24
RRu	1.59
P	+++
Asymm P	N.S.

Appendix Table B4 - 6

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose

Current Asthma
Unadjusted

RR data

N	18			
NS	18			
Wt	642.50			
Het Chi	31.52			
Het df	17			
Het P	*			
Fixed RR	1.38			
RRl	1.28			
RRu	1.50			
P	+++			
Random RR	1.40			
RRl	1.24			
RRu	1.59			
P	+++			
Asymm P	N.S.			
		<u>Sex</u>		
		both	male	female
				Total
N	18			18
NS	18			18
Wt	642.50			642.50
Het Chi	31.52			31.52
Het df	17			17
Het P	*			*
Fixed RR	1.38			1.38
RRl	1.28			1.28
RRu	1.50			1.50
P	+++			+++
Random RR	1.40			1.40
RRl	1.24			1.24
RRu	1.59			1.59
P	+++			+++
Between Chi				
Between df				
Between P				N.S.
		<u>Measure of exposure</u>		
		cigs	persn	other
				Total
N	10	6	2	18
NS	10	6	2	18
Wt	402.59	169.51	70.40	642.50
Het Chi	8.88	7.16	3.43	31.52
Het df	9	5	1	17
Het P	N.S.	N.S.	(*)	*
Fixed RR	1.26	1.73	1.37	1.38
RRl	1.14	1.49	1.08	1.28
RRu	1.39	2.02	1.73	1.50
P	+++	+++	++	+++
Random RR	1.26	1.77	2.05	1.40
RRl	1.14	1.43	0.64	1.24
RRu	1.39	2.20	6.51	1.59
P	+++	+++	N.S.	+++
Between Chi				12.05
Between df				2
Between P				**

Appendix Table B4 - 7

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	AKCAKA	ALBA	ALDAWO	ALFRA1	ALFRA2	ANDRAE	ANNESI	BARRET	BECKET	BENER	BRABIN	BURCHF	BURR	BUTZ	CHEN1	CUNNI2
	DEBENE	DELL	DODGE	DOLD	ECE	EHRLI2	FARBE1	FARBE2	FARBE3	FAROOQ	FERGUS	FLYNN1	FLYNN2	FORAST	GOREN1	GOREN2
1	GOREN3	GOREN4	GOREN5	GOREN6	GORTM1	GORTM2	GURKAN	HAJNAL	JENKIN	KAPLAN	KAY	KEARNE	KELLY	KENDIR	KERSHA	KIVITY
	KUEHR	KUHR	LEEDER	LEROUX	LIS	LISTER	MAIER	MARTIN	MCCON1	MCKEEV	MONTEF	MOYES1	MOYES2	MURRAY	NILSSO	NYSTAD
3	OCONNE	ODDY	POKHAR	PONSON	RASANE	RATAGE	RENNIE	RONCH1	RONCH2	RONCH3	ROSASV	RUDNIK	SANZOR	SCHENK	SENNHA	SHAMSS
	SHERMA	SIGURS	SOYSET	SPIEKE	SQUILL	STAZI	TAYLOR	TIMONE	TSIMOV	ULRIK	VARELA	VAVILI	VENNER	VERHOE	VOLKME	VONMAF
	WITHER	XU	ZEIGER	ZEJDA												
4	EHRLI1	OLIVET	WEITZ1	WEITZ2												
	ADDOYO	ARSHAD	AZIZI	BALL	BERGMA	CALL	CHHABR	CHINN	CLARK	CSONKA	DAIGLE	DEKOK	DIJKST	DOTTER	FAGBUL	FIELDE
	FORSB1	FORSB2	FORSB3	FUJI	GUPTA	HABY	HOST	HUI1	HU2	HUGHES	JAAKKO	JONES	KALYO1	KALYO2	KARUNA	KNIGHT
	LAU	LEE1	LEE2	LEEN	LILLJE	LINDFO	LOPEZC	MCCON2	MELIA	MOHAME	MOUSSA	NITTA	OHARA	PIC	RIBEIR	RONMAR
	SARRAZ	SCHMIT	SELCUK	SHOHAT	SOMERV	SOTOQU	STANHO	STERN1	STERN2	STODDA	TARIQ	TOMINA	WANG	WILLE2	WOLFO1	WOLFC3
5	YANG															
	CUNNI1		LAM2	WOLFO2												

Appendix Table B4 - 8

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Current Asthma
Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP	Adjusted - insufficient data for metaanalysis															RR SIG
GILLIL GILLIL	1	MCCON1/GILLIL																	
HJERN1 HJERN1	1	HJERN1/HJERN2																	
HJERN2 HJERN2	1	HJERN1/HJERN2																	
CUNN11 10 b 8 11 all NAmer 1988 1996 CS 9 AnyHh NoHhMemb current non cigs 30 999 1.07 ?																			
LAM2 8 b 8 13 all As:FE 1995 1999 CS 4 AnyHh NoHhMemb unspec non persn 3 999 0.81 ?																			
STRACH 14 b 13 18 all Eu:UK 1993 1995 CC 0 Mother NotMothr <1m non cigs 11 999 * n																			
WOLFO2 8 b 10 10 all Eu:Ger 1979 1995 CS 7 AnyHh NoHhMemb current non cigs 21 999 1.82 ?																			

Appendix Table B5 -

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), or parental exposure
- 2) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 3) Results for low amount of exposure
- 4) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 5) ASTHMA : lifetime, current
- 6) EXPOS : biochemical, total, household, parent
- 7) BIOMEA : saliva, blood, urine
- 8) MEASEX : number of cigarettes, number of persons, other
- 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
- 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
- 11) UNEXSO : not specific parent, neither parent, none in household, none
- 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
- 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
- 14) RACE : all in study or nearest available, otherwise by race
- 15) ONSET : yes, no (prevalence)
- 16) For overlapping studies: principal rather than subsidiary studies, and for prospective studies, most recent follow-up

Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3
(and those which actually differ from the adjusted results in Appendix Table B1 - 1 are marked 'x' in Section -1)
and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which
actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying
results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary),
and any results which would have been included in preference except that they had data not complete enough
for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B5 - 1

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

REF NRR CompB1 SEX AST AGEI AGEH RACE LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
AGABI1 29 x b c 6 7 all Eu:Ita 1994 1999 CC 11 Mother NotMothr current non cigs 1 10
AGABI2 29 x b c 13 14 all Eu:Ita 1994 1999 CC 12 Mother NotMothr current non cigs 1 10
CHEN2 38 b 1 6 17 all NAmer 1993 1996 CS 6 AnyHh NoHhMemb current non cigs 1 9
DEKKER 4 x b c 5 8 all NAmer 1988 1991 CC 9 AnyHh NoHhMemb unspec non persn 1 1
DOLD 18 b 1 9 11 all Eu:Ger 1989 1992 CS 1 AnyHh NoHhMemb unspec non cigs 1 10
ECE 4 b 1 6 15 all Eu:est 1999 2001 CS 0 AnyHh NoHhMemb current non cigs 1 10
EHRIT2 6 b 1 3 14 all NAmer 1988 1992 CC 0 Bio-urine Low - - other 3 7
FERGUS 16 b 1 0 6 all Auslia 1977 1985 Pr 1 Mother NotMothr in life non cigs 1 10
GILLIL 40 x b c 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 1 1
GOLD 8 x b c 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 1 19
HJERN1 14 x b c 3 15 all Eu:Sca 1996 2001 CS 9 Mother NotMothr current non cigs 1 14
HJERN2 14 x b c 3 15 all Eu:Sca 1996 2001 CS 9 Father NotFathr current non cigs 1 14
INFANT 8 x b c 3 4 all NAmer 1988 1993 CC 19 Mother NotMothr in life non cigs 1 20
LAM1 5 b 1 12 15 all As:FE 1994 1998 CS 4 AnyHh NoHhMemb unspec non persn 1 1
LISTER 7 b 1 0 4 all Auslia 1989 1998 CS 8 Mother NotMothr current non cigs 1 14
MAIER 2 b 1 5 9 all NAmer 1994 1997 CS 0 TotETS None current non other 1 1
MELSMOM 1 x b c 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 1 1
MUMCUO 4 x b c 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 1 30
NHANE3 26 b 1 4 16 w+b NAmer 1988 2001 CS 6 Bio-urine Low - - other 0 3
PALMIE 1 x b c 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 1 19
PETERS 4 x b c 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 1 1
RATAGE 6 b 1 5 15 all As:cen 1996 2000 CC 0 AnyHh NoHhMemb unspec non cigs 1 9
RONCH1 1 m 1 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH1 4 f 1 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH2 1 b 1 6 14 all Eu:Ita 1992 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH3 1 b 1 6 14 all Eu:Ita 1998 2001 CS 0 AnyHh Low current non cigs 20 39
STRACH 7 x b c 13 18 all Eu:UK 1993 1995 CC 4 Mother NotMothr current non cigs 1 10
VENNER 4 m 1 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29
VENNER 1 f 1 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29
WILLE1 12 x b c 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 20 29
ZHENG 20 x b c 6 10 all As:FE 1999 2002 CC 6 AnyHh NoHhMemb in life non persn 1 1

Appendix Table B5 - 2

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	29	b	11	200	-	573	-	1.22	(1.03- 1.45)
AGABI2	29	b	12	233	-	816	-	1.14	(0.97- 1.33)
CHEN2	38	b	6	8	-	61	-	1.62	(0.68- 3.85)
DEKKER	4	b	9	196	-	249	-	1.40	(1.13- 1.73)
DOLD	18	b	1	119	-	295	-	1.13	(0.90- 1.42)
ECE	4	b	0	217	1294	132	906	1.15	(0.91- 1.45)
EHRLI2	6	b	0	19	24	19	24	1.00	(0.43- 2.34)
*FERGUS	16	b	1	24	-	87	-	0.85	(0.54- 1.34)
GILLIL	40	b	8	-	-	-	-	0.90	(0.60- 1.30)
GOLD	8	b	11	-	-	-	-	1.20	(0.93- 1.55)
HJERN1	14	b	9	20	-	88	-	0.92	(0.56- 1.50)
HJERN2	14	b	9	5	-	34	-	1.00	(0.43- 2.35)
INFANT	8	b	19	138	-	273	-	1.16	(0.77- 1.76)
LAM1	5	b	4	118	-	201	-	0.89	(0.69- 1.12)
LISTER	7	b	8	-	-	-	-	1.33	(0.98- 1.81)
MAIER	2	b	0	25	102	73	674	2.26	(1.37- 3.73)
MELSON	1	b	0	35	51	44	49	0.76	(0.42- 1.38)
MUMCUO	4	b	0	74	46	119	38	0.51	(0.31- 0.86)
NHANE3	26	b	6	198	-	175	-	1.10	(0.70- 1.70)
PALMIE	1	b	0	90	133	67	96	0.97	(0.64- 1.46)
PETERS	4	b	6	-	-	-	-	0.76	(0.55- 1.07)
RATAGE	6	b	0	20	22	58	30	0.47	(0.22- 0.99)
RONCH1	1	m	0	14	177	48	790	1.30	(0.70- 2.41)
RONCH1	4	f	0	12	170	35	764	1.54	(0.78- 3.03)
Subtotal RONCH1								1.41	(0.89- 2.22)
RONCH2	1	b	0	44	266	93	726	1.29	(0.88- 1.90)
RONCH3	1	b	0	28	240	91	696	0.89	(0.57- 1.40)
STRACH	7	b	4	82	-	364	-	1.13	(0.73- 1.74)
VENNER	4	m	0	179	424	48	116	1.02	(0.70- 1.49)
VENNER	1	f	0	185	429	50	130	1.12	(0.78- 1.62)
Subtotal VENNER								1.07	(0.82- 1.39)
WILLE1	12	b	0	11	6	30	67	4.09	(1.39- 12.10)
ZHENG	20	b	6	126	-	118	-	1.30	(1.00- 1.80)
Partial Totals				2420	3384	4241	5106		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	29	b	11	0.20	131.37	0.89	0.0227
AGABI2	29	b	12	0.13	154.23	0.03	0.1037
CHEN2	38	b	6	0.48	5.11	0.68	0.2754
DEKKER	4	b	9	0.34	84.71	4.09	0.0020
DOLD	18	b	1	0.12	73.89	0.00	0.2935
ECE	4	b	0	0.14	71.12	0.04	0.2356
EHRLI2	6	b	0	0.00	5.30	0.07	1.0000
*FERGUS	16	b	1	-0.16	18.60	1.45	0.4833
GILLIL	40	b	8	-0.11	25.70	1.27	0.5932
GOLD	8	b	11	0.18	58.89	0.25	0.1618
HJERN1	14	b	9	-0.08	15.83	0.63	0.7401
HJERN2	14	b	9	0.00	5.33	0.07	1.0000
INFANT	8	b	19	0.15	22.48	0.02	0.4816
LAM1	5	b	4	-0.12	65.49	3.56	0.3457
LISTER	7	b	8	0.29	40.82	1.16	0.0684
MAIER	2	b	0	0.82	15.39	7.54	0.0014
MELSON	1	b	0	-0.27	10.95	1.63	0.3736
MUMCUO	4	b	0	-0.67	14.29	8.76	0.0118
NHANE3	26	b	6	0.10	19.52	0.01	0.6737
PALMIE	1	b	0	-0.03	22.74	0.50	0.8829
PETERS	4	b	6	-0.27	34.69	5.31	0.1060
RATAGE	6	b	0	-0.75	6.85	5.20	0.0483
RONCH1	1	m	0	0.26	10.08	0.22	0.4023
RONCH1	4	f	0	0.43	8.40	0.84	0.2103
Subtotal RONCH1				0.46	18.48	1.05	
RONCH2	1	b	0	0.26	25.90	0.50	0.1933
RONCH3	1	b	0	-0.11	19.12	1.02	0.6183
STRACH	7	b	4	0.12	20.37	0.00	0.5812
VENNER	4	m	0	0.02	26.74	0.25	0.9175
VENNER	1	f	0	0.11	28.23	0.00	0.5433

Appendix Table B5 - 2

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
Subtotal	VENNER			-0.10	54.96	0.25	
WILLE1	12	b	0	1.41	3.27	5.47	0.0108
ZHENG	20	b	6	0.26	44.48	0.94	0.0802

RR data

N	31
NS	29

Wt	1089.88
Het Chi	52.40
Het df	30
Het P	**
Fixed RR	1.12
RR1	1.06
RRu	1.19
P	+++
Random RR	1.10
RR1	1.01
RRu	1.20
P	+
Asymm P	N.S.

Appendix Table B5 - 3

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

RR data

N	31
NS	29

Wt	1089.88
Het Chi	52.40
Het df	30
Het P	**
Fixed RR	1.12
RRl	1.06
RRu	1.19
P	+++
Random RR	1.10
RRl	1.01
RRu	1.20
P	+
Asymm P	N.S.

	both	<u>Sex</u>		
		male	female	Total

N	27	2	2	31
NS	27	2	2	31

Wt	1016.43	36.82	36.62	1089.88
Het Chi	51.09	0.43	0.65	52.40
Het df	26	1	1	30
Het P	**	N.S.	N.S.	**
Fixed RR	1.12	1.09	1.21	1.12
RRl	1.06	0.79	0.87	1.06
RRu	1.19	1.51	1.67	1.19
P	+++	N.S.	N.S.	+++
Random RR	1.09	1.09	1.21	1.10
RRl	0.99	0.79	0.87	1.01
RRu	1.20	1.51	1.67	1.20
P	(+)	N.S.	N.S.	+
Between Chi				0.22
Between df				2
Between P				N.S.

	<u>Measure of exposure</u>			
	cigs	persn	other	Total

N	21	6	4	31
NS	19	6	4	29

Wt	780.38	266.02	43.48	1089.88
Het Chi	22.51	16.10	8.60	52.40
Het df	20	5	3	30
Het P	N.S.	**	*	**
Fixed RR	1.12	1.07	1.55	1.12
RRl	1.05	0.95	1.15	1.06
RRu	1.21	1.20	2.09	1.19
P	++	N.S.	++	+++
Random RR	1.11	1.01	1.66	1.10
RRl	1.03	0.80	0.95	1.01
RRu	1.21	1.27	2.90	1.20
P	++	N.S.	(+)	+
Between Chi				5.19
Between df				2
Between P				(*)

Appendix Table B5 - 4

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

REF NRR X SEX AST AGEL AGEH RACE LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
AGABI1 21 x b c 6 7 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 1 10
AGABI2 21 x b c 13 14 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 1 10
CHEN2 12 x b l 6 17 all NAmer 1993 1996 CS 0 AnyHh NoHhMemb current non cigs 1 9
DEKKER 1 x b c 5 8 all NAmer 1988 1991 CC 0 AnyHh NoHhMemb unspec non persn 1 1
DOLD 14 x b l 9 11 all Eu:Ger 1989 1992 CS 0 AnyHh NoHhMemb unspec non cigs 1 10
ECE 4 b l 6 15 all Eu:est 1999 2001 CS 0 AnyHh NoHhMemb current non cigs 1 10
EHRIT2 6 b l 3 14 all NAmer 1988 1992 CC 0 Bio-urine Low - - other 3 7
FERGUS 14 x b l 0 6 all Auslia 1977 1985 Pr 0 Mother NotMothr in life non cigs 1 10
GILLIL 40 b c 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 1 1
GOLD 8 b c 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 1 19
HJERN1 6 x b c 3 15 all Eu:Sca 1996 2001 CS 0 Mother NotMothr current non cigs 1 14
HJERN2 6 x b c 3 15 all Eu:Sca 1996 2001 CS 0 Father NotFathr current non cigs 1 14
INFANT 1 x b c 3 4 all NAmer 1988 1993 CC 0 Mother NotMothr in life non cigs 1 20
LAM1 1 x b l 12 15 all As:FE 1994 1998 CS 0 AnyHh NoHhMemb unspec non persn 1 1
LISTER 5 x b l 0 4 all Auslia 1989 1998 CS 0 Mother NotMothr current non cigs 1 14
MAIER 2 b l 5 9 all NAmer 1994 1997 CS 0 TotETS None current non other 1 1
MELSMOM 1 b c 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 1 1
MUMCUO 4 b c 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 1 30
NHANE3 35 x b l 4 16 w+b NAmer 1988 2001 CS 0 Bio-urine Low - - other 0 3
PALMIE 1 b c 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 1 19
PETERS 4 b c 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 1 1
RATAGE 6 b l 5 15 all As:cen 1996 2000 CC 0 AnyHh NoHhMemb unspec non cigs 1 9
RONCH1 1 m l 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH1 4 f l 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH2 1 b l 6 14 all Eu:Ita 1992 2001 CS 0 AnyHh Low current non cigs 20 39
RONCH3 1 b l 6 14 all Eu:Ita 1998 2001 CS 0 AnyHh Low current non cigs 20 39
STRACH 1 x b c 13 18 all Eu:UK 1993 1995 CC 0 Mother NotMothr current non cigs 1 10
VENNER 4 m l 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29
VENNER 1 f l 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 1 29
WILLE1 12 b c 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 20 29
ZHENG 8 x b c 6 10 all As:FE 1999 2002 CC 0 AnyHh NoHhMemb in life non persn 1 1

Appendix Table B5 - 5

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	21	b	0	200	2829	573	9614	1.19	(1.00- 1.40)
AGABI2	21	b	0	233	2585	816	10166	1.12	(0.96- 1.31)
CHEN2	12	b	0	8	89	61	548	0.81	(0.37- 1.74)
DEKKER	1	b	0	196	2550	249	4585	1.42	(1.17- 1.72)
DOLD	14	b	0	119	1248	295	3613	1.17	(0.93- 1.46)
ECE	4	b	0	217	1294	132	906	1.15	(0.91- 1.45)
EHRLI2	6	b	0	19	24	19	24	1.00	(0.43- 2.34)
*FERGUS	14	b	0	24	188	87	639	0.94	(0.62- 1.43)
GILLIL	40	b	8	-	-	-	-	0.90	(0.60- 1.30)
GOLD	8	b	11	-	-	-	-	1.20	(0.93- 1.55)
HJERN1	6	b	0	20	363	88	1804	1.13	(0.69- 1.86)
HJERN2	6	b	0	5	108	66	1552	1.09	(0.43- 2.76)
INFANT	1	b	0	138	135	273	289	1.08	(0.81- 1.45)
LAM1	1	b	0	118	1461	201	2162	0.87	(0.69- 1.10)
LISTER	5	b	0	-	-	-	-	1.26	(0.95- 1.68)
MAIER	2	b	0	25	102	73	674	2.26	(1.37- 3.73)
MELSMOM	1	b	0	35	51	44	49	0.76	(0.42- 1.38)
MUMCUO	4	b	0	74	46	119	38	0.51	(0.31- 0.86)
NHANE3	35	b	0	198	1729	175	1457	0.95	(0.77- 1.18)
PALMIE	1	b	0	90	133	67	96	0.97	(0.64- 1.46)
PETERS	4	b	6	-	-	-	-	0.76	(0.55- 1.07)
RATAGE	6	b	0	20	22	58	30	0.47	(0.22- 0.99)
RONCH1	1	m	0	14	177	48	790	1.30	(0.70- 2.41)
RONCH1	4	f	0	12	170	35	764	1.54	(0.78- 3.03)
Subtotal RONCH1								1.41	(0.89- 2.22)
RONCH2	1	b	0	44	266	93	726	1.29	(0.88- 1.90)
RONCH3	1	b	0	28	240	91	696	0.89	(0.57- 1.40)
STRACH	1	b	0	82	64	364	382	1.34	(0.94- 1.92)
VENNER	4	m	0	179	424	48	116	1.02	(0.70- 1.49)
VENNER	1	f	0	185	429	50	130	1.12	(0.78- 1.62)
Subtotal VENNER								1.07	(0.82- 1.39)
WILLE1	12	b	0	11	6	30	67	4.09	(1.39- 12.10)
ZHENG	8	b	0	126	248	118	305	1.31	(0.97- 1.78)
Partial Totals				2420	16981	4273	42222		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	21	b	0	0.17	138.84	0.55	0.0443
AGABI2	21	b	0	0.12	166.60	0.01	0.1345
CHEN2	12	b	0	-0.21	6.47	0.67	0.5864
DEKKER	1	b	0	0.35	102.79	5.90	0.0004
DOLD	14	b	0	0.16	77.69	0.17	0.1715
ECE	4	b	0	0.14	71.12	0.08	0.2356
EHRLI2	6	b	0	0.00	5.30	0.06	1.0000
*FERGUS	14	b	0	-0.06	21.61	0.64	0.7647
GILLIL	40	b	8	-0.11	25.70	1.17	0.5932
GOLD	8	b	11	0.18	58.89	0.33	0.1618
HJERN1	6	b	0	0.12	15.46	0.00	0.6321
HJERN2	6	b	0	0.08	4.44	0.00	0.8579
INFANT	1	b	0	0.08	45.92	0.04	0.5927
LAM1	1	b	0	-0.14	68.51	4.23	0.2442
LISTER	5	b	0	0.23	47.28	0.72	0.1120
MAIER	2	b	0	0.82	15.39	7.73	0.0014
MELSMOM	1	b	0	-0.27	10.95	1.55	0.3736
MUMCUO	4	b	0	-0.67	14.29	8.56	0.0118
NHANE3	35	b	0	-0.05	83.13	2.01	0.6637
PALMIE	1	b	0	-0.03	22.74	0.44	0.8829
PETERS	4	b	6	-0.27	34.69	5.07	0.1060
RATAGE	6	b	0	-0.75	6.85	5.09	0.0483
RONCH1	1	m	0	0.26	10.08	0.25	0.4023
RONCH1	4	f	0	0.43	8.40	0.88	0.2103
Subtotal RONCH1				0.48	18.48	1.13	
RONCH2	1	b	0	0.26	25.90	0.57	0.1933
RONCH3	1	b	0	-0.11	19.12	0.94	0.6183
STRACH	1	b	0	0.30	30.13	1.07	0.1041
VENNER	4	m	0	0.02	26.74	0.21	0.9175
VENNER	1	f	0	0.11	28.23	0.00	0.5433

Appendix Table B5 - 5

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
Subtotal	VENNER			-0.08	54.96	0.21	
WILLE1	12	b	0	1.41	3.27	5.54	0.0108
ZHENG	8	b	0	0.27	42.15	1.14	0.0769

RR data

N	31
NS	29

Wt	1238.69
Het Chi	55.62
Het df	30
Het P	**
Fixed RR	1.11
RR1	1.05
RRu	1.18
P	+++
Random RR	1.10
RR1	1.01
RRu	1.19
P	+
Asymm P	N.S.

Appendix Table B5 - 6

IESTAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

RR data

N	31			
NS	29			
Wt	1238.69			
Het Chi	55.62			
Het df	30			
Het P	**			
Fixed RR	1.11			
RRl	1.05			
RRu	1.18			
P	+++			
Random RR	1.10			
RRl	1.01			
RRu	1.19			
P	+			
Asymm P	N.S.			
 <u>Sex</u>				
both		male	female	Total
N	27	2	2	31
NS	27	2	2	31
Wt	1165.24	36.82	36.62	1238.69
Het Chi	54.28	0.43	0.65	55.62
Het df	26	1	1	30
Het P	***	N.S.	N.S.	**
Fixed RR	1.11	1.09	1.21	1.11
RRl	1.05	0.79	0.87	1.05
RRu	1.18	1.51	1.67	1.18
P	+++	N.S.	N.S.	+++
Random RR	1.09	1.09	1.21	1.10
RRl	0.99	0.79	0.87	1.01
RRu	1.19	1.51	1.67	1.19
P	(+)	N.S.	N.S.	+
Between Chi				0.25
Between df				2
Between P				N.S.
 <u>Measure of exposure</u>				
cigs	21	6	4	31
persn	19	6	4	29
other				
Total				
N	21	6	4	31
NS	19	6	4	29
Wt	846.79	284.80	107.09	1238.69
Het Chi	21.16	18.82	15.32	55.62
Het df	20	5	3	30
Het P	N.S.	**	**	**
Fixed RR	1.12	1.08	1.13	1.11
RRl	1.05	0.96	0.94	1.05
RRu	1.20	1.21	1.37	1.18
P	+++	N.S.	N.S.	+++
Random RR	1.12	1.01	1.58	1.10
RRl	1.04	0.79	0.84	1.01
RRu	1.20	1.28	2.99	1.19
P	++	N.S.	N.S.	+
Between Chi				0.32
Between df				2
Between P				N.S.

Appendix Table B5 - 7

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	CUNNI2	EHRLI1	KAPLAN	KELLY	NYSTAD	OLIVET	TAYLOR	WEITZ1	WEITZ2	XU						
3	ADDOYO	AKCAKA	ALBA	ALDAWO	ALFRA1	ALFRA2	ANDRAE	ANNESI	ARSHAD	AZIZI	BALL	BARRET	BECKET	BENER	BERGMA	BRABIN
	BURCHF	BURR	BUTZ	CALL	CHEN1	CHHABR	CHINN	CLARK	CSONKA	DAIGLE	DEBENE	DEKOK	DELL	DIJKST	DODGE	DOTTER
	FAGBUL	FARBE1	FARBE2	FARBE3	FAROOQ	FIELDE	FLYNN1	FLYNN2	FORAST	FORSB1	FORSB2	FORSB3	FUJI	GOREN1	GOREN2	GOREN3
	GOREN4	GOREN5	GOREN6	GORTM1	GORTM2	GUPTA	GURKAN	HABY	HAJNAL	HOST	HU1	HU2	HUGHES	JAAKKO	JENKIN	JONES
	KALYO1	KALYO2	KARUNA	KAY	KEARNE	KENDIR	KERSHA	KIVITY	KNIGHT	KUEHR	KUHR	LAU	LEE1	LEE2	LEEDER	LEEN
	LEROUX	LILLJE	LINDFO	LIS	LOPEZC	MARTIN	MCCON1	MCCON2	MCKEEV	MELIA	MOHAME	MONTEF	MOUSSA	MOYES1	MOYES2	MURRAY
	NILSSO	NITTA	OCONNE	ODDY	OHARA	PIC	POKHAR	PONSON	RASANE	RENNIE	RIBEIR	RONMAR	ROSASV	RUDNIK	SANZOR	SARRAZ
	SCHENK	SCHMIT	SELCUK	SENNHA	SHAMSS	SHERMA	SHOHAT	SIGURS	SOMERV	SOTOQU	SOYSET	SPIEKE	SQUILL	STANHO	STAZI	STERN1
	STERN2	STODDA	TARIQ	TIMONE	TOFINA	TSIMOY	ULRIK	VARELA	VAVILI	VERHOE	VOLKME	VONMAF	WANG	WILLE2	WITHER	WOLFO3
4	YANG	ZEIGER	ZEJDA													
	CUNNI1	LAM2	WOLF01	WOLF02												

Appendix Table B5 - 8

IRESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : Low Dose
Lifetime Asthma (or Current if Lifetime not available)
Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP	Adjusted - insufficient data for metaanalysis																RR			
				REF	NRR	SEX	AST	AGEL	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrce	EXP-time	UNEXTI	MEAS	LO	HI	
CUNN11	7	b	c	8	11	all	NAmer	1988	1996	CS	9	AnyHh	NoHhMemb	current	non	cigs	1	9	1.12				
LAM2	3	b	l	8	13	all	As:FE	1995	1999	CS	4	AnyHh	NoHhMemb	unspec	non	persn	1	1	0.91	*			
STRACH	13	b	c	13	18	all	Eu:UK	1993	1995	CC	0	Mother	NotMothr	<1m	non	cigs	1	10					
WOLF01	3	b	l	8	8	all	Eu:Ger	1977	1995	CS	7	AnyHh	NoHhMemb	current	non	cigs	1	10	0.94				
WOLF02	3	b	l	10	10	all	Eu:Ger	1979	1995	CS	7	AnyHh	NoHhMemb	current	non	cigs	1	10	0.99				
SIG																							
?																							
?																							
n																							
?																							
?																							

Appendix Table B6 -

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose Lifetime Asthma (or Current if Lifetime not available)

This analysis is restricted to results for:

- 1) Biochemical, total, household (overall), or parental exposure
- 2) Exposure during child's lifetime (also including parent ever smoker, but not specific in utero exposure or specific discontinued exposure)
- 3) Results for high amount of exposure
- 4) Results complete enough for use in metaanalysis

Within each study, results are then selected (in the following order of preference, within each sex) for:

- 5) ASTHMA : lifetime, current
- 6) EXPOS : biochemical, total, household, parent
- 7) BIOMEA : saliva, blood, urine
- 8) MEASEX : number of cigarettes, number of persons, other
- 9) WHOPAR : any/unspecified parent, mother regardless of father, mother only, father regardless of mother, father only
- 10) WHESMO : during child's lifetime, ever (i.e. during smoker's lifetime), unspecified, at a specific age, current
- 11) UNEXSO : not specific parent, neither parent, none in household, none
- 12) UNEXTI : not at specified time, never (in smoker's lifetime), not at longer than specified time
- 13) UNEXHI : not exposed defined as smoked none, or smoked none+low
- 14) RACE : all in study or nearest available, otherwise by race
- 15) ONSET : yes, no (prevalence)
- 16) For overlapping studies: principal rather than subsidiary studies, and for prospective studies, most recent follow-up

Finally by Age: whole study if available, otherwise by widest available age group
and then for single sex results (m, f) in preference to results for both sexes combined (b).

Results adjusted for the most potential confounders are then chosen in Sections -1 to -3 (and those which actually differ from the adjusted results in Appendix Table B2 - 1 are marked 'x' in Section -1) and results adjusted for the least confounders in Sections -4 to -6. (Those least adjusted results which actually differ from the most adjusted are marked 'x' in column X in Section -4)

Section -7 shows excluded studies, together with the stage (as above) at which no qualifying results were found.

Section -8 lists the potentially overlapping studies which have been included (1=principal, 2=subsidiary), and any results which would have been included in preference except that they had data not complete enough for use in metaanalysis. It also lists their significance (yes/no), if known.

Appendix Table B6 - 1

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

REF	NRR	CompB2	SEX	AST	AGEI	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrce	EXP-time	UNEXTI	MEAS	LO	HI
AGABI1	30	x	b	c	6	7	all	Eu:Ita	1994	1999	CC	11	Mother	NotMothr	current	non	cigs	11	999
AGABI2	30	x	b	c	13	14	all	Eu:Ita	1994	1999	CC	12	Mother	NotMothr	current	non	cigs	11	999
CHEN2	39		b	l	6	17	all	NAmer	1993	1996	CS	6	AnyHh	NoHhMemb	current	non	cigs	10	999
DEKKER	5	x	b	c	5	8	all	NAmer	1988	1991	CC	9	AnyHh	NoHhMemb	unspec	non	persn	2	999
DOLD	20		b	l	9	11	all	Eu:Ger	1989	1992	CS	1	AnyHh	NoHhMemb	unspec	non	cigs	21	999
ECE	5		b	l	6	15	all	Eu:est	1999	2001	CS	0	AnyHh	NoHhMemb	current	non	cigs	11	999
EHRIT2	9		b	l	3	14	all	NAmer	1988	1992	CC	0	Bio-urine	Low	-	-	other	36	999
FERGUS	17		b	l	0	6	all	Auslia	1977	1985	Pr	1	Mother	NotMothr	in life	non	cigs	11	999
GILLIL	41	x	b	c	7	19	all	NAmer	1993	2001	CS	8	AnyHh	NoHhMemb	current	non	persn	2	999
GOLD	10	x	b	c	6	14	all	NAmer	1974	1993	Pr	11	Mother	NotMothr	current	non	cigs	30	999
HJERN1	15	x	b	c	3	15	all	Eu:Sca	1996	2001	CS	9	Mother	NotMothr	current	non	cigs	15	999
HJERN2	15	x	b	c	3	15	all	Eu:Sca	1996	2001	CS	9	Father	NotFathr	current	non	cigs	15	999
INFANT	9	x	b	c	3	4	all	NAmer	1988	1993	CC	19	Mother	NotMothr	in life	non	cigs	21	999
LAM1	7		b	l	12	15	all	As:FE	1994	1998	CS	4	AnyHh	NoHhMemb	unspec	non	persn	3	999
LISTER	8		b	l	0	4	all	Auslia	1989	1998	CS	8	Mother	NotMothr	current	non	cigs	15	999
MAIER	3		b	l	5	9	all	NAmer	1994	1997	CS	0	TotETS	None	current	non	other	2	999
MELSM	2	x	b	c	11	17	all	As:cen	1997	2001	CC	0	AnyHh	NoHhMemb	unspec	non	persn	2	999
MUMCUO	5	x	b	c	3	15	all	As:ME	1986	1994	CC	0	AnyHh	NoHhMemb	unspec	non	cigs	31	999
NHANE3	27		b	l	4	16	w+b	NAmer	1988	2001	CS	6	Bio-urine	Low	-	-	other	3	113
PALMIE	2	x	b	c	1	12	all	Eu:Ita	*	1990	CC	0	AnyPar	NoParent	unspec	non	cigs	20	999
PETERS	5	x	b	c	9	14	all	As:FE	1989	1996	Pr	6	AnyHh	NoHhMemb	current	non	persn	2	999
RATAGE	7		b	l	5	15	all	As:cen	1996	2000	CC	0	AnyHh	NoHhMemb	unspec	non	cigs	10	999
RONCH1	2	m	l	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	40	999	
RONCH1	5	f	l	6	13	all	Eu:Ita	1974	2001	CS	0	AnyHh	Low	current	non	cigs	40	999	
RONCH2	2	b	l	6	14	all	Eu:Ita	1992	2001	CS	0	AnyHh	Low	current	non	cigs	40	999	
RONCH3	2	b	l	6	14	all	Eu:Ita	1998	2001	CS	0	AnyHh	Low	current	non	cigs	40	999	
STRACH	8	x	b	c	13	18	all	Eu:UK	1993	1995	CC	4	Mother	NotMothr	current	non	cigs	11	999
VENNER	5	m	l	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	30	999	
VENNER	2	f	l	8	15	all	As:FE	1995	2001	CS	0	Father	NoParent	current	never	cigs	30	999	
WILLE1	13	x	b	c	3	15	all	Eu:Sca	1988	1991	CC	0	Bio-urine	Low	-	-	other	30	999
ZHENG	22	x	b	c	6	10	all	As:FE	1999	2002	CC	6	AnyHh	NoHhMemb	in life	non	persn	4	999

Appendix Table B6 - 2

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
 Lifetime Asthma (or Current if Lifetime not available)
 Adjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	30	b	11	150	-	573	-	1.25	(1.03- 1.51)
AGABI2	30	b	12	214	-	816	-	1.23	(1.04- 1.45)
CHEN2	39	b	6	24	-	61	-	1.72	(0.93- 3.17)
DEKKER	5	b	9	190	-	249	-	1.59	(1.28- 1.98)
DOLD	20	b	1	23	-	295	-	1.00	(0.64- 1.57)
ECE	5	b	0	81	410	132	906	1.36	(1.00- 1.83)
EHRLI2	9	b	0	35	23	19	24	1.92	(0.86- 4.28)
*FERGUS	17	b	1	22	-	87	-	0.73	(0.45- 1.17)
GILLIL	41	b	8	-	-	-	-	1.70	(1.10- 2.50)
GOLD	10	b	11	-	-	-	-	1.07	(0.79- 1.44)
HJERN1	15	b	9	11	-	88	-	0.80	(0.43- 1.48)
HJERN2	15	b	9	7	-	66	-	0.70	(0.32- 1.53)
INFANT	9	b	19	45	-	273	-	2.77	(1.35- 5.66)
LAM1	7	b	4	13	-	201	-	1.49	(0.81- 2.71)
LISTER	8	b	8	-	-	-	-	1.76	(1.30- 2.37)
MAIER	3	b	0	8	43	73	674	1.72	(0.78- 3.79)
MELSMOM	2	b	0	39	24	44	49	1.81	(0.94- 3.47)
MUMCUO	5	b	0	107	16	119	38	2.14	(1.13- 4.05)
NHANE3	27	b	6	226	-	175	-	1.30	(0.80- 2.20)
PALMIE	2	b	0	145	204	67	96	1.02	(0.70- 1.49)
PETERS	5	b	6	-	-	-	-	1.22	(0.78- 1.92)
RATAGE	7	b	0	42	8	58	30	2.72	(1.13- 6.52)
RONCH1	2	m	0	9	58	48	790	2.55	(1.19- 5.46)
RONCH1	5	f	0	5	56	35	764	1.95	(0.73- 5.17)
Subtotal RONCH1								2.31	(1.27- 4.20)
RONCH2	2	b	0	16	85	93	726	1.47	(0.83- 2.61)
RONCH3	2	b	0	12	72	91	696	1.27	(0.67- 2.44)
STRACH	8	b	4	40	-	364	-	1.49	(0.80- 2.77)
VENNER	5	m	0	38	53	48	116	1.73	(1.01- 2.96)
VENNER	2	f	0	29	37	50	130	2.04	(1.13- 3.66)
Subtotal VENNER								1.87	(1.26- 2.77)
WILLE1	13	b	0	8	4	30	67	4.47	(1.25- 15.99)
ZHENG	22	b	6	36	-	118	-	2.60	(1.50- 4.40)
Partial Totals				1575	1093	4273	5106		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	30	b	11	0.22	105.00	0.94	0.0222
AGABI2	30	b	12	0.21	139.12	1.71	0.0146
CHEN2	39	b	6	0.54	10.22	0.51	0.0830
DEKKER	5	b	9	0.46	80.74	1.72	0.0000
DOLD	20	b	1	0.00	19.08	1.93	1.0000
ECE	5	b	0	0.30	42.62	0.01	0.0468
EHRLI2	9	b	0	0.65	6.01	0.68	0.1091
*FERGUS	17	b	1	-0.31	16.83	6.74	0.1967
GILLIL	41	b	8	0.53	22.80	1.03	0.0113
GOLD	10	b	11	0.07	42.63	2.67	0.6587
HJERN1	15	b	9	-0.22	10.06	2.94	0.4791
HJERN2	15	b	9	-0.36	6.28	2.86	0.3716
INFANT	9	b	19	1.02	7.48	3.67	0.0053
LAM1	7	b	4	0.40	10.54	0.07	0.1955
LISTER	8	b	8	0.57	42.61	2.61	0.0002
MAIER	3	b	0	0.54	6.12	0.30	0.1808
MELSMOM	2	b	0	0.59	9.05	0.69	0.0743
MUMCUO	5	b	0	0.76	9.38	1.82	0.0201
NHANE3	27	b	6	0.26	15.02	0.05	0.3093
PALMIE	2	b	0	0.02	26.92	2.42	0.9245
PETERS	5	b	6	0.20	18.94	0.27	0.3869
RATAGE	7	b	0	1.00	5.02	2.33	0.0253
RONCH1	2	m	0	0.94	6.65	2.55	0.0156
RONCH1	5	f	0	0.67	4.04	0.49	0.1800
Subtotal RONCH1				0.97	10.68	3.05	
RONCH2	2	b	0	0.38	11.57	0.05	0.1904
RONCH3	2	b	0	0.24	9.12	0.05	0.4635
STRACH	8	b	4	0.40	9.96	0.07	0.2082
VENNER	5	m	0	0.55	13.40	0.72	0.0442
VENNER	2	f	0	0.71	11.21	1.74	0.0171

Appendix Table B6 - 2

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
Subtotal	VENNER			0.63	24.61	2.46	
WILLE1	13	b	0	1.50	2.36	3.28	0.0214
ZHENG	22	b	6	0.96	13.27	5.39	0.0005

RR data

N	31
NS	29

Wt	734.03
Het Chi	52.31
Het df	30
Het P	**
Fixed RR	1.37
RR1	1.28
RRu	1.48
P	+++
Random RR	1.43
RR1	1.28
RRu	1.60
P	+++
Asymm P	*

Appendix Table B6 - 3

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Adjusted

RR data

N	31			
NS	29			
Wt	734.03			
Het Chi	52.31			
Het df	30			
Het P	**			
Fixed RR	1.37			
RRl	1.28			
RRu	1.48			
P	+++			
Random RR	1.43			
RRl	1.28			
RRu	1.60			
P	+++			
Asymm P	*			
<u>Sex</u>				
	both	male	female	Total
N	27	2	2	31
NS	27	2	2	31
Wt	698.74	20.04	15.25	734.03
Het Chi	46.56	0.67	0.01	52.31
Het df	26	1	1	30
Het P	**	N.S.	N.S.	**
Fixed RR	1.35	1.97	2.01	1.37
RRl	1.25	1.27	1.22	1.28
RRu	1.45	3.05	3.33	1.48
P	+++	++	++	+++
Random RR	1.39	1.97	2.01	1.43
RRl	1.24	1.27	1.22	1.28
RRu	1.56	3.05	3.33	1.60
P	+++	++	++	+++
Between Chi				5.07
Between df				2
Between P				(*)
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	21	6	4	31
NS	19	6	4	29
Wt	549.19	155.34	29.51	734.03
Het Chi	37.03	4.76	3.35	52.31
Het df	20	5	3	30
Het P	*	N.S.	N.S.	**
Fixed RR	1.30	1.63	1.65	1.37
RRl	1.19	1.39	1.15	1.28
RRu	1.41	1.90	2.36	1.48
P	+++	+++	++	+++
Random RR	1.35	1.63	1.68	1.43
RRl	1.18	1.39	1.14	1.28
RRu	1.54	1.90	2.49	1.60
P	+++	+++	++	+++
Between Chi				7.18
Between df				2
Between P				*

Appendix Table B6 - 4

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

REF NRR X SEX AST AGEH RACE	LOC BEGYR PUBYR STTYP ADJ EXPOS-who UNEXsrce EXP-time UNEXTI MEAS LO HI
AGABI1 22 x b c 6 7 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 11 999	
AGABI2 22 x b c 13 14 all Eu:Ita 1994 1999 CC 0 Mother NotMothr current non cigs 11 999	
CHEN2 13 x b l 6 17 all NAmer 1993 1996 CS 0 AnyHh NoHhMemb current non cigs 10 999	
DEKKER 2 x b c 5 8 all NAmer 1988 1991 CC 0 AnyHh NoHhMemb unspec non persn 2 999	
DOLD 16 x b l 9 11 all Eu:Ger 1989 1992 CS 0 AnyHh NoHhMemb unspec non cigs 21 999	
ECE 5 b l 6 15 all Eu:est 1999 2001 CS 0 AnyHh NoHhMemb current non cigs 11 999	
EHRIT2 9 b l 3 14 all NAmer 1988 1992 CC 0 Bio-urine Low - - other 36 999	
FERGUS 15 x b l 0 6 all Auslia 1977 1985 Pr 0 Mother NotMothr in life non cigs 11 999	
GILLIL 41 b c 7 19 all NAmer 1993 2001 CS 8 AnyHh NoHhMemb current non persn 2 999	
GOLD 10 b c 6 14 all NAmer 1974 1993 Pr 11 Mother NotMothr current non cigs 30 999	
HJERN1 7 x b c 3 15 all Eu:Sca 1996 2001 CS 0 Mother NotMothr current non cigs 14 999	
HJERN2 7 x b c 3 15 all Eu:Sca 1996 2001 CS 0 Father NotFathr current non cigs 14 999	
INFANT 2 x b c 3 4 all NAmer 1988 1993 CC 0 Mother NotMothr in life non cigs 21 999	
LAM1 3 x b l 12 15 all As:FE 1994 1998 CS 0 AnyHh NoHhMemb unspec non persn 3 999	
LISTER 6 x b l 0 4 all Auslia 1989 1998 CS 0 Mother NotMothr current non cigs 15 999	
MAIER 3 b l 5 9 all NAmer 1994 1997 CS 0 TotETS None current non other 2 999	
MELSM 2 b c 11 17 all As:cen 1997 2001 CC 0 AnyHh NoHhMemb unspec non persn 2 999	
MUMCUO 5 b c 3 15 all As:ME 1986 1994 CC 0 AnyHh NoHhMemb unspec non cigs 31 999	
NHANE3 36 x b l 4 16 w+b NAmer 1988 2001 CS 0 Bio-urine Low - - other 3 113	
PALMIE 2 b c 1 12 all Eu:Ita * 1990 CC 0 AnyPar NoParent unspec non cigs 20 999	
PETERS 5 b c 9 14 all As:FE 1989 1996 Pr 6 AnyHh NoHhMemb current non persn 2 999	
RATAGE 7 b l 5 15 all As:cen 1996 2000 CC 0 AnyHh NoHhMemb unspec non cigs 10 999	
RONCH1 2 m l 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH1 5 f l 6 13 all Eu:Ita 1974 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH2 2 b l 6 14 all Eu:Ita 1992 2001 CS 0 AnyHh Low current non cigs 40 999	
RONCH3 2 b l 6 14 all Eu:Ita 1998 2001 CS 0 AnyHh Low current non cigs 40 999	
STRACH 2 x b c 13 18 all Eu:UK 1993 1995 CC 0 Mother NotMothr current non cigs 11 999	
VENNER 5 m l 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 30 999	
VENNER 2 f l 8 15 all As:FE 1995 2001 CS 0 Father NoParent current never cigs 30 999	
WILLE1 13 b c 3 15 all Eu:Sca 1988 1991 CC 0 Bio-urine Low - - other 30 999	
ZHENG 10 x b c 6 10 all As:FE 1999 2002 CC 0 AnyHh NoHhMemb in life non persn 4 999	

Appendix Table B6 - 5

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
 Lifetime Asthma (or Current if Lifetime not available)
 Unadjusted

REF	NRR	SEX	ADJ	Numbers Exposed		Non-exposed		RR	95.00%CI
				Case	Cont	Case	Cont		
AGABI1	22	b	0	150	1982	573	9614	1.27	(1.05- 1.53)
AGABI2	22	b	0	214	1984	816	10166	1.34	(1.15- 1.57)
CHEN2	13	b	0	24	162	61	548	1.33	(0.80- 2.20)
DEKKER	2	b	0	190	2072	249	4585	1.69	(1.39- 2.05)
DOLD	16	b	0	23	257	295	3613	1.10	(0.70- 1.71)
ECE	5	b	0	81	410	132	906	1.36	(1.00- 1.83)
EHRLI2	9	b	0	35	23	19	24	1.92	(0.86- 4.28)
*FERGUS	15	b	0	22	205	87	639	0.79	(0.51- 1.22)
GILLIL	41	b	8	-	-	-	-	1.70	(1.10- 2.50)
GOLD	10	b	11	-	-	-	-	1.07	(0.79- 1.44)
HJERN1	7	b	0	11	257	88	1804	0.88	(0.46- 1.66)
HJERN2	7	b	0	7	201	66	1552	0.82	(0.37- 1.81)
INFANT	2	b	0	45	32	273	289	1.49	(0.92- 2.41)
LAM1	3	b	0	13	101	201	2162	1.38	(0.76- 2.51)
LISTER	6	b	0	-	-	-	-	1.75	(1.33- 2.29)
MAIER	3	b	0	8	43	73	674	1.72	(0.78- 3.79)
MELSMOM	2	b	0	39	24	44	49	1.81	(0.94- 3.47)
MUMCUO	5	b	0	107	16	119	38	2.14	(1.13- 4.05)
NHANE3	36	b	0	226	1615	175	1457	1.17	(0.94- 1.44)
PALMIE	2	b	0	145	204	67	96	1.02	(0.70- 1.49)
PETERS	5	b	6	-	-	-	-	1.22	(0.78- 1.92)
RATAGE	7	b	0	42	8	58	30	2.72	(1.13- 6.52)
RONCH1	2	m	0	9	58	48	790	2.55	(1.19- 5.46)
RONCH1	5	f	0	5	56	35	764	1.95	(0.73- 5.17)
Subtotal RONCH1								2.31	(1.27- 4.20)
RONCH2	2	b	0	16	85	93	726	1.47	(0.83- 2.61)
RONCH3	2	b	0	12	72	91	696	1.27	(0.67- 2.44)
STRACH	2	b	0	40	29	364	382	1.45	(0.88- 2.38)
VENNER	5	m	0	38	53	48	116	1.73	(1.01- 2.96)
VENNER	2	f	0	29	37	50	130	2.04	(1.13- 3.66)
Subtotal VENNER								1.87	(1.26- 2.77)
WILLE1	13	b	0	8	4	30	67	4.47	(1.25- 15.99)
ZHENG	10	b	0	36	33	118	305	2.82	(1.68- 4.73)
Partial Totals				1575	10023	4273	42222		

*prospective study

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
AGABI1	22	b	0	0.24	110.86	0.87	0.0119
AGABI2	22	b	0	0.30	153.83	0.16	0.0002
CHEN2	13	b	0	0.29	15.14	0.03	0.2660
DEKKER	2	b	0	0.52	100.20	3.86	0.0000
DOLD	16	b	0	0.09	19.59	1.09	0.6847
ECE	5	b	0	0.30	42.62	0.02	0.0468
EHRLI2	9	b	0	0.65	6.01	0.64	0.1091
*FERGUS	15	b	0	-0.24	19.80	6.33	0.2896
GILLIL	41	b	8	0.53	22.80	0.94	0.0113
GOLD	10	b	11	0.07	42.63	2.88	0.6587
HJERN1	7	b	0	-0.13	9.37	1.97	0.6890
HJERN2	7	b	0	-0.20	6.11	1.70	0.6214
INFANT	2	b	0	0.40	16.50	0.08	0.1060
LAM1	3	b	0	0.33	10.84	0.00	0.2842
LISTER	6	b	0	0.56	52.04	2.80	0.0001
MAIER	3	b	0	0.54	6.12	0.28	0.1808
MELSMOM	2	b	0	0.59	9.05	0.64	0.0743
MUMCUO	5	b	0	0.76	9.38	1.74	0.0201
NHANE3	36	b	0	0.15	87.38	2.67	0.1532
PALMIE	2	b	0	0.02	26.92	2.57	0.9245
PETERS	5	b	6	0.20	18.94	0.31	0.3869
RATAGE	7	b	0	1.00	5.02	2.26	0.0253
RONCH1	2	m	0	0.94	6.65	2.47	0.0156
RONCH1	5	f	0	0.67	4.04	0.47	0.1800
Subtotal RONCH1				0.95	10.68	2.94	
RONCH2	2	b	0	0.38	11.57	0.04	0.1904
RONCH3	2	b	0	0.24	9.12	0.07	0.4635
STRACH	2	b	0	0.37	15.42	0.03	0.1464
VENNER	5	m	0	0.55	13.40	0.66	0.0442
VENNER	2	f	0	0.71	11.21	1.66	0.0171

Appendix Table B6 - 5

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

REF	NRR	SEX	ADJ	Ys	Ws	Qs	Ps
Subtotal	VENNER			0.61	24.61	2.32	
WILLE1	13	b	0	1.50	2.36	3.23	0.0214
ZHENG	10	b	0	1.04	14.32	7.20	0.0001

RR data

N	31
NS	29

Wt	879.25
Het Chi	49.67
Het df	30
Het P	*
Fixed RR	1.39
RR1	1.30
RRu	1.48
P	+++
Random RR	1.42
RR1	1.28
RRu	1.56
P	+++
Asymm P	N.S.

Appendix Table B6 - 6

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Unadjusted

RR data

N	31			
NS	29			
Wt	879.25			
Het Chi	49.67			
Het df	30			
Het P	*			
Fixed RR	1.39			
RRl	1.30			
RRu	1.48			
P	+++			
Random RR	1.42			
RRl	1.28			
RRu	1.56			
P	+++			
Asymm P	N.S.			
<u>Sex</u>				
	both	male	female	Total
N	27	2	2	31
NS	27	2	2	31
Wt	843.95	20.04	15.25	879.25
Het Chi	44.22	0.67	0.01	49.67
Het df	26	1	1	30
Het P	*	N.S.	N.S.	*
Fixed RR	1.37	1.97	2.01	1.39
RRl	1.28	1.27	1.22	1.30
RRu	1.46	3.05	3.33	1.48
P	+++	++	++	+++
Random RR	1.38	1.97	2.01	1.42
RRl	1.25	1.27	1.22	1.28
RRu	1.53	3.05	3.33	1.56
P	+++	++	++	+++
Between Chi				4.78
Between df				2
Between P				(*)
<u>Measure of exposure</u>				
	cigs	persn	other	Total
N	21	6	4	31
NS	19	6	4	29
Wt	601.23	176.15	101.87	879.25
Het Chi	28.84	6.24	5.98	49.67
Het df	20	5	3	30
Het P	(*)	N.S.	N.S.	*
Fixed RR	1.33	1.69	1.27	1.39
RRl	1.23	1.46	1.04	1.30
RRu	1.44	1.96	1.54	1.48
P	+++	+++	+	+++
Random RR	1.34	1.69	1.63	1.42
RRl	1.20	1.40	1.01	1.28
RRu	1.49	2.03	2.62	1.56
P	+++	+++	+	+++
Between Chi				8.61
Between df				2
Between P				*

Appendix Table B6 - 7

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Excluded studies (and stage at which they were excluded)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
2	CUNNI2	EHRLI1	KAPLAN	KELLY	NYSTAD	OLIVET	TAYLOR	WEITZ1	WEITZ2	XU						
3	ADDOYO	AKCAKA	ALBA	ALDAWO	ALFRA1	ALFRA2	ANDRAE	ANNESI	ARSHAD	AZIZI	BALL	BARRET	BECKET	BENER	BERGMA	BRABIN
	BURCHF	BURR	BUTZ	CALL	CHEN1	CHHABR	CHINN	CLARK	CSONKA	DAIGLE	DEBENE	DEKOK	DELL	DIJKST	DODGE	DOTTER
	FAGBUL	FARBE1	FARBE2	FARBE3	FAROOQ	FIELDE	FLYNN1	FLYNN2	FORAST	FORSB1	FORSB2	FORSB3	FUJI	GOREN1	GOREN2	GOREN3
	GOREN4	GOREN5	GOREN6	GORTM1	GORTM2	GUPTA	GURKAN	HABY	HAJNAL	HOST	HU1	HU2	HUGHES	JAAKKO	JENKIN	JONES
	KALYO1	KALYO2	KARUNA	KAY	KEARNE	KENDIR	KERSHA	KIVITY	KNIGHT	KUEHR	KUHR	LAU	LEE1	LEE2	LEEDER	LEEN
	LEROUX	LILLJE	LINDFO	LIS	LOPEZC	MARTIN	MCCON1	MCCON2	MCKEEV	MELIA	MOHAME	MONTEF	MOUSSA	MOYES1	MOYES2	MURRAY
	NILSSO	NITTA	OCONNE	ODDY	OHARA	PIC	POKHAR	PONSON	RASANE	RENNIE	RIBEIR	RONMAR	ROSASV	RUDNIK	SANZOR	SARRAZ
	SCHENK	SCHMIT	SELCUK	SENNHA	SHAMSS	SHERMA	SHOHAT	SIGURS	SOMERV	SOTOQU	SOYSET	SPIEKE	SQUILL	STANHO	STAZI	STERN1
	STERN2	STODDA	TARIQ	TIMONE	TOMINA	TSIMOVY	ULRIK	VARELA	VAVILI	VERHOE	VOLKME	VONMAF	WANG	WILLE2	WITHER	WOLFO3
4	YANG	ZEIGER	ZEJDA													
	CUNNI1	LAM2	WOLF01	WOLF02												

Appendix Table B6 - 8

IESAST - Meta-analysis of Lifetime Exposure, Biochemical/Total (or Household, or Parent if Bio/Tot not avail) : High Dose
Lifetime Asthma (or Current if Lifetime not available)
Potentially overlapping studies

REF	REFGP	PRINC	OVERLAP	Adjusted - insufficient data for metaanalysis																RR			
				REF	NRR	SEX	AST	AGEL	AGEH	RACE	LOC	BEGYR	PUBYR	STTYP	ADJ	EXPOS-who	UNEXsrce	EXP-time	UNEXTI	MEAS	LO	HI	
CUNN11	10	b	c	8	11	all	NAmer	1988	1996	CS	9	AnyHh	NoHhMemb	current	non	cigs	30	999	1.07				
LAM2	5	b	l	8	13	all	As:FE	1995	1999	CS	4	AnyHh	NoHhMemb	unspec	non	persn	3	999	0.71				
STRACH	14	b	c	13	18	all	Eu:UK	1993	1995	CC	0	Mother	NotMothr	<1m	non	cigs	11	999	*				
WOLF01	5	b	l	8	8	all	Eu:Ger	1977	1995	CS	7	AnyHh	NoHhMemb	current	non	cigs	21	999	0.40				
WOLF02	5	b	l	10	10	all	Eu:Ger	1979	1995	CS	7	AnyHh	NoHhMemb	current	non	cigs	21	999	0.63				
SIG																							
?																							
?																							
n																							
?																							
?																							