

Web Appendix : Acknowledgments by Study (listed by location and name in alphabetical order). Further information can be found in study references and websites, and <https://clic.berkeley.edu>.

Brazil, BCSG-IAL

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France, ADELE & ESCALE (<http://www.cress-umr1153.fr/en/>)

Research Investigator: Jacqueline Clavel (Inserm, CRESS, Université Paris Descartes).

Funding: Inserm, the Fondation de France, ARC, the Agence Française de Sécurité Sanitaire des Produits de Santé (AFSSAPS), the Agence Française de Sécurité Sanitaire de l'Environnement et du Travail (AFSSET), the association Cent pour Sang la vie, the Institut National du Cancer (INCa), the Agence Nationale de la Recherche (ANR), and the Cancéropôle Ile de France.

Germany, German Childhood Cancer Registry (GCCR)

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Greece, NARECHEM

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Italy, SETIL

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"Daniele Chianelli" - Associazione per la Ricerca e la Cura delle Leucemie, Linfomi e Tumori di Adulti e Bambini (Perugia).

Mexico, MIGICCL

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Hospital General "Dr. Manuel Gea González", Hospital Pediátrico de San Juan de Aragón del Gobierno del D.F., Hospital Juárez de Centro; and hospitals from the Instituto de Seguridad y

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New Zealand, NZCCS

Research Investigators: John D Dockerty, Peter G Herbison, David CG Skegg and J Mark Elwood (University of Otago). **Funding:** Health Research Council of NZ, the NZ Lottery Grants Board, the Otago Medical School (Faculty Bequest Funds), the Cancer Society of NZ, the Otago Medical Research Foundation, and the A.B. de Lautour Charitable Trust.

United Kingdom, UKCCS (www.ukccs.org)

Research Investigators: Eve Roman and Tracy Lightfoot (University of York), part of a team of 10 clinical and epidemiological investigators, and two biological investigators (university departments, research institutes, and the National Health Service in Scotland). **Funding:** Leukaemia and Lymphoma Research.

United States, California State, CCLS

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United States, Washington State

Research Team: Beth Mueller, Dave Doody (Fred Hutchinson Cancer Research Center; Dr. Mueller also affiliated with the University of Washington); Bill O'Brien (data management/programming at the University of Washington). Data access: The Washington State Department of Health. Cancer Registries funded by the Cancer Surveillance System of Western Washington (part of the Surveillance, Epidemiology, and End Results (SEER) Program of the National Cancer Institute, and the Washington State Cancer Registry (part of the Centers for Disease Control National Program of Cancer Registries). Research work funded in part by the Fred Hutchinson Cancer Research Center, and NCI Contract # HHSN261201000094P.

Web Table 1. Study Characteristics and Availability of Smoking Data for Acute Myeloid Leukemia Cases and Controls, Childhood Leukemia International Consortium, 1974-2012

First Author, Year (Reference No.)	Country (Study Name)	Study Characteristics				Data Availability									
		Enrollment Period	Controls	Cases	Total	Mother, Ever-Smoking ^a	Mother, Prenatal ^b	Mother, Preconception ^c	Mother, Pregnancy	Mother, After Birth	Father, Ever-Smoking ^a	Father, Prenatal ^b	Father, Preconception ^c	Father, Pregnancy	Father, After Birth
Podvin, 2006 (1)	United States, Washington	1974-2009	936	94	1030	n/a	X #	X #	X #	n/a	n/a	n/a	n/a	n/a	n/a
J.D. Dockerty, unpublished data	New Zealand (NZCCR) ^d	1990-1995	303	22	325	X	X #	X #	X #	X	X	X #	n/a	n/a	X
Pang, 2003 (2)	United Kingdom (UKCCS) ^d	1991-1996	3450	248	3698	X	X #	X #	X #	X	X	X #	n/a	n/a	X
Schuz, 1999 (3)	Germany (GCCR)	1992-1997	2456	130	2586	n/a	X #	X #	X #	X #	n/a	X #	X #	X #	X #
Menegaux, 2005 (4)	France (Adele)	1995-1999	287	35	322	X	X #	n/a	X #	X #	X	X #	X #	n/a	X #
C. Wesseling, unpublished data	Costa Rica	1995-2000	579	39	618	X	X #	X	X	X	X	X	X	X	X
Metayer, 2013 (5)	United States, California (NCCLS)	1995-2008	1226	145	1371	X	X #	X #	X #	X #	X	X #	X #	X	X
Klimentopoulou, 2012 (6)	Greece (NARECHEM)	1996-2012	1180	119	1299	n/a	X #	X	X	X	n/a	X	X	X	X
J.M. Mejia-Arangure, unpublished data	Mexico (MIGICCL)	1998-2007	520	257	777	n/a	X	X	X	X	n/a	X	X	X	X
Mattioli, 2014 (7)	Italy (SETIL) ^d	1999-2002	129	83	212	X	X #	n/a	X #	n/a	X	X #	X #	X #	n/a
Ferreira, 2012 (8)	Brazil	1999-2007	422	59	481	n/a	X #	X #	X #	X #	n/a	n/a	n/a	n/a	n/a
Rudant, 2008 (9)	France (ESCALE)	2003-2005	1681	99	1780	n/a	X #	n/a	X #	n/a	n/a	X #	X #	X #	X #
Total Studies [X(#)]:						6	12 (11)	9 (6)	12 (9)	9 (4)	6	10 (7)	8 (5)	7 (3)	9 (3)
Total Participants [X(#)]:						6518	14420 (13478)	11325 (8613)	14409 (11528)	11451 (4672)	6091	12346 (9661)	8722 (6038)	8308 (4460)	12424 (4512)
Range of available data per study:						99% to 100%	95% to 100%	20% ^e to 100%	95% to 100%	97% to 100%	86% to 100%	85% to 100%	84% to 100%	84% to 100%	81% to 100%

Abbreviations: ESCALE: Epidemiologic Study on Childhood Cancer and Leukemia; GCCR: German Childhood Cancer Registry; MIGICCL: Mexican Inter-Institutional Group for the Identification of the Causes of Childhood Leukemia; NARECHEM: Nationwide Registration for Childhood Hematological Malignancies; NCCLS: Northern California Childhood Leukemia Study; SETIL: Study on the Etiology of Childhood Lymphohematopoietic Malignancies; UKCCS: United Kingdom Childhood Cancer Study; X: available data (yes/no); #: available data (cigarettes per day); n/a: not available

^aEver is defined as having ever smoked regularly, ever smoked 1 cigarette per day for six months to one year, or smoked 100 cigarettes or more in the mother or father's lifetime

^bPrenatal is defined as any time up to the child's birth

^cPreconception is defined as between 3 months and 1 year before conception, or time is not defined

^dStudy was individually-matched

^e20% applies to United States, Washington only

Web Table 2. Description of Studies Participating in the Analysis of Parental Smoking and Risk of Childhood Acute Myeloid Leukemia: The Childhood Leukemia International Consortium, 1974-2012

First Author, Year (Reference No.)	Study Location, Name	Period of Recruitment	Study Design	Control Source	Case Source
Ferreira, 2012 (8)	Brazil	1999-2007	Case-control study; Frequency matching (focus on infant leukemia)	Hospitals	Hospitals (in The Brazilian Collaborative Study Group, BCSG)
C. Wesseling, unpublished data	Costa Rica	2001-2003	Case-control study; Frequency matching	Birth Registry (nationwide)	Population-based cancer registry & hospitals (nationwide)
Menegaux, 2005 (4)	France, Adele	1995-1999	Case-control study; Frequency matching & case-parental trios	Hospitals (same as cases)	Hospitals
Rudant, 2008 (9)	France, ESCALE	2003-2004	Case-control study; Frequency matching; case-parental trios	Population quotas by age, sex, region (nationwide)	Population-based cancer registry (nationwide)
Schuz, 1999 (3)	Germany, GCCR	1980-1996	Pooled case-control study (2 time periods, see case eligibility criteria); Individual matched control recruitment; Frequency-matching in analyses	Population-based registry (community-based but complete nationwide coverage)	Population-based cancer registry (nationwide)
Klimentopoulou, 2012 (6)	Greece, NARECHEM	1996-present	Case-control study; Individual matching	Hospital, age and gender matched	Epidemiological-clinical database (Nationwide Registry for Childhood Haematological malignancies, NARECHEM)
Mattioli, 2014 (7)	Italy, SETIL	1998-2001	Case-control study; Individual matching	Registry (nationwide)	Clinical cancer registry (nationwide)
J.M. Mejia-Arangure, unpublished data	Mexico, MIGICCL	1998-2007	Case-control study; Frequency matching (age, sex, institution)	Hospitals (secondary-care groups)	Hospitals
J.D. Dockerty, unpublished data	New Zealand, NZCCS	1990-93	Case-control study; Individual matching	Birth Registry (nationwide)	National Cancer Registry; Children's Cancer Registry; and Hospital Admission/Discharge System (nationwide)
Pang, 2003 (2)	United Kingdom, UKCCS	1991-98	Case-control study; Individual matching; Case-parental trios	General practionner (GP) registry (nationwide)	General practionner (GP) registries (nationwide)
Metayer, 2013 (5)	United States, California State, NCCLS	1995-2008; 2010-present	Case-control study; Individual matching	Birth registry (statewide)	Hospitals
Podvin, 2006 (1)	United States, Washington State	1974-2009	Case-control study; Frequency matching	Birth registry (statewide)	Population-based cancer registry (Regional 1974-1993; statewide 1994-2009)

Abbreviations: ESCALE: Epidemiologic Study on Childhood Cancer and Leukemia; GCCR: German Childhood Cancer Registry; MIGICCL: Mexican Inter-Institutional Group for the Identification of the Causes of Childhood Leukemia; NARECHEM: Nationwide Registration for Childhood Hematological Malignancies; NCCLS: Northern California Childhood Leukemia Study; NZCCS: New Zealand Childhood Cancer Study; SETIL: Study on the Etiology of Childhood Lymphohematopoietic Malignancies; UKCCS: United Kingdom Childhood Cancer Study

Web Table 3. Translated interviews for maternal and paternal smoking, by study and period of interest, Childhood Leukemia International Consortium, 1974-2012						
First Author, Year (Reference No.)	Country, Study Name	Lifetime	Preconception	Pregnancy	After Birth	Other
Pang, 2003 (2)	United Kingdom, UKCCS	Have you ever regularly smoked at least one cigarette a day for at least a year?	On average how many did you smoke per day one year before child was born?	Questions regarding the 3 months before pregnancy, first trimester, second trimester, and third trimester are not available	How many one year after child was born?	
J.D. Dockerty, unpublished data, 1990-1995	New Zealand	Have you ever regularly smoked at least one cigarette a day for at least a year?	On average how many did you smoke per day one year before child was born?	Questions regarding the 3 months before pregnancy, first trimester, second trimester, and third trimester are not available	How many one year after child was born?	
Klimentopoulou, 2012 (6)	Greece	Does the father smoke or did he smoke in the past? Does the mother smoke or did she smoke in the past?		Did she smoke during pregnancy?		
Menegaux, 2005 (4)	France, Adele (translated from French)	Have you smoked at least one cigarette per day for 6 months? (translated) If yes, what age did you start? Do you still smoke now?				
Rudant, 2008 (9)	France, ESCALE (translated from French)	Have you ever smoked regularly? At what age did you start? Does the father smoke regularly? Did he stop? At what age? How many did you smoke?		Did you smoke when you were pregnant?		
C. Wesseling, unpublished data, 1995-2000	Costa Rica (translated from Spanish)	Have you smoked at some point in your life? At what age did you begin smoking?	Did you smoke the year before becoming pregnant with child? How many per day/week?	Did you smoke during your pregnancy with child? During which stages (trimesters) did you smoke? How many per day/week?	Did you smoke after the birth of child?	Have you stopped smoking?
Metayer, 2013 (5)	United States, NCCLS (using Phase 3 questionnaire to approximate all three phases)	M&F: Have you ever smoked at least one hundred cigarettes in your entire life? How old were you when you started smoking?	M&F: Did you smoke during the 3 months before your pregnancy with [Child]? Approximately how many cigarettes per day did you smoke during that time?	M only: Did you smoke during the time you were pregnant with [child]? Approximately how many cigarettes per day did you smoke during that time?	M only: Did you smoke while breast-feeding [child]? Approximately how many cigarettes per day did you smoke during that time? Not including the time you were breastfeeding, did you smoke between the time the child was born and his/her third birthday?	M&F: Do you smoke now? In what month and year did you last quit smoking?
Schuz, 1999 (3)	Germany (translated from German)		M&F: How many cigarettes per day in the last 3 months before pregnancy?	How many cigarettes per day during pregnancy?	How many cigarettes per day in the 3 months after birth?	
Ferreira, 2012 (8)	Brazil	Do you smoke? Have you ever smoked in any part of your life? How long have you smoked? How old were you when you first started smoking regularly? How long ago did you quit smoking?	Approximately how many cigarettes did you smoke before and during the pregnancy and breastfeeding of your child? [pre-gestational trimester, 1st trimester, 2nd trimester, 3rd trimester, breastfeeding]	Approximately how many cigarettes did you smoke before and during the pregnancy and breastfeeding of your child? [pre-gestational trimester, 1st trimester, 2nd trimester, 3rd trimester, breastfeeding]	Approximately how many cigarettes did you smoke before and during the pregnancy and breastfeeding of your child? [pre-gestational trimester, 1st trimester, 2nd trimester, 3rd trimester, breastfeeding]	During your pregnancy did someone who lived in your house smoke?
Mattioli, 2014 (7)	Italy (translated)	M&F: Do you smoke or have you ever smoked regularly (at least once a day for 6 months?) If yes, what year did you start? Smoke still? If you stopped smoking, what year did you stop?	Father only: Did you smoke during pregnancy with the child or within 6 months prior to conception of the child?	Did you smoke during the pregnancy with the child? If yes, what trimester? How many per day?		
J.M. Mejia-Arangure, unpublished data, 1998-2007	Mexico, MIGICCL (translated from Spanish)	M&F: Have you smoked at some point? You've never smoked? At what age did you begin smoking? During some point in your life did you stop smoking? What age? Which time period?	M&F: Before pregnancy with the child did you smoke? Which years? How many cigarettes did you smoke?	M&F: During the pregnancy of the child, did you smoke? During what months of the pregnancy did you smoke? How many cigarettes did you smoke?	M&F: After the child was born, did you smoke? What years did you smoke? How many cigarettes did you smoke?	M&F: Do you smoke now? How many cigarettes do you smoke now? At what age did you stop smoking?
Podvin, 2006 (1)	United States, Washington			2003-Present: Collected as number of cigarettes, by trimester 1984-2002: Collected as smoking status during pregnancy (follow up questions asked about #cigarettes by trimester)		

Abbreviations: : ESCALE: Epidemiologic Study on Childhood Cancer and Leukemia; F: question directed towards father; GCCR: German Childhood Cancer Registry; M: question directed towards mother; MIGICCL: Mexican Inter-Institutional Group for the Identification of the Causes of Childhood Leukemia; NARECHEM: Nationwide Registration for Childhood Hematological Malignancies; NCCLS: Northern California Childhood Leukemia Study; NZCCS: New Zealand Childhood Cancer Study; SETIL: Study on the Etiology of Childhood Lymphohematopoietic Malignancies; UKCCS: United Kingdom Childhood Cancer Study

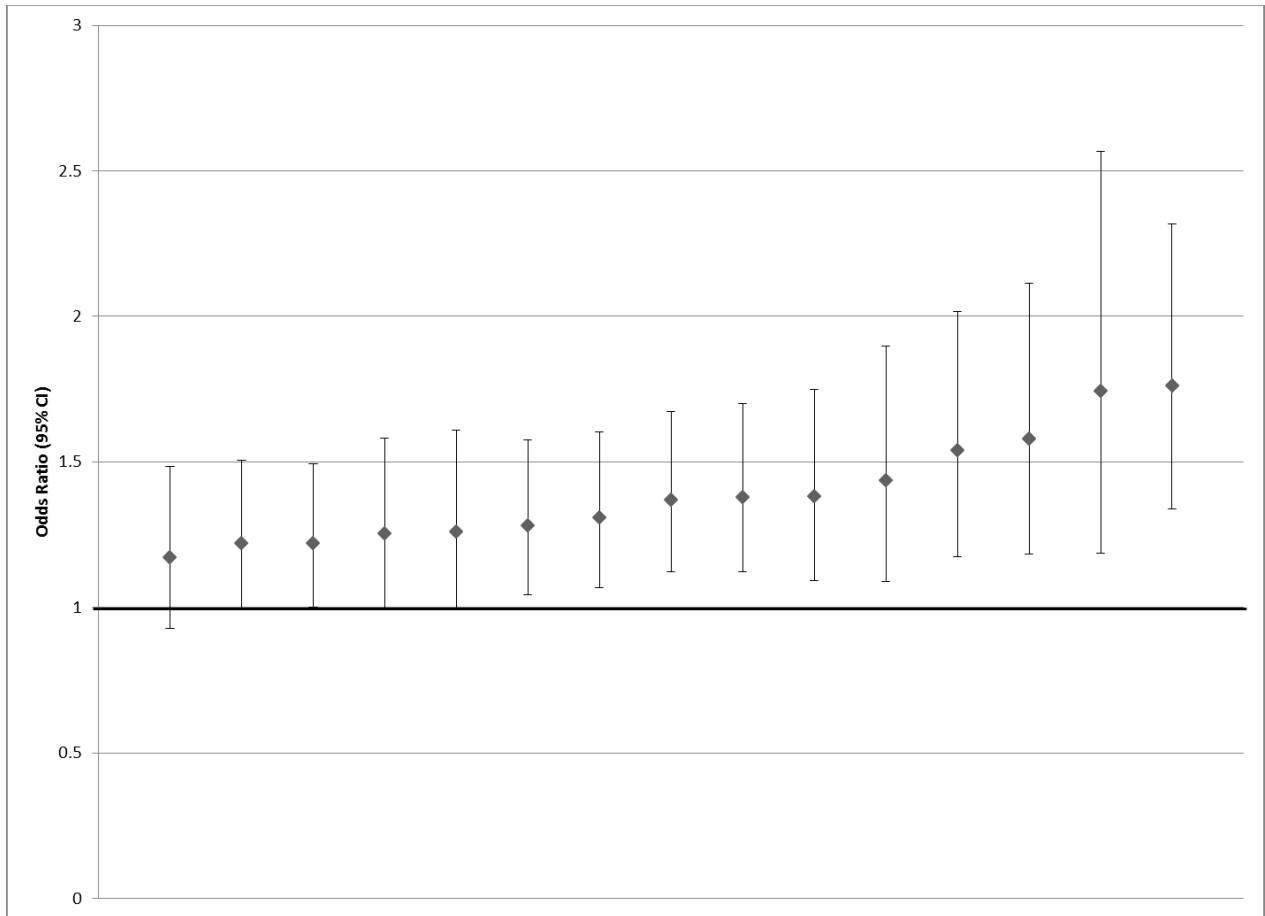
Web Table 4. Categorization of Race/Ethnicity Variables by Study, Childhood Leukemia International Consortium, 1974-2012

First Author, Year (Reference No.)	Study Location (Study Name)	Original Category	Standardized Category
Podvin, 2006 (1)	United States, Washington	White Black Native American Chinese Japanese Filipino Other Asian Hispanic Other Non-White	Non-Hispanic White Non-Hispanic Other Non-Hispanic Other Non-Hispanic Other Non-Hispanic Other Non-Hispanic Other Non-Hispanic Other Hispanic Hispanic Non-Hispanic Other
J.D. Dockerty, unpublished data, 1990-1995	New Zealand (NZCCS)	NZ European Maori Pacific Island Other	Non-Hispanic White Non-Hispanic Other Non-Hispanic Other Non-Hispanic Other
Pang, 2003 (2)	United Kingdom (UKCCS)	White Non-White Mixed Other No Dad Not Known	Non-Hispanic White Non-Hispanic Other Non-Hispanic White Non-Hispanic White Non-Hispanic White Non-Hispanic White
Schuz, 1999 (3)	Germany (GCCR)	NA	Non-Hispanic White
Menegaux, 2005 (4); Rudant, 2008 (9)	France (Adele & ESCALE)	Non-Caucasian Caucasian	Non-Hispanic Other Non-Hispanic White
C. Wesseling, unpublished data, 1995-2000	Costa Rica	NA	Hispanic
Metayer, 2013 (5)	United States, California (NCCLS)	Hispanic Non-Hispanic White Non-Hispanic Other	Hispanic Non-Hispanic White Non-Hispanic Other
Klimentopoulou, 2012 (6)	Greece (NARECHEM)	Greek Russian Albania Poland Georgia Moldavia Armenia Romania Bulgaria Kazakhstan Lithuania Sri Lanka	Non-Hispanic White Non-Hispanic White Non-Hispanic White Non-Hispanic White Non-Hispanic White Non-Hispanic White Non-Hispanic Other Non-Hispanic White Non-Hispanic White Non-Hispanic Other Non-Hispanic White Non-Hispanic Other
J.M. Mejia-Arangure, unpublished data, 1998-2007	Mexico (MIGICCL)	Hispanic	Hispanic
Mattioli, 2014 (7)	Italy (SETIL)	NA	Non-Hispanic White**
Ferreira, 2012 (8)	Brazil	White Non-White Japanese	Non-Hispanic White Non-Hispanic Other Non-Hispanic Other

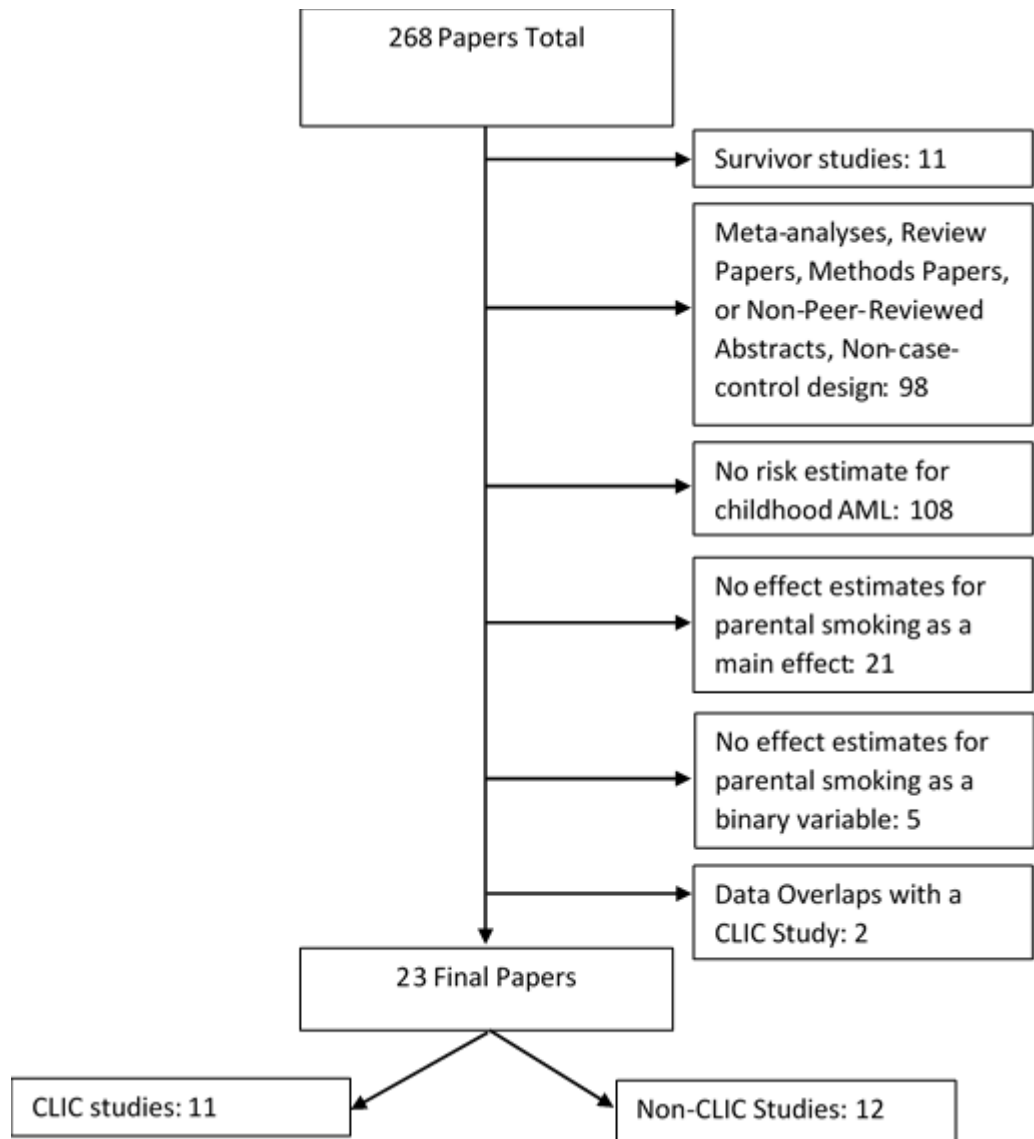
Abbreviations: : ESCALE: Epidemiologic Study on Childhood Cancer and Leukemia; GCCR: German Childhood Cancer Registry; MIGICCL: Mexican Inter-Institutional Group for the Identification of the Causes of Childhood Leukemia; NARECHEM: Nationwide Registration for Childhood Hematological Malignancies; NCCLS: Northern California Childhood Leukemia Study; NZCCS: New Zealand Childhood Cancer Study; SETIL: Study on the Etiology of Childhood Lymphohematopoietic Malignancies; UKCCS: United Kingdom Childhood Cancer Study
NA indicates data not available/provided

*In all previous UKCCS analyses, all groups were considered White except the Non-White group

**Based on demographic data

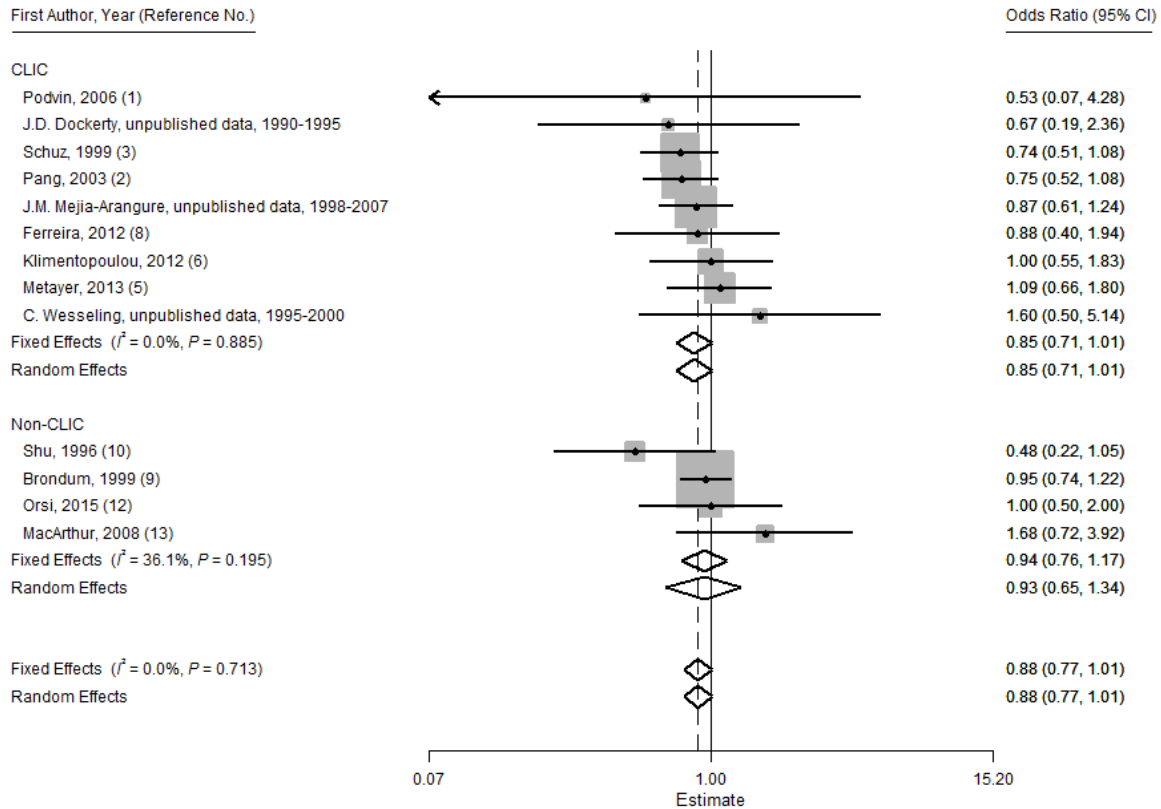


Web Figure 1. Sensitivity Analysis for Paternal Ever-Smoking, Removing Two Studies at a Time, Resulting in 15 Combinations of 4 studies. Abbreviations: CI: Confidence Interval.

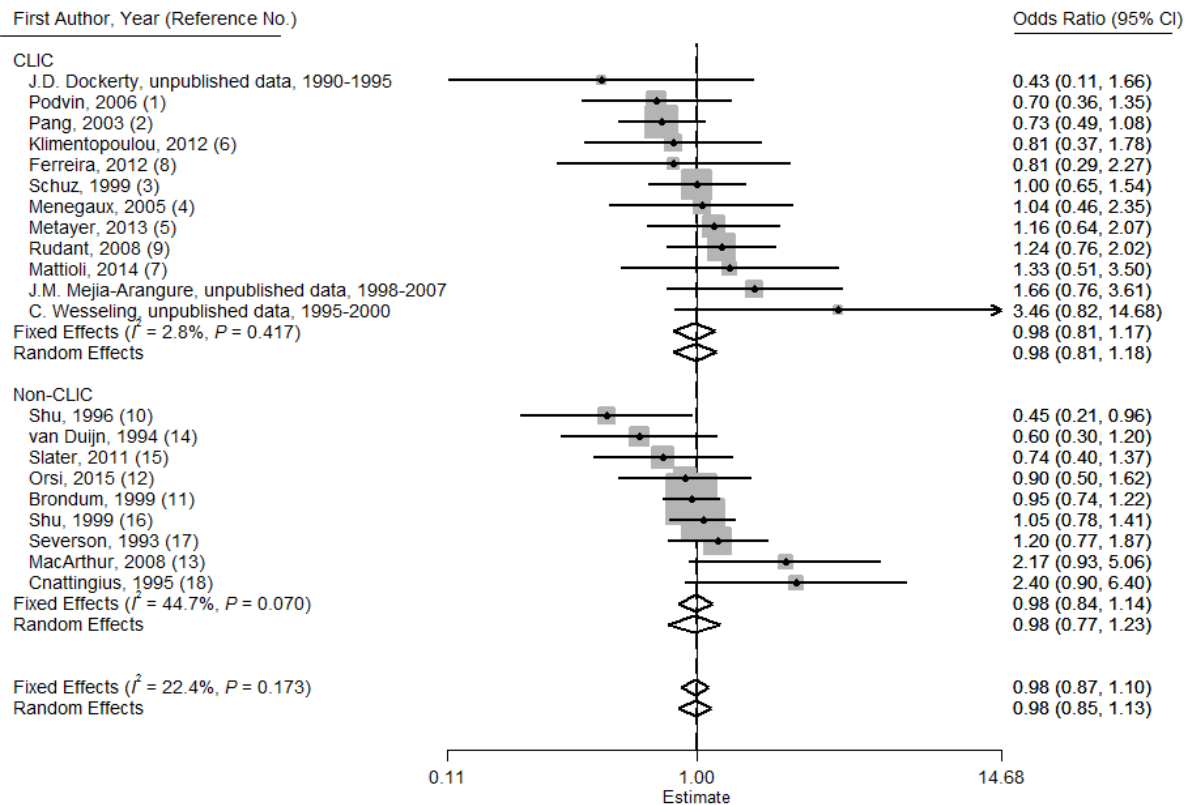


Web Figure 2. Flow diagram of exclusion criteria for systematic literature review conducted for parental smoking and risk of childhood acute myeloid leukemia. The following search term was used: “(pediatric OR childhood) AND leukemia AND (tobacco OR smok*) AND (parent* OR maternal OR paternal)” in PubMed, Embase and Web of Science; reference lists of published review papers and meta-analyses were also screened.

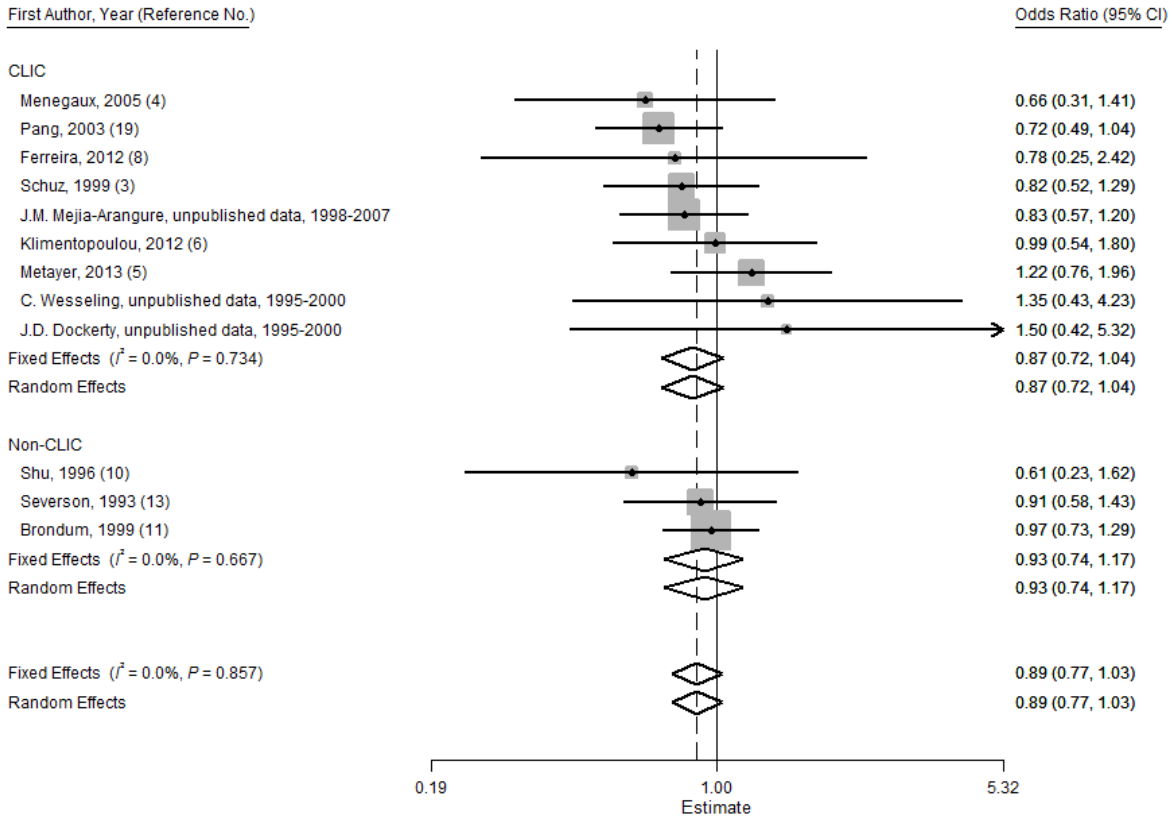
Abbreviations: AML: Acute Myeloid Leukemia; CLIC: Childhood Leukemia International Consortium.



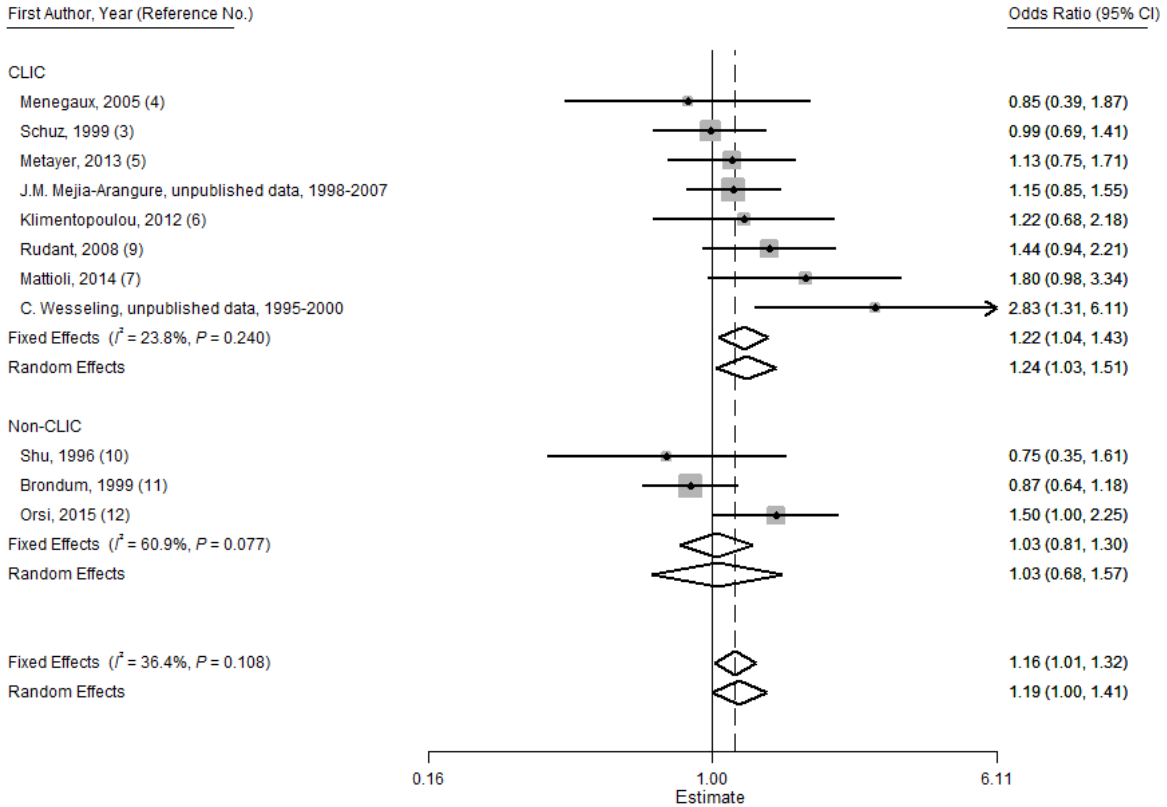
Web Figure 3. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Maternal Smoking Before Pregnancy and Risk of Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Odds Ratios for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.476. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium



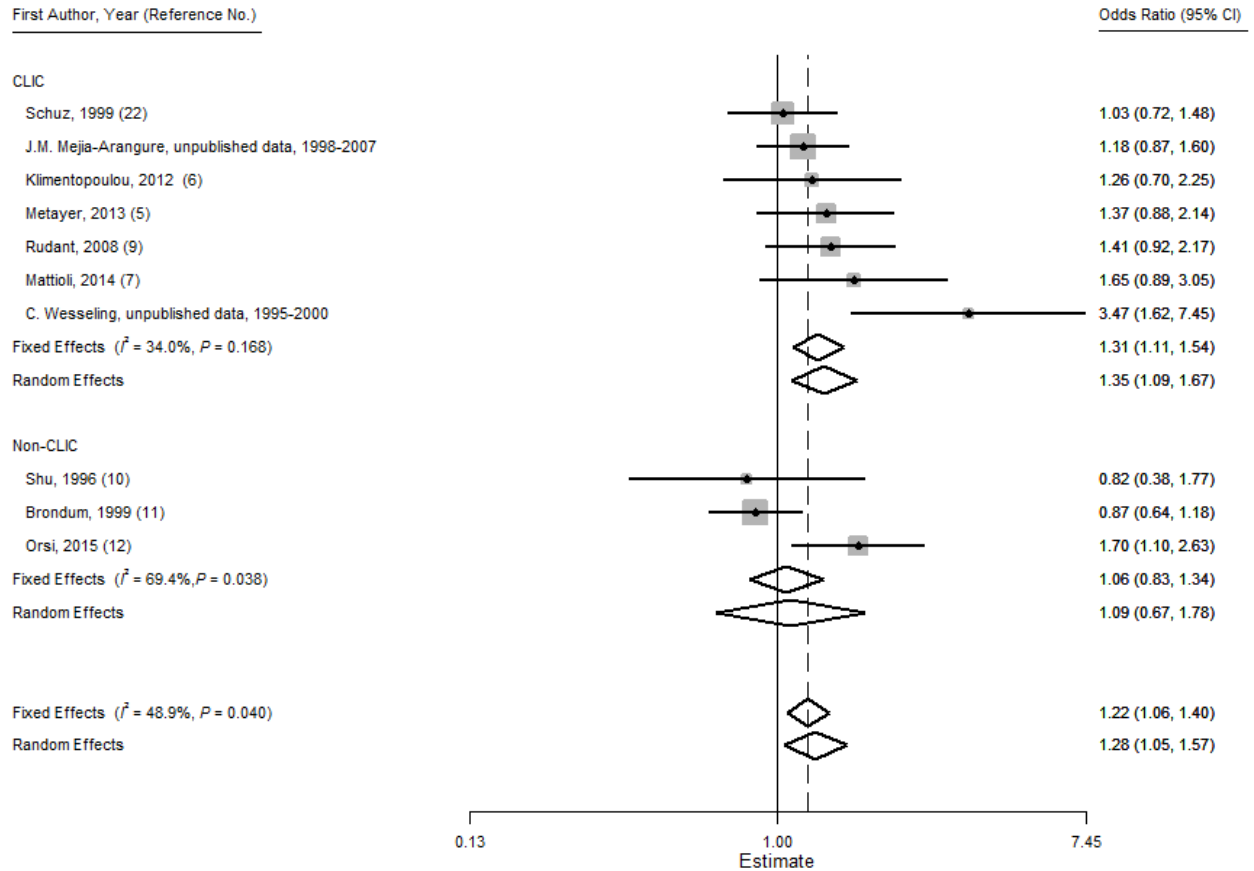
Web Figure 4. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Maternal Smoking During Pregnancy and Risk of Childhood Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Estimates for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.967. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium.



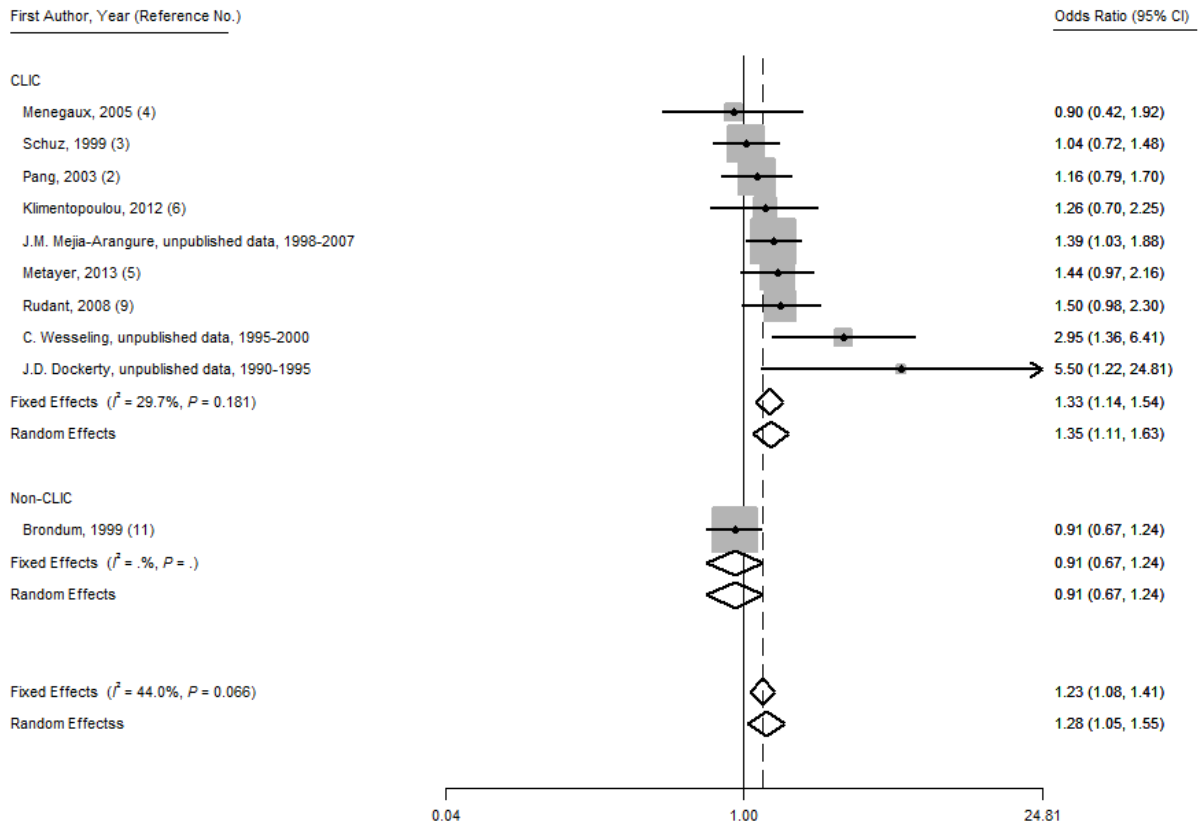
Web Figure 5. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Maternal Smoking After Pregnancy and Risk of Childhood Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Estimates for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.651. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium.



Web Figure 6. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Paternal Smoking Before Pregnancy and Risk of Childhood Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Estimates for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.233. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium.



Web Figure 7. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Paternal Smoking During Pregnancy and Risk of Childhood Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Estimates for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.158. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium.



Web Figure 8. Study-specific Odds Ratios (ORs) and Fixed- and Random-effects Meta-analysis ORs for Paternal Smoking After Pregnancy and Risk of Childhood Acute Myeloid Leukemia (AML) in Childhood Leukemia International Consortium (CLIC) and non-CLIC studies. Estimates for CLIC studies were generated using original data. P value for heterogeneity between groups is 0.031. Abbreviations: CI: Confidence Interval; CLIC: Childhood Leukemia International Consortium.

Web Materials Bibliography

1. Podvin D, Kuehn CM, Mueller BA, et al. Maternal and birth characteristics in relation to childhood leukaemia. *Paediatr Perinat Epidemiol* 2006;20(4):312-322.
2. Pang D, McNally R, Birch JM. Parental smoking and childhood cancer: results from the United Kingdom Childhood Cancer Study. *Br J Cancer* 2003;88(3):373-381.
3. Schuz J, Kaatsch P, Kaletsch U, et al. Association of childhood cancer with factors related to pregnancy and birth. *Int J Epidemiol* 1999;28(4):631-639.
4. Menegaux F, Steffen C, Bellec S, et al. Maternal coffee and alcohol consumption during pregnancy, parental smoking and risk of childhood acute leukaemia. *Cancer Detect Prev* 2005;29(6):487-493.
5. Metayer C, Zhang L, Wiemels JL, et al. Tobacco Smoke Exposure and the Risk of Childhood Acute Lymphoblastic and Myeloid Leukemias by Cytogenetic Subtype. *Cancer Epidemiol Biomarkers Prev* 2013;22(9):1600-1611.
6. Klimentopoulou A, Antonopoulos CN, Papadopoulou C, et al. Maternal smoking during pregnancy and risk for childhood leukemia: a nationwide case-control study in Greece and meta-analysis. *Pediatr Blood Cancer* 2012;58(3):344-351.
7. Mattioli S, Farioli A, Legittimo P, et al. Tobacco smoke and risk of childhood acute non-lymphocytic leukemia: findings from the SETIL study. *PLoS ONE* 2014;9(11):1-9.
8. Ferreira JD, Couto AC, Pombo-de-Oliveira MS, et al. Pregnancy, maternal tobacco smoking, and early age leukemia in Brazil. *Front Oncol* 2012;2(151):1-9.
9. Rudant J, Menegaux F, Leverger G, et al. Childhood hematopoietic malignancies and parental use of tobacco and alcohol: the ESCALE study (SFCE). *Cancer Causes Control* 2008;19(10):1277-1290.
10. Shu XO, Ross JA, Pendergrass TW, et al. Parental alcohol consumption, cigarette smoking, and risk of infant leukemia: a Childrens Cancer Group study. *J Natl Cancer Inst* 1996;88(1):24-31.
11. Brondum J, Shu XO, Steinbuch M, et al. Parental cigarette smoking and the risk of acute leukemia in children. *Cancer* 1999;85(6):1380-1388.
12. Orsi L, Rudant J, Ajrouche R, et al. Parental smoking, maternal alcohol, coffee and tea consumption during pregnancy, and childhood acute leukemia: the ESTELLE study. *Cancer Causes Control* 2015;26(7):1003-1017.
13. MacArthur AC, McBride ML, Spinelli JJ, et al. Risk of childhood leukemia associated with parental smoking and alcohol consumption prior to conception and during pregnancy: the cross-Canada childhood leukemia study. *Cancer Causes Control* 2008;19(3):283-295.
14. van Duijn CM, van Steensel-Moll HA, Coebergh JW, et al. Risk factors for childhood acute non-lymphocytic leukemia: an association with maternal alcohol consumption during pregnancy? *Cancer Epidemiol Biomarkers Prev* 1994;3(6):457-460.
15. Slater ME, Linabery AM, Blair CK, et al. Maternal prenatal cigarette, alcohol and illicit drug use and risk of infant leukaemia: a report from the Children's Oncology Group. *Paediatr Perinat Epidemiol* 2011;25(6):559-565.
16. Shu XO, Linet MS, Steinbuch M, et al. Breast-feeding and risk of childhood acute leukemia. *J Natl Cancer Inst* 1999;91(20):1765-1772.
17. Severson RK, Buckley JD, Woods WG, et al. Cigarette smoking and alcohol consumption by parents of children with acute myeloid leukemia: an analysis within morphological subgroups--a report from the Childrens Cancer Group. *Cancer Epidemiol Biomarkers Prev* 1993;2(5):433-439.
18. Cnattingius S, Zack M, Ekblom A, et al. Prenatal and neonatal risk factors for childhood myeloid leukemia. *Cancer Epidemiol Biomarkers Prev* 1995;4(5):441-445.