Supplementary Material

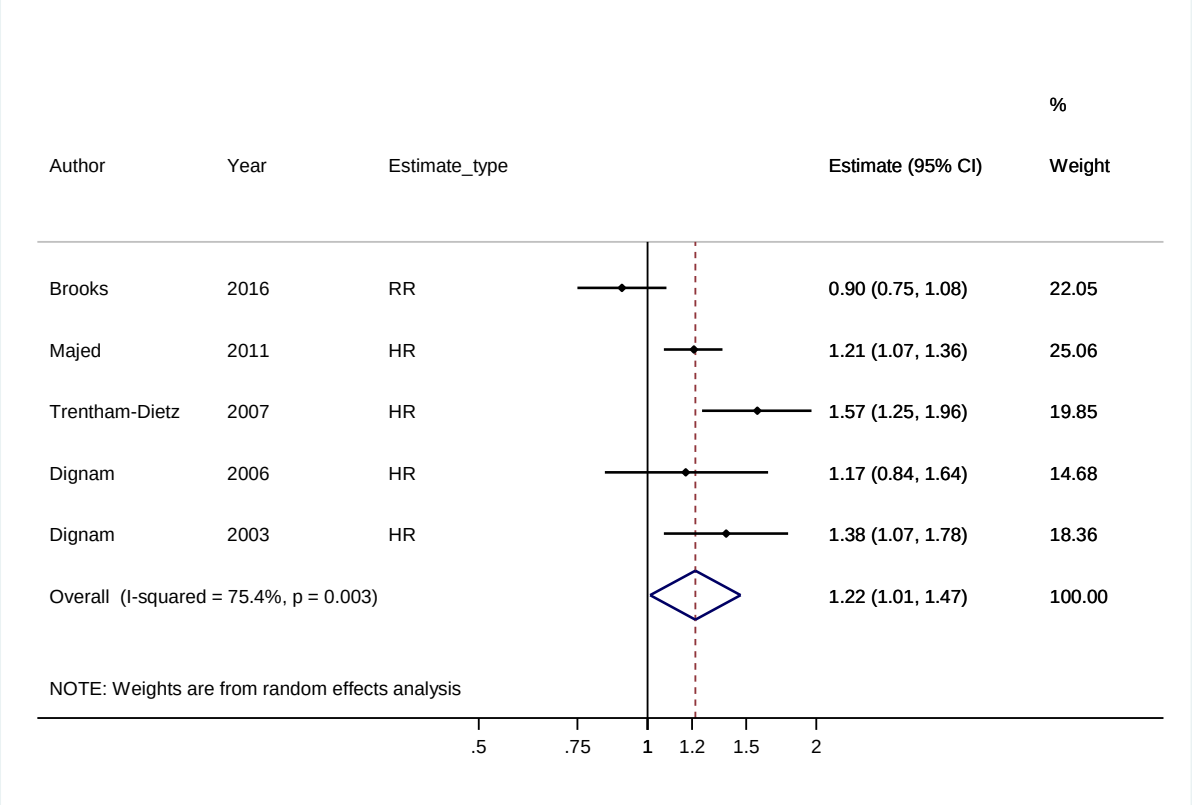
Supplementary Table S1: Search strategy used to identify publications publishing on lifestyle and/or reproductive risk factors for contralateral breast cancer in the PubMed electronic database.

Number	Search term
1	"(Contralateral Breast Cancer* [tiab] OR Contralateral Breast Tumor* [tiab] OR Contralateral Breast Tumour* [tiab] OR Contralateral Breast Neoplasm* [tiab] OR CBC [tiab] OR (Breast Neoplasms [MeSH] AND Contralateral [tiab]) OR (Breast Neoplasms [MeSH] AND Neoplasms, Second Primary [MeSH]) OR Second Primary Breast Cancer [tiab] OR Second Breast Cancer [tiab]) AND
2	("Health Behavior"[MeSH] OR "Food Habits"[MeSH] OR "Exercise"[MeSH] OR "Smoking"[MeSH] OR Smoking [tiab] OR "Alcohol Drinking"[MeSH] OR "Body Mass Index"[MeSH] OR "Obesity"[MeSH] OR Obes* [tiab] OR "Life Style"[MeSH] OR Life Style [tiab] OR Lifestyl* [tiab]
3	OR "Parity"[MeSH] OR Parity [tiab] OR Parities [tiab] OR Primiparit* [tiab] OR Multiparit* [tiab] OR "Menarche"[MeSH] OR Menarche [tiab] OR "Menopause"[MeSH] OR Menopaus* [tiab] OR "Contraceptives, Oral, Hormonal"[MeSH] OR Contracepti* [tiab] OR "Breast Feeding"[Mesh] OR Breast feeding [tiab] OR "Reproductive History"[MeSH] OR Reproductive Histor* [tiab])".

Search terms for contralateral breast cancer (number 1) were combined with search terms for lifestyle factors (number 2) and reproductive factors (number 3) .

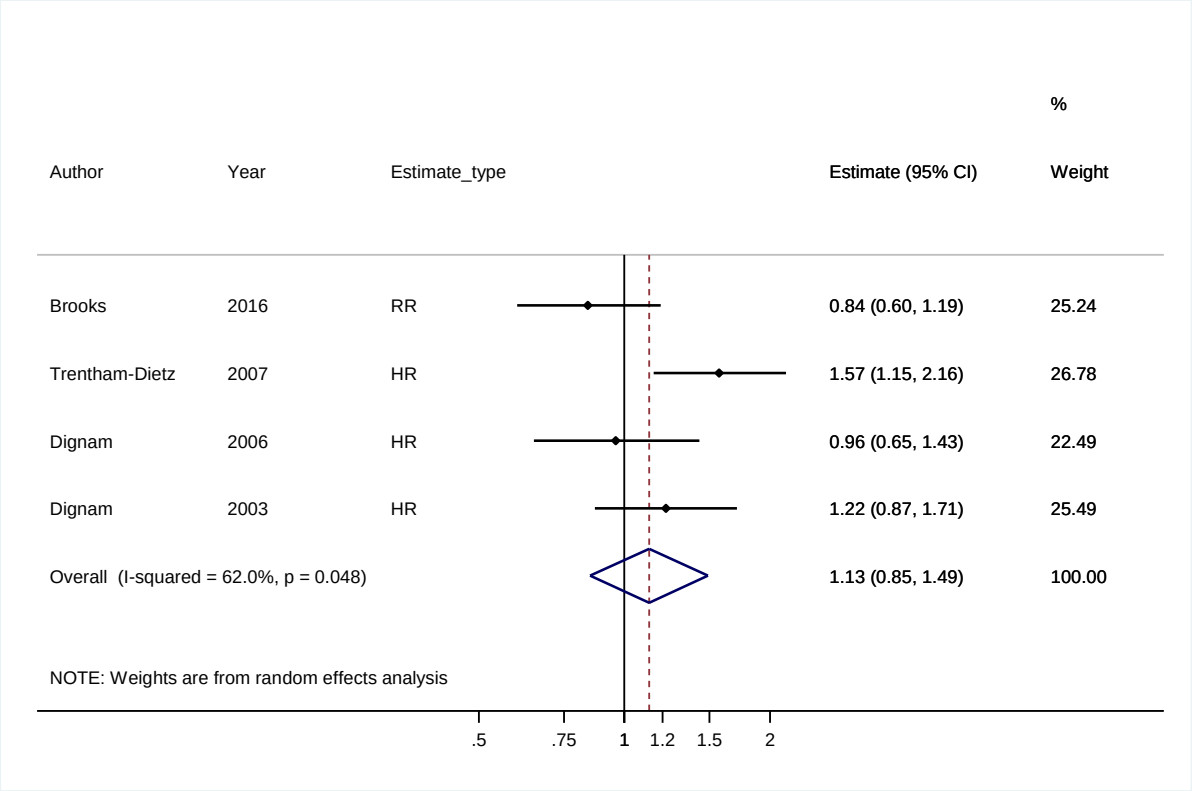
Restrictions: publication date from 01/01/1990 onwards, papers published in English

Supplementary Figures



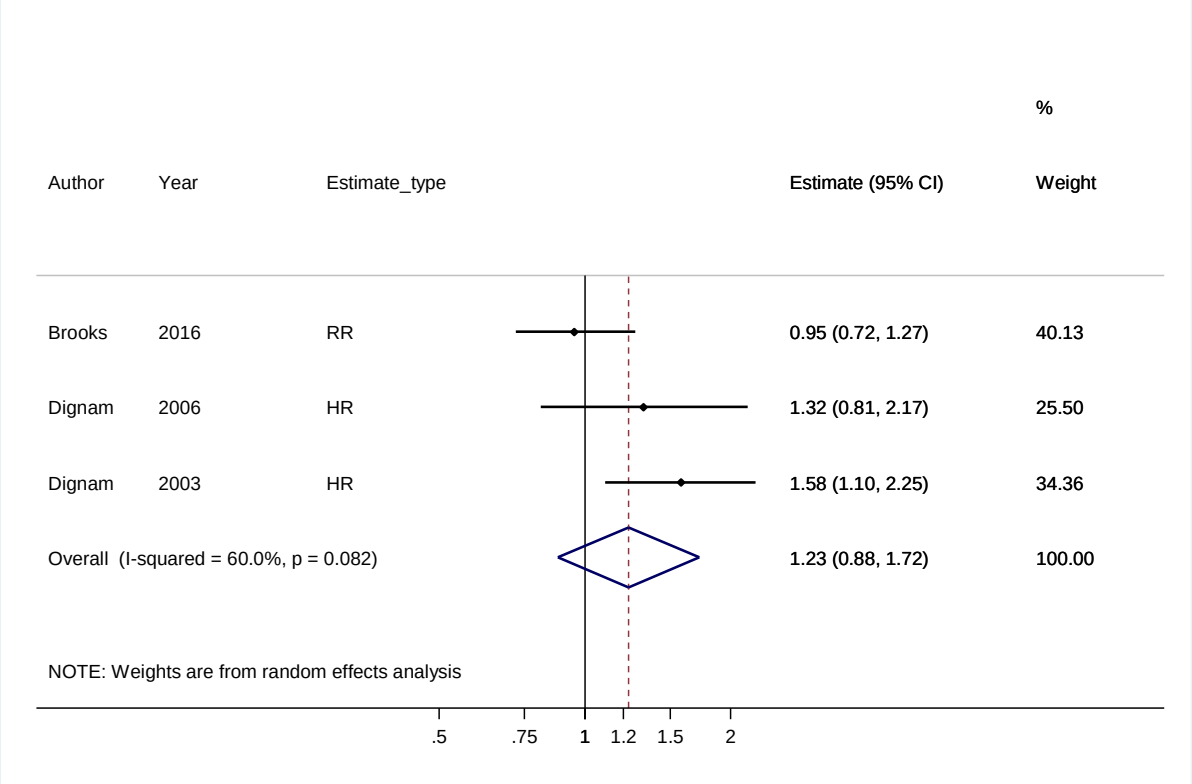
Supplementary Figure S1: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing body mass index (kg/m^2): ≥25 vs <25.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, p<0.05 considered significant.



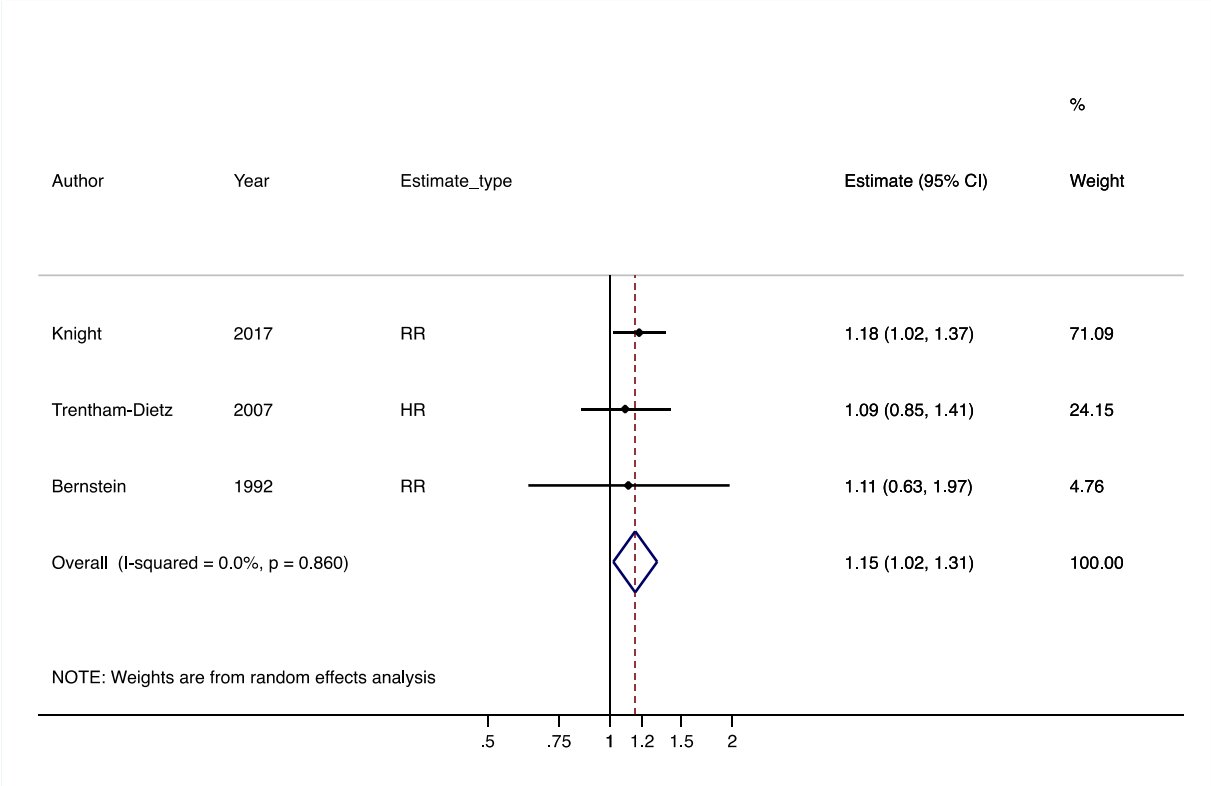
Supplementary Figure S2: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing body mass index (kg/m^2): 25-<30 vs <25.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, p<0.05 considered significant.



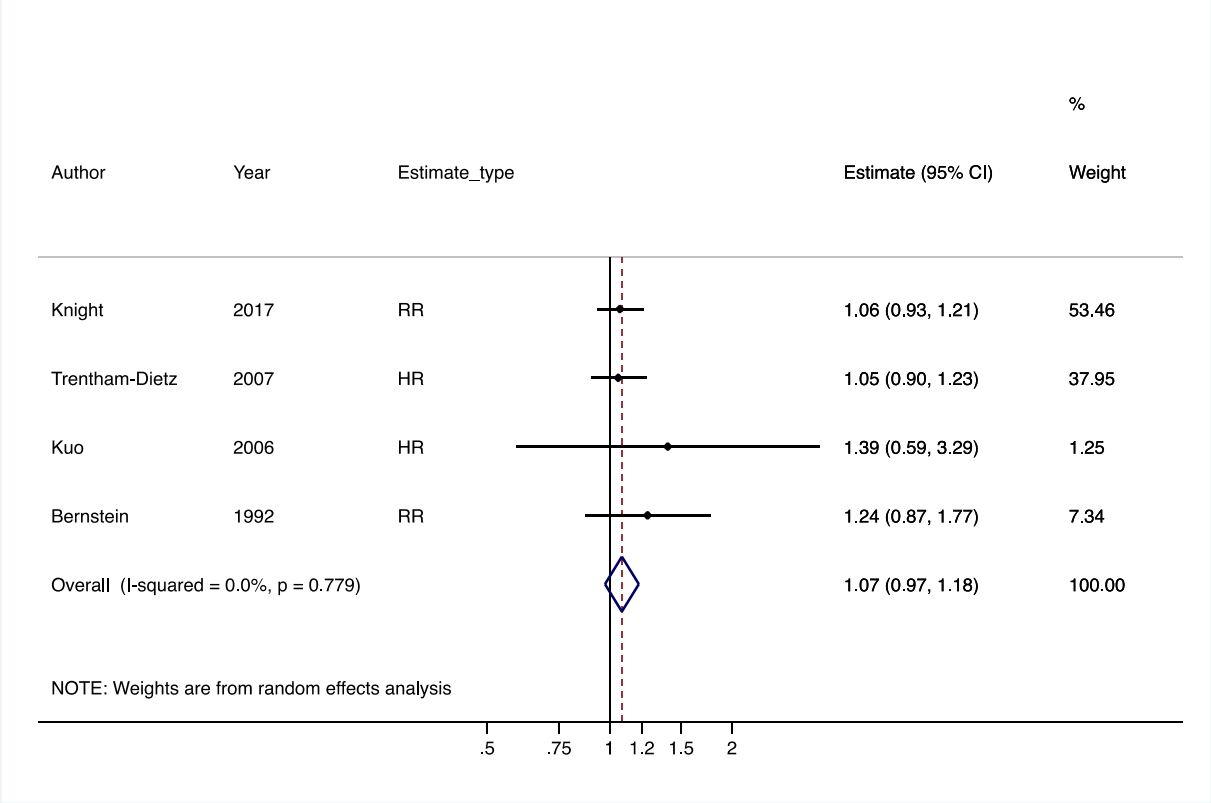
Supplementary Figure S3: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing body mass index (kg/m^2): ≥30 vs <25.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, p<0.05 considered significant.



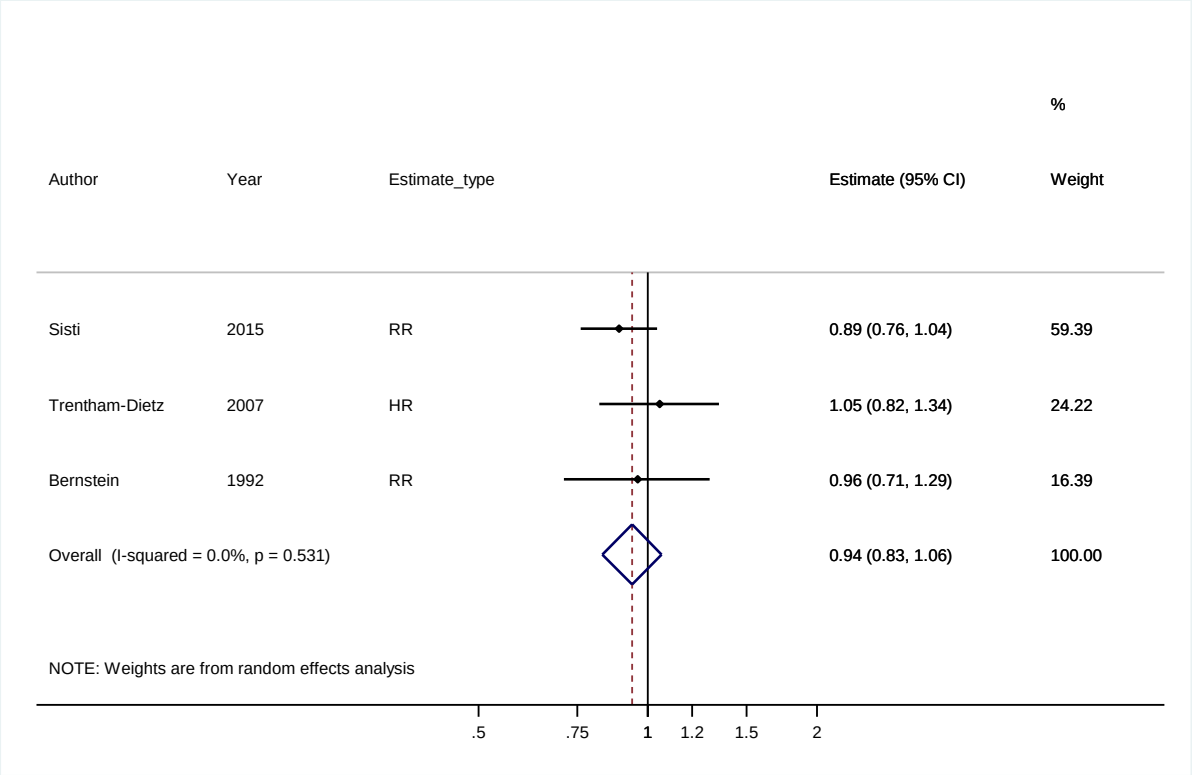
Supplementary Figure S4: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing alcohol use: ever vs never.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



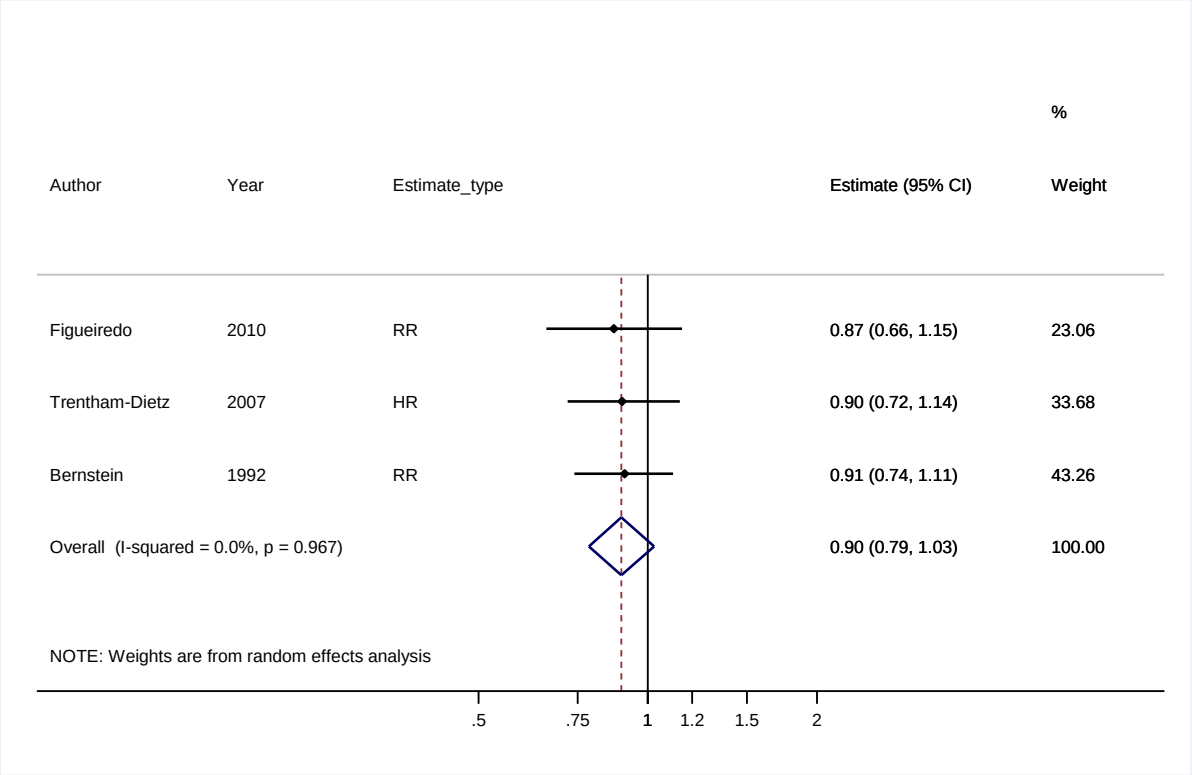
Supplementary Figure S5: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing smoking status: ever vs never.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



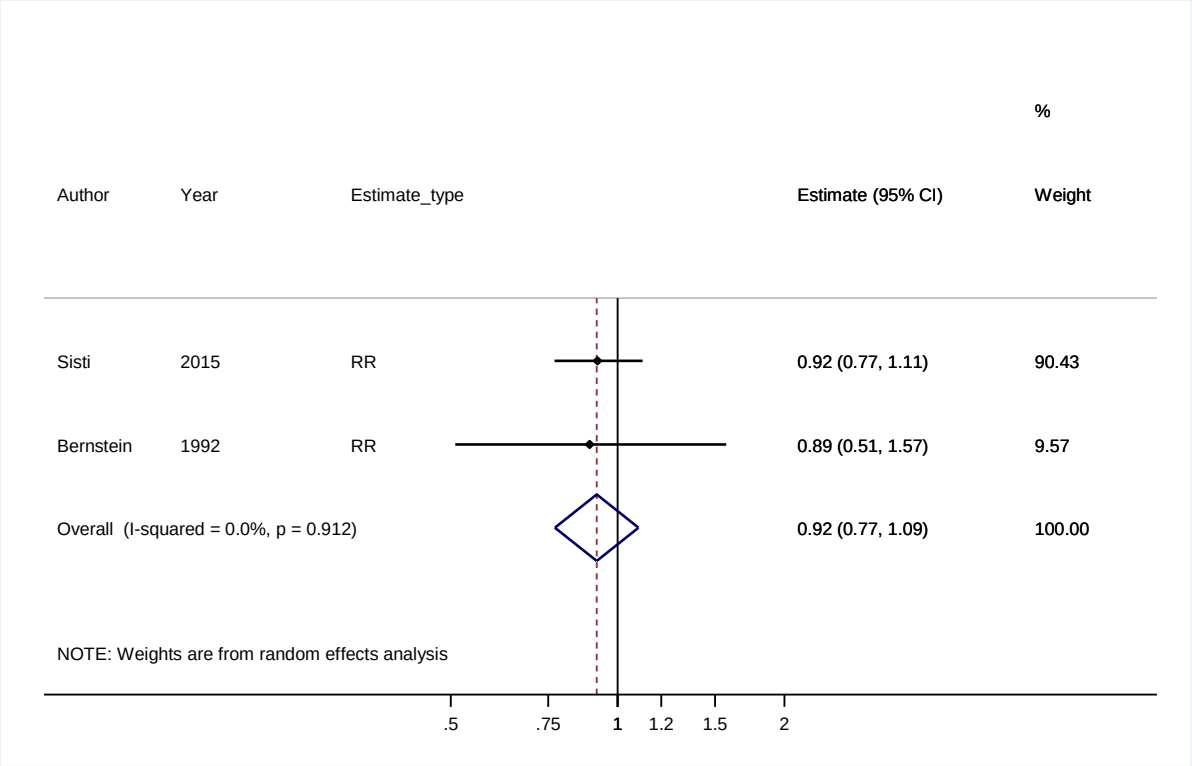
Supplementary Figure S6: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing menarche (years): ≥13 vs <13.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, p<0.05 considered significant.



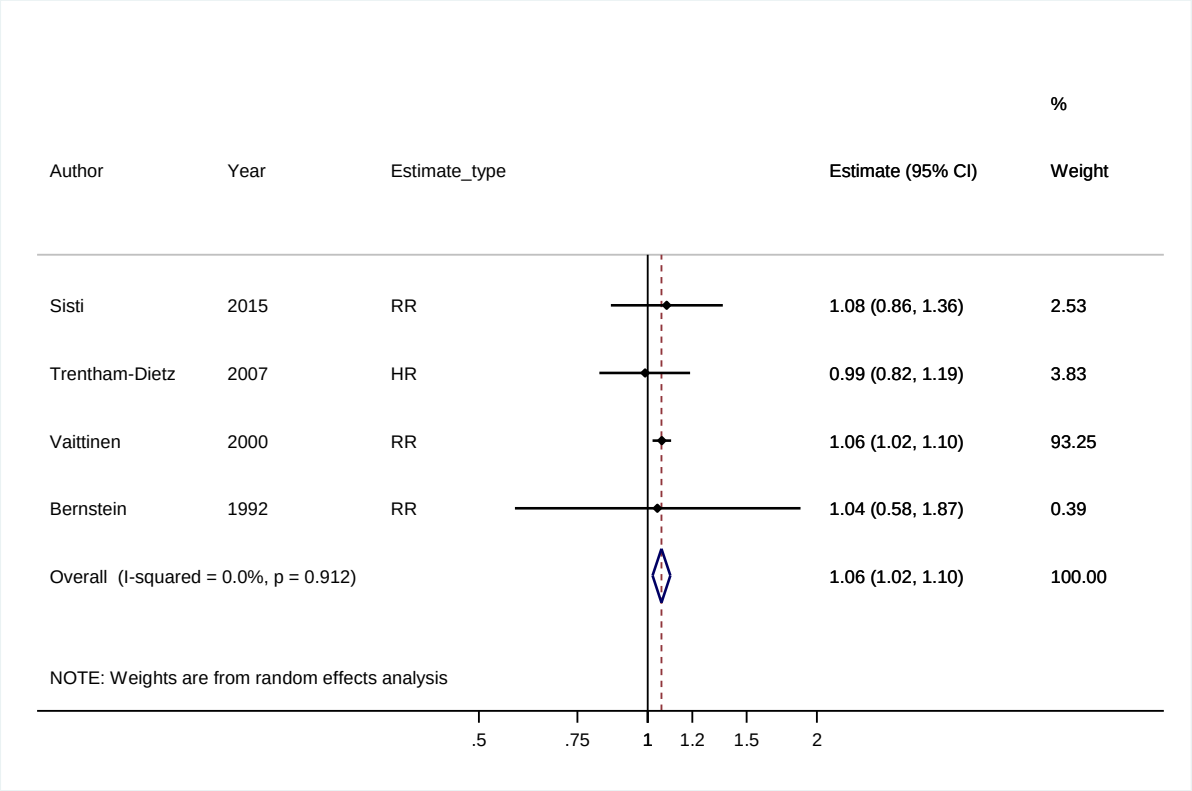
Supplementary Figure S7: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing oral contraceptive use: ever vs never.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



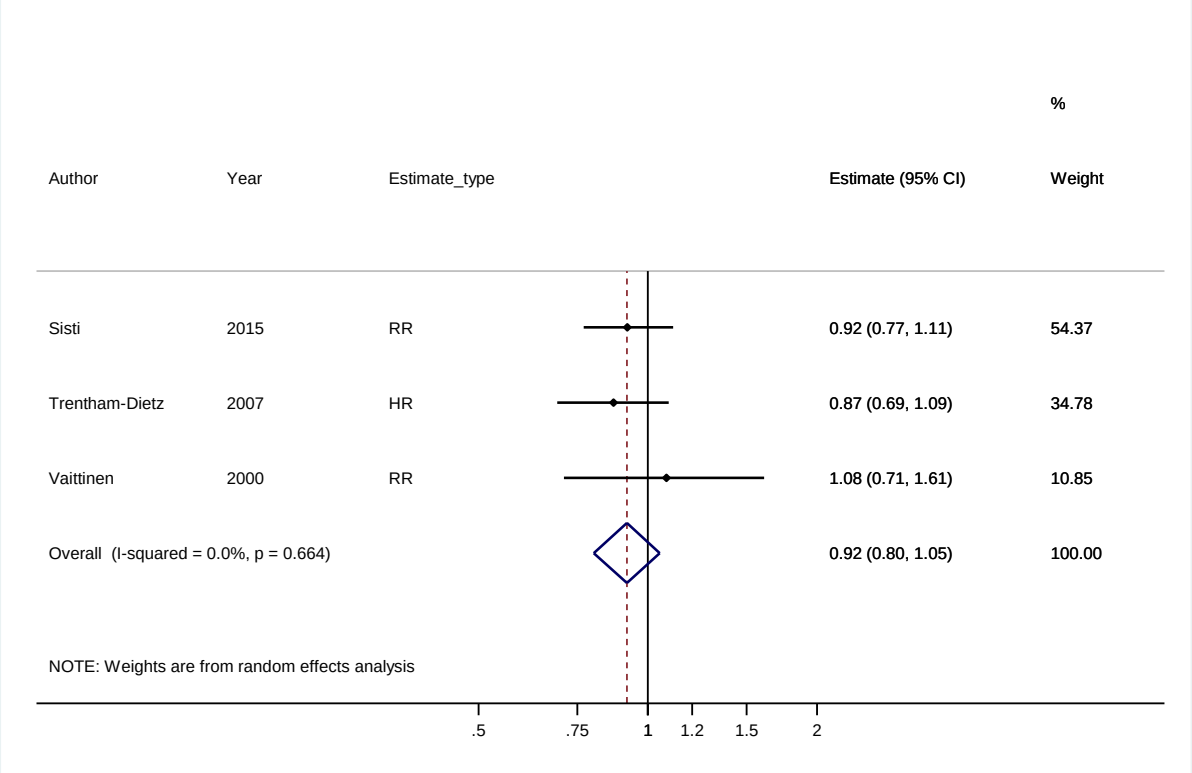
Supplementary Figure S8: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing gravidity: ever vs never.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



Supplementary Figure S9: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing age at primiparity (years): ≥25 vs <25.

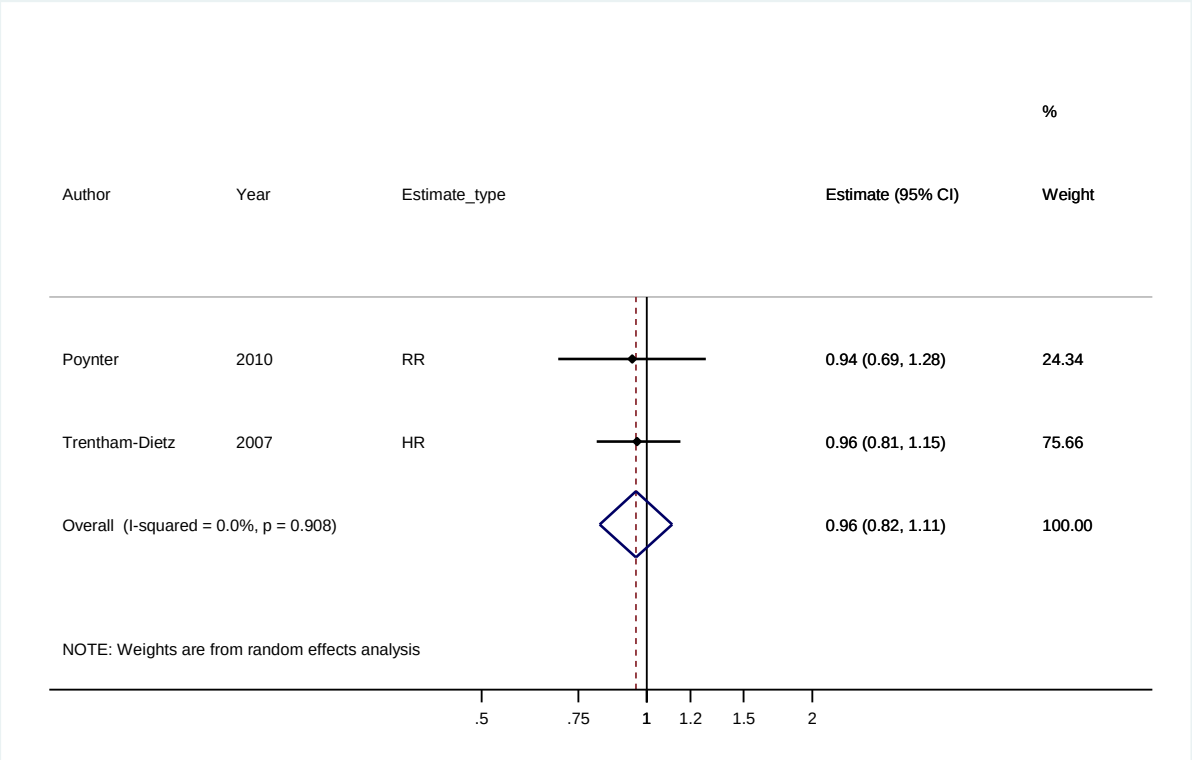
Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, p<0.05 considered significant.



Supplementary Figure S10: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing parity: ≥1 full-term pregnancies vs nulliparous.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.

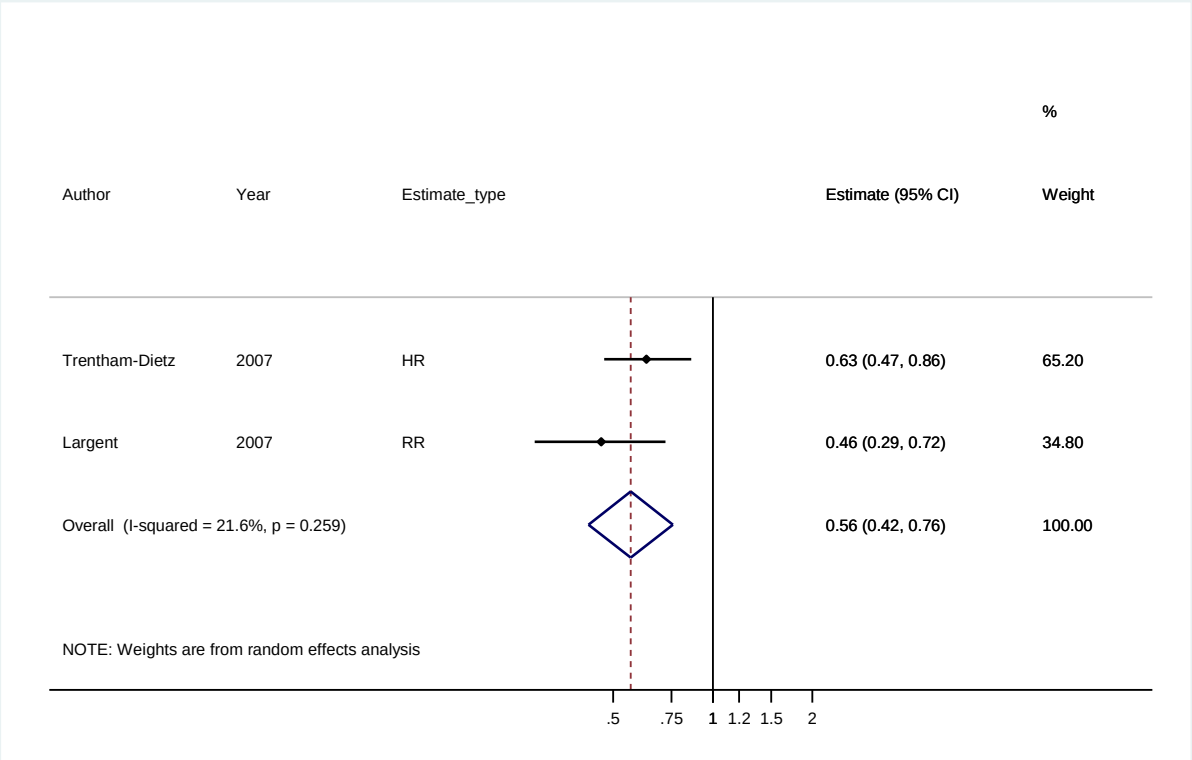
FTPs=full-term pregnancies.



Supplementary Figure S11: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing parity: 1-3 full-term pregnancies vs nulliparous.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.

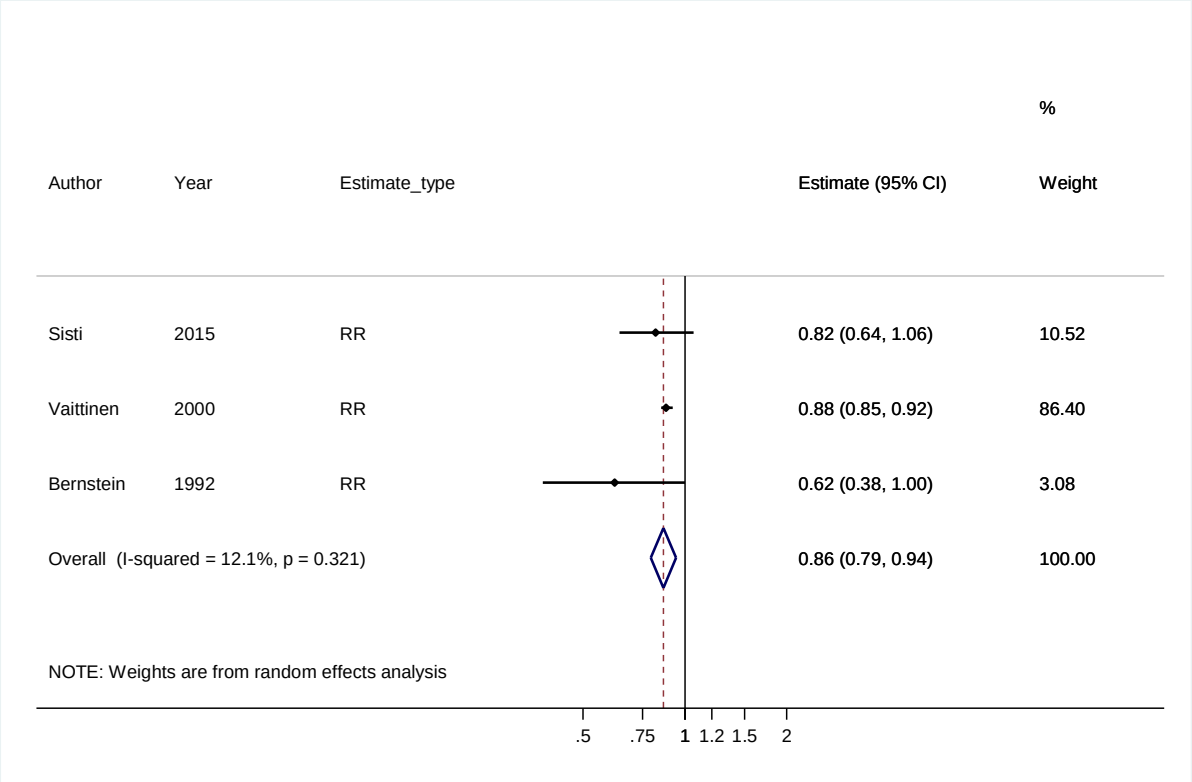
FTPs=full-term pregnancies.



Supplementary Figure S12: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing parity: ≥4 full-term pregnancies vs nulliparous.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.

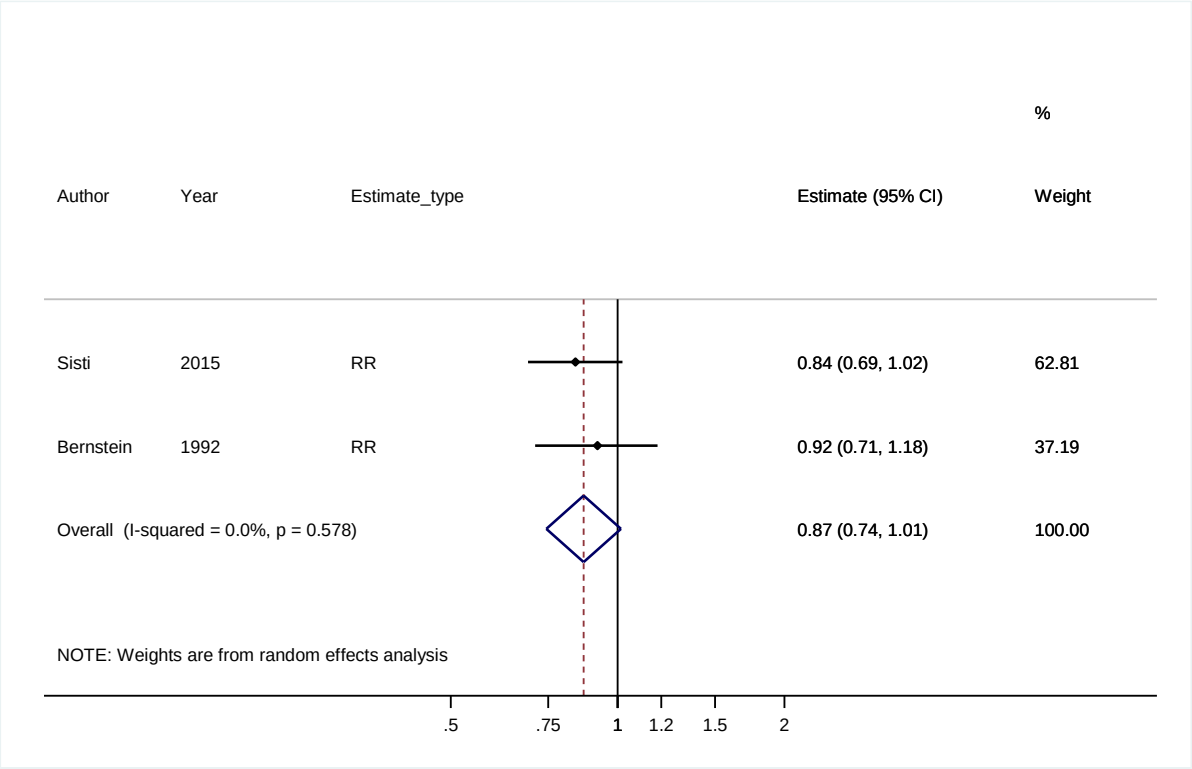
FTPs=full-term pregnancies.



Supplementary Figure S13: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing parity: ≥2 full-term pregnancies vs 1 full-term pregnancy.

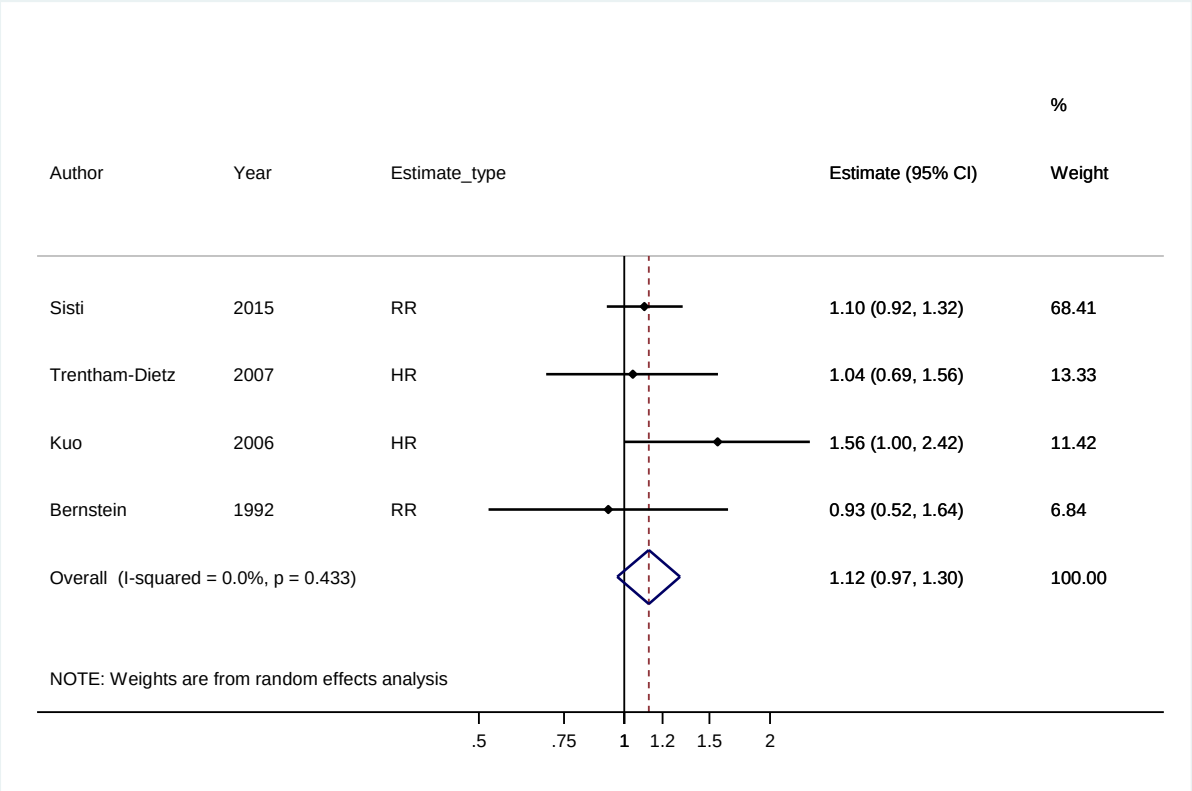
Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.

FTPs= full-term pregnancies.



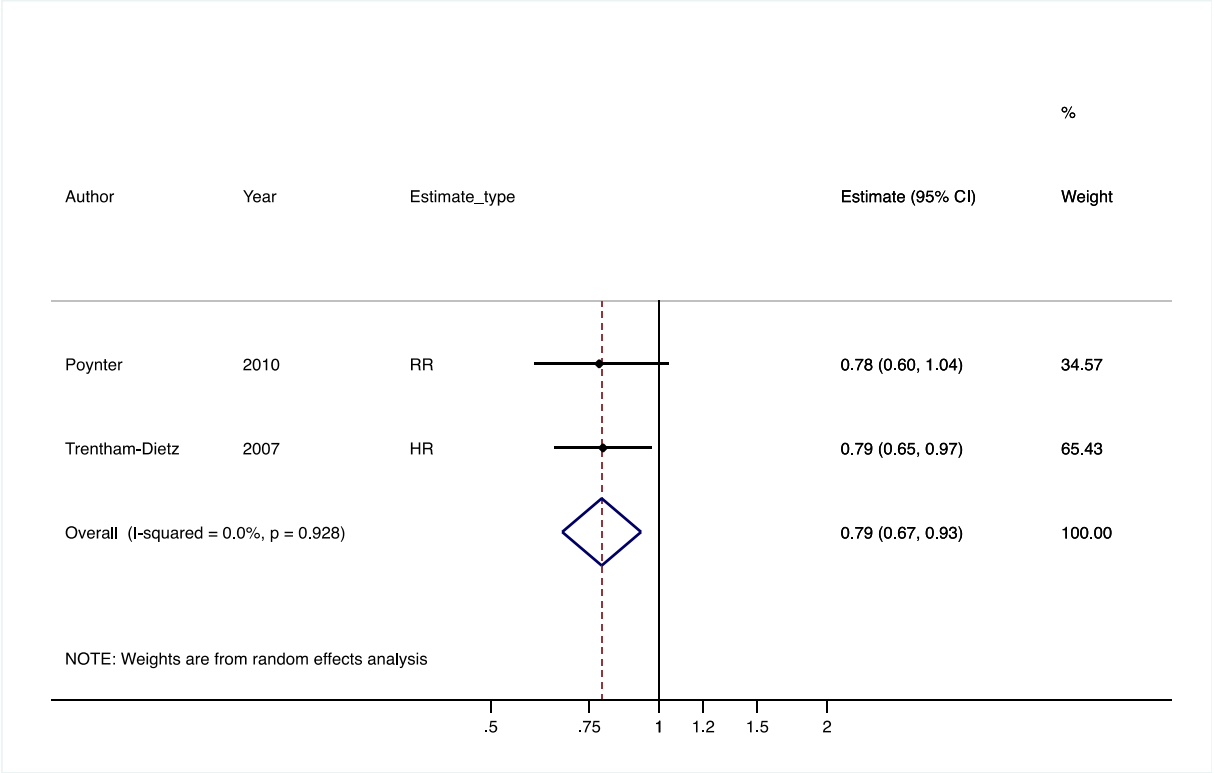
Supplementary Figure S14: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing breastfeeding: ever vs never.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



Supplementary Figure S15: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing postmenopausal women with premenopausal women.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.



Supplementary Figure S16: Forest plot of the included publications publishing adjusted estimates on the risk of developing contralateral breast cancer in population-based cohorts comparing age at menopause (years): <45 vs ≥45.

Author=first author; Year=year of publication; Estimate_type=type of risk estimate provided, which can be a relative risk (RR), odds ratio (OR), hazard ratio (HR); Estimate=reported adjusted estimate (i.e. relative risk, odds ratio or hazard ratio); Weight=value assigned by random-effects analysis using the inverse of the study variance (variance includes within-study variance plus the between-study variance); Overall=relative risk estimate combining relative risks, odds ratios and hazard ratios; I-squared=measure of heterogeneity; p-value=p-value for heterogeneity, $p<0.05$ considered significant.