

Table S1. Summary of studies not included in the meta-analysis.

Lung function measurements									
Author	Year	Country	Variables	Type of study	Exposure type	Sample	Study setting	Statistical Analysis	Summary of results
1. Lodrup Carlsen ³⁹	1997	Norway	<p>Tidal breathing parameters: Tidal flow/volume (TFV ratios), ratio of time to reach peak tidal expiratory flow to total expiratory (tPTEF/tE) and peak volume ratio (VPTEF/VE).</p> <p>Passive respiratory mechanics: compliance of the respiratory system (Crs) as a measure of tissue and airway elasticity; and resistance of the respiratory system (Rrs) as a measure of airway size.</p>	Prospective cohort	Tobacco smoke	803 healthy neonates	Two primary birth clinics: Ullevål and Aker Hospitals	<p>Two-tailed t-test with a calculation of 95% confidence intervals of the means.</p> <p>Wilcoxon's rank test</p> <p>Linear regression analysis adjusting for confounders.</p> <p>Residual analysis to assess the fit of the model</p>	<p>When comparing only children exposed to active smoking, there was not a statistically significant difference with the non-exposed.</p> <p>When adjusting for confounders, the effects of uterine tobacco smoke exposure on tidal breathing parameters was estimated to be a -0.0021 change in tPTEF/tE ($p=0.03$) per unit increase in the daily smoking rate. The approximated mean decreases in infants of smoking mothers (mean 11 cigarettes per day) was 0.023.</p> <p>Rrs was not significantly different between the groups by any of the analyses performed.</p> <p>In linear regression analysis, one daily cigarette corresponded to a change in Crs of -0.026 mL·cmH₂O⁻¹, with an average decrease in Crs among infants of daily smoking mothers of 0.29 mL·cmH₂O⁻¹.</p>

2. Young ²⁶	2000	Australia	Maximal forced expiratory flow rate at the point of FRC (V'maxFRC).	Prospective cohort	Tobacco smoke	237 infants	Antenatal clinic at Osborne Park Hospital (Perth, Western Australia)	The statistical technique of mixed linear models (or random-effects models)	<p>A lower absolute V'maxFRC (-14.24mL. s⁻¹) was observed throughout the first year of life in association with a maternal history of antenatal smoking ($p=0.05$).</p> <p>Each gender was equally affected by exposure to maternal antenatal smoking. V'maxFRC was influenced independently by height and weight, and by maternal smoking.</p> <p>V'maxFRC in early life differs between the genders and, maternal antenatal smoking reduces V'maxFRC.</p> <p>Maternal smoking during pregnancy significantly reduces airway function throughout the first 12 months of life</p>
3. Bisgaard ⁴⁰	2009	Denmark	Forced flow-volume measurement. The forced expiratory volume at 0.5 seconds (FEV _{0.5}) Transcutaneous oxygen pressure (PtcO ₂)	Prospective cohort	Tobacco smoke	411 newborns	Clinical research facility	Nonlinear logistic function Linear normal models Second order and third-order powers Multiple regression models. Final models were validated by using robust MM-estimators.	<p>Neonatal lung function was significantly affected by the mother's smoking (β estimate = 0.930; 95% CI 0.878 to 0.985; $p=0.013$). The effect of the mother's smoking was similar in all three trimesters.</p> <p>Smoking during pregnancy was associated with 7% lower baseline airflow, however, it did not affect bronchial responsiveness. This finding was similar for smoking ever during pregnancy or smoking in the first, second, or third trimester.</p>

4. Stick ³⁸	1996	Australia	Tidal breathing parameters: tPTEF/tE and tPTEF	Prospective cohort	Tobacco smoke	461 healthy newborns	Lung function data was collected at the hospital as close to 48 hours after delivery as possible.	Simple linear regression for continuous data and ANOVA for categorical data Multiple linear regression model and Check of goodness-of-fit.	Smoking mother was a significant predictor of tPTEF/tE. Significantly lower values of tPTEF/tE were associated with maternal smoking, a family history of asthma, and maternal hypertension, independently of the effects of respiratory rate and age on tPTEF/tE. There was a significant dose-response effect of maternal smoking on tPTEF/tE. Infants born to mothers who smoked >10 cigarettes daily had the lowest mean tPTEF/tE. Infants of non-smoking mothers had the highest mean tPTEF/tE. For the analysis of tPTEF/tE, significant covariates were age, respiratory rate, amount of maternal smoking, and mode of delivery. In a multivariate model that included those previous covariates used, only age, respiratory rate, and amount of maternal smoking remained significant.
Apnoea									
Author	Year	Country	Variables	Type of study	Exposure type	Sample	Study setting	Statistical Analysis	Summary of results
1. Gunnerbeck ⁴²	2011	Swedish	Apnoea	Retrospective cohort	Tobacco smoke and snus use	609 551	Swedish Medical Birth Register	Unconditional logistic regression analyses. Odds ratios presented with 95% confidence intervals. Adjusted model: maternal characteristics (maternal age, height, parity, and years of formal	The study evaluated two groups: snus users (n=7599) compared to nonusers (n=503 460), and smokers (n= 58 319) compared to nonusers (n=503 460). There was greater than twofold increase in the risk of apnoea in infants born to snus users compared with nontobacco users, whereas there was a 50% increase in the risk among infants born to smokers. The risk of apnoea among infants of snus users and moderate and heavy smokers was slightly attenuated. After adjustment, infants born to light or heavy smokers were no longer at increased risk of apnoea. There was no interaction between gender and tobacco use concerning the risk of apnoea.

								education) as potential confounders	
								Final model: adjusted for gender, gestational age, SGA, and method of delivery.	
								Likelihood ratio test	
Wheezing									
Author	Year	Country	Variables	Type of study	Exposure type	Sample	Study setting	Statistical Analysis	Summary of results
1. Lundholm ⁵⁴	2020	Sweden	Asthma/Wheeze	Retrospective cohort	Tobacco smoke and snus	788,508	Medical Birth Register (MBR), The Swedish Prescribed Drug Register (SPDR) and the National Patient Register (NPR).	Results presented as Hazard ratio (HR) curves over age with 95% CI; HRs with cox proportional hazards model with time-varying effects; Models were also adjusted (aHR). Sensitivity analysis for snuff was also performed;	Crude association between smoking in early pregnancy and offspring incidence of asthma/wheeze from 0-365 days of age was: HR 1.57, 95% CI 1.50 – 1.65; aHR 1.32, 95% CI 1.25 – 1.39. From birth to five months of life, HR for asthma/wheeze increased. Then a decrease is observed until 12 months of life. For smoking later in the pregnancy, the pattern was similar, although it reached a higher peak.