Evaluating the Quality of Individual Studies

Chemical X – Anogenital Distance Studies (Draft)

Reference	Exposure Meaure and Range	Outcome classification	Participant Selection and Comparability	Consideration of Likely Confounding	Completeness of results	Adequate Sample Size	Additional Comments - Limitations in Confidence in Results
Author A et al., 2011	Maternal urine (9 – 40 weeks; mean 29 weeks), 75th percentile = 32 ng/mL	Anogenital distance , measured at birth (1-3 days); blinded to exposure	Birth cohort; 120 of 344 enrollees excluded because did not delivery at study hospital. Internal comparison group.	Gestational age, birth order, maternal age, maternal smoking and environmental tobacco smoke exposure (stepwise regression); Used SG-corrected urine concentrations	Described as not associated (details not reported)	n = 111 male infants	Relatively low, narrow exposure range. Unclear if approach to dilution adjustment is optimal
Author B 2008; Author B et al., 2005	Maternal urine (3rd trimester), 75th percentile = 437 ng/mL	Anogenital distance, measured at ages 0 - 36 months; assessors blinded to exposure but no information on agreement between sites / raters	Birth cohort; 21 of 172 enrollees excluded because exam not considered reliable (child too active); 2 declined interview); other exclusions based on lack of urine sample. Internal Comparison group	Adjusted for weight percentile and age	Percent change per interquartile increase in metabolite and p-value; also presented as metabolite distribution by 3 categories of anogenital distance	n =106 boys	Is age-size adjustment adequate (considering potential temporal changes in exposure)? No adjustment for urine dilution in model