

Odds ratios (OR) for the associations between selected Selective Serotonin Reuptake Inhibitors (SSRIs) and selected birth defects using different statistical methods, National Birth Defects Prevention Study, 1997-2009

SSRI		Expose d cases	cOR (95% CI)	Frequentist approach LR aOR (95% CI)	Bayesian approach pOR (95% CrI) non-informative prior	Bayesian approach pOR (95% CrI) informative prior	Bayesian approach pOR (95% CrI) informative prior and modeling the missing values
Citalopram	Controls	29					
Citalopram	Neural tube defects	5	0.9 (0.4-2.4)	1.0 (0.4-2.7)	1.0 (0.3-2.5)	1.8 (1.0-3.0)	1.8 (1.0-3.0)
Citalopram	Ventricular septal defects	6	1.2 (0.5-2.9)	1.2 (0.5-2.8)	1.1 (0.4-2.5)	1.3 (0.9-1.8)	1.3 (0.9-1.8)
Citalopram	Cleft lip w/wo cleft palate	8	1.1 (0.5-2.5)	1.1 (0.5-2.5)	1.1 (0.5-2.3)	1.4 (0.7-2.7)	1.4 (0.7-2.7)
Citalopram	Hypospadias	8	1.2 (0.5-2.9)	1.1 (0.5-2.6)	1.1 (0.4-2.4)	1.2 (0.7-2.0)	1.2 (0.7-2.1)
Escitalopram	Controls	26					
Escitalopram	Septal defects	11	1.0 (0.5-2.1)	1.0 (0.5-2.1)	1.0 (0.5-2.0)	1.3 (0.7-2.1)	1.3. (0.7-2.1)
Fluoxetine	Controls	74					
Fluoxetine	Ventricular septal defects	16	1.3 (0.7-2.2)	1.2 (0.7-2.1)	1.2 (0.7-2.1)	1.4 (1.0-1.9)	1.4 (1.0-1.9)
Fluoxetine	Right ventricular outflow tract obstruction defects	27	2.1 (1.4-3.4)	2.2 (1.4-3.4)	2.2 (1.4-3.4)	2.0 (1.4-3.1)	2.0 (1.3-3.0)
Fluoxetine	Esophageal atresia	10	2.2 (1.1-4.2)	2.0 (1.0-3.9)	1.8 (0.8-3.4)	No informative prior*	1.9 (0.9-3.6)
Fluoxetine	Craniosynostosis	21	2.2 (1.4-3.7)	1.9 (1.1-3.1)	1.9 (1.1-3.0)	No informative prior*	1.9 (1.1-3.0)
Paroxetine	Controls	42					

<b>SSRI</b>		<b>Expose d cases</b>	<b>cOR (95% CI)</b>	<b>Frequentist approach LR aOR (95% CI)</b>	<b>Bayesian approach pOR (95% CrI) non-informative prior</b>	<b>Bayesian approach pOR (95% CrI) informative prior</b>	<b>Bayesian approach pOR (95% CrI) informative prior and modeling the missing values</b>
Paroxetine	Anencephaly	6	2.7 (1.2-6.4)	3.1 (1.3-7.3)	3.1 (1.2-7.0)	3.3 (1.6-6.2)	3.3 (1.6-6.3)
Paroxetine	Atrial septal defects	15	1.9 (1.1-3.4)	2.0 (1.1-3.6)	1.8 (1.0-3.3)	1.8 (1.1-3.0)	1.8 (1.1-3.0)
Paroxetine	Right ventricular outflow tract obstruction defects	16	2.3 (1.3-4.0)	2.1 (1.1-3.7)	2.0 (1.1-3.5)	2.4 (1.4-3.9)	2.5 (1.5-4.0)
Paroxetine	Cleft palate	10	1.7 (0.9-3.4)	1.6 (0.8-3.2)	1.0 (0.4-2.2)	1.3 (0.7-2.3)	1.6 (0.9-2.7)
Paroxetine	Hypospadias	9	0.9 (0.4-2.0)	0.8 (0.4-1.7)	0.8 (0.4-1.8)	1.1 (0.6-1.9)	1.1 (0.6-1.9)
Paroxetine	Gastroschisis	13	2.7 (1.4-5.0)	3.1 (1.6-5.8)	2.5 (1.2-4.8)	No informative prior*	2.5 (1.2-4.8)
Paroxetine	Omphalocele	6	3.8 (1.6-9.1)	3.7 (1.6-8.8)	3.5 (1.3-8.0)	No informative prior*	3.6 (1.3-8.1)
Sertraline	Controls	115					
Sertraline	Anencephaly	7	1.2 (0.5-2.5)	1.3 (0.5-2.8)	1.3 (0.5-2.7)	1.2 (0.5-2.5)	1.2 (0.5-2.5)
Sertraline	Septal defects	47	1.0 (0.7-1.4)	1.0 (0.7-1.4)	1.0 (0.7-1.4)	1.1 (0.8-1.4)	1.1 (0.8-1.4)
Sertraline	Anal atresia	11	1.1 (0.6-2.0)	1.1 (0.6-2.0)	1.1 (0.6-2.0)	1.4 (0.8-2.4)	1.4 (0.8-2.3)
Sertraline	Any limb reduction	13	1.1 (0.6-1.9)	0.9 (0.5-1.6)	0.9 (0.5-1.6)	1.2 (0.7-2.0)	1.3 (0.8-2.1)
Sertraline	Omphalocele	4	0.9 (0.3-2.5)	0.6 (0.1-1.7)	0.6 (0.1-1.7)	1.5 (0.7-2.8)	1.6 (0.8-3.1)

Abbreviations: cOR=crude odds ratio, LR=Logistic regression, aOR= adjusted odds ratio, CI=confidence interval, pOR= posterior odds ratio, CrI=credible interval