Supplemental Table S1 – Results of Meta-Analyses of Autism Risk following Antidepressant Exposure during Second & Third Trimester

						Com	parator Subgr	oup)							Heterogeneity		
AD Class	Population						Psychiatr	Discordant Sibling						between Comparator Subgroup Analyses				
	OR / HR	[95% CI]	N	Z	P	OR / HR	[95% CI]	N	Z	P	OR / HR	[95% CI]	N	Z	P	Q	df	P
					ANTIDE	PRESSANT	EXPOSURE D	URII	NG SEC	COND T	RIMESTER							
	Hazard Ratio																	
Any	1.74	[1.31 - 2.31]	4	3.84	<.001	1.94	[1.20 - 3.14]	1	2.69	.007						0.14	1	.708
SSRI	1.87	[1.27 - 2.76]	3	3.14	.002													
	Odds Ratio																	
Any	1.71	[1.49 - 1.96]	8	7.70	<.001	1.89	[1.49 - 2.38]	2	5.29	<.001						0.49	2	.480
SSRI	1.88	[1.50 - 2.36]	6	5.46	<.001	1.12	[0.40 - 3.12]	1	0.22	.829						0.94	1	.332
ANTIDEPRESSANT EXPOSURE DURING THIRD TRIMESTER																		
I	Hazard Ratio																	
Any	1.74	[1.31 - 2.31]	4	3.84	<.001	1.94	[1.20 - 3.14]	1	2.69	.007						0.14	1	.708
SSRI	1.87	[1.27 - 2.76]	3	3.14	.002													
	Odds Ratio								•	•					•		Ť	
Any	1.69	[1.36 - 2.10]	8	4.77	<.001	1.87	[1.30 - 2.70]	2	3.36	.001						0.21	1	.644
SSRI	1.81	[1.27 - 2.59]	6	3.27	.001	1.43	[0.46 - 4.47]	1	0.62	.539						0.15	1	.699

Supplemental Table S2 – Results of Meta-Regression with Incremental Inclusion of Candidate Moderators: Population-Based Studies of Prenatal Exposure to Any Antidepressant

Moderator		Current Model		of N	Model Goodness of Fit			Change Prior F	Test of Change				
		R ²	Q	df	р	Q	df	р	τ²	R ²	Q	df	р
Intercept	.0028	0.00											
Ethnicity Control ¹	.0000	1.00	5.97	1	.0145	2.52	5	.7742	0028	1.00	5.97	1	.0145
Study Design ²	.0000	1.00	6.80	2	.0333	1.68	4	.7935	.0000	0.00	0.83	1	.3620
Study Location ³	.0000	1.00	6.80	3	.0785	1.68	3	.6405	.0000	0.00	0.00	1	.9853
Publication Year		1.00	7.38	4	.1173	1.11	2	.5741	.0000	0.00	0.57	1	.4486

^{1.} Ethnicity Control - No Significant Difference vs. Significant Difference in Maternal Ethnicity between Study Groups. 2. Study Design: Cohort vs. Case-Control. 3. Study Location - North America vs. Europe.

Supplemental Figure S1 – Search Strategy

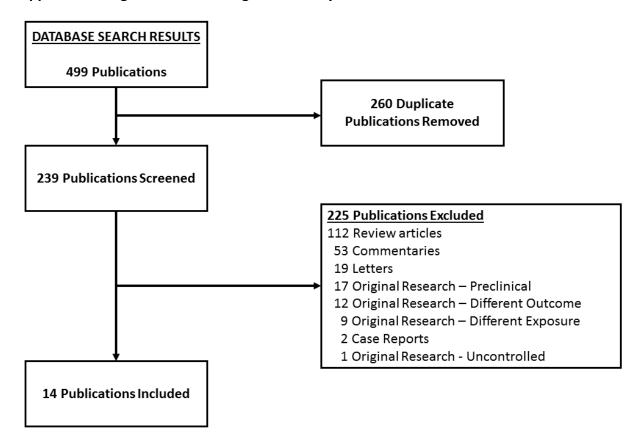
((((Asperger) OR autism) OR autism spectrum disorder) OR autistic)

AND

AND

((((antenatal) OR fetal) OR pregnancy) or prenatal)

Supplemental Figure S2 – Flow Diagram of Study Inclusions and Exclusions



Supplemental Figure S3 - Forest Plots of Autism Risk following Antidepressant Exposure during First Trimester Stratified by Comparison Group Definition

A. Hazard Ratios

nparison Group	Study name		Stat	istics for eac	h study				Hazard	ratio and 95	6 CI
		Hazard ratio	Lower limit	Upper limit	Z-Value	p-Value					
	Boukhris 2016	0.840	0.519	1.358	-0.711	0.477					
	Brown 2017	1.240	0.699	2.198	0.736	0.462			-	 -	-
	Hviid 2013; Sorensen 2013	1.449	1.200	1.749	3.859	0.000				-•	┡
	Sujan 2017	1.640	1.465	1.836	8.585	0.000					=
		1.403	1.148	1.714	3.307	0.001					
	Brown 2017	1.620	0.934	2.811	1.716	0.086				+-	-
	Sorensen 2013	1.300	0.717	2.356	0.865	0.387			.		
:		1.461	0.930	2.296	1.644	0.100					
	Sujan 2017	0.830	0.615	1.121	-1.217	0.224			-	▄	
nt Sibling		0.830	0.549	1.255	-0.882	0.378					
							•	•	•	•	•
							0.1	0.2	0.5	1	2

No Autism Risk Autism Risk

B. Odds Ratios

. Ouus itai	103										
omparison Group	Study name		Stat	istics for eac	h study				Odds	ratio and 95	% CI
		Odds ratio	Lower limit	Upper limit	Z-Value	p-Value					
	Brown 2017	1.280	1.054	1.555	2.488	0.013	1	1		-=	-
	Castro 2016; Clements 2015	1.232	0.800	1.897	0.947	0.344					—
	Croen 2011	4.100	1.708	9.843	3.158	0.002					-
	Gidays 2014	2.000	1.519	2.633	4.940	0.000					-
	Harrington 2014	1.380	0.477	3.991	0.594	0.552			-		\dashv
	Sujan 2017	1.690	1.400	2.040	5.464	0.000					-
on		1.616	1.299	2.012	4.300	0.000				•	
	Brown 2017	1.540	1.202	1.973	3.415	0.001				-	
	Harrington 2014	1.700	0.661	4.373	1.101	0.271			-	-	-
atric		1.565	1.038	2.360	2.137	0.033				-	
	Sujan 2017	0.620	0.500	0.769	-4.353	0.000			-	•	
ordant Sibling		0.620	0.402	0.955	-2.168	0.030				-	
							0.1	0.2	0.5	1	2

No Autism Risk Autism Risk

^{*}A single pooled estimate was calculated for studies from the same data source.

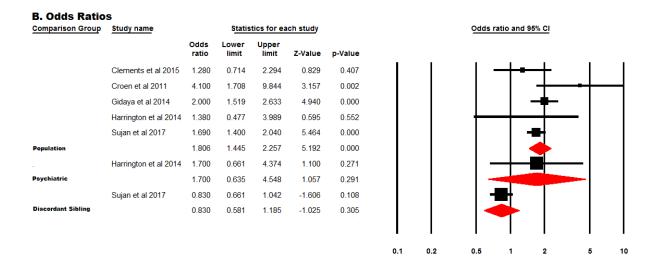
Supplemental Figure S4 - Forest Plots of Autism Risk following SSRI Exposure during First Trimester Stratified by Comparison Group Definition

A. Hazard Ratios Hazard ratio and 95% CI Comparison Group Study name Statistics for each study Z-Value p-Value Hviid 2013; Sorensen 2013 1.520 1.270 1.820 4.561 0.000 Sujan 2017 0.000 1.660 1.889 7.696 1.611 1.451 1.789 8.912 0.000 Sorensen 2013 0.778 1.123 Psychiatric 1.400 0.778 2.519 1.123 0.262 Sujan 2017 0.578 -1.222 0.222 Discordant Sibling 0.810 -1.222 0.222

No Autism Risk Autism Risk

0.5

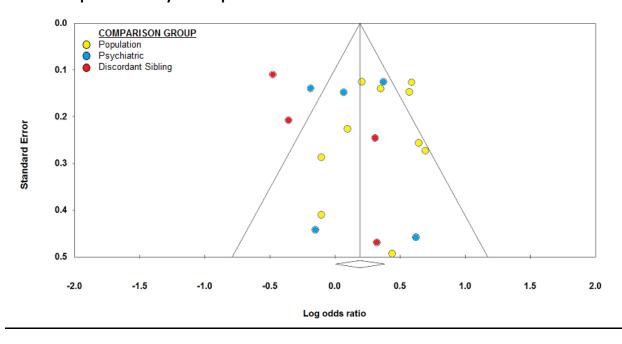
0.2



No Autism Risk Autism Risk

^{*}A single pooled estimate was calculated for studies from the same data source.

Supplemental Figure S5 – Funnel Plot of Publications Reporting Association of Autism with Prenatal Exposure to Any Antidepressant



Supplemental Figure S6 – Funnel Plot of Publications Reporting Association of Autism with Prenatal SSRI Exposure

