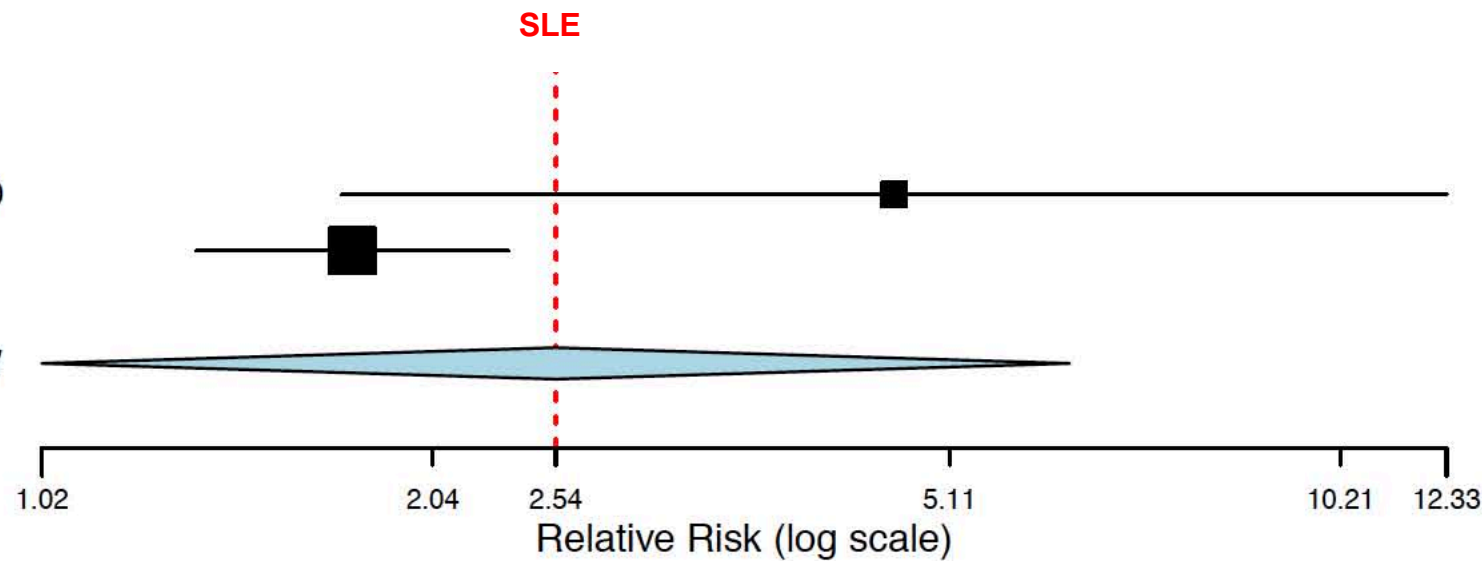
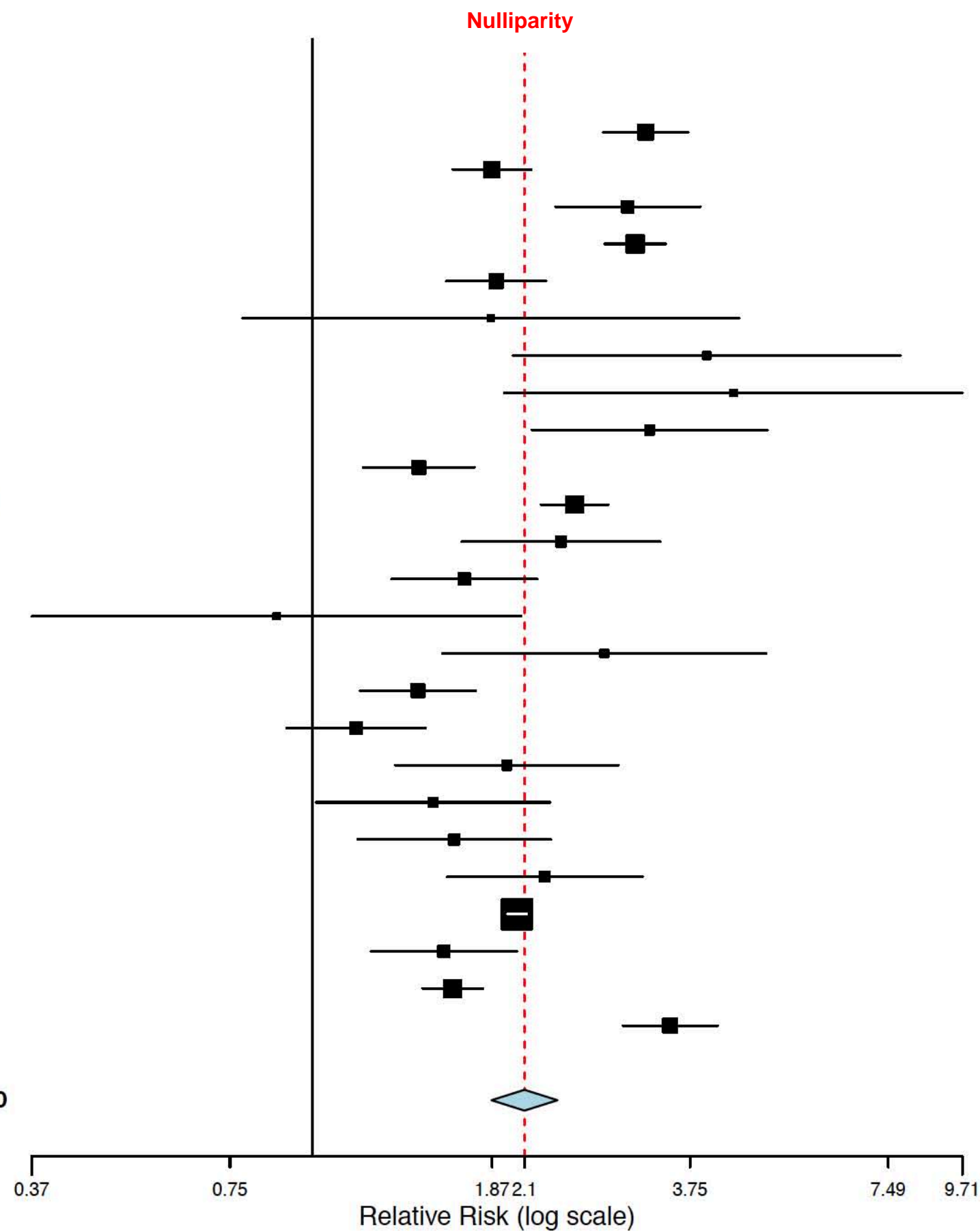


Supplemental file 3. Forest plots of the pooled relative risk for each risk factor for preeclampsia (named in red)

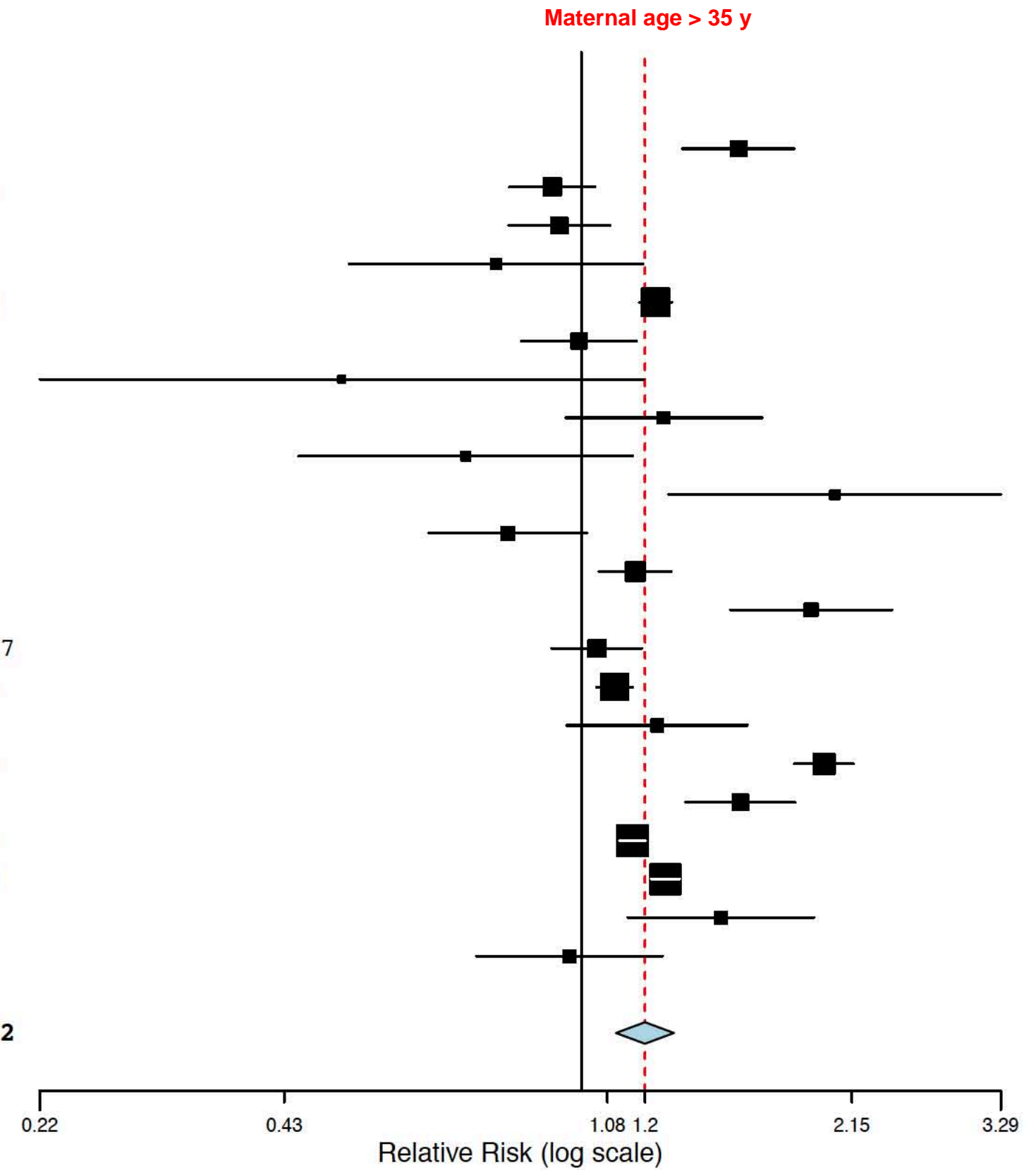
Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Liu S 2011	4.628 (1.738, 12.326)	4/1108	1477/1893590
Sohlberg S 2012	1.772 (1.344, 2.337)	46/542	24076/502637
Overall (I²=7075 % , P=0.064)	2.541 (1.021, 6.320)	50/1650	25553/2396227



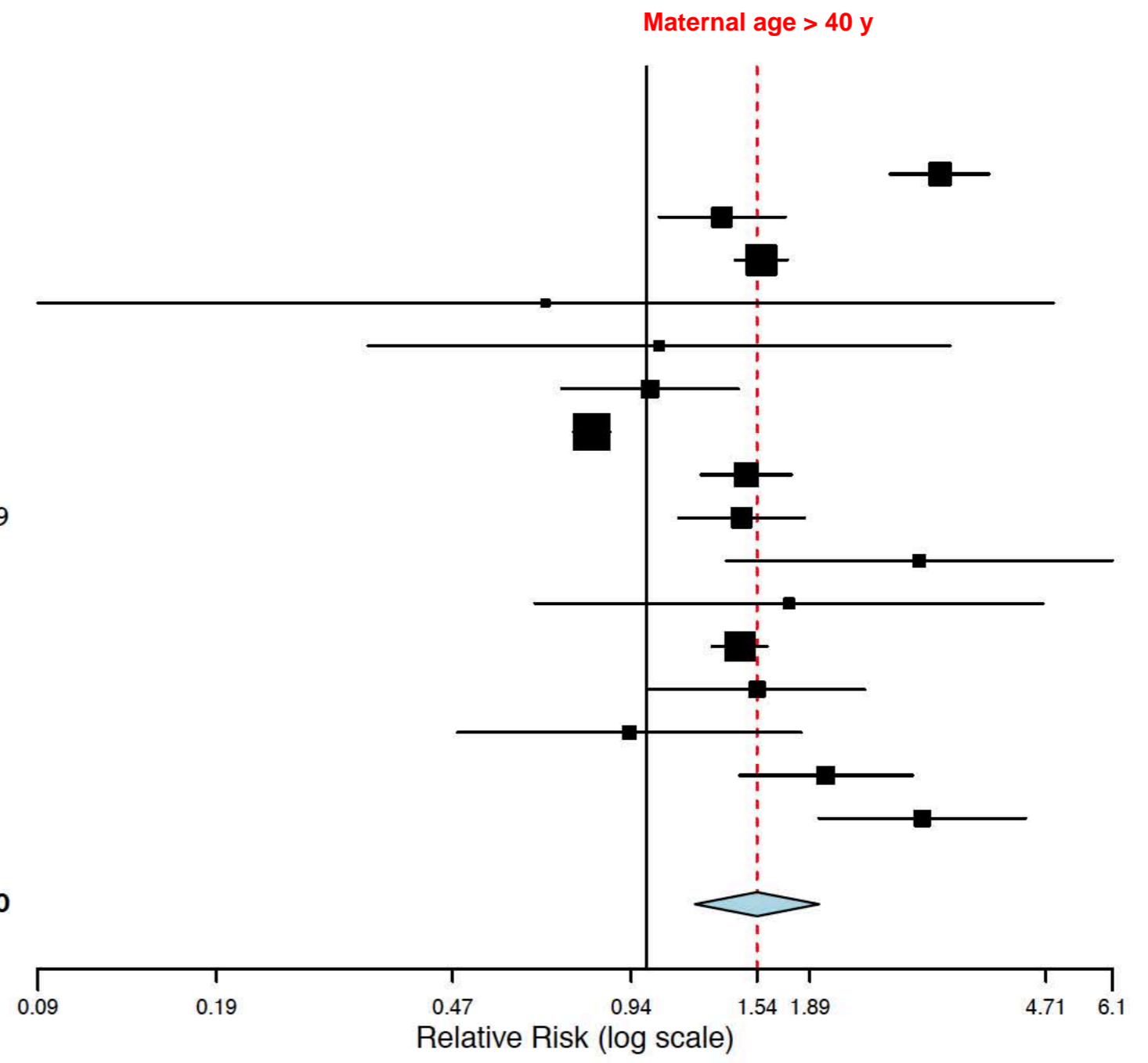
Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Al-Mulhim AA 2003	3.209 (2.765, 3.723)	288/5124	397/22663
Anderson NH 2012	1.874 (1.633, 2.151)	550/12860	307/13454
Basso O 2004	3.013 (2.339, 3.881)	213/27583	83/32385
Catov JM 2007	3.094 (2.777, 3.446)	1719/41325	398/29599
Dayan N 2015	1.903 (1.598, 2.264)	318/4587	194/5324
Di Lorenzo G 2012	1.867 (0.783, 4.452)	18/1227	7/891
Eras JL 2000	3.973 (2.017, 7.824)	33/1061	11/1405
Fortner RT 2009	4.361 (1.958, 9.714)	22/466	8/739
Gaio DS 2001	3.253 (2.154, 4.913)	57/1353	36/2780
Lee CJ 2000	1.450 (1.194, 1.761)	245/14821	170/14914
Liu S 2011	2.504 (2.226, 2.816)	841/665077	416/823661
Magnussen EB 2007	2.387 (1.687, 3.379)	85/1488	48/2006
Martin CL 2000	1.702 (1.319, 2.196)	111/619	94/892
Ngowa JDK 2013	0.882 (0.375, 2.077)	7/682	20/1719
Oken E 2007	2.777 (1.576, 4.891)	43/845	16/873
Papageorghiou AT 2005	1.446 (1.182, 1.770)	184/6848	185/9958
Pare E 2014	1.166 (0.914, 1.486)	113/1157	124/1480
Plasencia W a 2007	1.974 (1.336, 2.917)	68/2821	39/3194
Plasencia W b 2008	1.526 (1.014, 2.298)	56/1547	37/1560
Poon LCY 2010	1.642 (1.171, 2.302)	66/2674	66/4391
Rode L 2005	2.255 (1.602, 3.174)	153/5044	41/3048
Schneider S 2011	2.047 (1.979, 2.117)	9989/321563	4945/325822
Suzuki S 2009	1.585 (1.227, 2.047)	146/5861	95/6043
Wright D 2012	1.634 (1.471, 1.816)	877/29108	549/29776
Xiong X 2000	3.496 (2.964, 4.125)	451/21494	201/33493
Overall (I²=8997% , P< 0.001)	2.100 (1.871, 2.358)	16653/1177235	8487/1372070



Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Al-Mulhim AA 2003 2003	1.561 (1.333, 1.829)	219/6429	466/21358
Ananth CV 2007 2007	0.920 (0.815, 1.039)	259/6631	6289/148174
Anderson NH 2012 2012	0.940 (0.814, 1.085)	255/8158	602/18096
Basso O 2004 2004	0.785 (0.518, 1.190)	24/6060	272/53908
Blomberg M 2014	1.234 (1.178, 1.292)	1975/73797	15721/724877
Catov JM 2007	0.993 (0.843, 1.169)	150/5059	1967/65865
Eras JL 2000	0.507 (0.215, 1.192)	6/586	38/1880
Erez O 2006	1.263 (0.956, 1.669)	58/522	185/2103
Gaijard R 2011a 2011	0.721 (0.449, 1.157)	19/1282	151/7341
Gaio DS 2001	2.051 (1.280, 3.285)	21/517	81/4090
Goetzinger KR 2010	0.811 (0.648, 1.016)	178/2438	115/1278
Khalil A 2013	1.165 (1.051, 1.291)	507/20386	1191/55772
Lee CJ 2000	1.918 (1.526, 2.412)	92/3844	323/25891
Liu S 2011	1.045 (0.919, 1.187)	290/349502	1240/1561227
Ostlund I 2004	1.099 (1.043, 1.157)	1612/53293	10396/377559
Pare E 2014	1.239 (0.959, 1.602)	79/758	158/1879
Rasmussen S 2000	1.990 (1.830, 2.164)	591/19096	5463/351278
Salem Yaniv S 2011	1.570 (1.343, 1.834)	146/1224	3329/43809
Schneider S 2011	1.155 (1.114, 1.198)	3876/150676	11058/496710
Sohlberg S 2012	1.269 (1.219, 1.320)	2532/42549	21605/460630
Suzuki S 2009	1.485 (1.141, 1.934)	81/3026	160/8878
Xiong X 2000	0.967 (0.742, 1.259)	60/5420	574/50119
Overall (I²=9237% , P< 0.001)	1.197 (1.103, 1.300)	13030/761253	81384/4482722



Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Al-Mulhim AA 2003	3.119 (2.570, 3.785)	116/1705	569/26082
Anderson NH 2012	1.341 (1.049, 1.714)	66/1538	791/24716
Blomberg M 2014	1.561 (1.410, 1.728)	365/10634	17331/788040
Eras JL 2000	0.676 (0.094, 4.850)	1/82	43/2384
Gaijallard R 2011a 2011	1.050 (0.339, 3.251)	3/145	167/8478
Goetzinger KR 2010	1.014 (0.719, 1.429)	34/426	259/3290
Jacobsson B 2004	0.809 (0.754, 0.868)	775/32867	25547/876361
Khalil A 2013	1.472 (1.234, 1.755)	130/4061	1568/72097
Liu S 2011	1.446 (1.132, 1.847)	67/58650	1463/1852079
Ngowa JDK 2013	2.883 (1.363, 6.097)	13/585	14/1816
Oken E 2007	1.738 (0.648, 4.659)	4/69	55/1649
Ostlund I 2004	1.436 (1.290, 1.599)	329/8289	11678/422563
Pare E 2014	1.536 (1.011, 2.333)	21/157	216/2480
Poon LCY 2010	0.935 (0.481, 1.820)	9/486	156/7880
Salem Yaniv S 2011	2.007 (1.434, 2.809)	29/188	3447/44845
Yogev Y 2010	2.919 (1.954, 4.360)	61/1947	38/3540
Overall (I²=9490 % , P< 0.001)	1.536 (1.207, 1.954)	2023/121829	63342/4138300



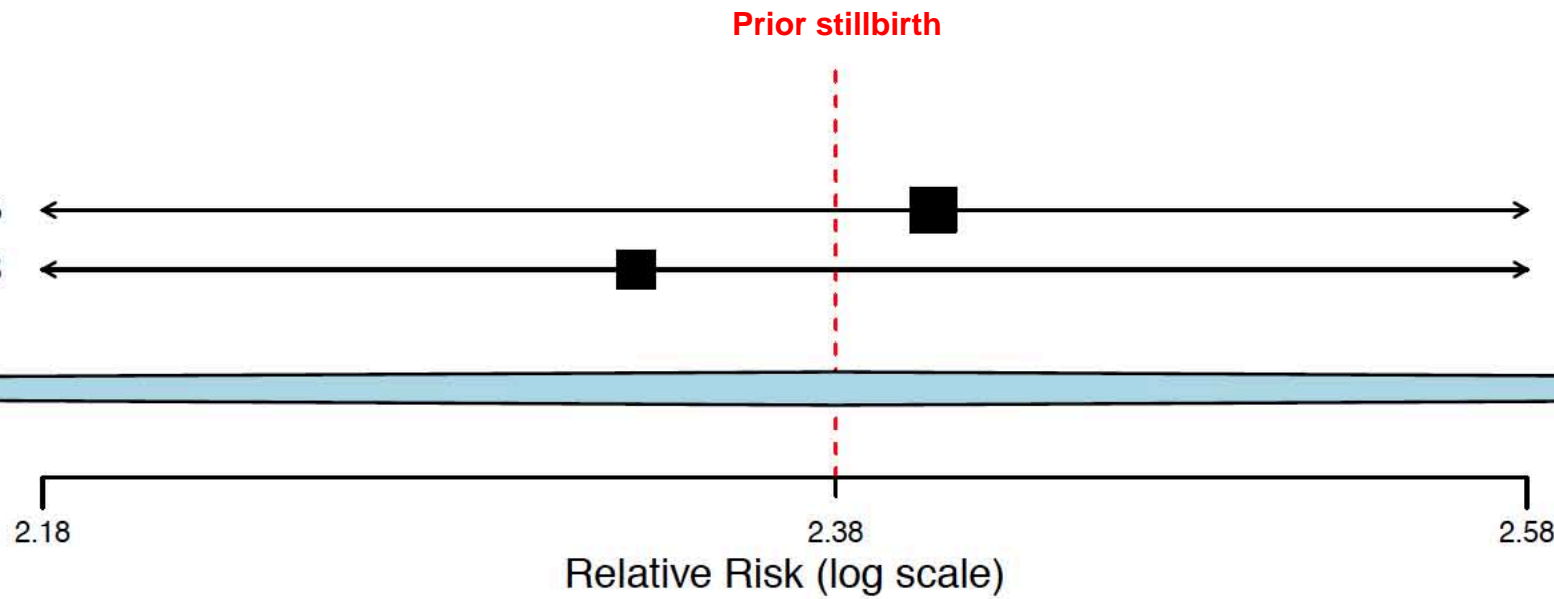
Studies

Estimate (95% C.I.) Ev/Trt Ev/Ctrl

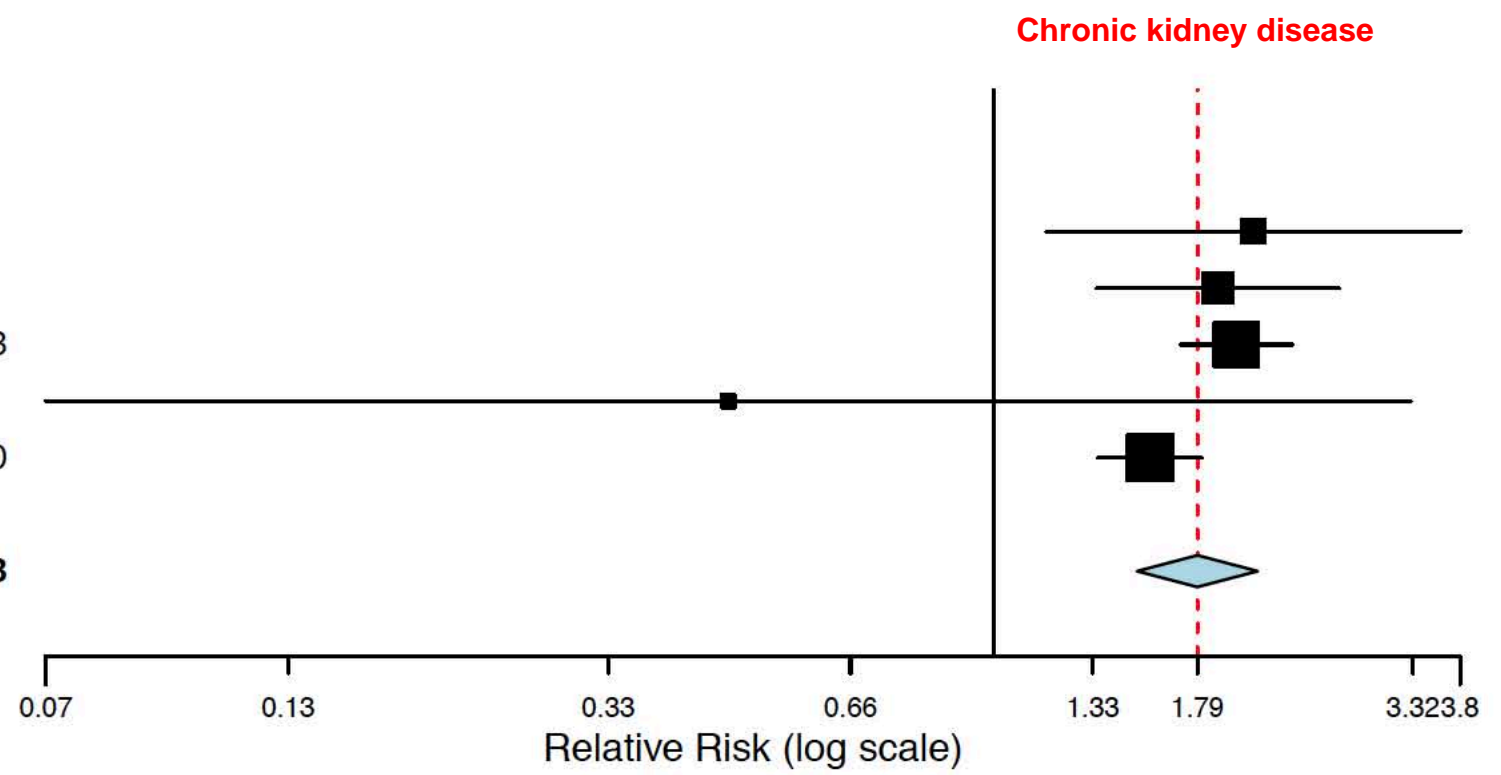
Black M 2008 2.409 (1.564, 3.710) 20/364 769/33715

Lee CJ 2000 2.329 (1.256, 4.317) 10/312 405/29423

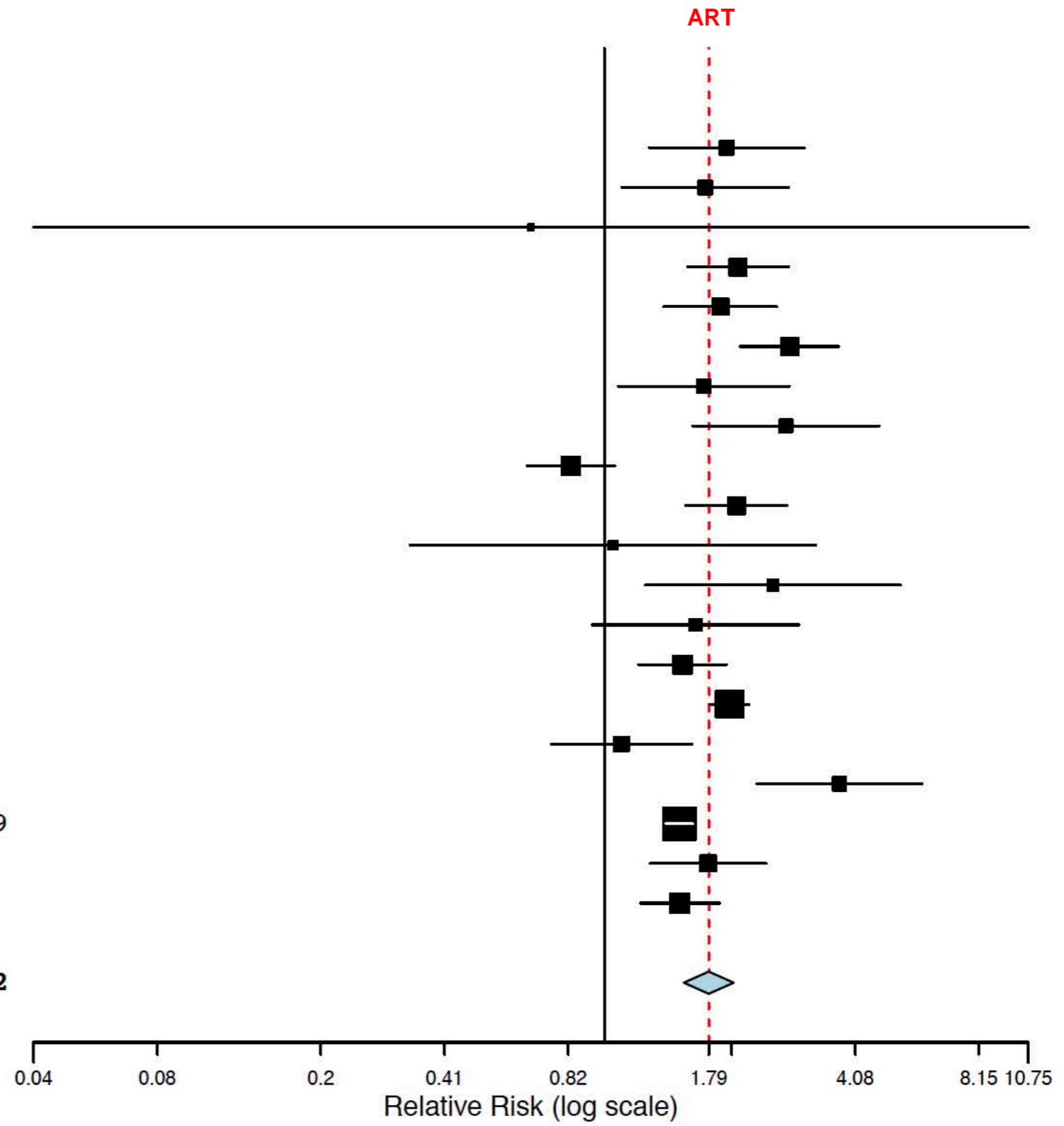
~~Overall (I²=0%, P=0.000) 2.300 (1.570, 3.030)~~



Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Dayan N 2015	2.103 (1.164, 3.800)	10/93	502/9818
Munkhaugen J 2009	1.900 (1.343, 2.689)	38/1117	166/9273
Ostlund I 2004	2.003 (1.706, 2.353)	142/2559	11864/428293
Papageorghiou AT 2005	0.468 (0.066, 3.298)	1/97	368/16709
Sohlberg S 2012	1.565 (1.349, 1.815)	163/2179	23948/501000
Overall (I²=44.42 % , P=0.126)	1.792 (1.508, 2.130)	354/6045	36848/965093

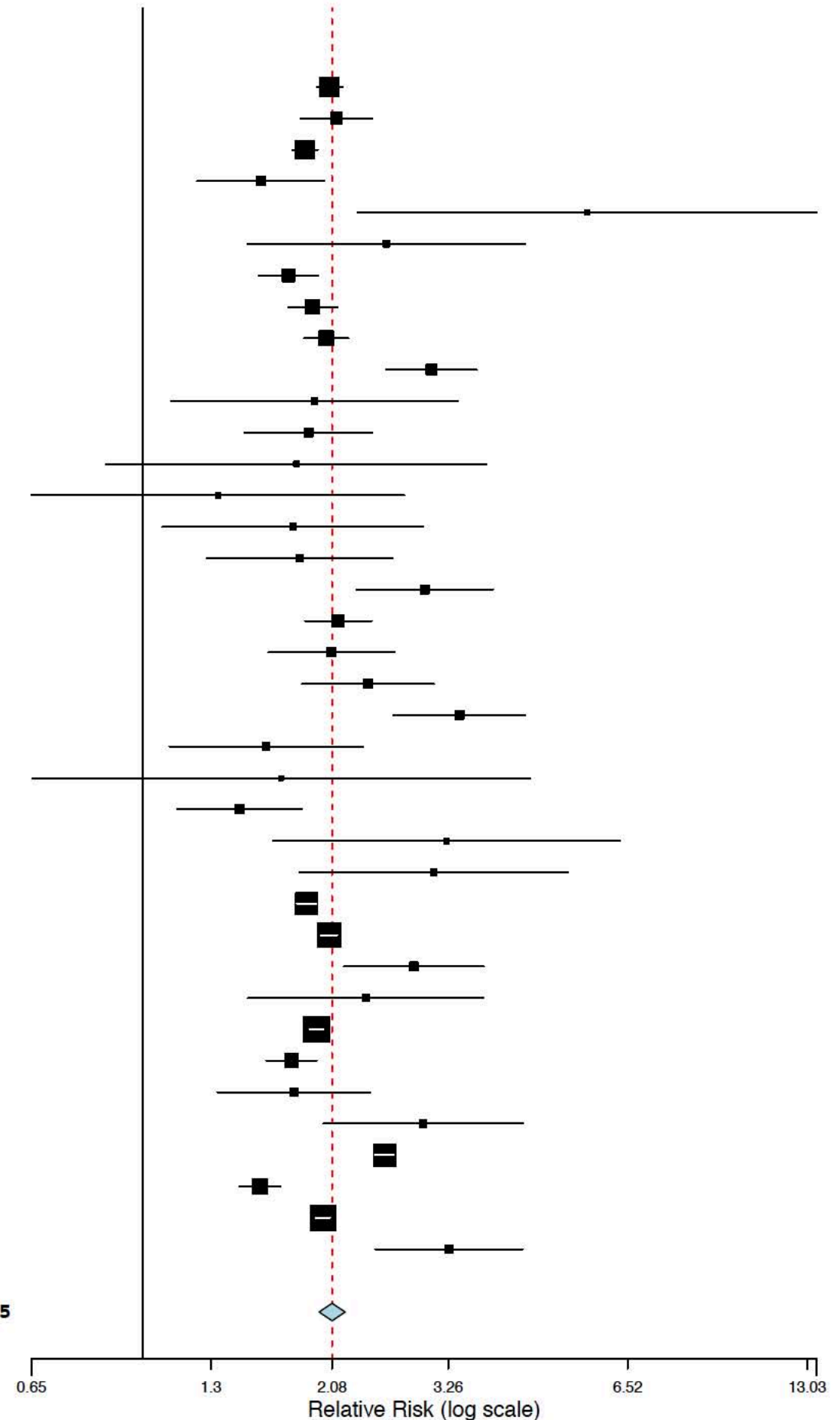


Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Carbone IF 2011	1.984 (1.284, 3.064)	20/426	628/26538
Chen XK 2009	1.759 (1.103, 2.807)	25/622	53/2320
Di Lorenzo G 2012	0.662 (0.041, 10.746)	0/60	25/2058
Erez O 2006	2.114 (1.592, 2.807)	51/292	193/2336
Jie Z 2015	1.916 (1.396, 2.629)	45/428	153/2788
Johnston R 2015	2.822 (2.139, 3.724)	46/551	12019/406334
Kuivasaari-Pirinen P 2012	1.743 (1.081, 2.813)	16/255	967/26870
Lee CJ 2000	2.763 (1.638, 4.662)	14/371	401/29364
Luke B 2004	0.829 (0.648, 1.060)	70/352	174/725
Pare E 2014	2.095 (1.577, 2.783)	52/312	185/2325
Plasencia W a 2007	1.049 (0.336, 3.270)	3/161	104/5854
Plasencia W b 2008	2.570 (1.257, 5.252)	8/142	65/2965
Poon LCY 2010	1.667 (0.935, 2.972)	12/376	153/7990
Shevell T 2005	1.548 (1.210, 1.980)	66/1776	823/34286
Silberstein T 2014	2.015 (1.807, 2.248)	303/3268	7890/171513
Sun LM 2009	1.100 (0.741, 1.633)	31/2118	112/8420
Suzuki S 2009	3.732 (2.347, 5.934)	18/252	223/11652
Tandberg A 2015	1.520 (1.411, 1.638)	666/12440	38629/1097089
Thomson F 2005	1.786 (1.291, 2.471)	37/785	589/22320
Wright D 2012	1.526 (1.221, 1.907)	79/2179	1347/56705
Overall (I²=7928 % , P< 0.001)	1.794 (1.560, 2.063)	1562/27166	64733/1920452



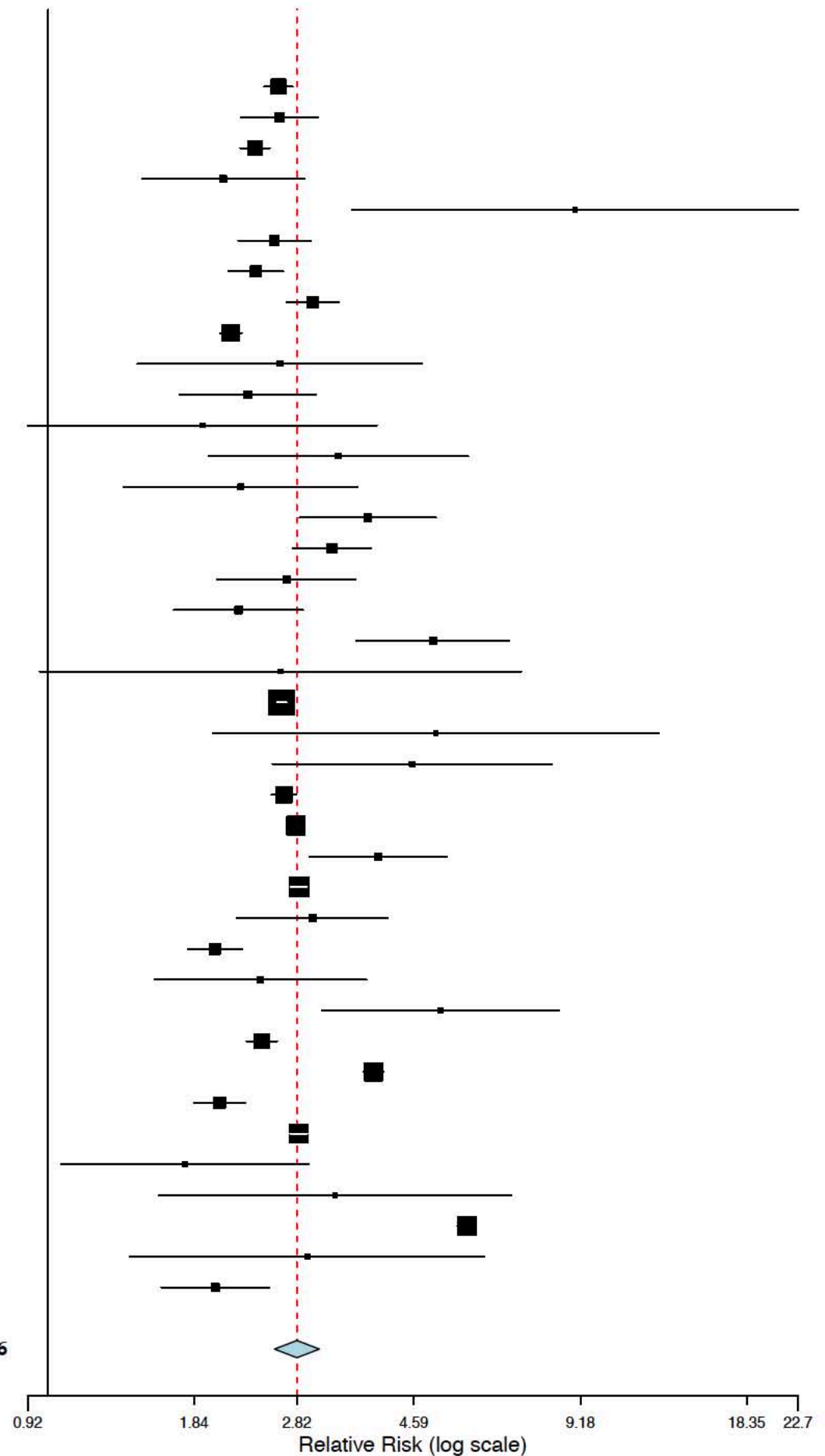
Pre-pregnancy BMI > 25 kg/m²

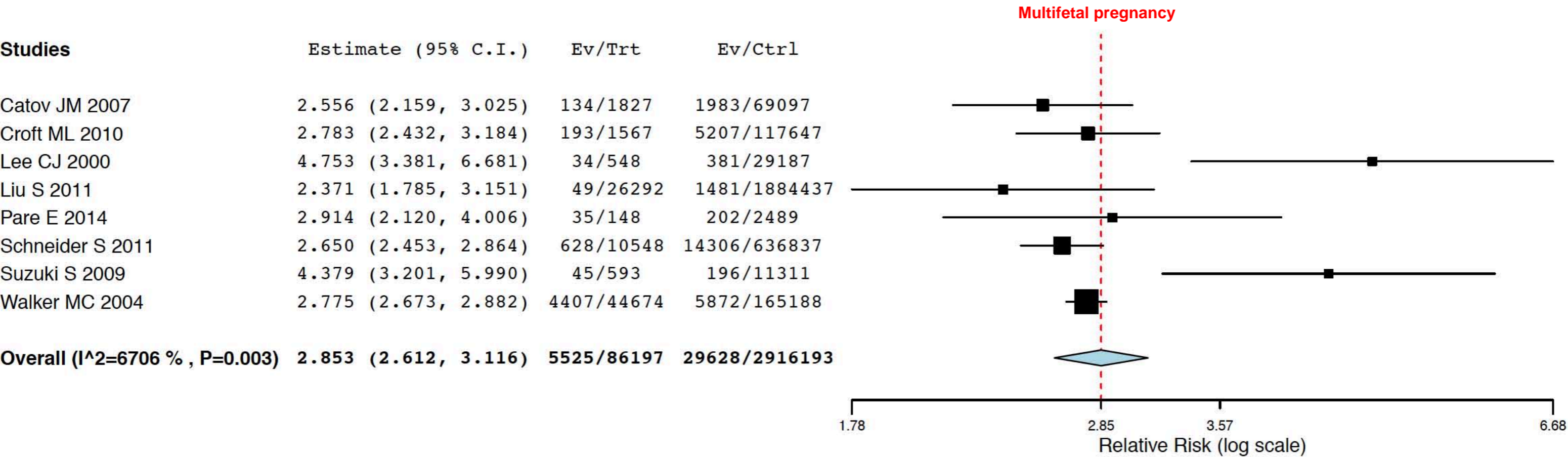
Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Ananth CV 2007	2.060 (1.962, 2.162)	3054/43604	3128/91987
Anderson NH 2012	2.115 (1.840, 2.430)	549/11802	297/13501
Baeten JM 2001	1.872 (1.782, 1.967)	2915/27279	2866/50212
Basso O 2004 2004	1.579 (1.235, 2.019)	112/16022	146/32982
Bautista–Castano 2013	5.567 (2.294, 13.505)	26/2751	6/3534
Berlac JF 2014	2.565 (1.500, 4.385)	46/826	18/829
Bhattacharya S 2007	1.758 (1.566, 1.972)	523/7323	572/14076
Boghossian NS 2014	1.930 (1.754, 2.124)	875/9695	708/15143
Catov JM 2007	2.033 (1.867, 2.213)	926/19240	1147/48446
Dayan N 2015	3.051 (2.562, 3.635)	324/3614	188/6399
Dokras A 2006	1.945 (1.118, 3.383)	33/610	19/683
El–Chaar D 2013	1.898 (1.484, 2.429)	154/2970	101/3698
Eras JL 2000	1.812 (0.868, 3.779)	9/312	30/1884
Fortner RT 2009	1.339 (0.652, 2.751)	16/433	13/471
Frederick IO 2006	1.788 (1.080, 2.958)	24/402	36/1078
Gaillard R 2011b 2011	1.834 (1.283, 2.622)	56/1907	62/3873
Goetzinger KR 2010	2.975 (2.287, 3.871)	186/1509	72/1738
Hauger MS 2008	2.131 (1.874, 2.423)	423/12409	489/30563
Kenny LC 2014	2.075 (1.626, 2.647)	172/2419	96/2801
Lee CJ 2000	2.390 (1.853, 3.081)	74/2106	261/17750
Liu X 2011	3.399 (2.639, 4.378)	132/1268	98/3200
Magnussen EB 2007	1.613 (1.110, 2.343)	69/1394	43/1401
Mahande MJ 2013	1.709 (0.653, 4.469)	21/499	5/203
Ness RB 2008	1.455 (1.142, 1.853)	72/811	365/5981
Ohkuchi A 2006	3.236 (1.657, 6.319)	13/206	22/1128
Oken E 2007	3.078 (1.833, 5.169)	37/607	22/1111
Ostlund I 2004	1.884 (1.816, 1.954)	5147/119316	5836/254835
Ovesen P 2011	2.057 (1.993, 2.122)	7666/120411	7217/233160
Pare E 2014	2.852 (2.175, 3.739)	169/1228	68/1409
Park JH 2011	2.369 (1.504, 3.732)	34/517	37/1333
Persson M 2012	1.957 (1.906, 2.009)	11638/284744	10094/483211
Ramos GA 2005	1.778 (1.614, 1.959)	542/3811	1074/13427
Rode L 2005	1.795 (1.337, 2.409)	64/1742	130/6350
Saereeporncharenkul K 2011	2.958 (2.013, 4.348)	44/642	56/2417
Schneider S 2011	2.547 (2.458, 2.638)	7983/200353	4779/305438
Sebire NJ 2001	1.573 (1.454, 1.702)	1214/110290	1238/176923
Sohlberg S 2012	2.008 (1.954, 2.063)	9078/121556	10770/289515
Suzuki S 2009	3.266 (2.459, 4.338)	61/1119	180/10785
Overall (I²=8917 % , P< 0.001)	2.080 (1.978, 2.188)	54481/1137747	52289/2133475



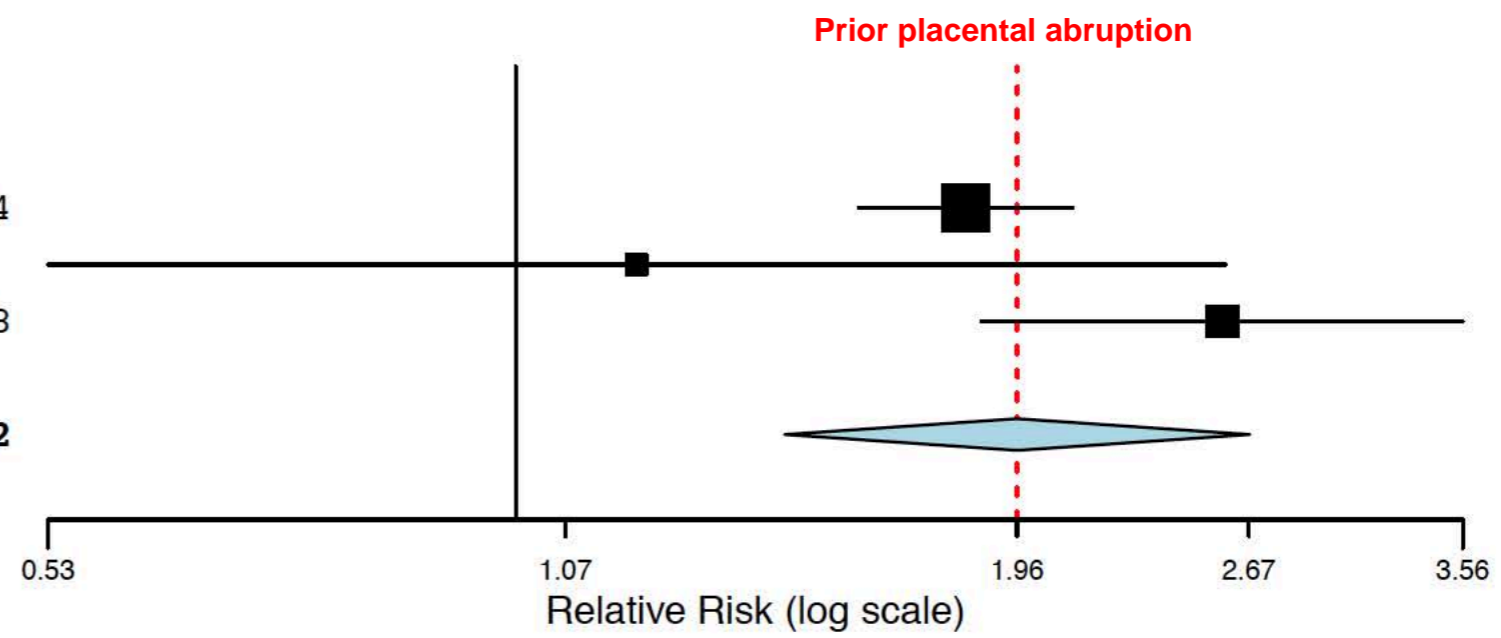
Pre-pregnancy BMI > 30 kg/m²

Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Ananth CV 2007	2.608 (2.459, 2.767)	1516/17092	3128/91987
Anderson NH 2012	2.618 (2.229, 3.075)	274/4758	297/13501
Baeten JM 2001	2.367 (2.226, 2.517)	1321/9778	2866/50212
Basso O 2004	2.073 (1.477, 2.908)	43/4687	146/32982
Bautista-Castano 2013	8.972 (3.546, 22.701)	17/1116	6/3534
Bhattacharya S 2007	2.565 (2.205, 2.983)	210/2015	572/14076
Boghossian NS 2014	2.375 (2.118, 2.662)	432/3891	708/15143
Catov JM 2007	3.011 (2.699, 3.360)	408/5723	1147/48446
Cedergren MI 2004	2.140 (2.045, 2.239)	2457/84931	7111/526038
Dokras A 2006	2.625 (1.451, 4.748)	23/315	19/683
El-Chaar D 2013	2.295 (1.729, 3.048)	83/1324	101/3698
Fortner RT 2009	1.900 (0.918, 3.935)	15/286	13/471
Frederick IO 2006	3.348 (1.949, 5.751)	18/161	36/1078
Gaillard R 2011b 2001	2.231 (1.371, 3.631)	21/588	62/3873
Goetzinger KR 2010	3.784 (2.846, 5.031)	108/689	72/1738
Hauger MS 2008	3.262 (2.774, 3.835)	197/3864	489/31286
Kenny LC 2014	2.696 (2.020, 3.599)	78/844	96/2801
Kerrigan AM 2010	2.209 (1.689, 2.889)	78/1452	147/6044
Liu X 2011	4.965 (3.615, 6.818)	52/342	98/3200
Mahande MJ 2013	2.631 (0.965, 7.174)	14/216	5/203
Mbah AK 2010	2.644 (2.593, 2.697)	15973/183042	22144/671043
Ohkuchi A 2006	5.027 (1.984, 12.735)	5/51	22/1128
Oken E 2007	4.552 (2.546, 8.138)	21/233	22/1111
Ostlund I 2004	2.668 (2.535, 2.809)	1811/29637	5836/254835
Ovesen P 2011	2.803 (2.698, 2.912)	3745/43161	7217/233160
Pare E 2014	3.957 (2.972, 5.269)	110/576	68/1409
Persson M 2012	2.842 (2.749, 2.938)	4924/82949	10094/483211
Poon LCY 2010	3.006 (2.196, 4.115)	58/1278	107/7088
Ramos GA 2005	2.003 (1.788, 2.243)	338/2110	1074/13427
Rode L 2005	2.420 (1.556, 3.764)	22/444	130/6350
Saareporncharenkul K 2011	5.125 (3.124, 8.409)	19/160	56/2417
Salihu HM 2011	2.434 (2.285, 2.593)	1588/26954	2179/90022
Schneider S 2011	3.878 (3.725, 4.037)	4351/71709	4779/305438
Sebire NJ 2001	2.042 (1.834, 2.274)	447/31276	1238/176923
Sohlberg S 2012	2.839 (2.737, 2.945)	3454/32707	10770/289515
Steinfeld JD 2000	1.767 (1.056, 2.957)	15/168	114/2256
Suzuki S 2009	3.302 (1.584, 6.884)	7/127	180/10785
Voigt M 2008a 2008	5.717 (5.501, 5.942)	4673/49925	5071/309736
Wahabi HA 2014	2.942 (1.406, 6.158)	23/1185	10/1516
Weiss JL 2004	2.005 (1.602, 2.508)	99/2350	289/13752
Overall (I²=9795 % , P< 0.001)	2.818 (2.566, 3.094)	49048/704114	88519/3726116

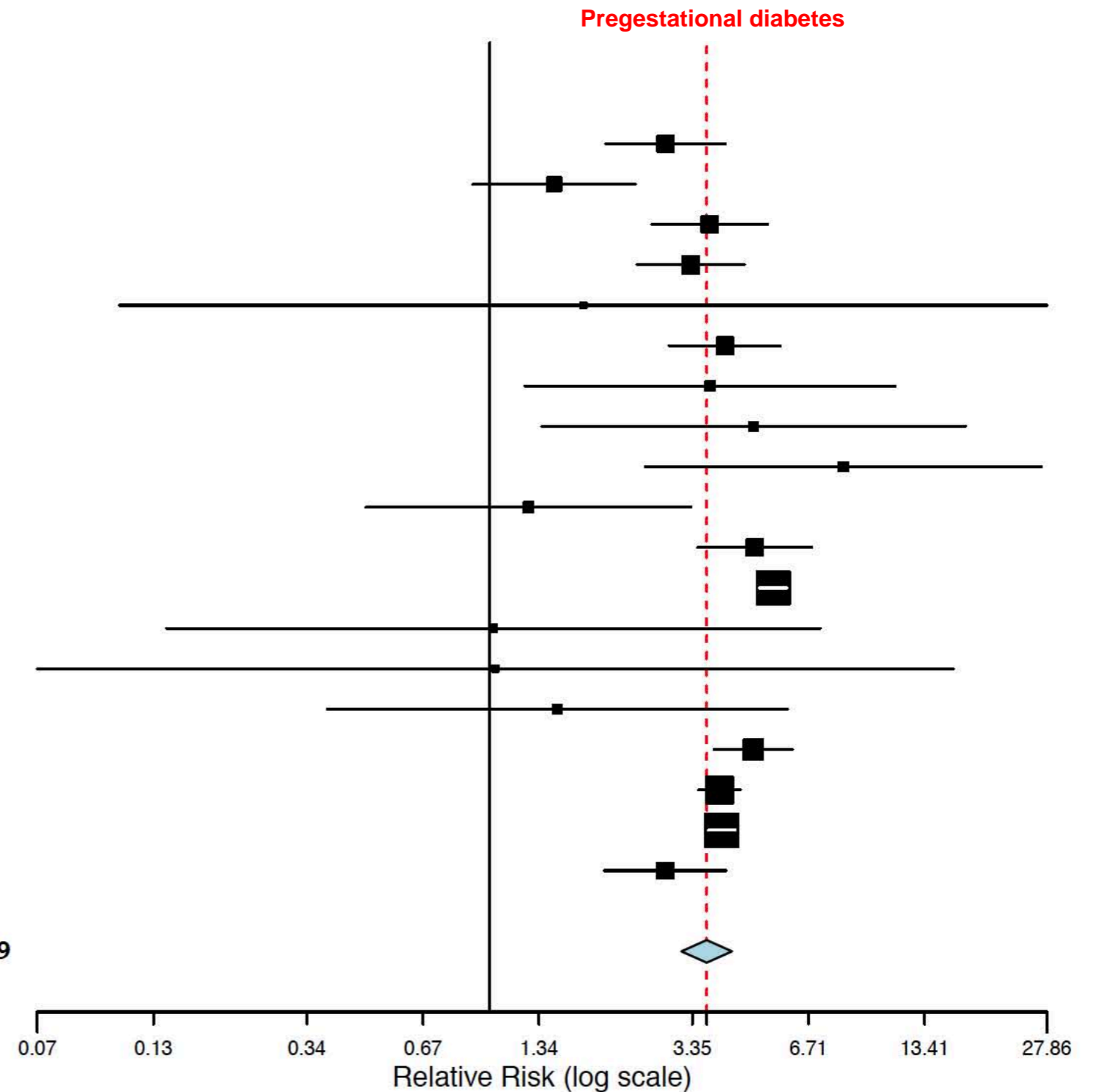




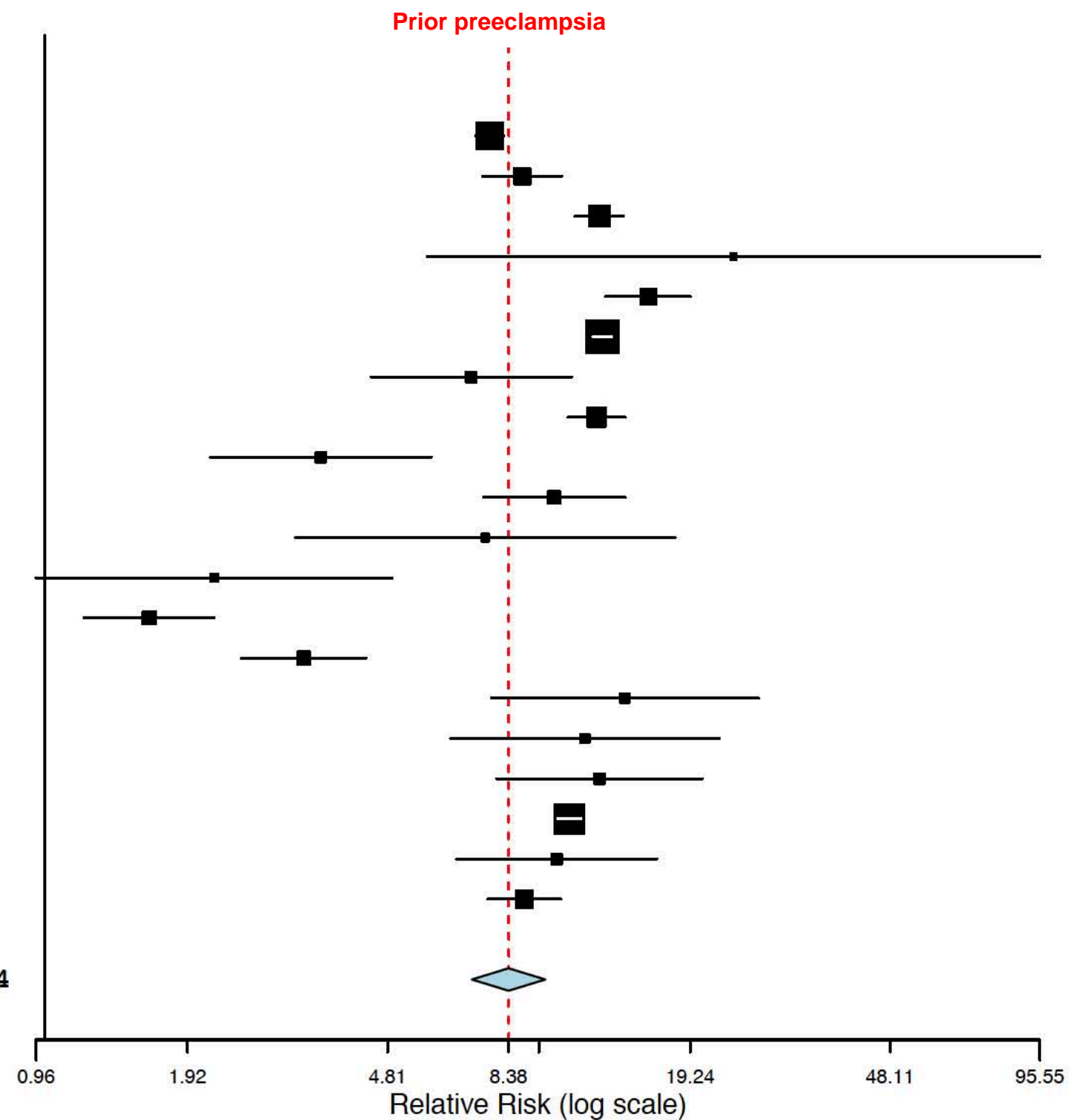
Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Ananth CV 2007	1.828 (1.584, 2.110)	161/1076	12584/153734
Papageorghiou AT 2005	1.176 (0.534, 2.589)	6/138	363/9820
Rasmussen S 2007	2.578 (1.867, 3.559)	35/550	2937/118968
Overall (I²=6100 % , P=0.077)	1.959 (1.434, 2.675)	202/1764	15884/282522



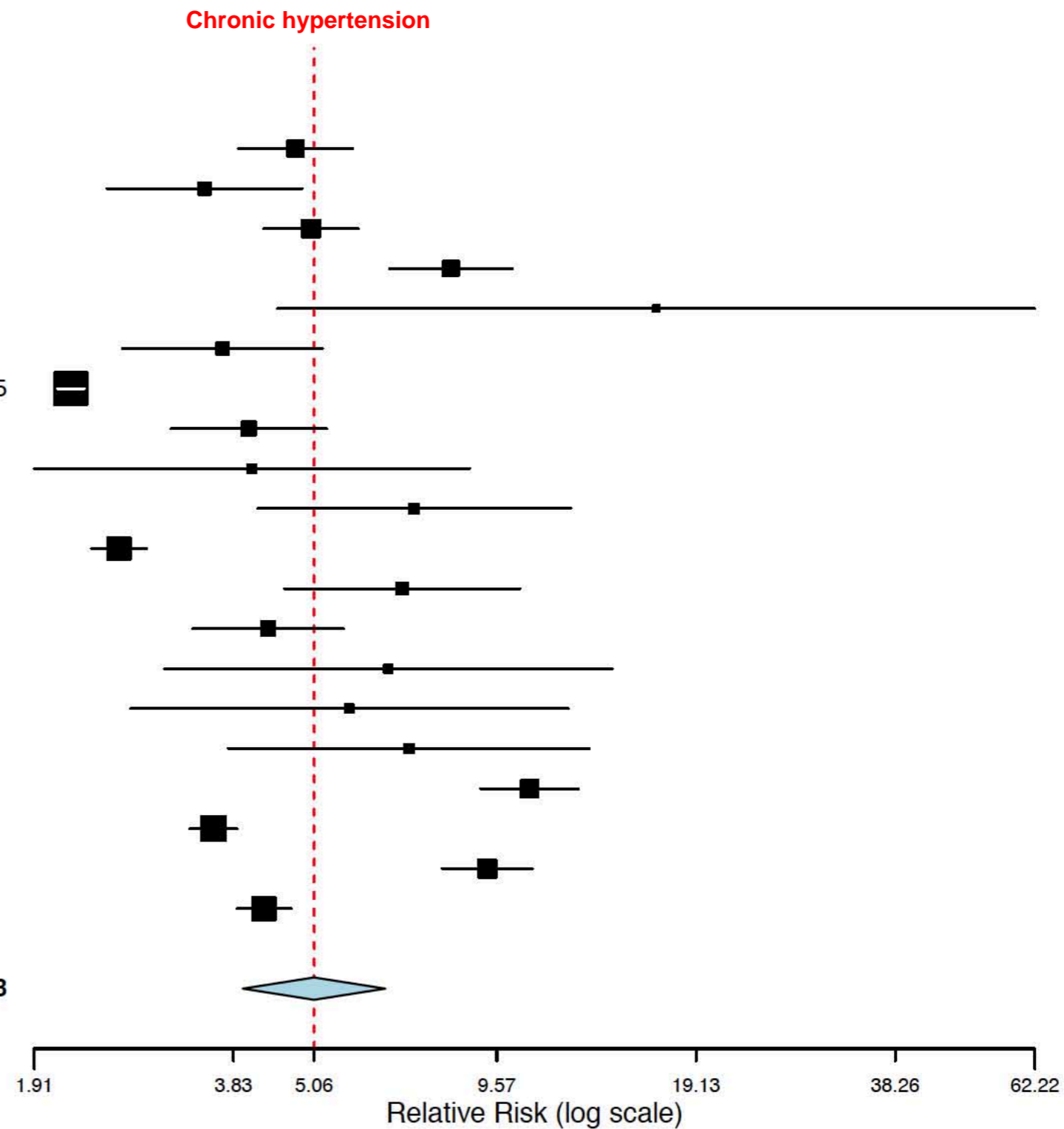
Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Anderson NH 2012	2.855 (1.995, 4.085)	29/349	542/18622
Boghossian NS 2014	1.468 (0.904, 2.385)	15/167	1618/26446
Catov JM 2007	3.717 (2.630, 5.254)	29/264	2088/70660
Dayan N 2015	3.318 (2.410, 4.568)	34/208	478/9703
Di Lorenzo G 2012	1.749 (0.110, 27.862)	0/22	25/2050
Goetzinger KR 2010	4.071 (2.923, 5.670)	28/94	265/3622
Lee CJ 2000	3.726 (1.233, 11.261)	3/58	412/29677
Magnussen EB 2007	4.834 (1.365, 17.124)	2/11	131/3483
Mahande MJ 2013	8.258 (2.530, 26.955)	2/7	135/3902
Papageorghiou AT 2005	1.259 (0.477, 3.327)	4/145	365/16661
Pare E 2014	4.865 (3.460, 6.840)	23/57	214/2580
Persson M 2012	5.432 (5.013, 5.886)	521/3457	21211/764498
Plasencia W a 2007	1.022 (0.145, 7.194)	1/55	106/5960
Plasencia W b 2008	1.034 (0.067, 15.937)	0/15	93/3092
Poon LCY 2010	1.497 (0.379, 5.915)	2/68	163/8298
Rasmussen S 2000	4.821 (3.812, 6.096)	65/832	5989/369542
Sandvik MK 2010	3.942 (3.483, 4.462)	216/1481	23476/634499
Sohlberg S 2012	3.997 (3.690, 4.330)	500/2667	23340/497651
Wright D 2012	2.849 (1.985, 4.090)	28/411	1398/58473
Overall (I²=7863 % , P< 0.001)	3.651 (3.139, 4.247)	1502/10368	82049/2529419



Studies	Estimate (95% C.I.)		Ev/Trt	Ev/Ctrl
Ananth CV 2007	7.683	(7.203, 8.194)	1080/6548	3183/148262
Boghossian NS 2014	8.908	(7.430, 10.681)	155/1292	341/25321
Boyd HA 2013	12.691	(11.352, 14.188)	337/4824	2088/379314
Brown MA 2007	23.475	(5.768, 95.547)	54/383	2/333
Catov JM 2007	15.885	(13.075, 19.299)	144/1020	254/28579
Hernandez-Diaz S 2009	12.874	(12.335, 13.436)	2871/19540	5538/485249
Lee CJ 2000	7.064	(4.454, 11.203)	19/261	151/14653
Li DK 2000	12.527	(10.987, 14.283)	260/2833	1006/137314
Magnussen EB 2007	3.544	(2.137, 5.876)	15/121	118/3373
Mahande MJ 2013	10.330	(7.466, 14.292)	42/171	103/4332
Melamed N 2012	7.529	(3.154, 17.975)	17/289	7/896
Oken E 2007	2.175	(0.962, 4.916)	6/85	53/1633
Papageorghiou AT 2005	1.614	(1.198, 2.173)	47/826	322/9132
Pare E 2014	3.277	(2.461, 4.364)	45/176	192/2461
Plasencia W a 2007	14.268	(7.742, 26.297)	18/181	21/3013
Plasencia W b 2008	11.882	(6.417, 22.002)	16/94	21/1466
Poon LCY 2010	12.688	(7.926, 20.313)	28/241	38/4150
Rasmussen S 2000	11.070	(10.496, 11.676)	1687/12489	4367/357885
Suzuki S 2009	10.434	(6.597, 16.503)	21/160	74/5883
Wright D 2012	9.007	(7.624, 10.640)	203/1821	346/27955
Overall (I²=9599 % , P< 0.001)	8.378	(7.078, 9.916)	7065/53355	18225/1641204



Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Anderson NH 2012	4.746 (3.890, 5.791)	95/672	762/25582
Basso O 2004	3.459 (2.467, 4.851)	38/2449	258/57519
Catov JM 2007	5.010 (4.253, 5.902)	132/929	1985/69995
Dayan N 2015	8.154 (6.586, 10.095)	64/170	448/9703
Di Lorenzo G 2012	16.656 (4.459, 62.216)	2/11	23/2107
Erez O 2006	3.683 (2.601, 5.216)	25/79	219/2549
Gilbert WM 2007	2.171 (2.074, 2.274)	1741/29917	115106/4294985
Goetzinger KR 2010	4.035 (3.077, 5.291)	47/168	246/3548
Magnussen EB 2007	4.080 (1.913, 8.699)	6/40	127/3454
Mahande MJ 2013	7.174 (4.160, 12.371)	11/47	126/3862
Ostlund I 2004	2.569 (2.334, 2.827)	404/5761	11605/425091
Papageorghiou AT 2005	6.886 (4.574, 10.367)	21/146	348/16660
Pare E 2014	4.315 (3.322, 5.607)	53/165	184/2472
Plasencia W a 2007	6.558 (3.010, 14.288)	6/54	101/5961
Plasencia W b 2008	5.722 (2.673, 12.250)	6/37	87/3070
Poon LCY 2010	7.040 (3.757, 13.193)	9/68	156/8298
Rasmussen S 2000	10.721 (9.042, 12.713)	112/650	5942/369724
Sohlberg S 2012	3.568 (3.287, 3.872)	487/2886	23664/500293
Wright D 2012	9.249 (7.903, 10.825)	140/685	1286/58199
Zetterstrom K 2005	4.253 (3.871, 4.672)	393/3374	18573/678141
Overall (I²=9782 % , P< 0.001)	5.064 (3.953, 6.488)	3792/48308	181246/6541213



Studies	Estimate (95% C.I.)	Ev/Trt	Ev/Ctrl
Nili F 2013	2.682 (1.699, 4.233)	14/58	18989/210987
Plasencia W a 2007	4.044 (0.606, 26.984)	1/14	106/6001
Plasencia W b 2008	4.151 (0.308, 55.915)	0/3	93/3104
Overall (I²=0 % , P=0.876)	2.775 (1.792, 4.298)	15/75	19188/220092

