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Supplementary Information

Supplementary Table

Table S1

All study arms with references

Study Arm	Year	Sample Size	Drug	Weight	Prolactin	QTc
Ishigooka 2018 ⁵³	2018	116	Placebo	Yes	Yes	No
Ishigooka 2018 ⁵³	2018	228	Brexpiprazole	Yes	Yes	No
Litman 2016 ⁴¹	2016	55	Placebo	Yes	Yes	No
Litman 2016 ⁴¹	2016	31	Risperidone	Yes	Yes	No
NCT01104766a ⁶⁴	2015	153	Placebo	Yes	Yes	No
NCT01104766a ⁶⁴	2015	152	Aripiprazole	Yes	Yes	No
NCT01104766b ⁶⁴	2015	312	Cariprazine	Yes	Yes	No
Lieberman 2015 ⁷⁵	2015	85	Placebo	Yes	Yes	No
Lieberman 2015 ⁷⁵	2015	82	Risperidone	Yes	Yes	No
Kane 2015 ¹²³	2015	184	Placebo	Yes	Yes	Yes
Kane 2015 ¹²³	2015	370	Brexpiprazole	Yes	Yes	Yes
Correll 2015 ⁵⁴	2015	184	Placebo	Yes	Yes	Yes
Correll 2015 ⁵⁴	2015	362	Brexpiprazole	Yes	Yes	Yes
NCT01098110 ⁸²	2015	174	Placebo	Yes	Yes	No
NCT01098110 ⁸²	2015	358	Asenapine	Yes	Yes	No
NCT01617187a ⁴⁹	2015	113	Asenapine	Yes	No	No
NCT01617187a ⁴⁹	2015	103	Placebo	Yes	No	No
NCT01617187b ⁴⁹	2015	46	Olanzapine	Yes	No	No
NCT00905307a ⁹⁴	2015	50	Aripiprazole	Yes	Yes	No
NCT00905307a ⁹⁴	2015	95	Placebo	Yes	Yes	No
NCT00905307b ⁹⁴	2015	90	Brexpiprazole	Yes	Yes	No
Loebel 2015a ⁹²	2015	199	Lurasidone	Yes	Yes	No
Loebel 2015a ⁹²	2015	112	Placebo	Yes	Yes	No
Litmann 2014 ⁹³	2014	41	Placebo	Yes	No	No
Litmann 2014 ⁹³	2014	22	Olanzapine	Yes	No	No
Schmidt 2014 ⁹⁸	2014	93	Olanzapine	Yes	Yes	No
Shen 2014 ⁸¹	2014	78	Placebo	Yes	No	No
Shen 2014 ⁸¹	2014	77	Olanzapine	Yes	No	No
Durgam 2014a ⁷⁷	2014	151	Placebo	Yes	Yes	Yes
Durgam 2014a ⁷⁷	2014	140	Risperidone	Yes	Yes	Yes
Durgam 2014b ⁷⁷	2014	438	Cariprazine	Yes	Yes	Yes
Geffen 2012 ⁹⁹	2012	91	Risperidone	No	Yes	No
Geffen 2012 ⁹⁹	2012	93	Placebo	No	Yes	No
Kinon 2011 ⁵⁰	2011	62	Olanzapine	Yes	Yes	No
Kinon 2011 ⁵⁰	2011	122	Placebo	Yes	Yes	No
Kane 2010a ⁶⁷	2010	115	Haloperidol	Yes	Yes	No
Kane 2010a ⁶⁷	2010	123	Placebo	Yes	Yes	No
Kane 2010b ⁶⁷	2010	220	Asenapine	Yes	Yes	No
Study 006 ⁴⁵	2010	99	Lurasidone	Yes	Yes	Yes
Study 006 ⁴⁵	2010	50	Placebo	Yes	Yes	Yes
Study 049a ⁸⁸	2010	73	Haloperidol	Yes	Yes	Yes
Study 049a ⁸⁸	2010	72	Placebo	Yes	Yes	Yes
Study 049b ⁸⁸	2010	140	Lurasidone	Yes	Yes	Yes
Study 196 ⁵⁷	2010	90	Placebo	Yes	Yes	Yes
Study 196 ⁵⁷	2010	90	Lurasidone	Yes	Yes	Yes
Study 229 ⁷⁸	2010	372	Lurasidone	Yes	Yes	Yes

VARIABILITY OF SIDE EFFECTS

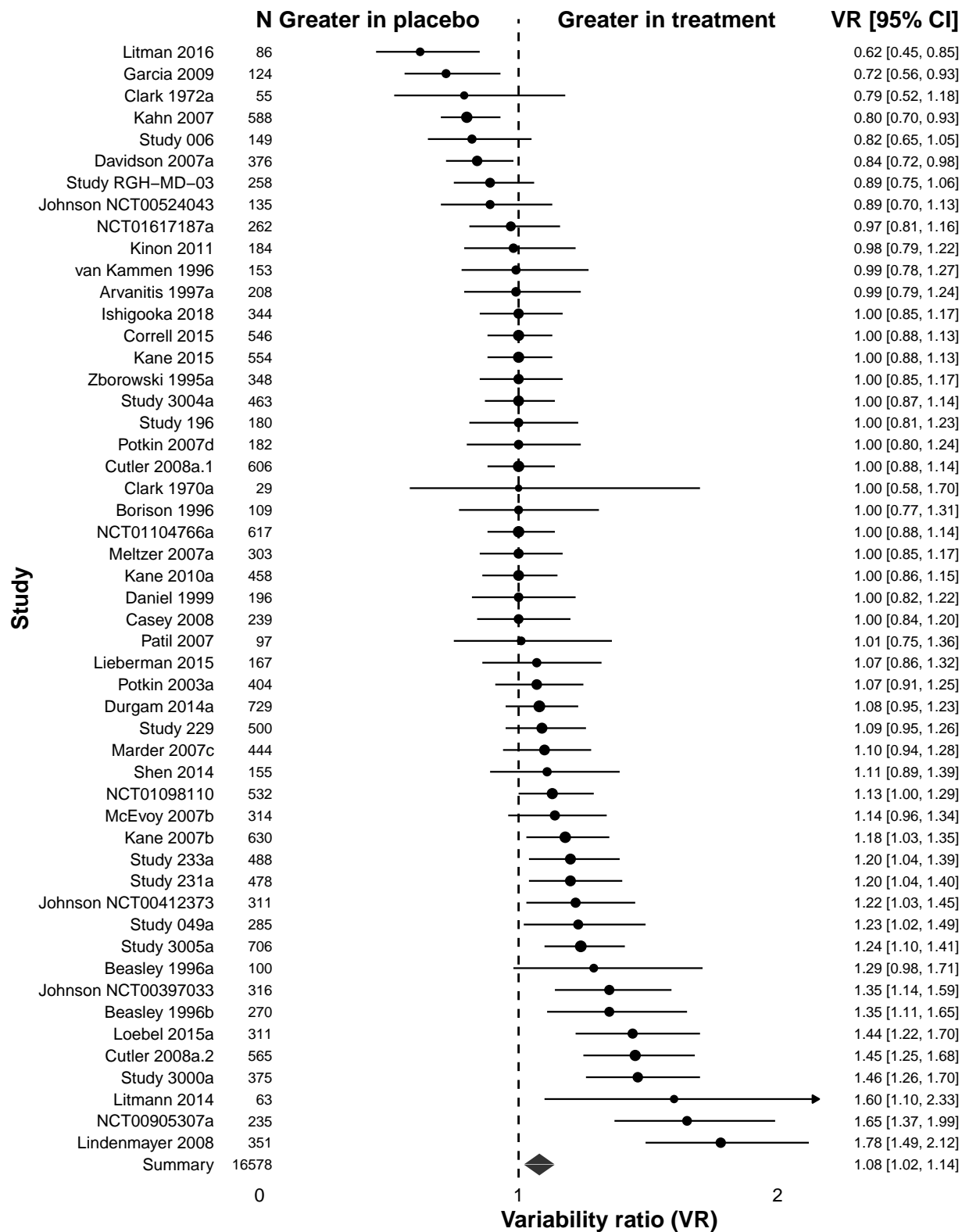
Study Arm	Year	Sample Size	Drug	Weight	Prolactin	QTc
Study 229 ⁷⁸	2010	128	Placebo	Yes	Yes	Yes
Study 231a ⁸⁶	2010	116	Placebo	Yes	Yes	Yes
Study 231a ⁸⁶	2010	123	Olanzapine	Yes	Yes	Yes
Study 231b ⁸⁶	2010	239	Lurasidone	Yes	Yes	Yes
Study 233a ⁸⁵	2010	122	Placebo	Yes	Yes	Yes
Study 233a ⁸⁵	2010	120	Quetiapine	Yes	Yes	Yes
Study 233b ⁸⁵	2010	246	Lurasidone	Yes	Yes	Yes
Garcia 2009 ⁴²	2009	60	Haloperidol	Yes	Yes	Yes
Garcia 2009 ⁴²	2009	64	Placebo	Yes	Yes	Yes
Hera 041-021a ¹²⁴	2009	208	Asenapine	No	Yes	No
Hera 041-021a ¹²⁴	2009	106	Placebo	No	Yes	No
Hera 041-021b ¹²⁴	2009	103	Olanzapine	No	Yes	No
Hera 041-022 ¹²⁵	2009	93	Olanzapine	No	Yes	No
Hera 041-022 ¹²⁵	2009	93	Placebo	No	Yes	No
Casey 2008 ⁷²	2008	120	Risperidone	Yes	Yes	No
Casey 2008 ⁷²	2008	119	Placebo	Yes	Yes	No
Cutler 2008a ⁶⁰	2008	151	Ziprasidone	Yes	Yes	Yes
Cutler 2008a ⁶⁰	2008	152	Placebo	Yes	Yes	Yes
Cutler 2008b ⁶⁰	2008	303	Iloperidone	Yes	Yes	Yes
Johnson NCT00397033 ⁹⁰	2008	209	Paliperidone	Yes	Yes	No
Johnson NCT00397033 ⁹⁰	2008	107	Placebo	Yes	Yes	No
Johnson NCT00412373 ⁸⁷	2008	95	Placebo	Yes	Yes	No
Johnson NCT00412373 ⁸⁷	2008	216	Paliperidone	Yes	Yes	No
Johnson NCT00524043 ⁴⁸	2008	70	Paliperidone	Yes	Yes	No
Johnson NCT00524043 ⁴⁸	2008	65	Placebo	Yes	Yes	No
Lindenmayer 2008 ⁹⁵	2008	267	Quetiapine	Yes	Yes	Yes
Lindenmayer 2008 ⁹⁵	2008	84	Placebo	Yes	Yes	Yes
Study 3000a ⁵⁶	2008	127	Placebo	Yes	Yes	Yes
Study 3000a ⁵⁶	2008	124	Haloperidol	Yes	Yes	Yes
Study 3000b ⁵⁶	2008	124	Iloperidone	Yes	Yes	Yes
Study 3004a ⁵⁶	2008	156	Placebo	Yes	Yes	Yes
Study 3004a ⁵⁶	2008	154	Iloperidone	Yes	Yes	Yes
Study 3004b ⁵⁶	2008	153	Risperidone	Yes	Yes	Yes
Study 3005a ⁵⁶	2008	157	Risperidone	Yes	No	Yes
Study 3005a ⁵⁶	2008	160	Placebo	Yes	No	Yes
Study 3005b ⁵⁶	2008	389	Iloperidone	Yes	No	Yes
Study RGH-MD-03 ⁴⁷	2008	130	Placebo	Yes	Yes	No
Study RGH-MD-03 ⁴⁷	2008	128	Cariprazine	Yes	Yes	No
Cutler 2008a ⁶⁰	2008	117	Placebo	Yes	Yes	Yes
Cutler 2008a ⁶⁰	2008	448	Quetiapine	Yes	Yes	Yes
Davidson 2007a ⁴⁶	2007	123	Placebo	Yes	Yes	No
Davidson 2007a ⁴⁶	2007	128	Olanzapine	Yes	Yes	No
Davidson 2007b ⁴⁶	2007	125	Paliperidone	Yes	Yes	No
Kahn 2007 ⁴⁴	2007	118	Placebo	Yes	Yes	No
Kahn 2007 ⁴⁴	2007	470	Quetiapine	Yes	Yes	No
McEvoy 2007b ⁸³	2007	206	Aripiprazole	Yes	Yes	No
McEvoy 2007b ⁸³	2007	108	Placebo	Yes	Yes	No
Meltzer 2007a ⁶⁵	2007	149	Placebo	Yes	Yes	No
Meltzer 2007a ⁶⁵	2007	154	Risperidone	Yes	Yes	No
Kane 2007b ⁸⁴	2007	127	Placebo	Yes	Yes	No
Kane 2007b ⁸⁴	2007	128	Olanzapine	Yes	Yes	No
Kane 2007c ⁸⁴	2007	375	Paliperidone	Yes	Yes	No

Study Arm	Year	Sample Size	Drug	Weight	Prolactin	QTc
Marder 2007c ⁷⁹	2007	110	Placebo	Yes	Yes	Yes
Marder 2007c ⁷⁹	2007	224	Paliperidone	Yes	Yes	Yes
Marder 2007d ⁷⁹	2007	110	Olanzapine	Yes	Yes	Yes
Patil 2007 ⁷⁴	2007	34	Olanzapine	Yes	Yes	Yes
Patil 2007 ⁷⁴	2007	63	Placebo	Yes	Yes	Yes
Potkin 2007d ⁵⁸	2007	62	Placebo	Yes	Yes	Yes
Potkin 2007d ⁵⁸	2007	60	Risperidone	Yes	Yes	Yes
Potkin 2007c ⁵⁸	2007	60	Asenapine	Yes	Yes	Yes
Potkin 2003a ⁷⁶	2003	202	Aripiprazole	Yes	Yes	Yes
Potkin 2003a ⁷⁶	2003	103	Placebo	Yes	Yes	Yes
Potkin 2003b ⁷⁶	2003	99	Risperidone	Yes	Yes	Yes
Kane 2002b ⁶⁸	2002	104	Haloperidol	Yes	Yes	Yes
Study 94202 2002a ¹²⁶	2002	61	Aripiprazole	No	Yes	Yes
Study 94202 2002a ¹²⁶	2002	64	Placebo	No	Yes	Yes
Study 94202 2002b ¹²⁶	2002	63	Haloperidol	No	Yes	Yes
Study 115 2000a ¹²⁷	2000	83	Placebo	No	No	Yes
Study 115 2000a ¹²⁷	2000	164	Ziprasidone	No	No	Yes
Study 115 2000b ¹²⁷	2000	85	Haloperidol	No	No	Yes
Daniel 1999 ⁷⁰	1999	92	Placebo	Yes	No	Yes
Daniel 1999 ⁷⁰	1999	104	Ziprasidone	Yes	No	Yes
Arvanitis 1997a ⁵²	1997	51	Placebo	Yes	Yes	Yes
Arvanitis 1997a ⁵²	1997	105	Quetiapine	Yes	Yes	Yes
Arvanitis 1997b ⁵²	1997	52	Haloperidol	Yes	Yes	Yes
Small 1997 ⁹⁷	1997	96	Quetiapine	No	Yes	No
Small 1997 ⁹⁷	1997	96	Placebo	No	Yes	No
Zimbroff 1997a ¹⁰⁰	1997	144	Sertindole	No	Yes	Yes
Zimbroff 1997a ¹⁰⁰	1997	73	Placebo	No	Yes	Yes
Zimbroff 1997b ¹⁰⁰	1997	137	Haloperidol	No	Yes	Yes
Beasley 1996a ⁸⁹	1996	50	Placebo	Yes	Yes	No
Beasley 1996a ⁸⁹	1996	50	Olanzapine	Yes	Yes	No
Beasley 1996b ⁹¹	1996	69	Haloperidol	Yes	Yes	Yes
Beasley 1996b ⁹¹	1996	68	Placebo	Yes	Yes	Yes
Beasley 1996c ⁹¹	1996	133	Olanzapine	Yes	Yes	Yes
Borison 1996 ⁶²	1996	55	Placebo	Yes	Yes	Yes
Borison 1996 ⁶²	1996	54	Quetiapine	Yes	Yes	Yes
van Kammen 1996 ⁵¹	1996	105	Sertindole	Yes	Yes	Yes
van Kammen 1996 ⁵¹	1996	48	Placebo	Yes	Yes	Yes
Zborowski 1995a ⁵⁵	1995	116	Placebo	Yes	Yes	Yes
Zborowski 1995a ⁵⁵	1995	115	Haloperidol	Yes	Yes	Yes
Zborowski 1995b ⁵⁵	1995	117	Sertindole	Yes	Yes	Yes
Clark 1972a ⁴³	1972	19	Chlorpromazine	Yes	No	No
Clark 1972a ⁴³	1972	18	Placebo	Yes	No	No
Clark 1972b ⁴³	1972	18	Loxapine	Yes	No	No
Clark 1970a ⁶¹	1970	15	Chlorpromazine	Yes	No	No
Clark 1970a ⁶¹	1970	14	Placebo	Yes	No	No

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Supplementary Figures

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55 **Figure S1.** Variability ratio for weight gain. The forest plot shows the VR together with its 95% confidence interval (CI) for treatment
56 versus placebo. All included studies⁴¹⁻⁹⁵ are also listed in Table S1.

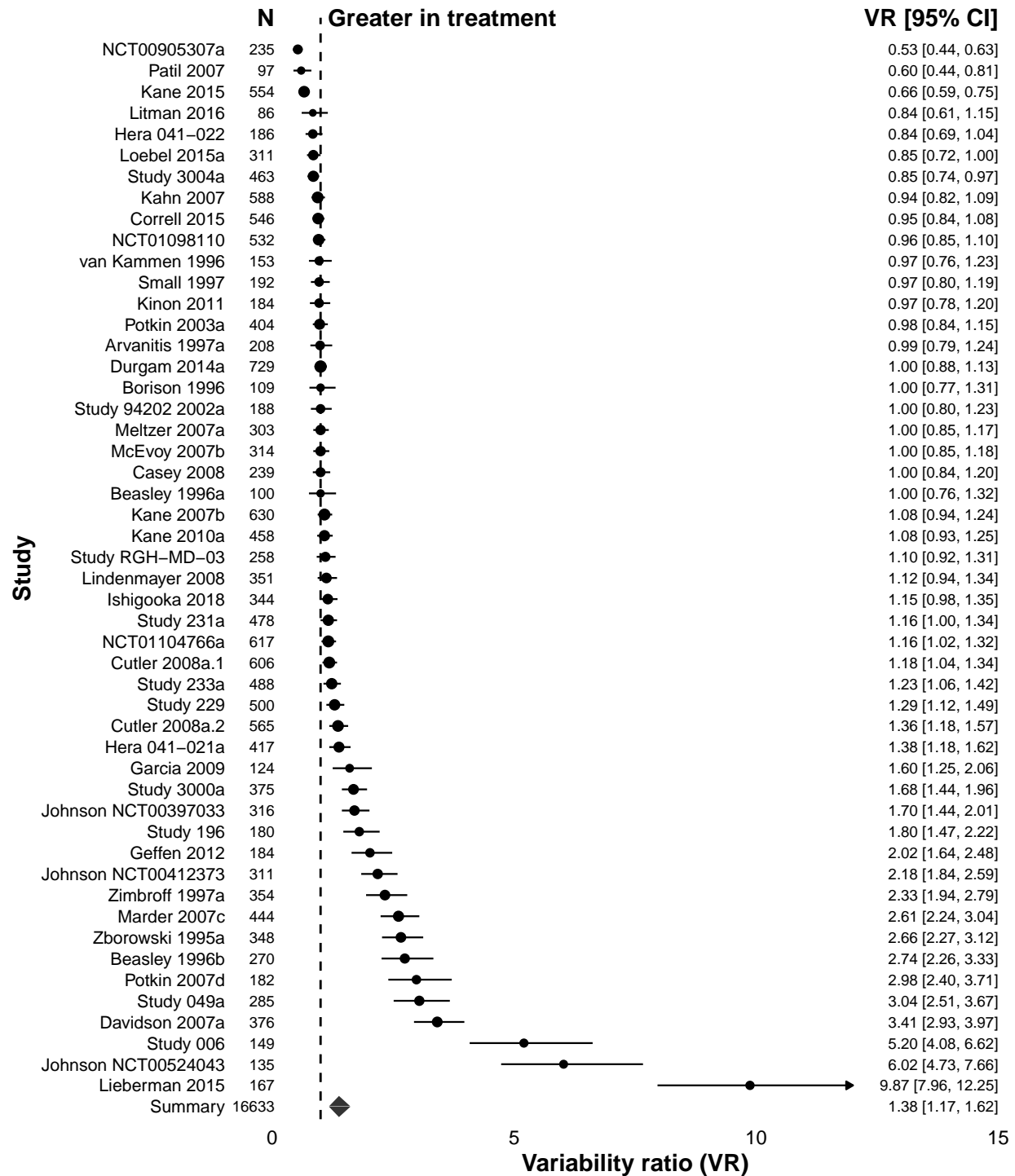


Figure S2. Variability ratio for hyperprolactinemia. The forest plot shows the VR together with its 95% confidence interval (CI) for treatment versus placebo. All included studies^{41,42,44-48,50-58,60,62,64,65,67-69,72,74-79,82-92,94-100} are also listed in Table S1.

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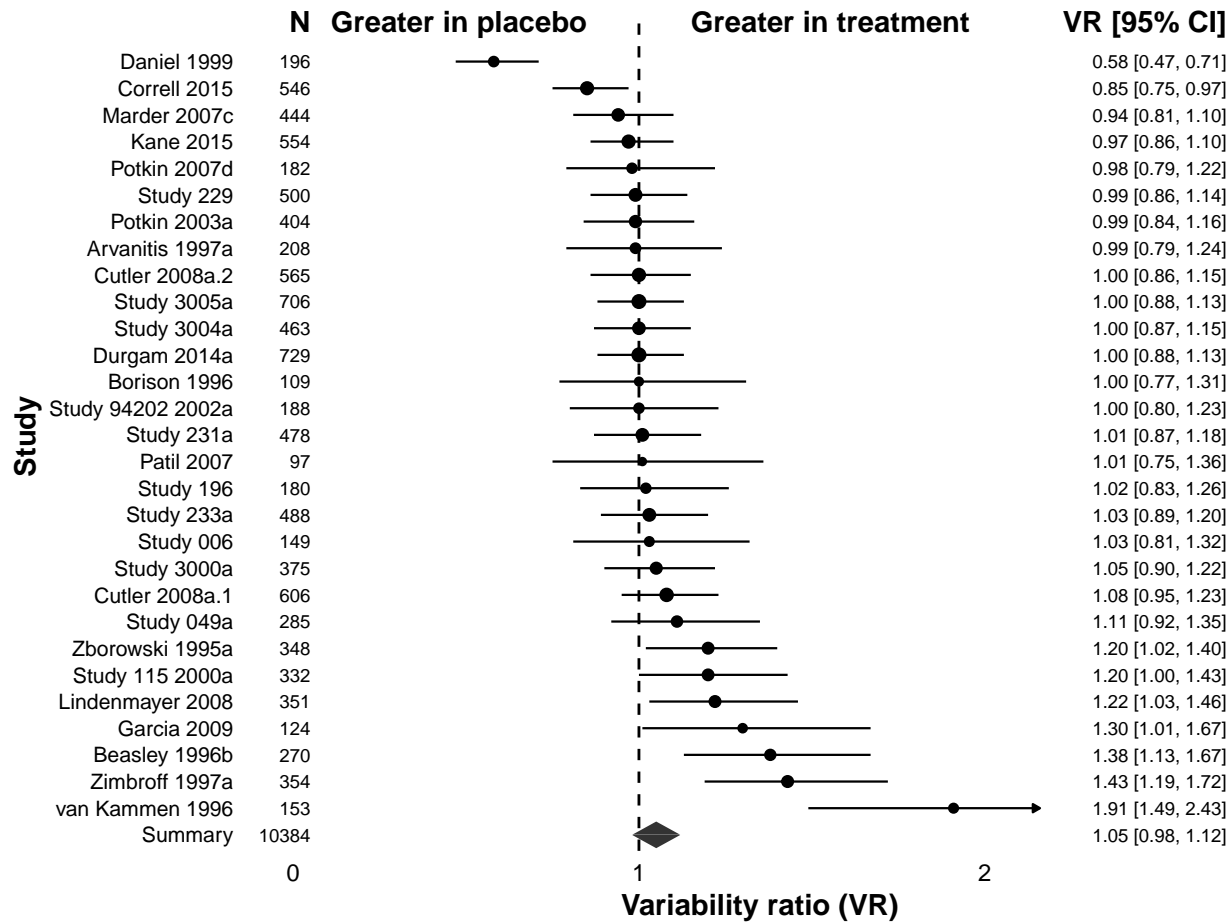


Figure S3. Variability ratio for QTc prolongation. The forest plot shows the VR together with its 95% confidence interval (CI) for treatment versus placebo. All included studies^{42,45,51,52,54-60,62,68,70,74,76-80,85,86,88,91,95,96,100} are also listed in Table S1.