

Appendix 23c: 2009 Pharmacological clinical evidence forest plots¹

| | |
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| Initial treatment with antipsychotic drugs | 2 |
| Acute treatment (SGA versus FGA) | 32 |
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| Effectiveness of antipsychotic drugs | 392 |

¹ Each study included in this appendix is referred to by a study ID, with studies included in the previous guideline in lower case and new studies in upper case (primary author and date or study number for unpublished trials).

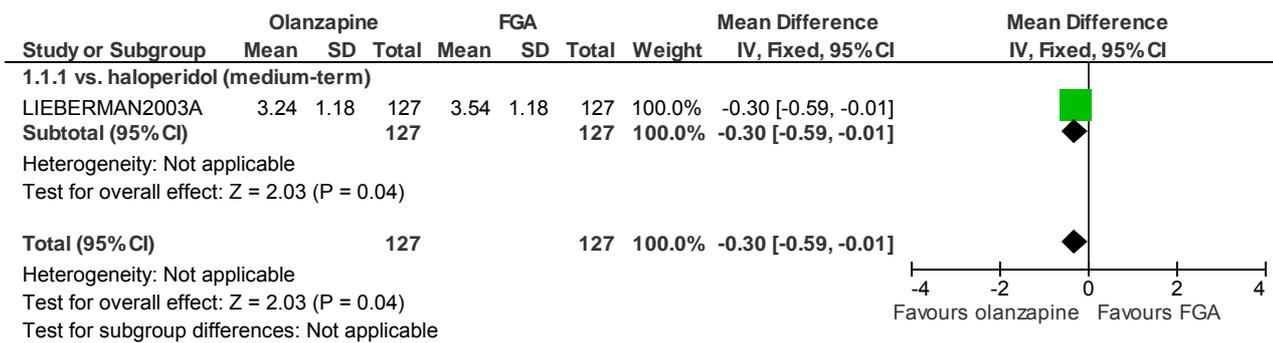
Table 1: Studies included in the initial treatment review

| Treatment | versus Comparator | | |
|------------|---|------------------------------|---|
| | HAL | QUE | RIS |
| OLZ | Jones 1998 [54weeks, N=44] DEHAAN2003 [6weeks, N=24] LIEBERMAN2003A [24weeks, N=263] | MCEVOY2007A [52weeks, N=267] | Jones 1998 [54weeks, N=42] MCEVOY2007A [52weeks, N=266] VANNIMWEGEN2008 [6weeks, N=138] |
| RIS | Emsley1995 [6weeks, N=183] Jones 1998 [54weeks, N=44] LEE2007 [24weeks, N=20] MOLLER2008 [8weeks, N=296] SCHOOLER2005 [104weeks, N=559] | MCEVOY2007A [52weeks, N=267] | |

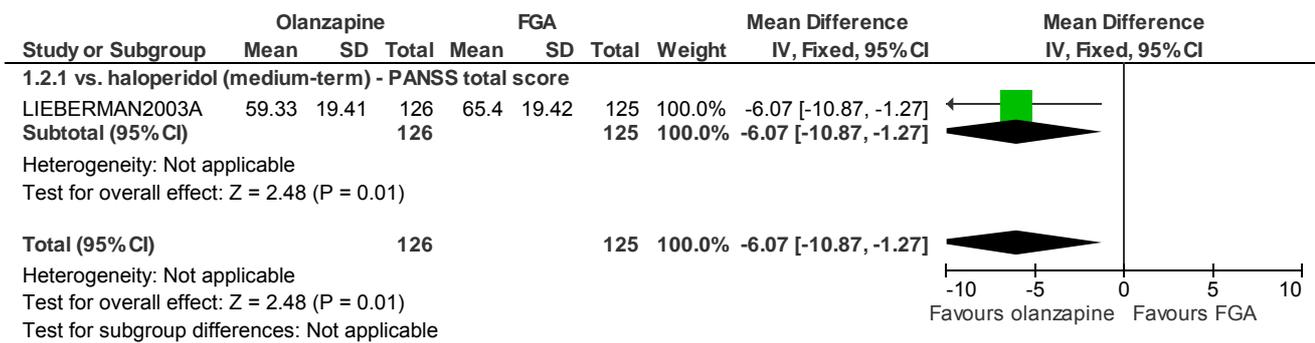
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

1 Olanzapine versus haloperidol (critical outcomes)

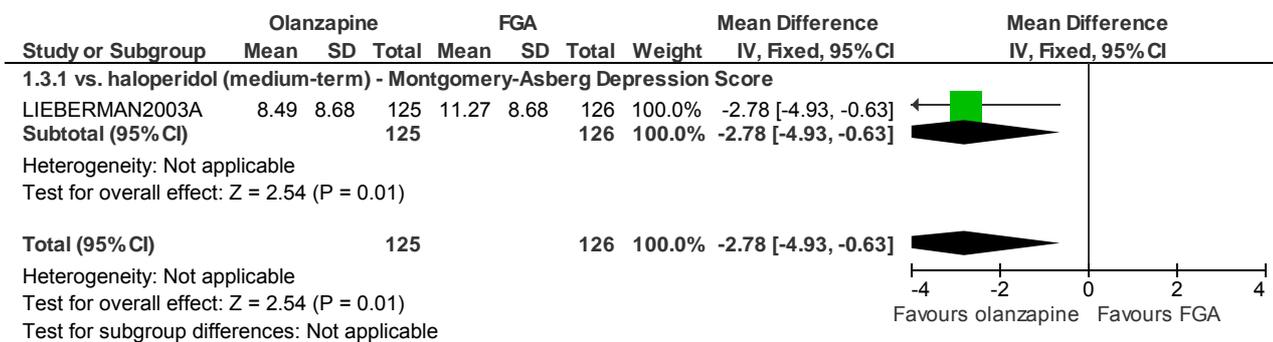
1.1 Global state: 1. Severity score (CGI)



1.2 Mental state: 1. PANSS total (endpoint)

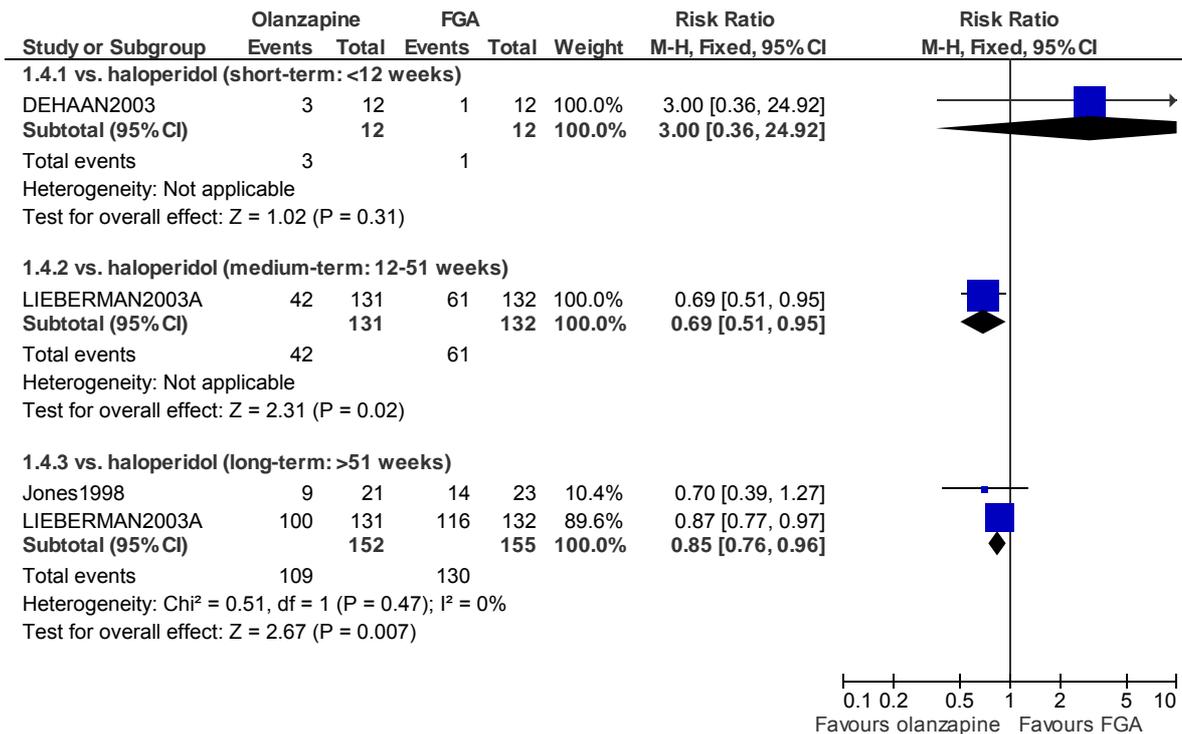


1.3 Mental state: 2. Depression (endpoint)

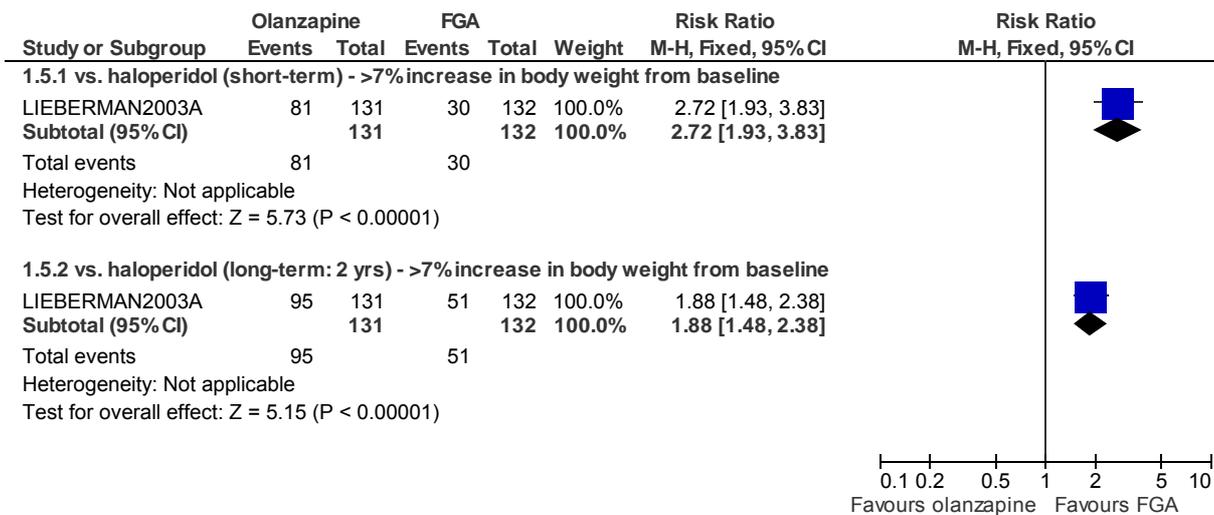


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

1.4 Leaving the study early: 1. Any reason

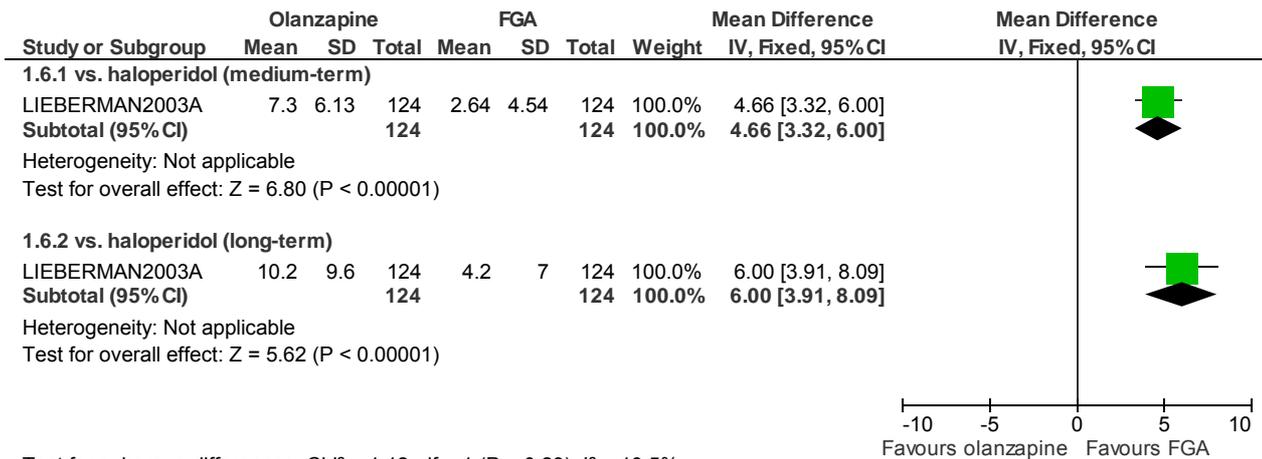


1.5 AE: 1. Metabolic SEs - weight gain

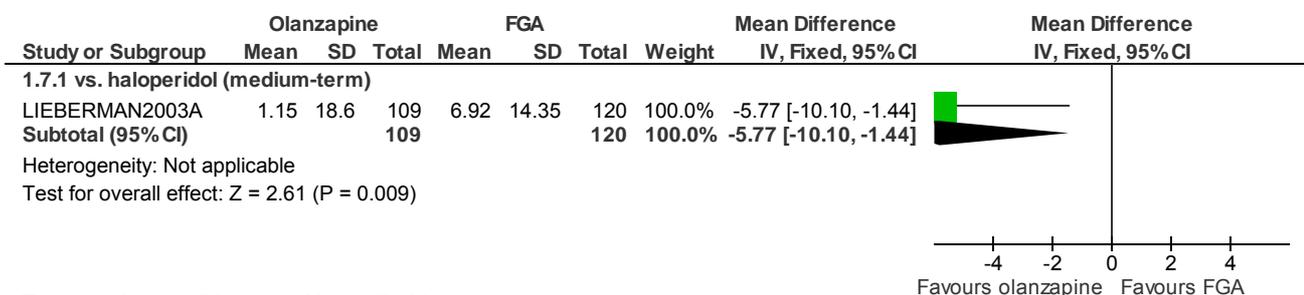


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

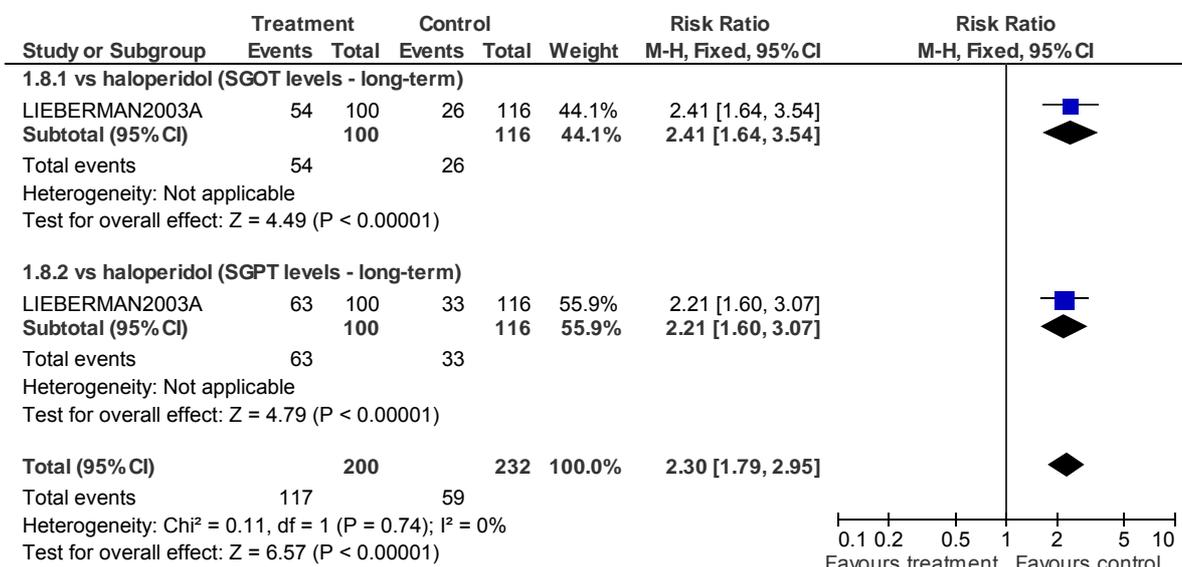
1.6 AE: 1. Metabolic SEs - weight gain (change from baseline)



1.7 AE: 1. Metabolic SEs - prolactin (ng/ml) (change from baseline)

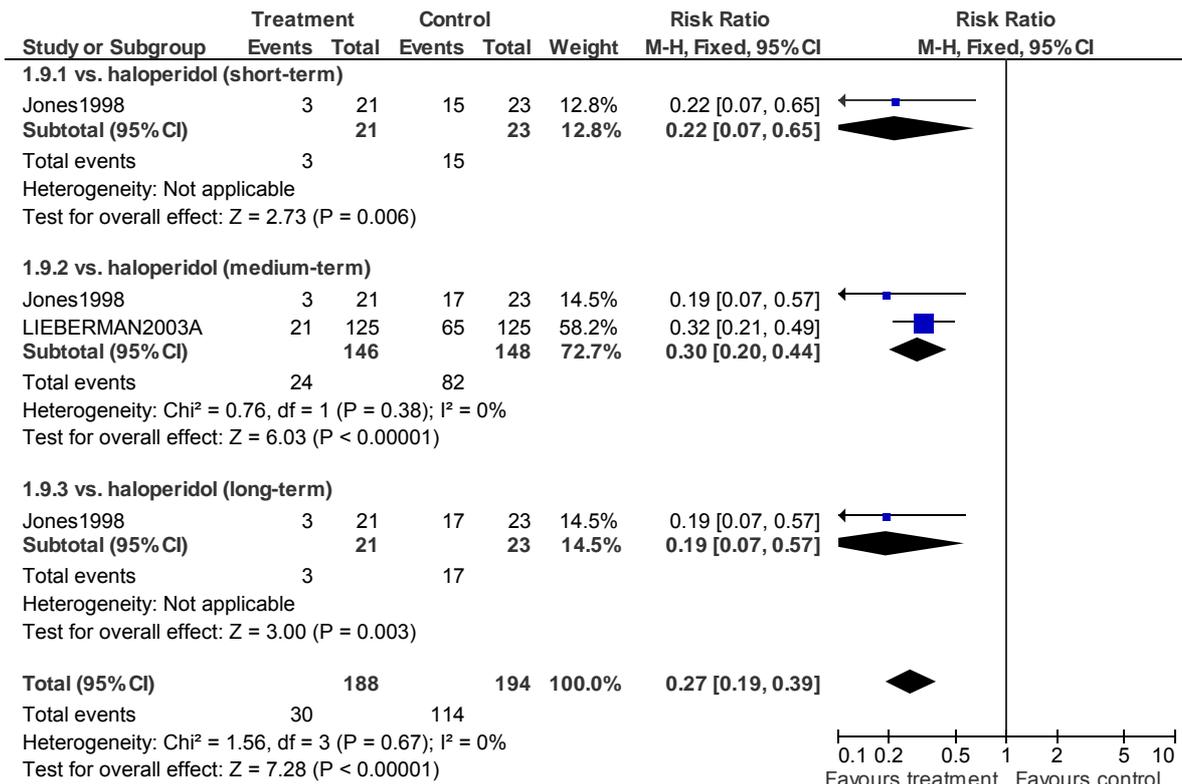


1.8 AE: 1. Metabolic SEs - abnormal liver enzyme levels

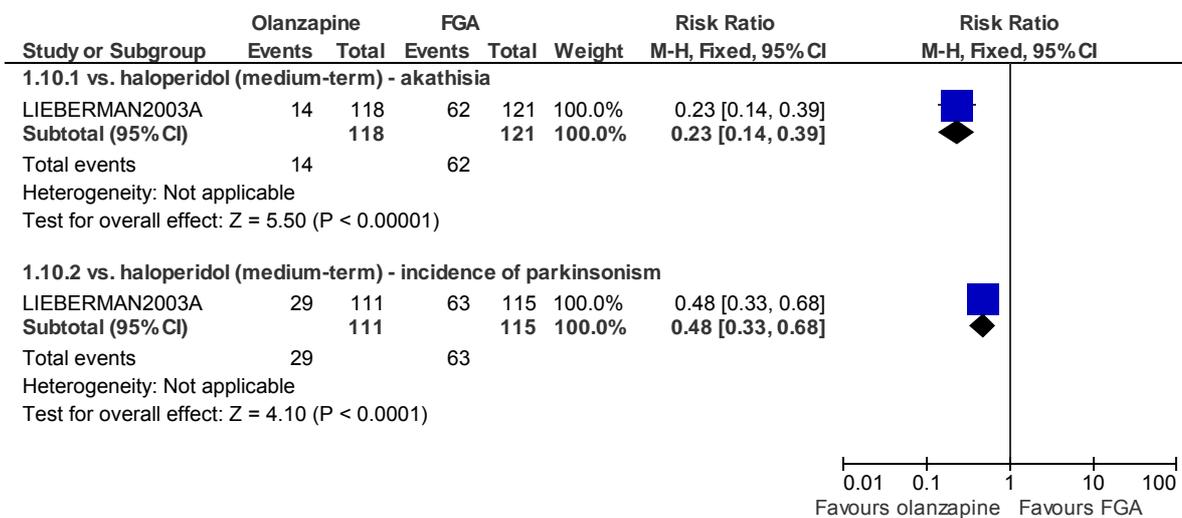


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

1.9 AE: 2. Neurologic SEs - Use of anticholinergic medication

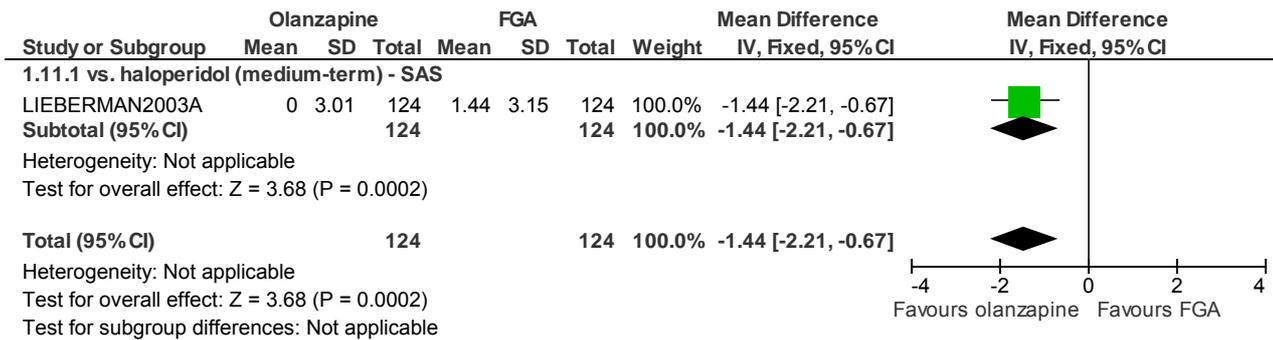


1.10 AE: 2. Neurologic SEs (treatment-emergent)

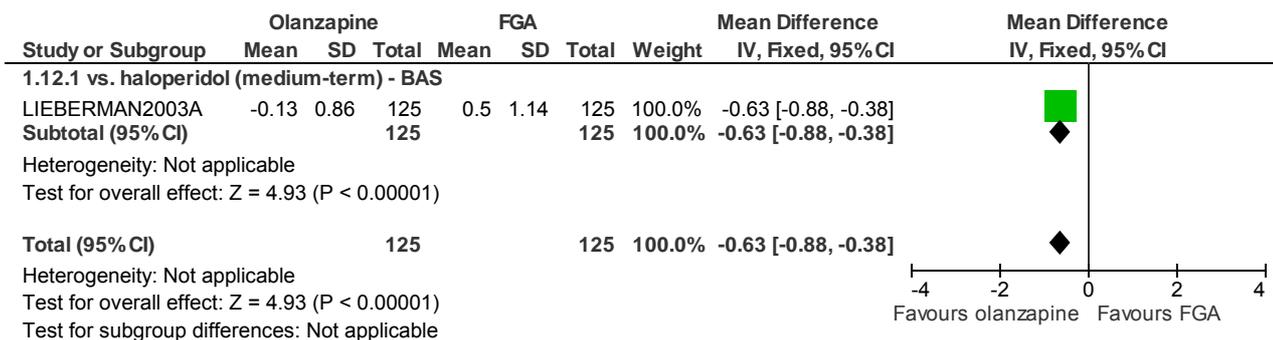


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

1.11 AE: 2. Neurologic SEs - treatment-emergent EPS (change from baseline)

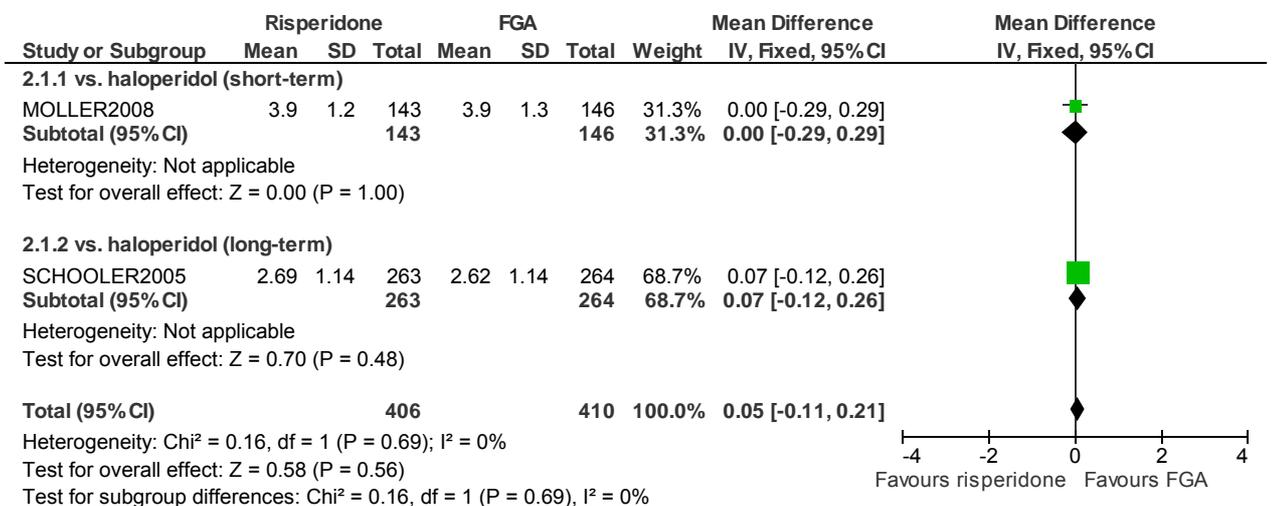


1.12 AE: 2. Neurologic SEs - treatment-emergent akathisia (change from baseline)



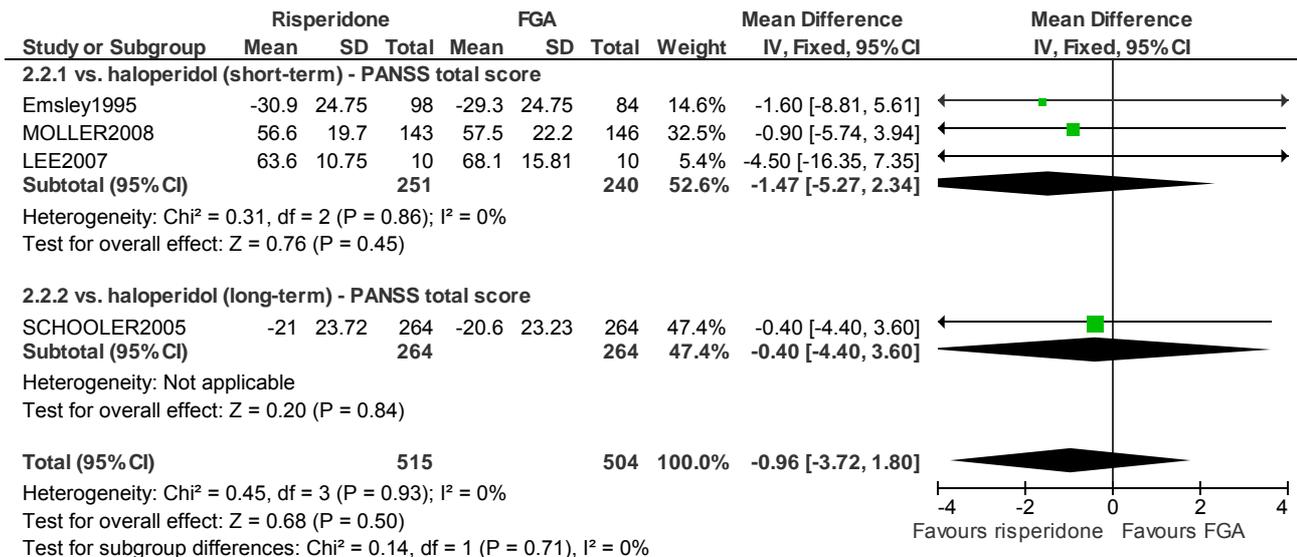
2 Risperidone versus haloperidol (critical outcomes)

2.1 Global state: 1. Severity score (CGI)

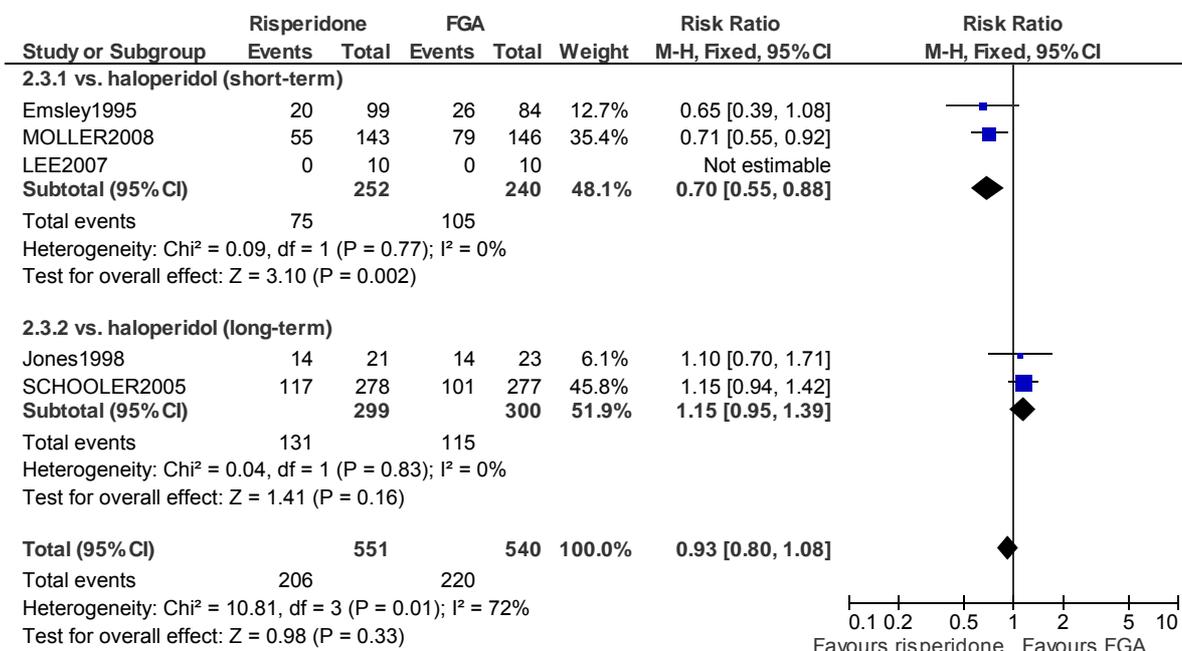


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

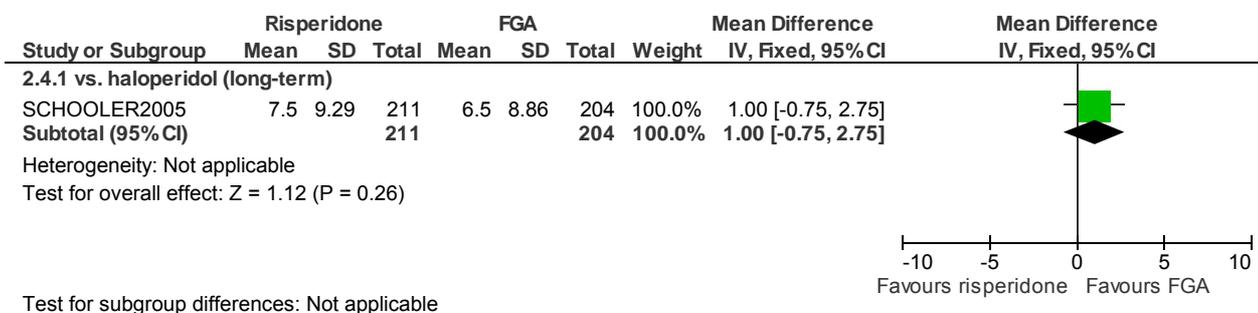
2.2 Mental state: 1. PANSS total (endpoint/change)



2.3 Leaving the study early: 1. Any reason

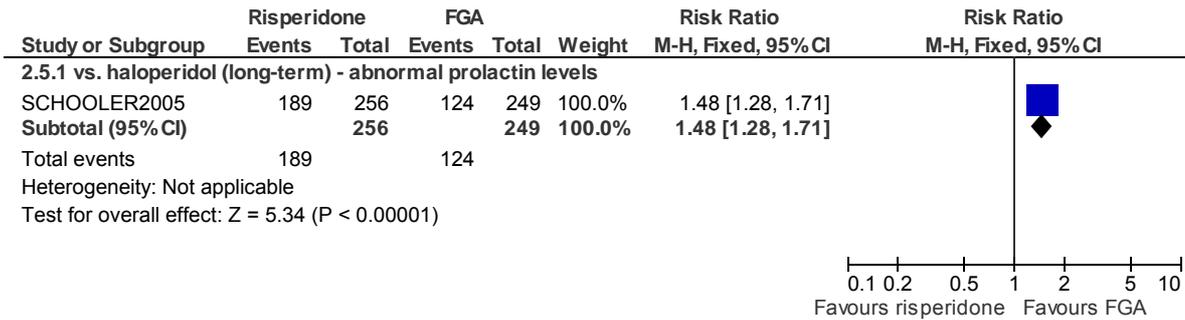


2.4 AE: 1. Metabolic SEs - weight gain - Endpoint

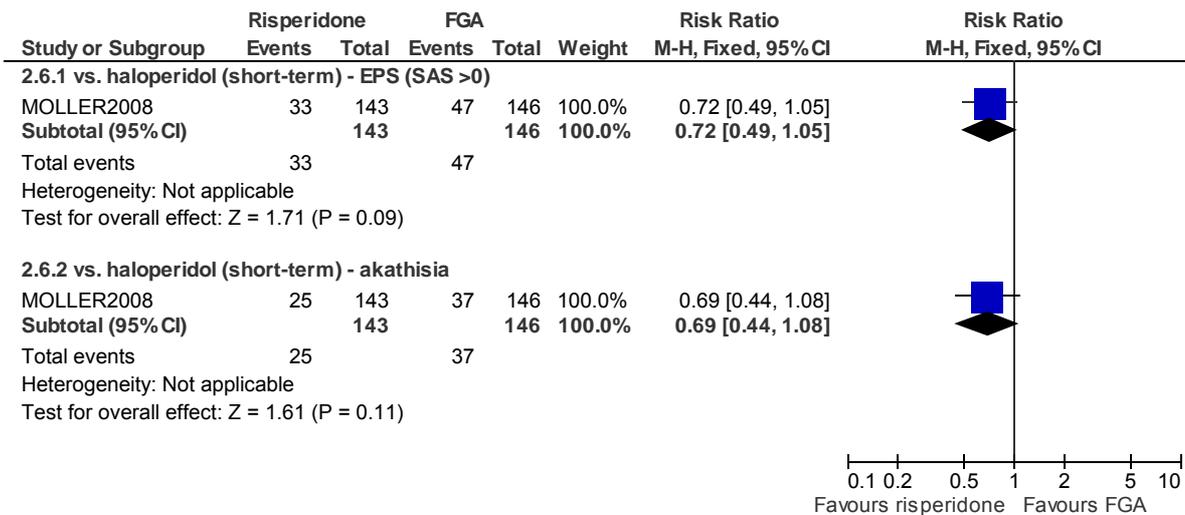


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

2.5 AE: 1. Metabolic SEs - prolactin related problems

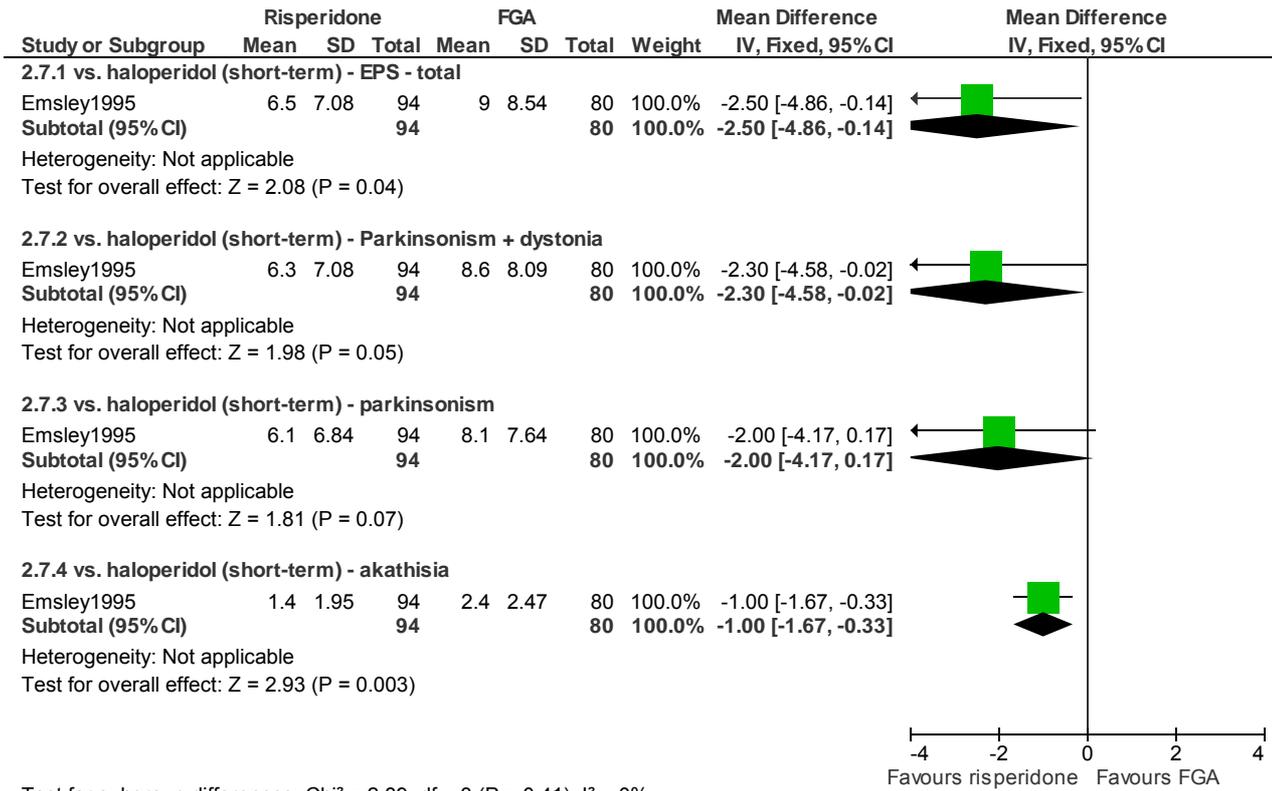


2.6 AE: 2. Neurologic SEs (treatment-emergent)



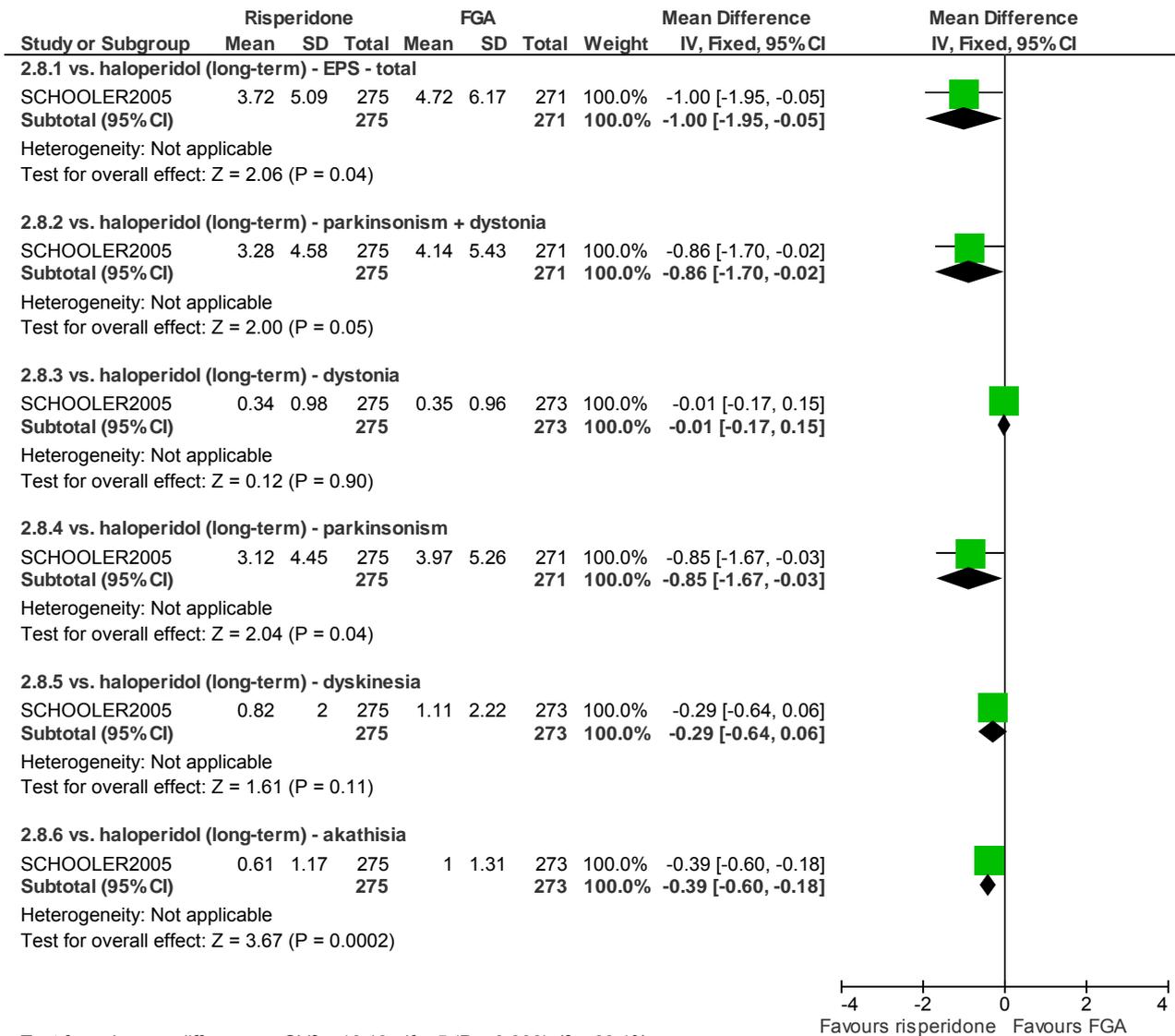
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

2.7 AE: 2. Neurologic SEs - Change from baseline (ESRS)



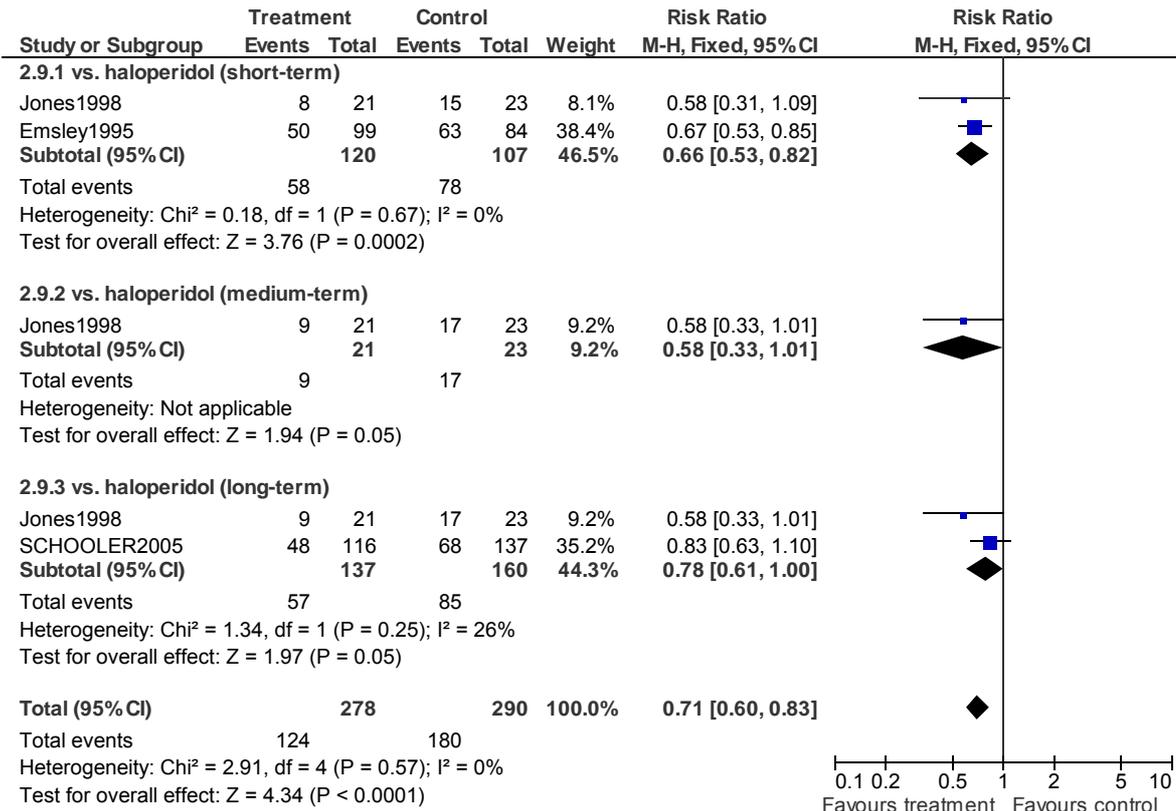
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

2.8 AE: 2. Neurologic SEs - Change from baseline (ESRS)



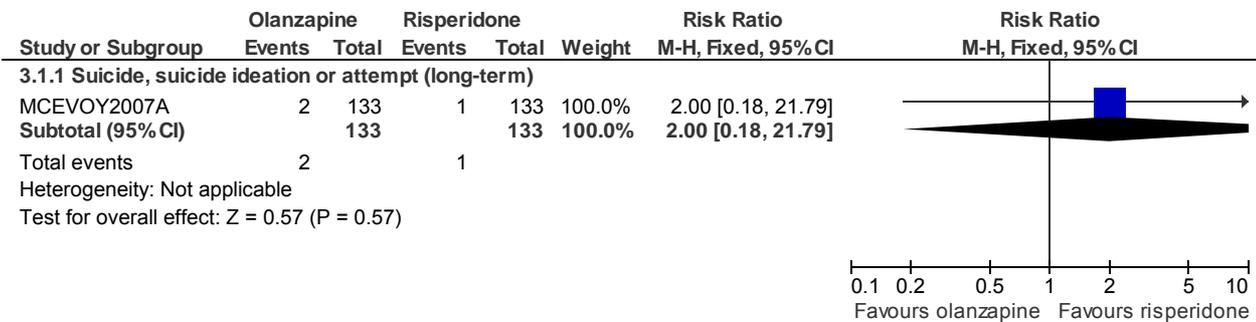
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

2.9 AE: 2. Neurologic SEs - Use of anticholinergic medication

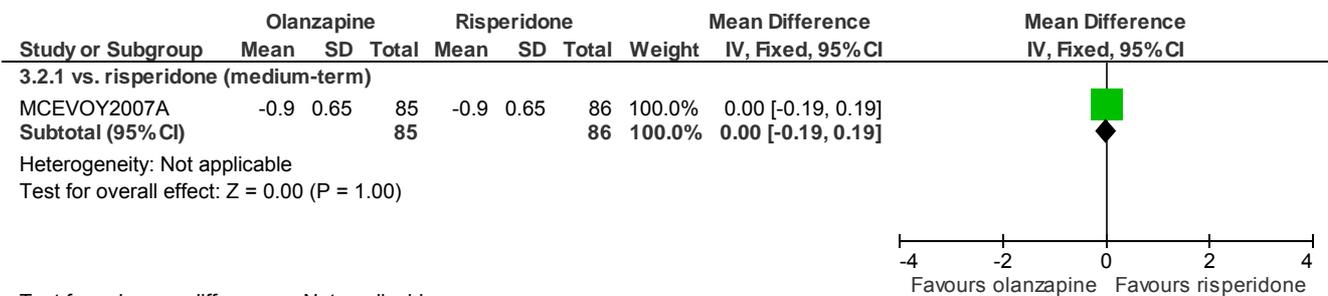


3 Olanzapine versus risperidone (critical outcomes)

3.1 Mortality



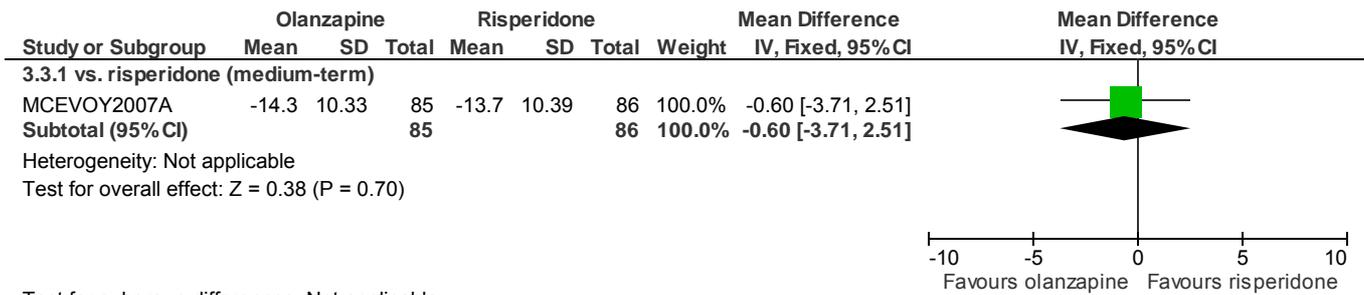
3.2 Global state: 1. Severity score - Change from baseline (CGI)



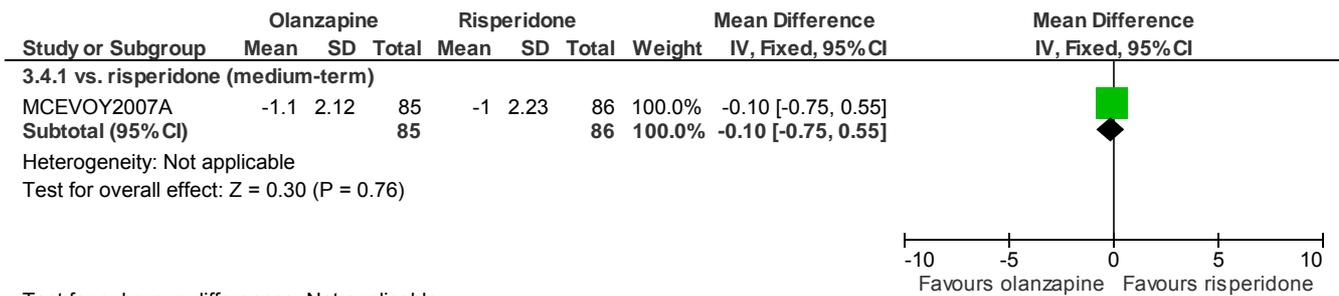
Test for subgroup differences: Not applicable

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

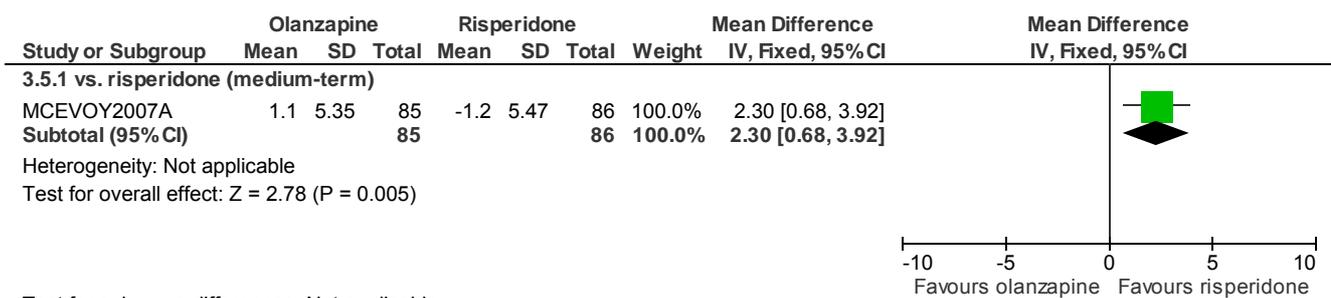
3.3 Mental state: 1. PANSS total score (change from baseline)



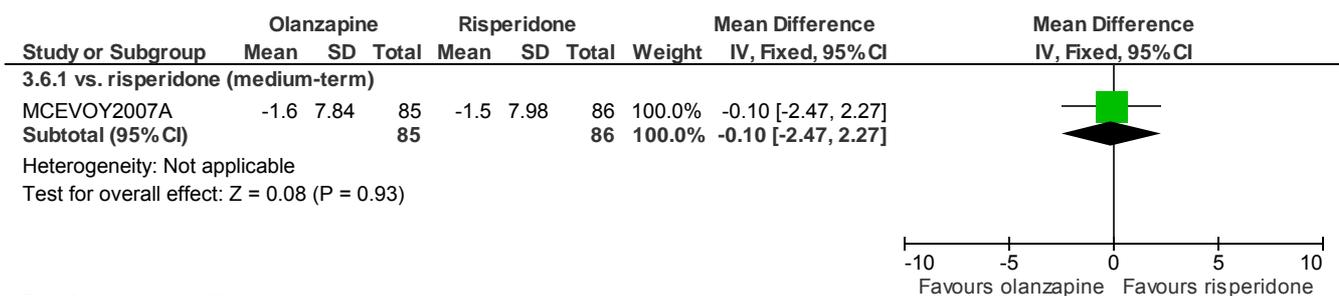
3.4 Mental state: 4. Depression (change from baseline: Calgary Depression Scale for Schizophrenia score)



3.5 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, social subscale) - sign changed

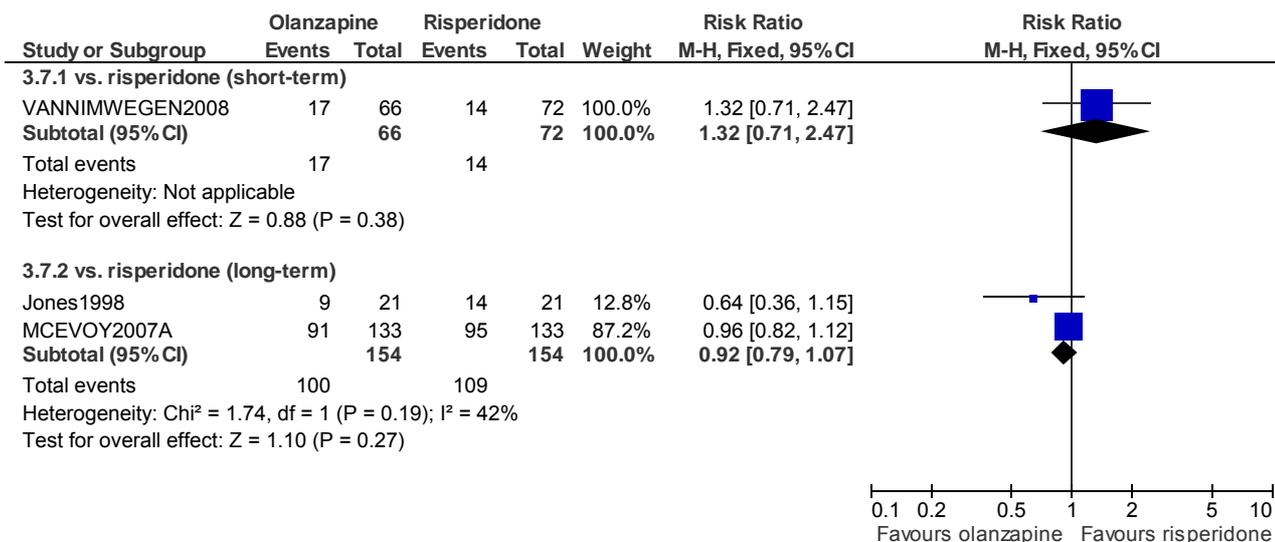


3.6 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, vocational subscale) - sign changed

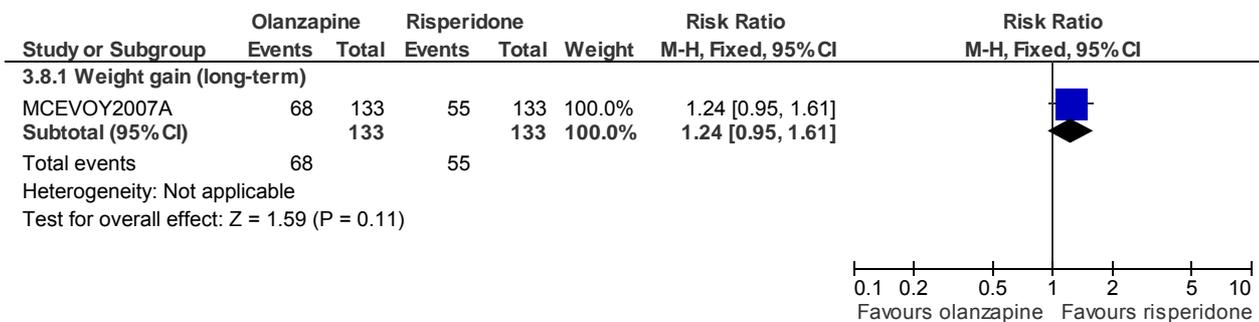


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

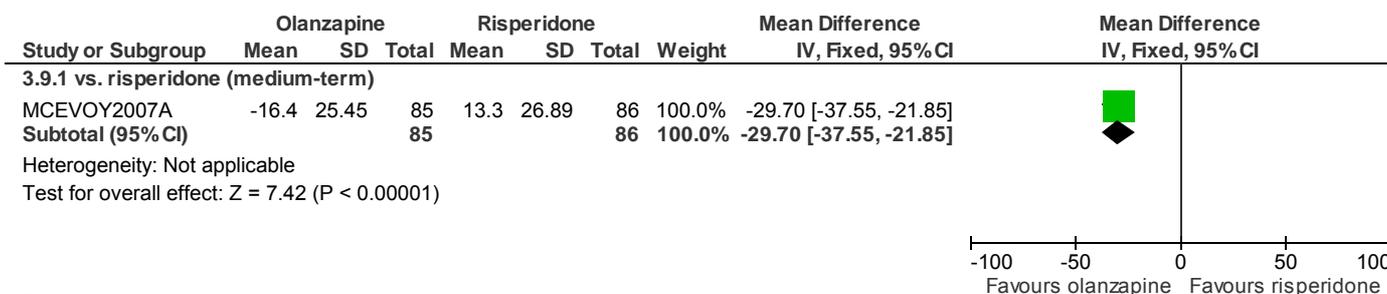
3.7 Leaving the study early: 1. Any reason



3.8 AE: 1. Metabolic SEs - weight gain (at least moderate in severity)



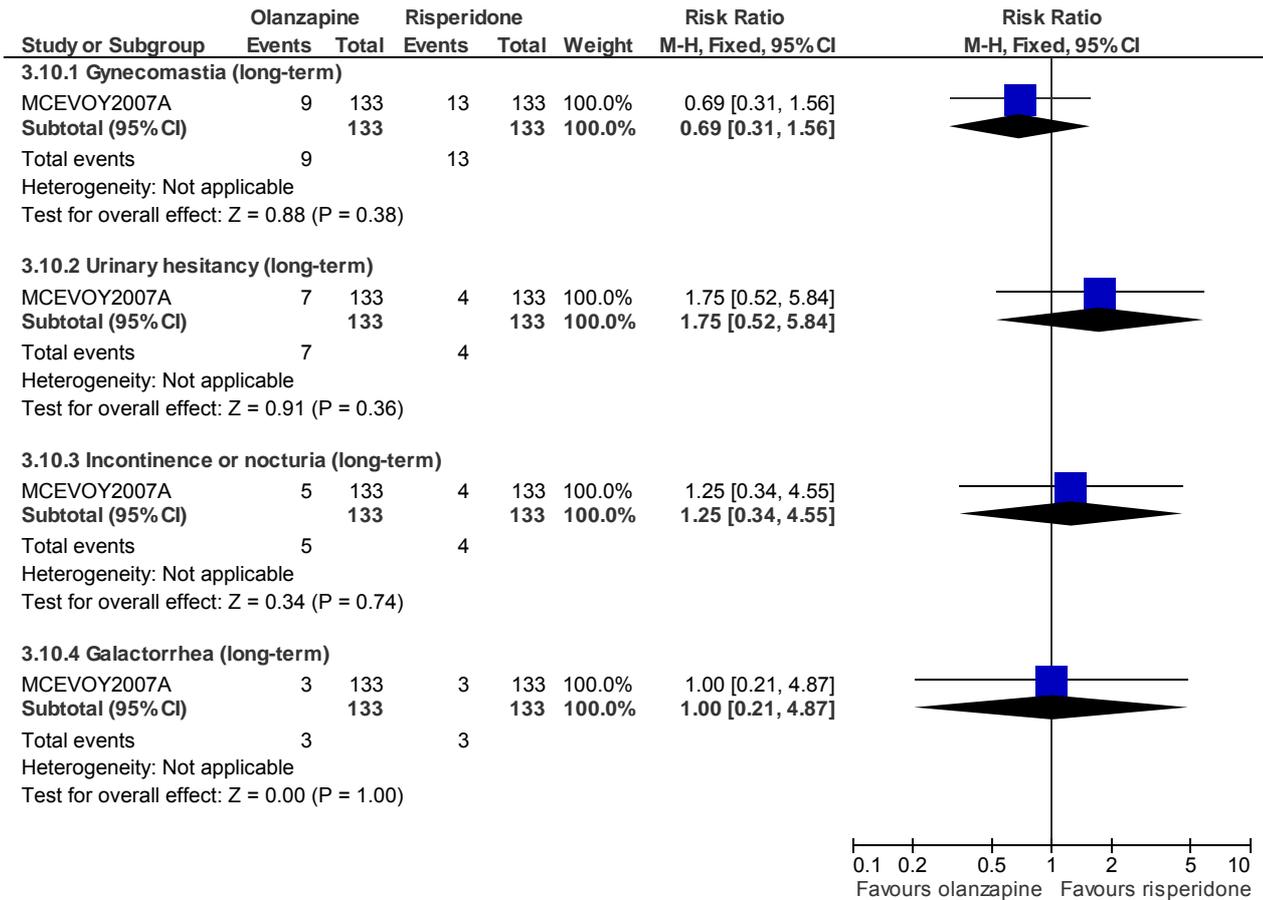
3.9 AE: 1. Metabolic SEs - prolactin level (change from baseline)



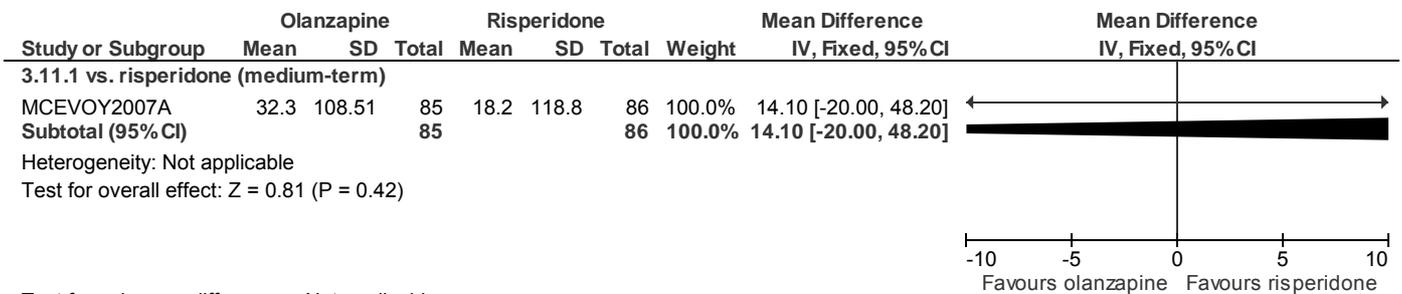
Test for subgroup differences: Not applicable

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

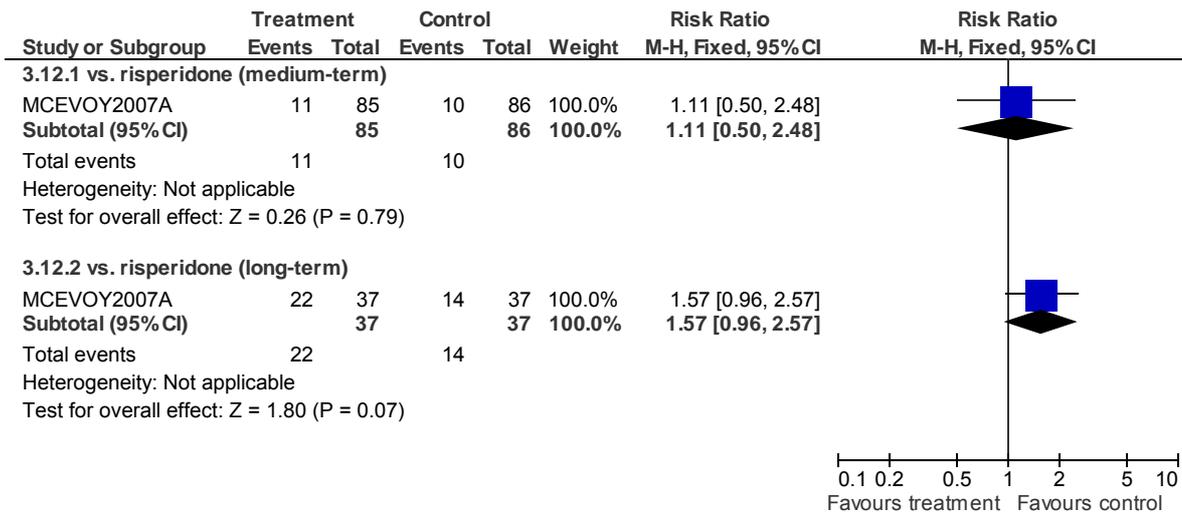
3.10 AE: 1. Metabolic SEs - prolactin related problems (at least moderate in severity)



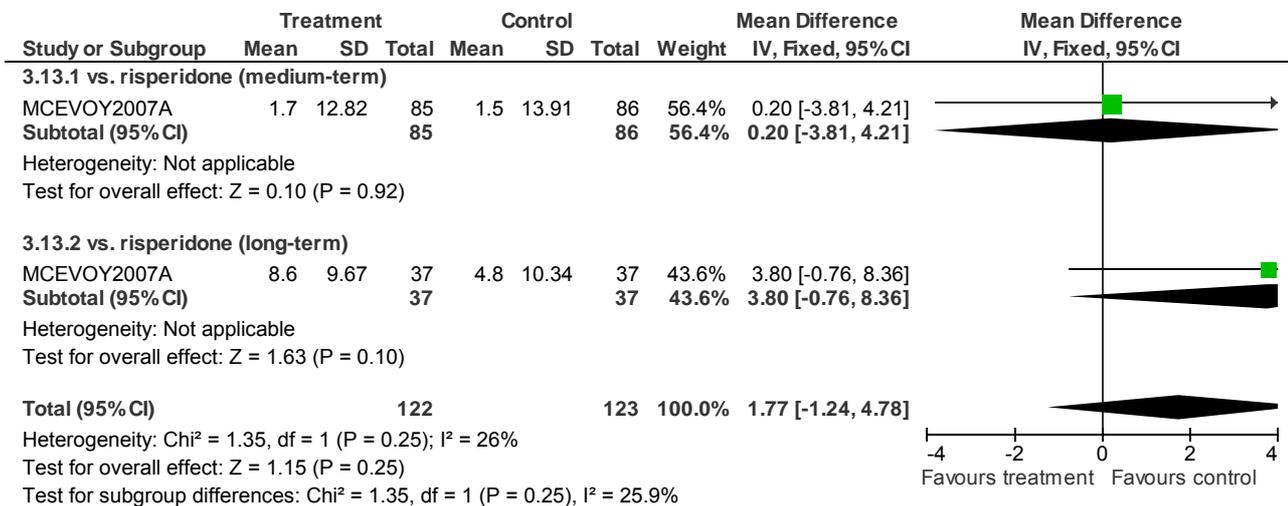
3.11 AE: 1. Metabolic SEs - fasting triglycerides level (mg/dl) (change from baseline)



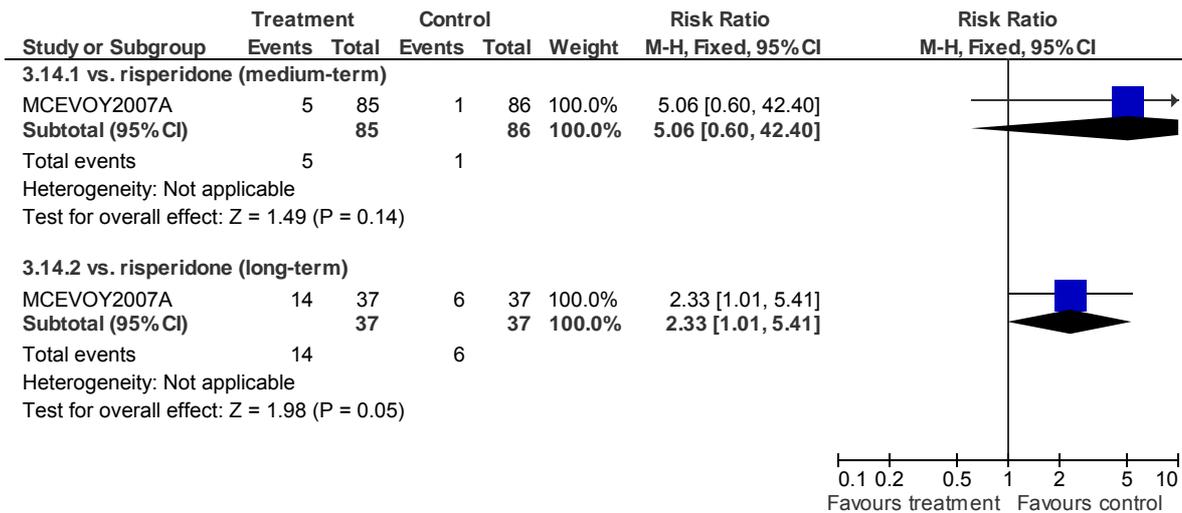
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

3.12 AE: 1. Metabolic SEs - fasting triglycerides level (≥ 150 mg/dl)

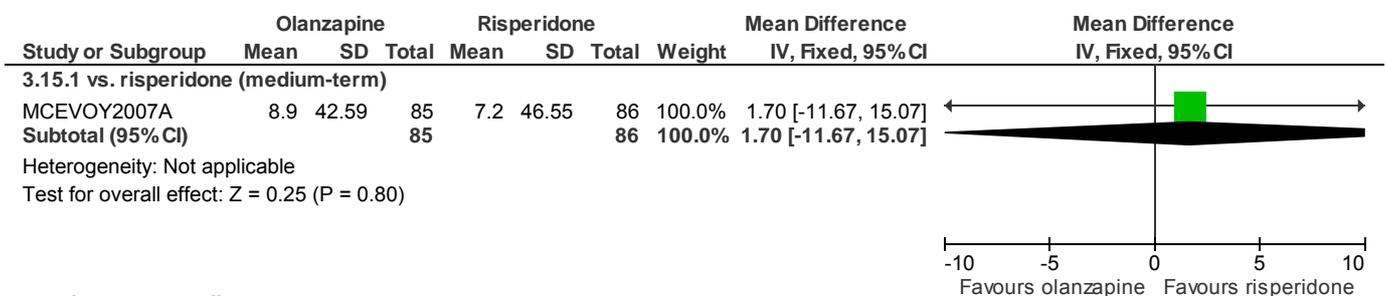
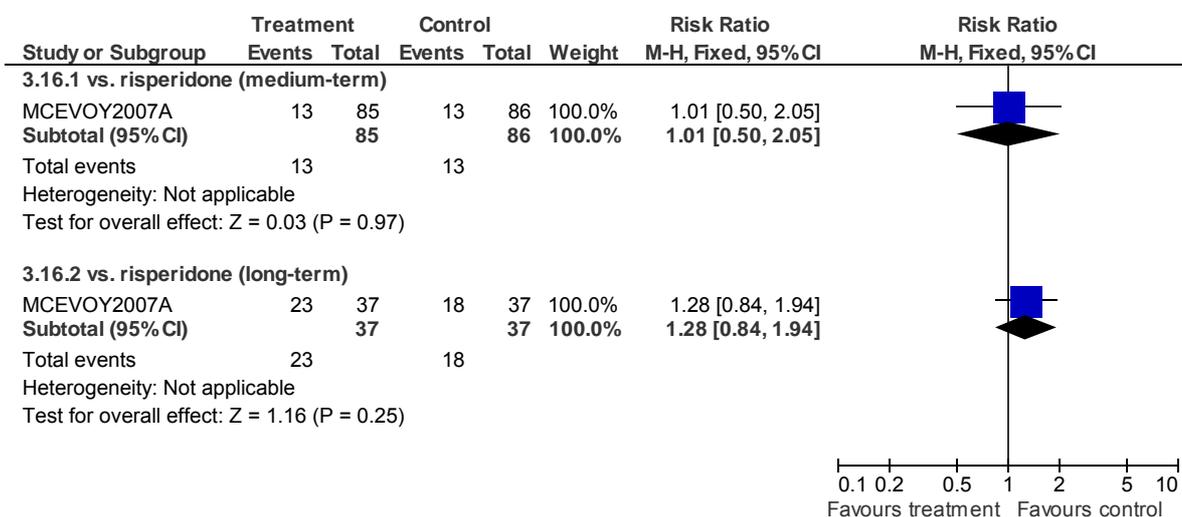
3.13 AE: 1. Metabolic SEs - fasting glucose level (mg/dl) (change from baseline)



Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

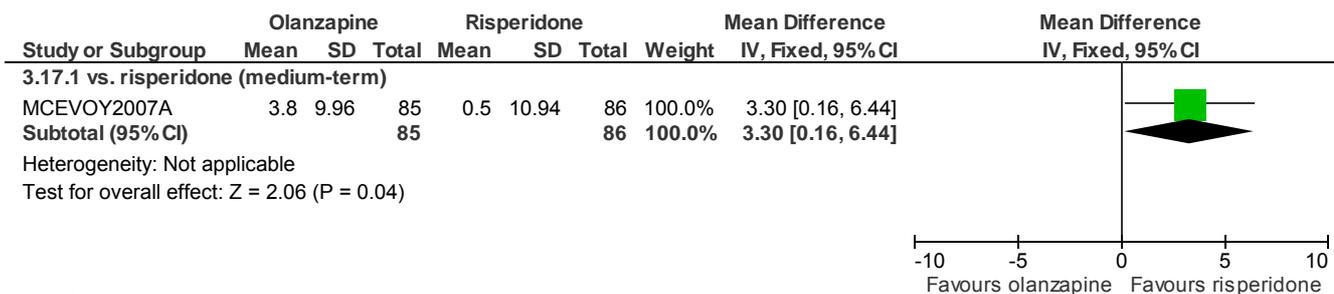
3.14 AE: 1. Metabolic SEs - fasting glucose level (≥ 100 mg/dl)

3.15 AE: 1. Metabolic SEs - fasting total cholesterol level (mg/dl) (change from baseline)

3.16 AE: 1. Metabolic SEs - fasting total cholesterol level (≥ 200 mg/dl)

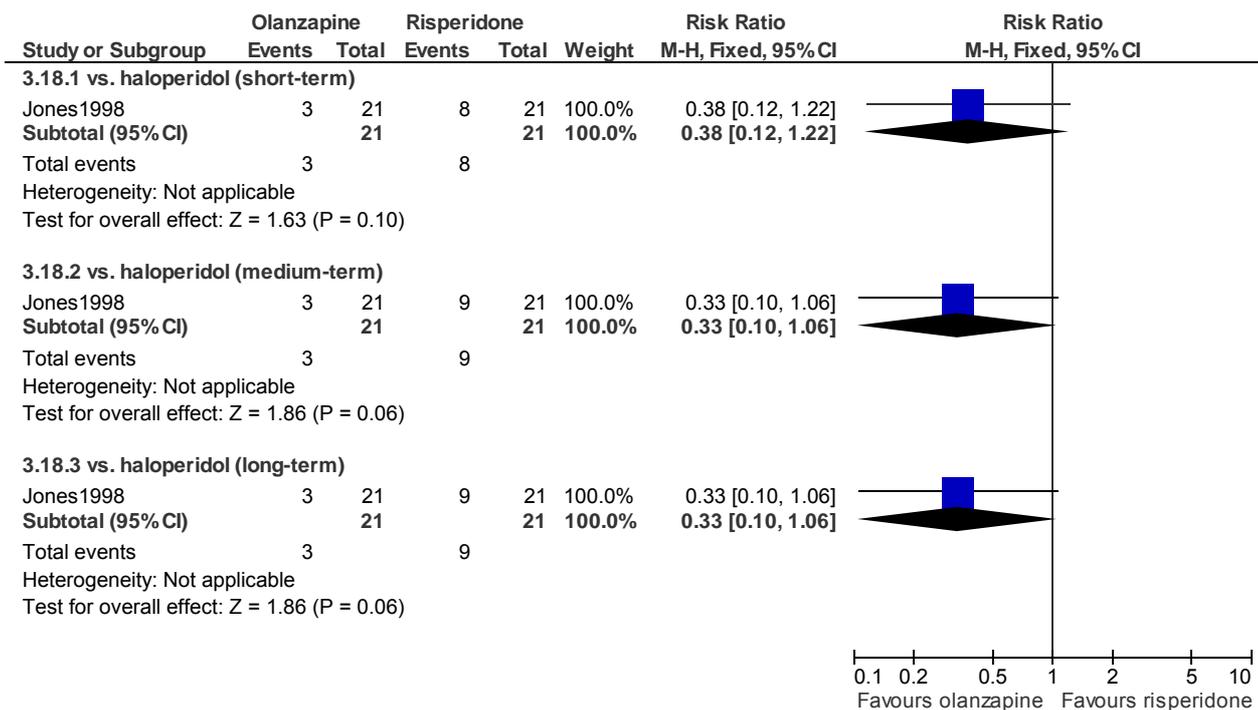
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

3.17 AE: 1. Metabolic SEs - fasting high-density lipoprotein cholesterol level (mg/dl) (change from baseline)

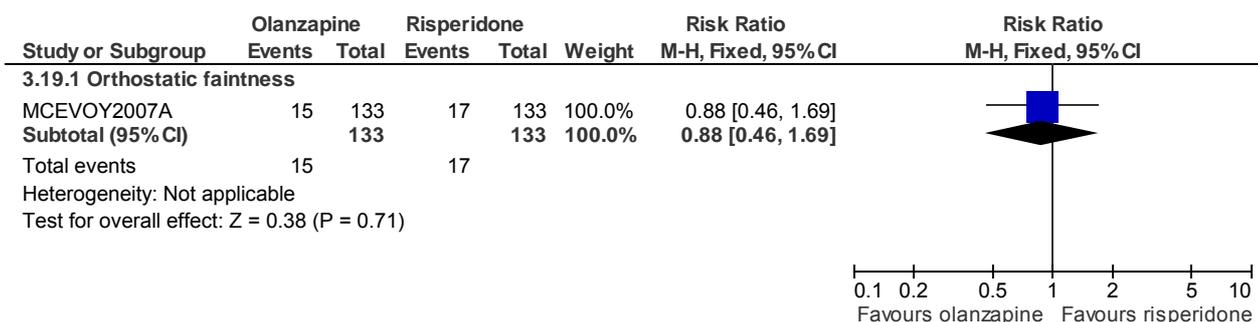


Test for subgroup differences: Not applicable

3.18 AE: 2. Neurologic SEs - Use of anticholinergic medication

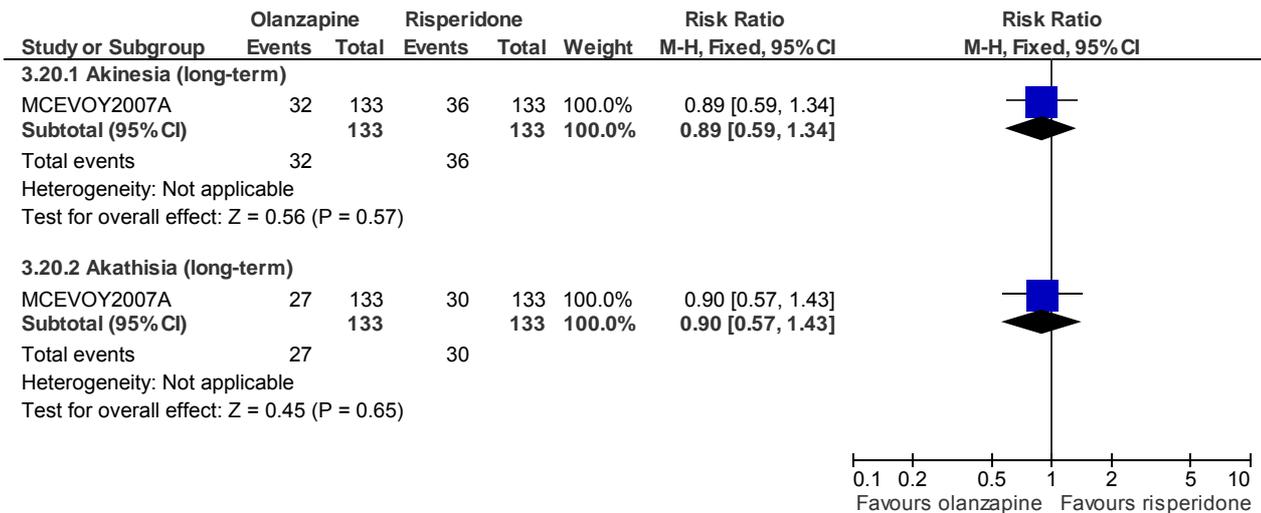


3.19 AE: 1. Metabolic SEs - other (at least moderate in severity) (long-term)



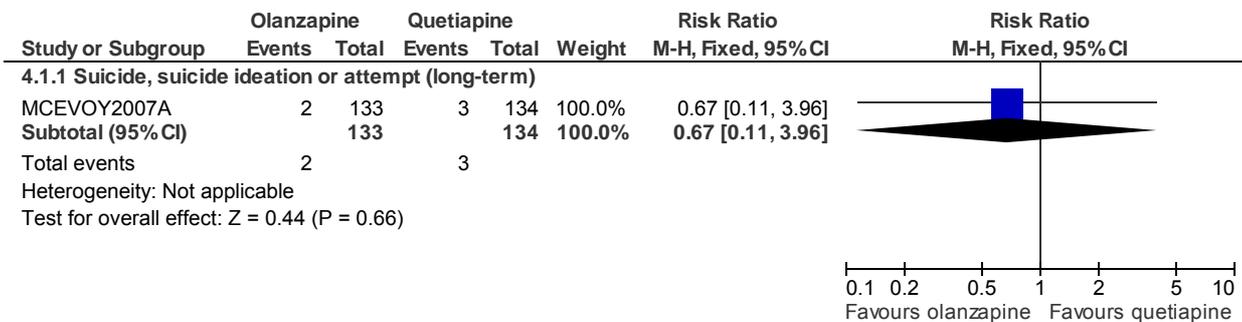
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

3.20 AE: 2. Neurologic SEs (treatment-emergent - at least moderate in severity)

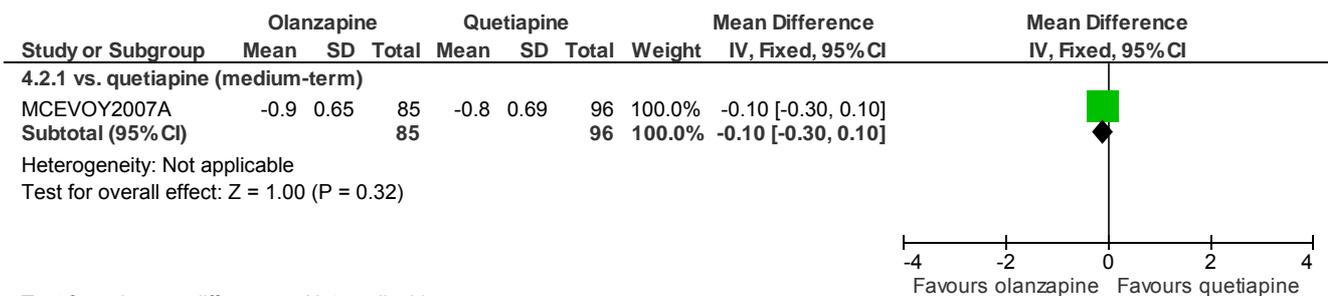


4 Olanzapine versus quetiapine (critical outcomes)

4.1 Mortality



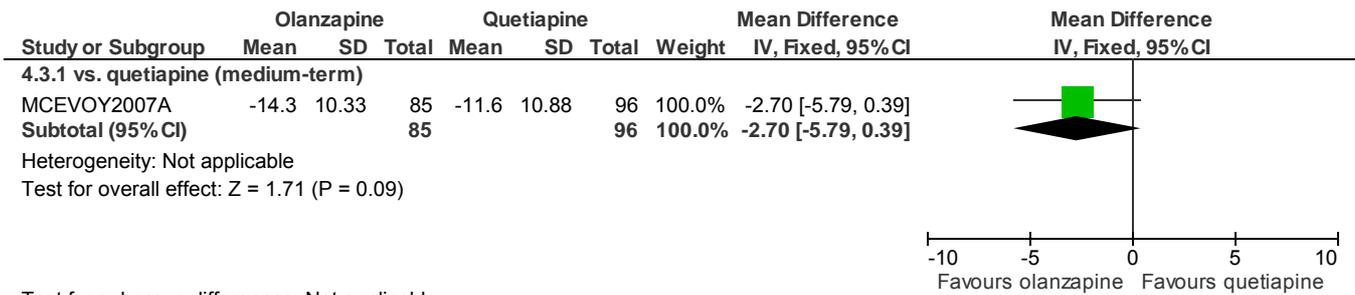
4.2 Global state: 1. Severity score - Change from baseline (CGI)



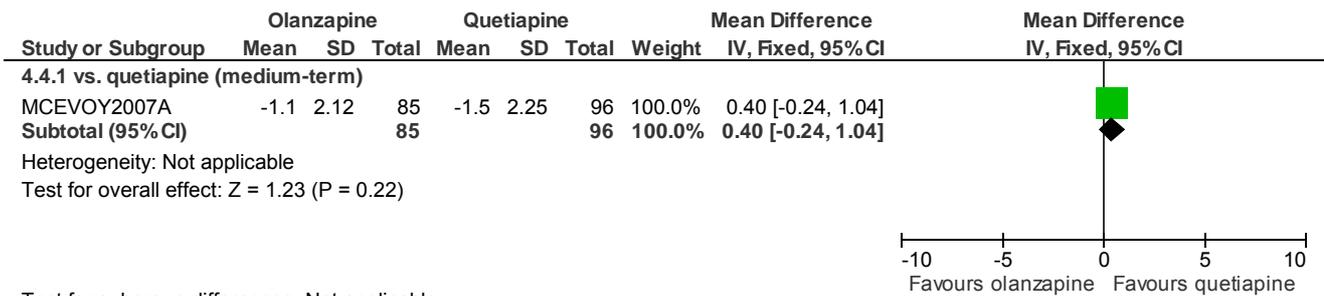
Test for subgroup differences: Not applicable

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

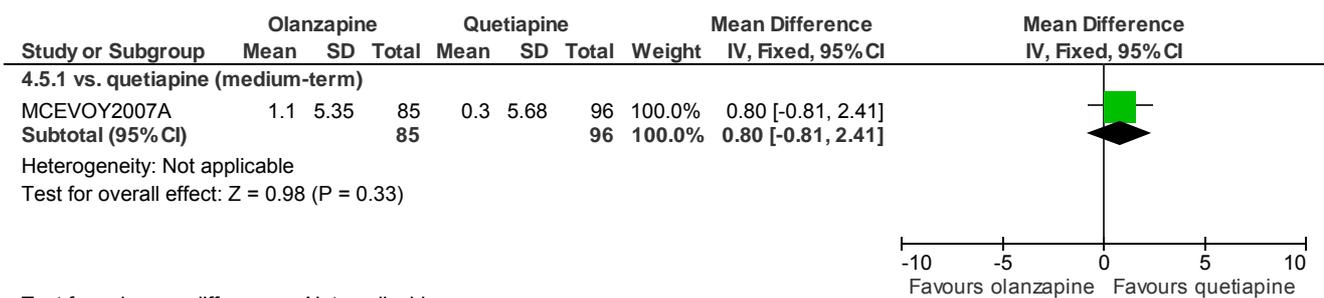
4.3 Mental state: 1. PANSS total score (change from baseline)



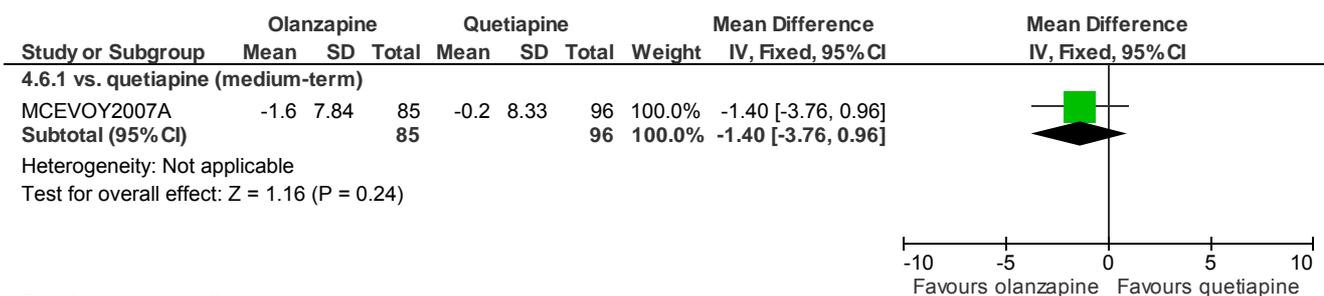
4.4 Mental state: 4. Depression (change from baseline: Calgary Depression Scale for Schizophrenia score)



4.5 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, social subscale) - sign changed

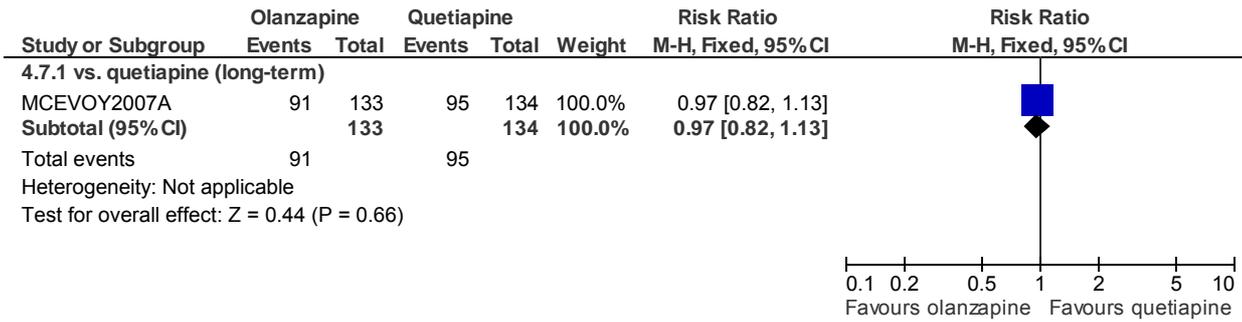


4.6 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, vocational subscale) - sign changed

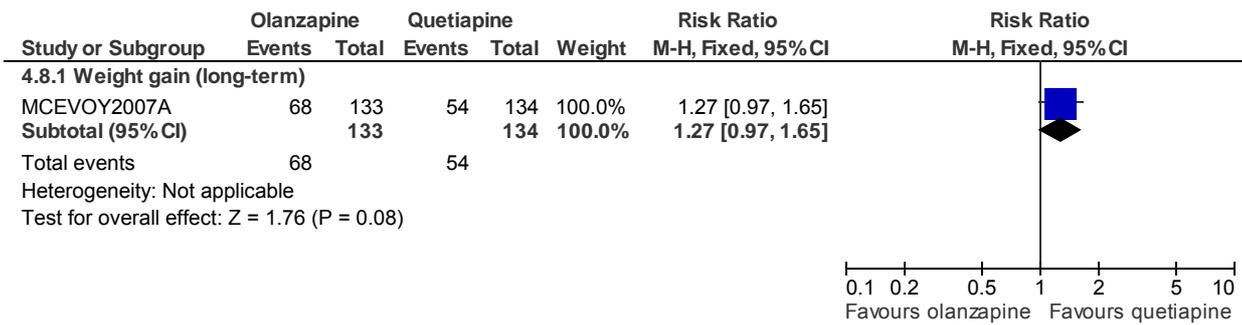


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

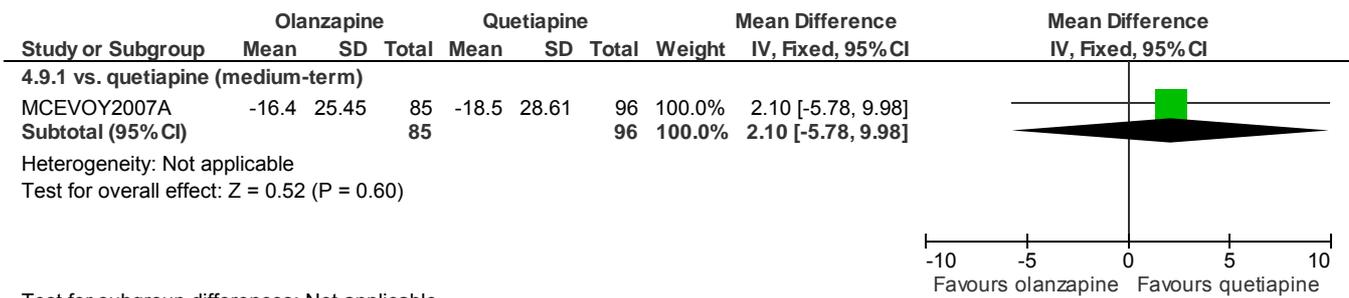
4.7 Leaving the study early: 1. Any reason



4.8 AE: 1. Metabolic SEs - weight gain (at least moderate in severity)



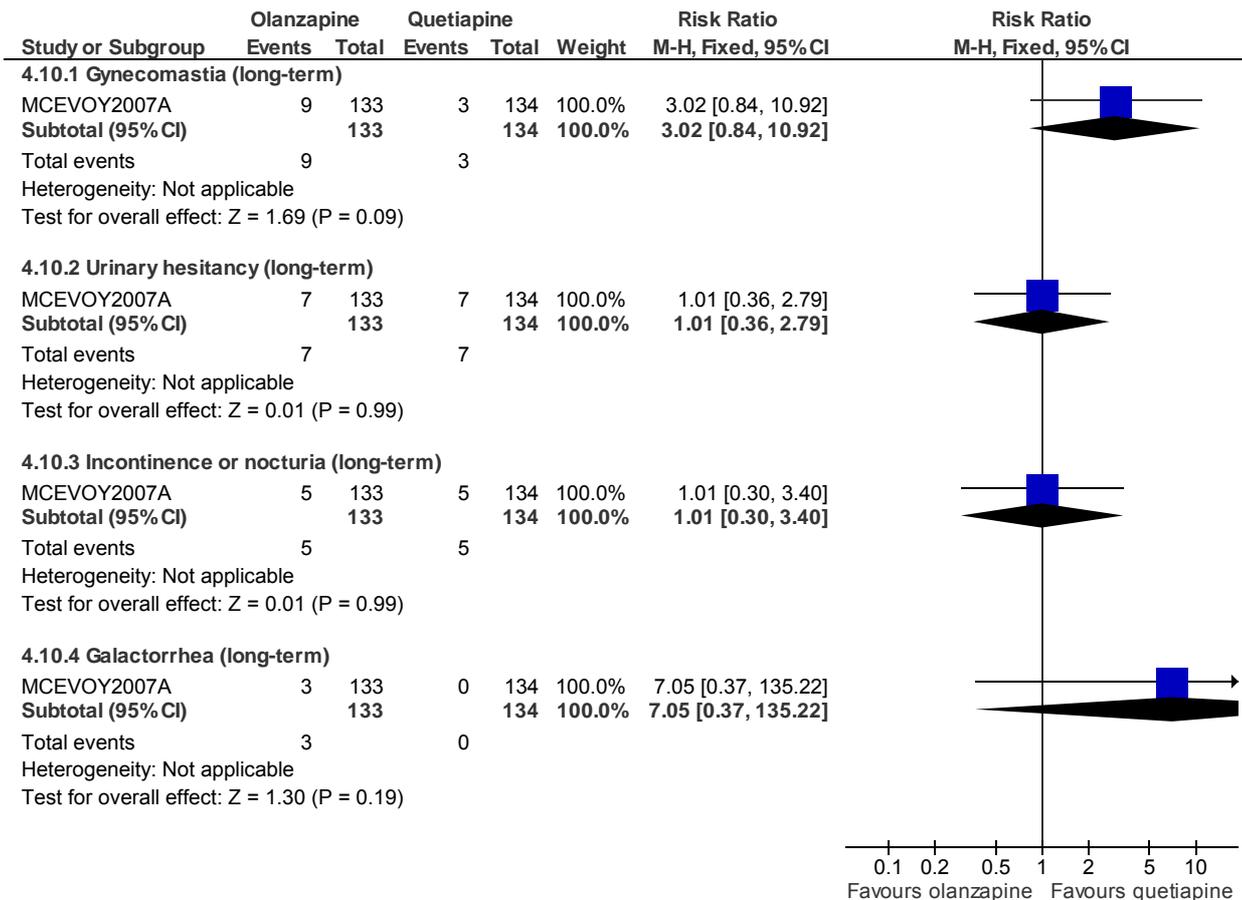
4.9 AE: 1. Metabolic SEs - prolactin level (change from baseline)



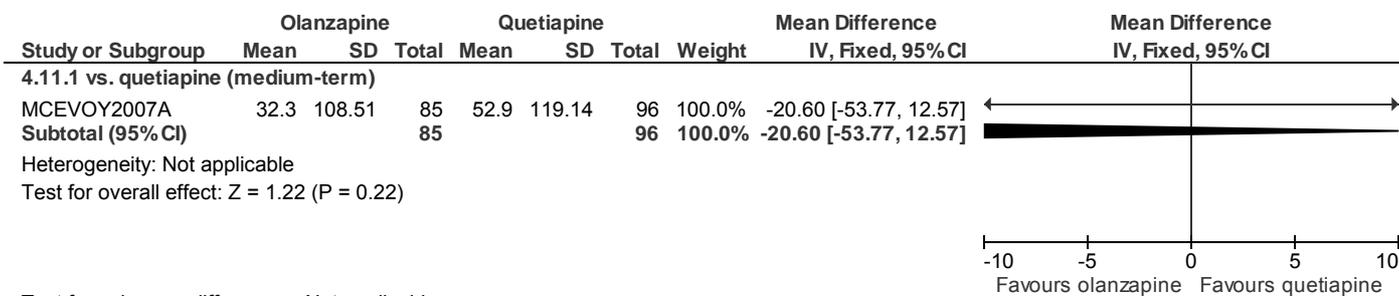
Test for subgroup differences: Not applicable

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

4.10 AE: 1. Metabolic SEs - prolactin related SEs (at least moderate in severity)

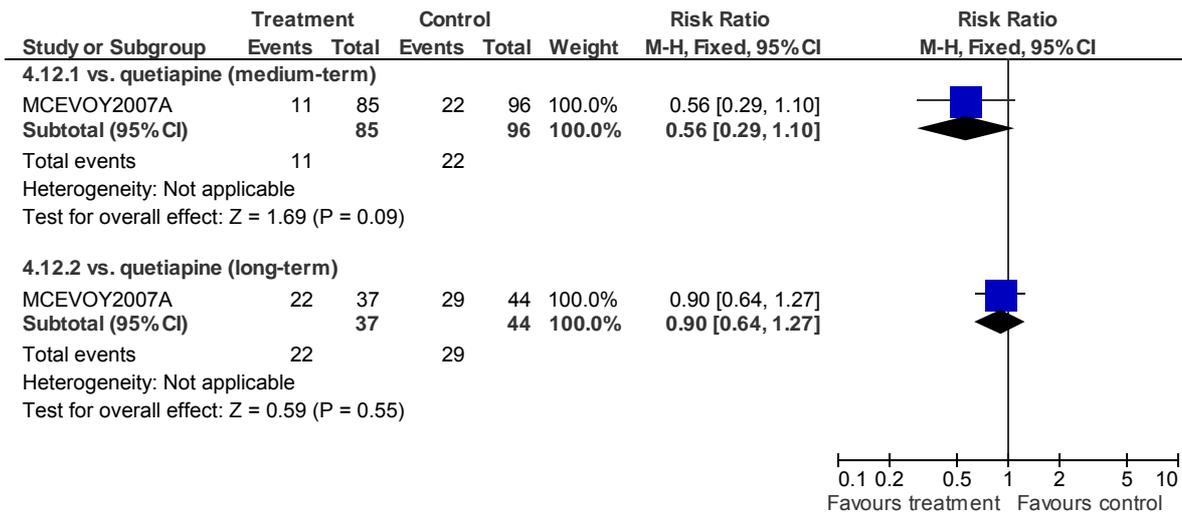


4.11 AE: 1. Metabolic SEs - fasting triglycerides level (mg/dl) (change from baseline)

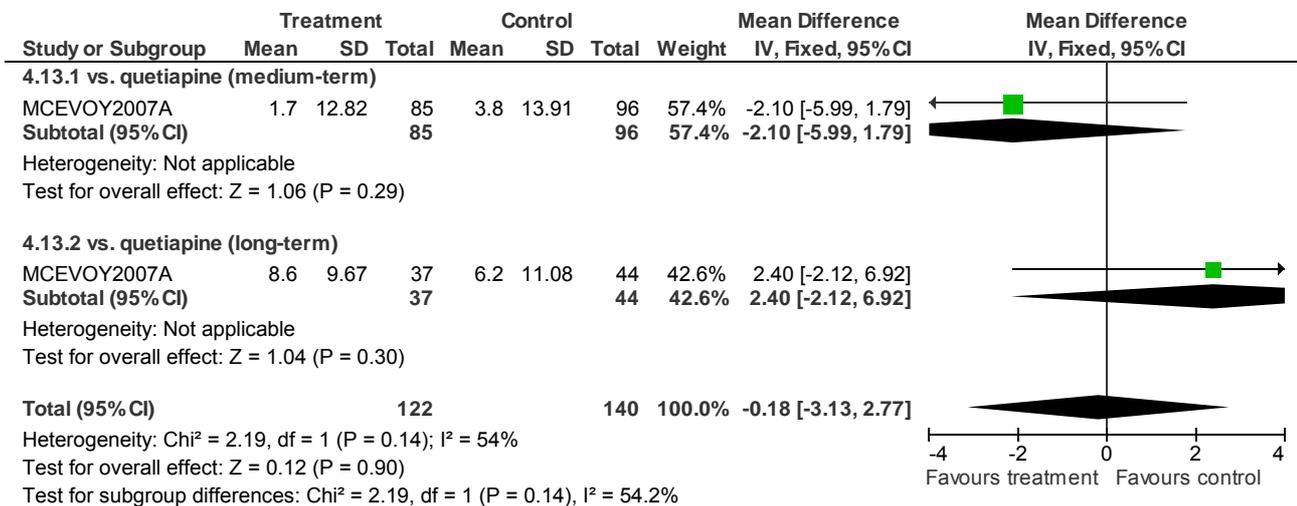


Test for subgroup differences: Not applicable

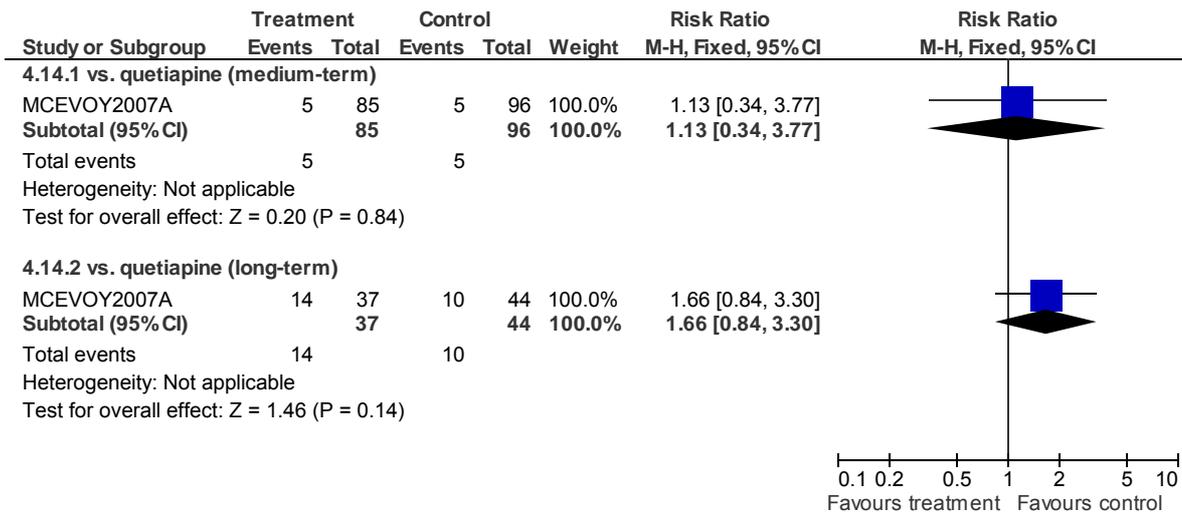
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

4.12 AE: 1. Metabolic SEs - fasting triglycerides level (≥ 150 mg/dl)

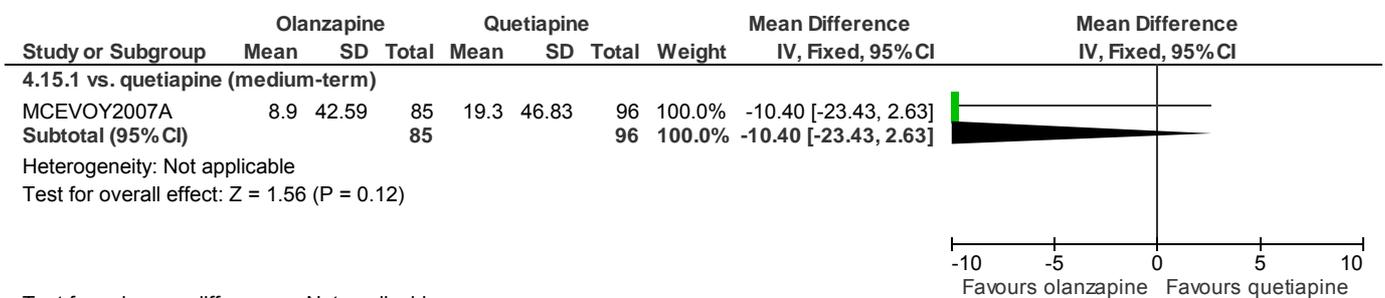
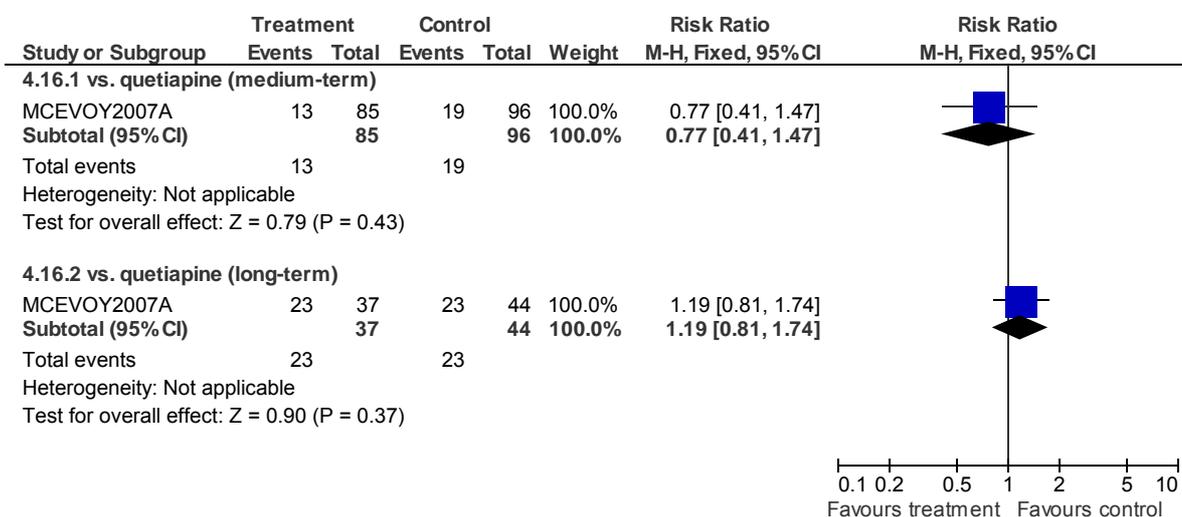
4.13 AE: 1. Metabolic SEs - fasting glucose level (mg/dl) (change from baseline)



Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

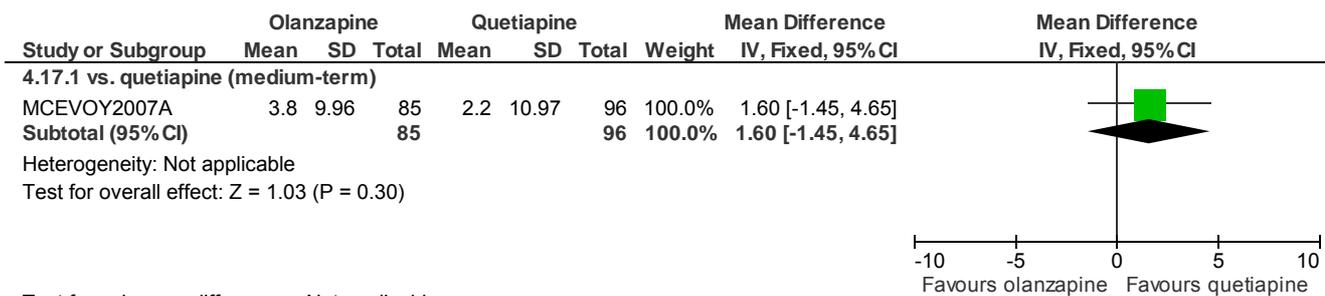
4.14 AE: 1. Metabolic SEs - fasting glucose level (≥ 100 mg/dl)

4.15 AE: 1. Metabolic SEs - fasting total cholesterol level (mg/dl) (change from baseline)

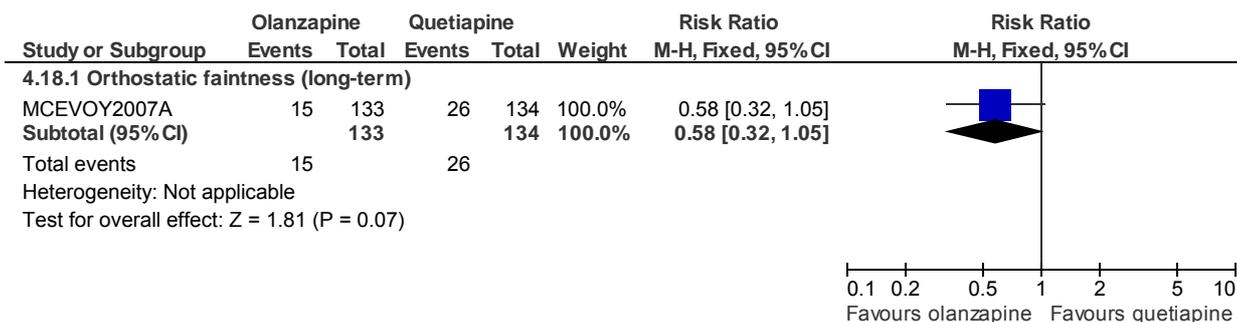
4.16 AE: 1. Metabolic SEs - fasting total cholesterol level (≥ 200 mg/dl)

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

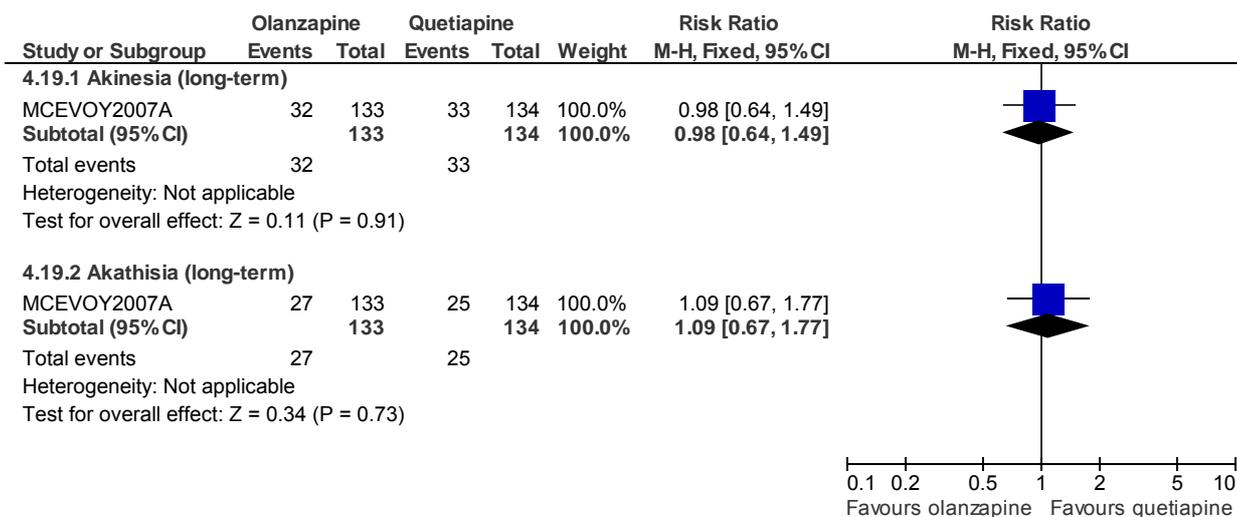
4.17 AE: 1. Metabolic SEs - fasting high-density lipoprotein cholesterol level (mg/dl) (change from baseline)



4.18 AE: 1. Metabolic SEs - other (at least moderate in severity)



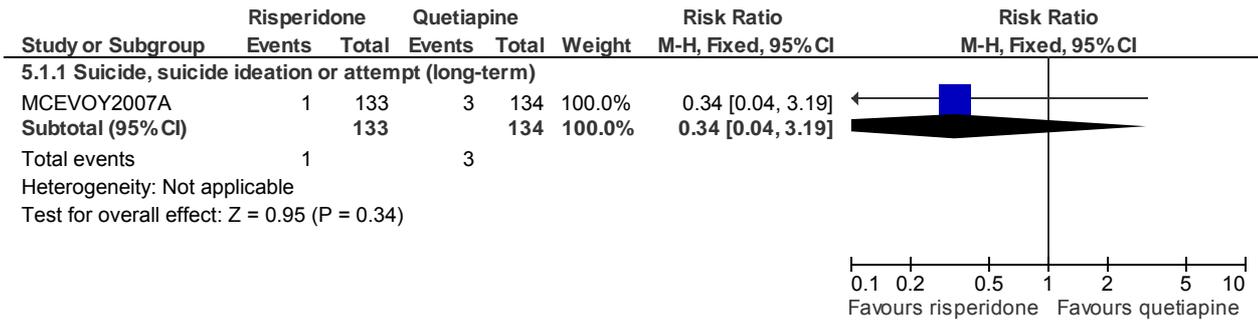
4.19 AE: 2. Neurologic SEs (treatment-emergent - at least moderate in severity)



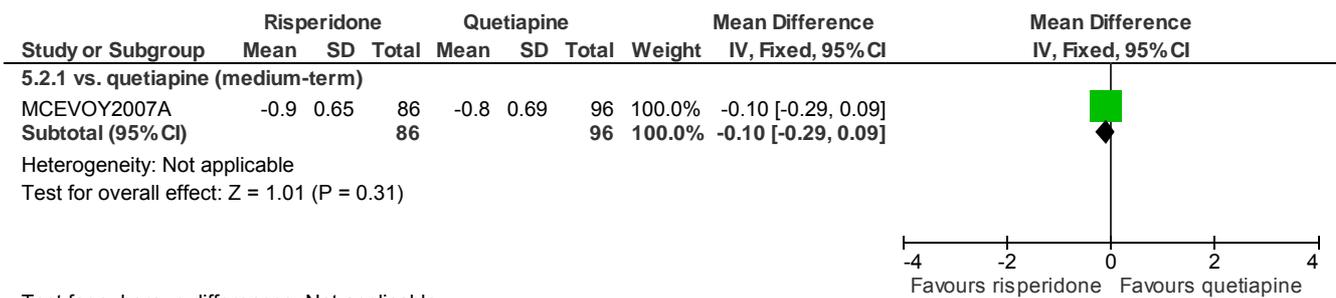
5 Risperidone versus quetiapine (critical outcomes)

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

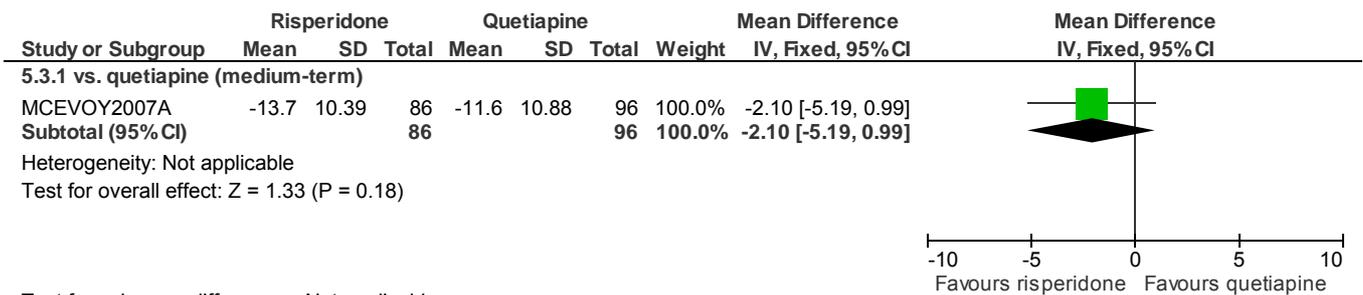
5.1 Mortality



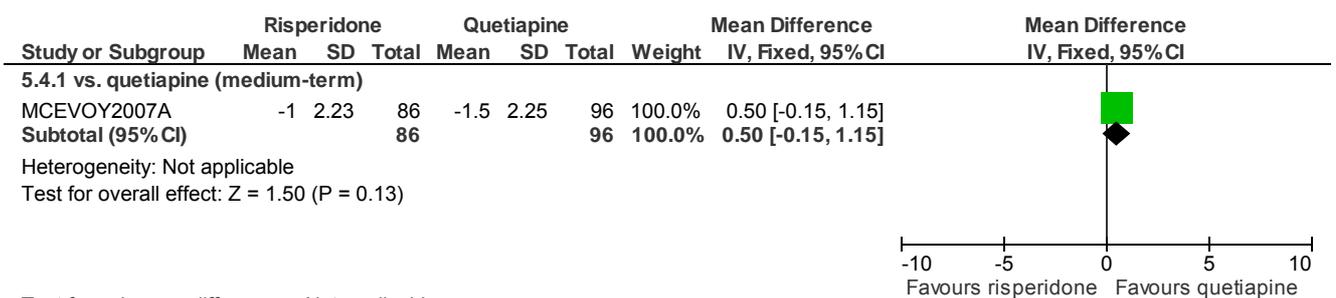
5.2 Global state: 1. Severity score - Change from baseline (CGI)



5.3 Mental state: 1. PANSS total score (change from baseline)

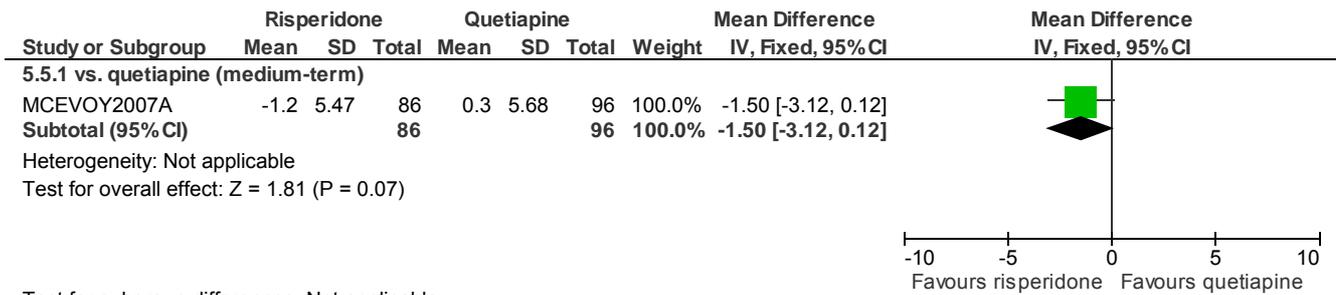


5.4 Mental state: 4. Depression (change from baseline: Calgary Depression Scale for Schizophrenia score)

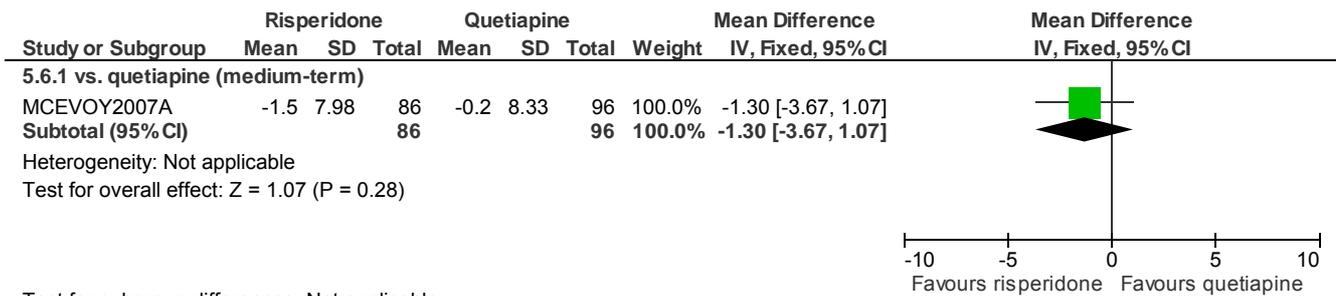


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

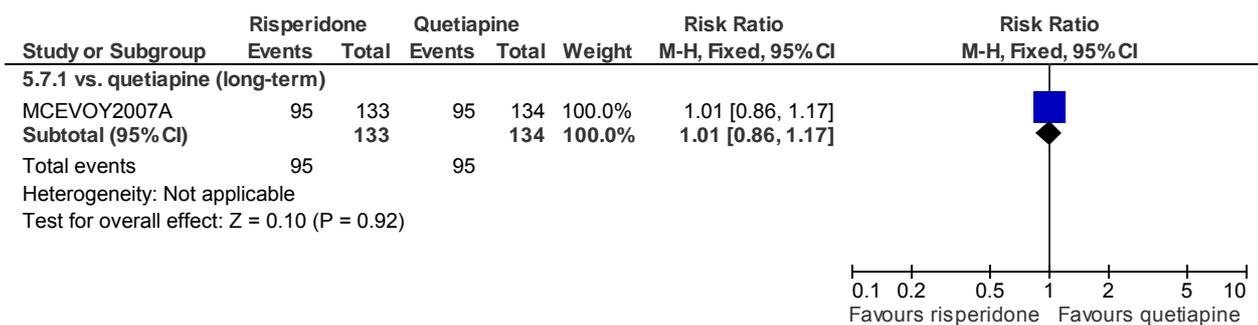
5.5 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, social subscale) - sign changed



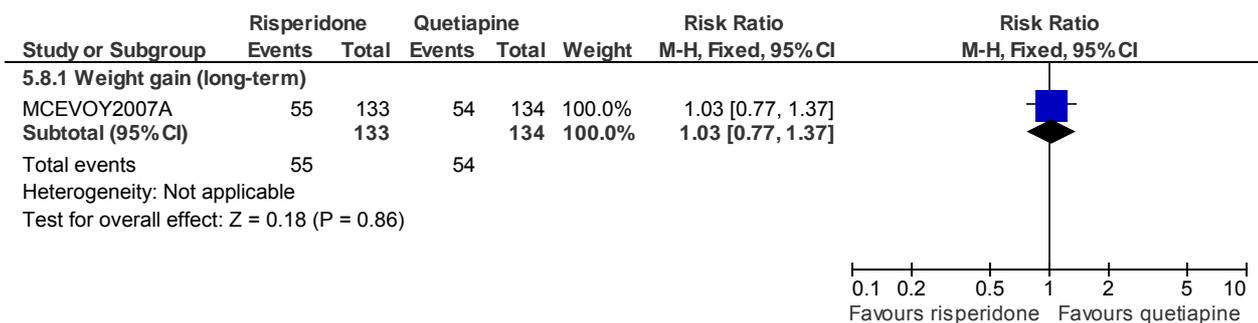
5.6 Psychosocial functioning: 1. Change from baseline (HC QoL Scale, vocational subscale) - sign changed



5.7 Leaving the study early: 1. Any reason

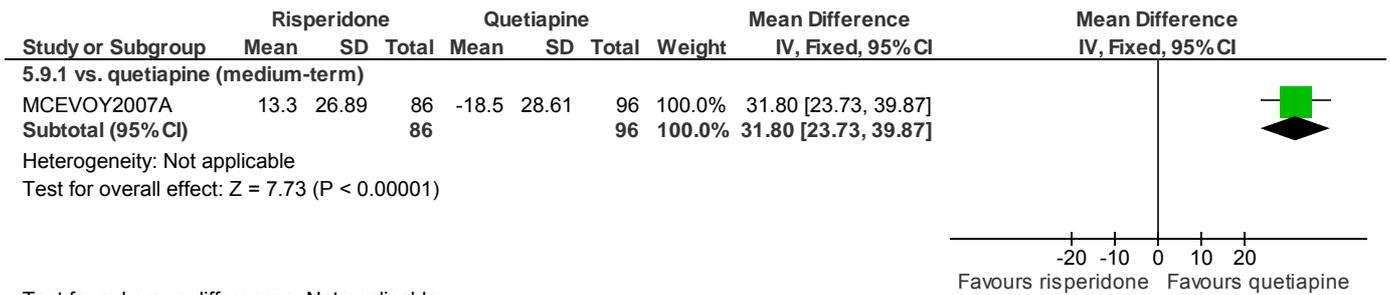


5.8 AE: 1. Metabolic SEs - weight gain (at least moderate in severity)

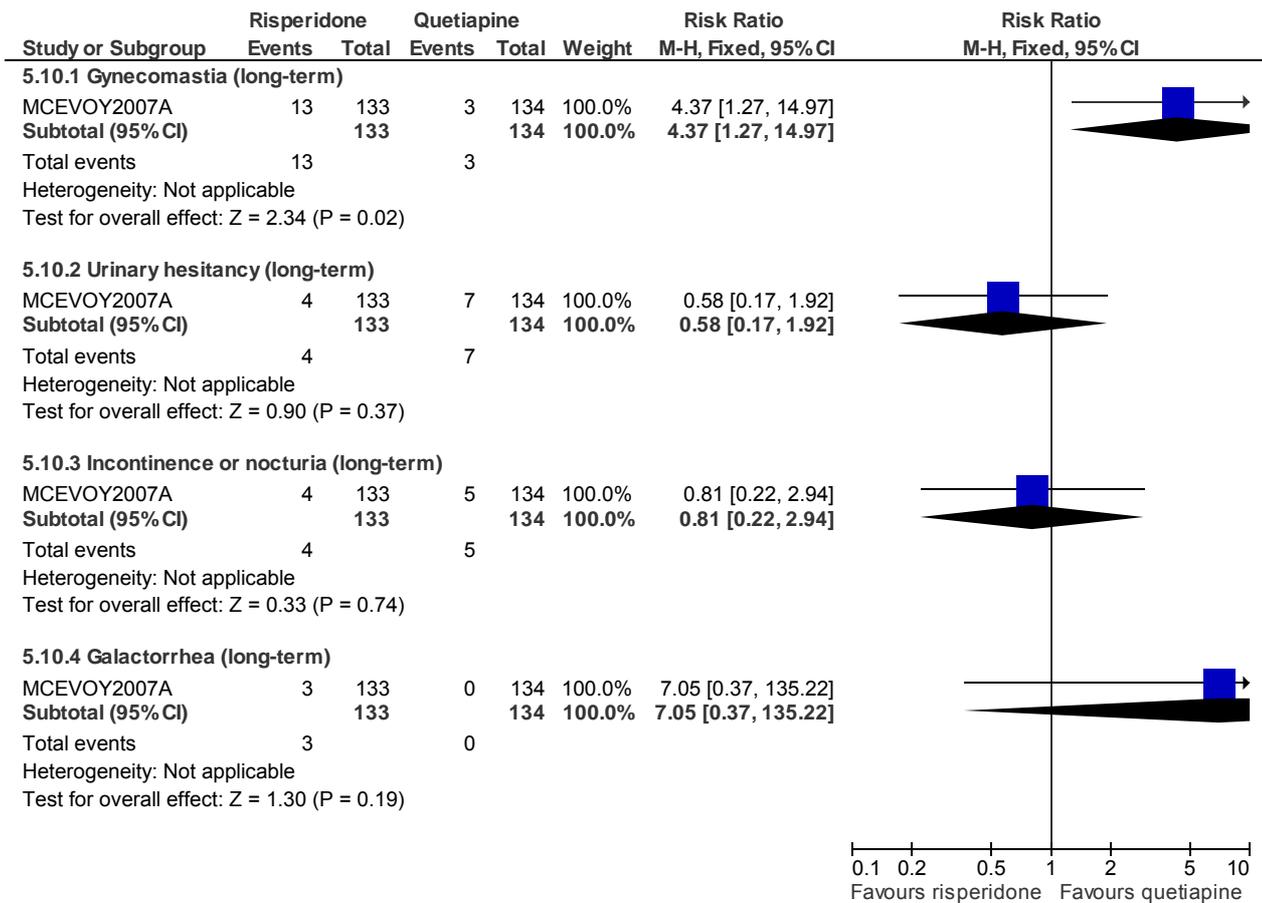


Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

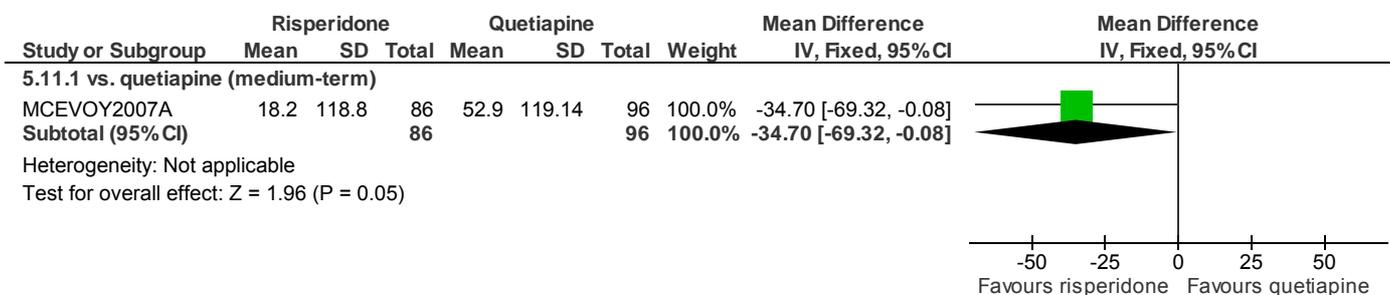
5.9 AE: 1. Metabolic SEs - prolactin level (change from baseline)



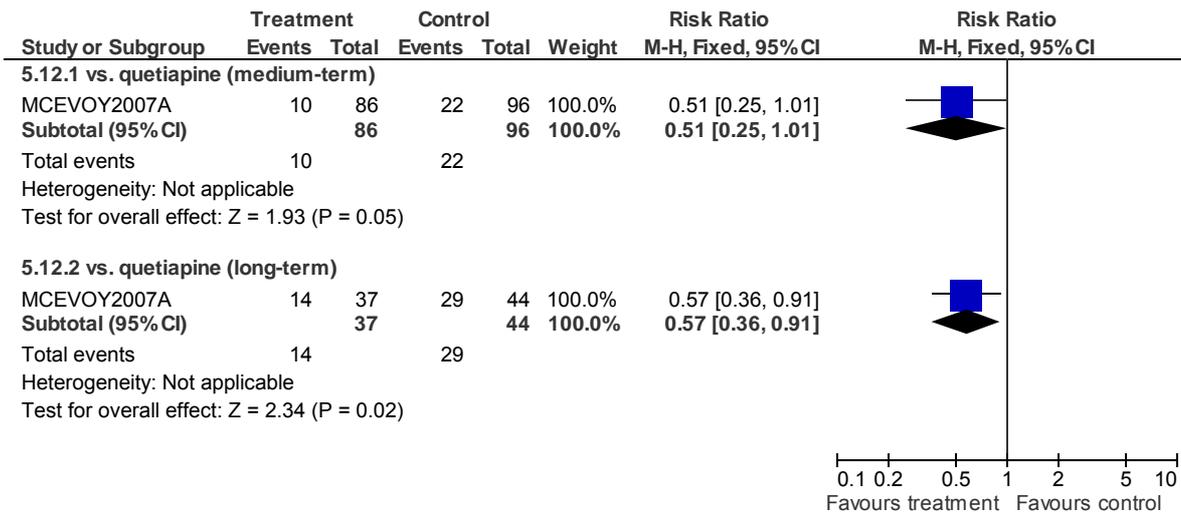
5.10 AE: 1. Metabolic SEs - prolactin related SEs (at least moderate in severity)



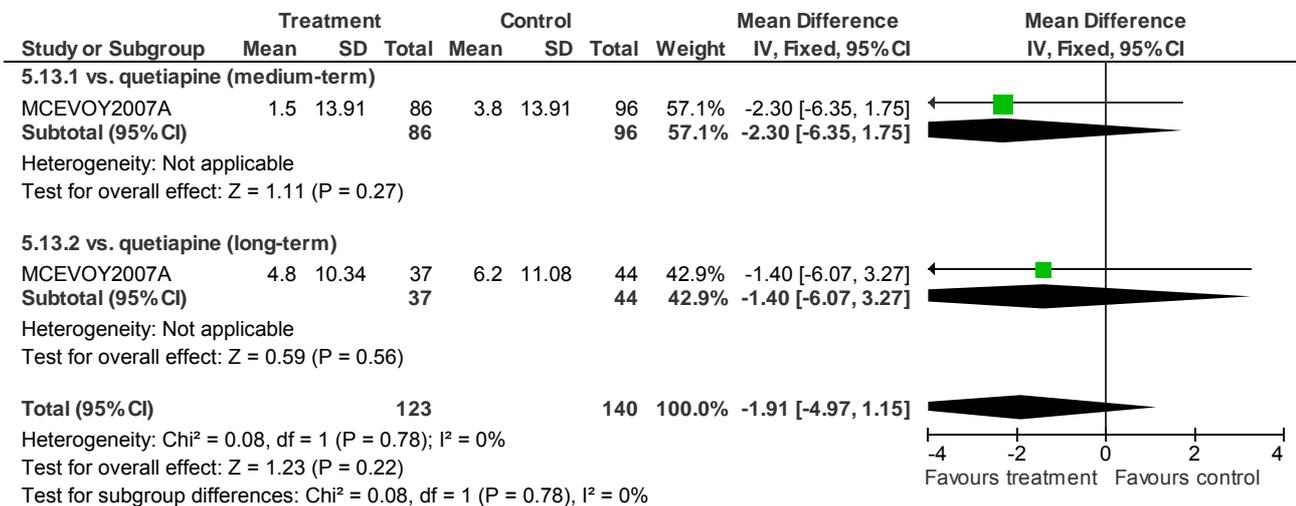
5.11 AE: 1. Metabolic SEs - fasting triglycerides level (mg/dl) (change from baseline)



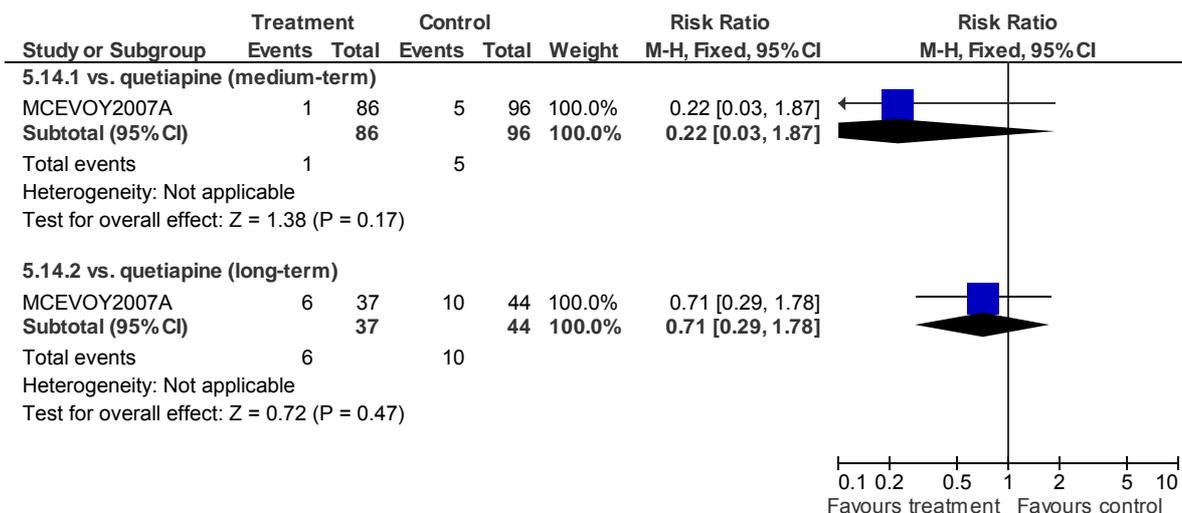
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

5.12 AE: 1. Metabolic SEs - fasting triglycerides level (≥ 150 mg/dl)

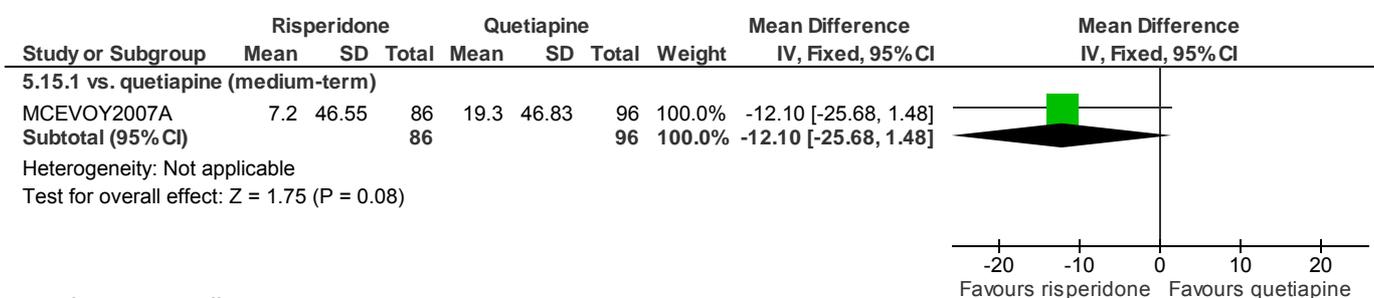
5.13 AE: 1. Metabolic SEs - fasting glucose level (mg/dl) (change from baseline)



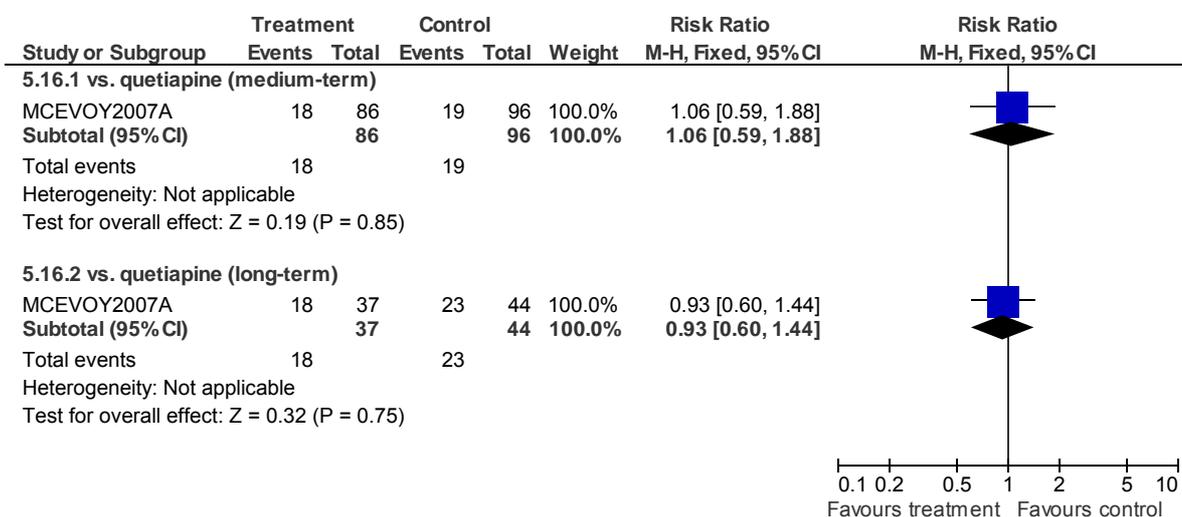
Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

5.14 AE: 1. Metabolic SEs - fasting glucose level (≥ 100 mg/dl)

5.15 AE: 1. Metabolic SEs - fasting total cholesterol level (mg/dl) (change from baseline)

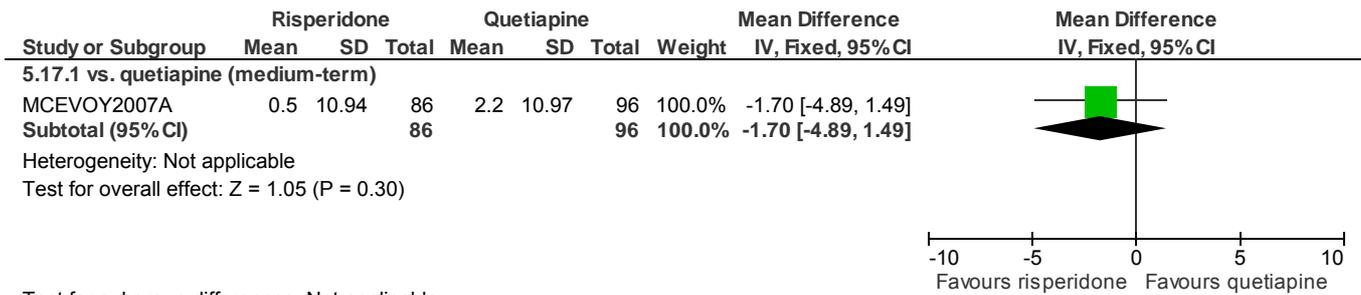


Test for subgroup differences: Not applicable

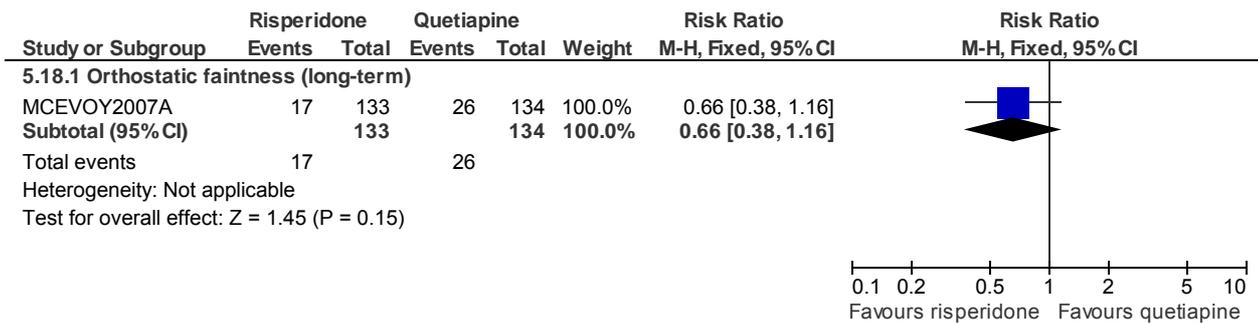
5.16 AE: 1. Metabolic SEs - fasting total cholesterol level (≥ 200 mg/dl)

Pharmacological clinical evidence: Initial treatment with antipsychotic drugs

5.17 AE: 1. Metabolic SEs - fasting high-density lipoprotein cholesterol level (mg/dl) (change from baseline)



5.18 AE: 1. Metabolic SEs - other (at least moderate in severity)



5.19 AE: 2. Neurologic SEs (treatment-emergent - at least moderate in severity)

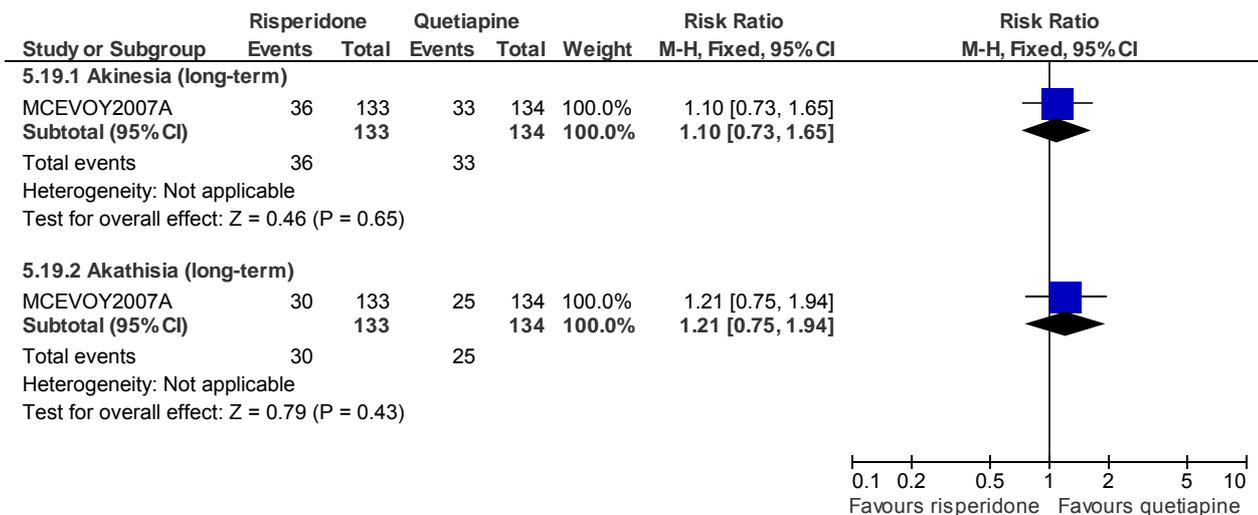


Table 2: Studies included in the acute treatment review (SGA versus FGA)

| Treatment | versus Comparator | | | | | |
|------------|------------------------------|---------------------------------|------------------------------------|--|---|-----|
| | CHL | FLUPE | FLUPH | HAL | PER | ZUC |
| AMI | | Hillert 1994 [6weeks, N=132] | | Carriere 2000 [16weeks, N=199] Delcker 1990 [6weeks, N=41] Moller 1997 [6weeks, N=322] Puech 1998 [4weeks, N=319] Ziegler 1989 [4weeks, N=40] | | |
| ARI | | | | KANE2002 [4 weeks, N=414] KASPER2003 [52weeks, N=1294] | | |
| OLZ | Loza 1999 [6weeks, N=41] | HGBL 1997 [4weeks, N=46] | Jakovljevic 1999 [6weeks, N=60] | Beasley 1996a [6weeks, N=138] Beasley 1997 [6weeks, N=170] HGCJ 1999 (HK) [14weeks, N=31] HVCU 1998 (Taiwan) [14weeks, N=54] KONGSAKON2006 [24weeks, N=281] Malyarov 1999 [26weeks, N=33] Reams 1998 [6weeks, N=59] ROSENHECK2003 [52weeks, N=309] Tollefson 1997 [6weeks, N=1996] | Naukkarinen 1999 [26weeks, N=46] Szafranski 1999 [18weeks, N=56] | |
| QUE | Link 1994 [6weeks, N=201] | | | Arvanitis 1996 [6weeks, N=310] ATMACA2002 [6weeks, N=35] Fleischhacker 1996 [6weeks, N=448] Purdon 2000 [26weeks, N=25] | | |

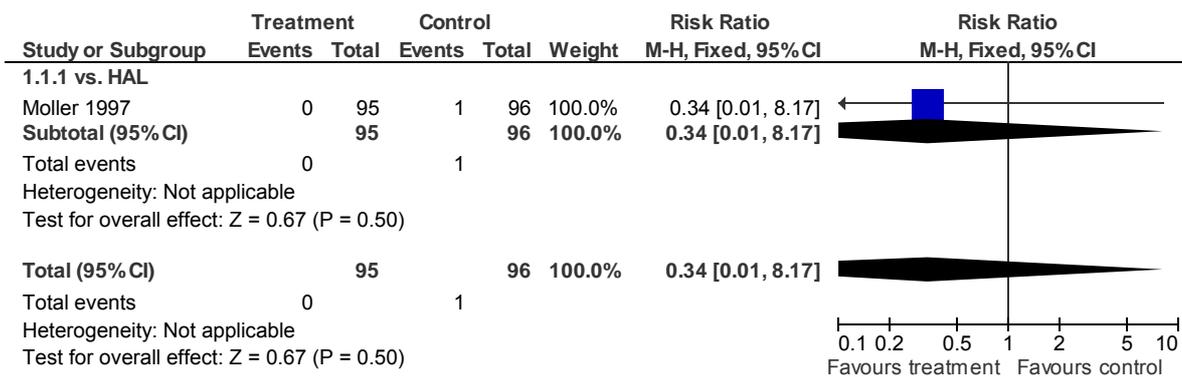
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

| | | | | | | |
|------------|-------------------------------------|--|--|--|-------------------------------------|-------------------------------------|
| RIS | | | | <p>Blin 1996 [4weeks, N=41] Ceskova 1993 [8weeks, N=62] Cetin 1999 [6weeks, N=70] Chouinard 1993a [8weeks, N=113] Claus 1991 [12weeks, N=44] Janicak 1999 [6weeks, N=61] Liu 2000 [12weeks, N=38] Malyarov 1999 [26weeks, N=28] Marder 1994 [8weeks, N=322] Mesotten 1991 [8weeks, N=60] Min 1993 [8weeks, N=35] Muller-Siecheneder 1998 [6weeks, N=123] Peuskens 1995 [8weeks, N=1362] ZHANG2001 [12weeks, N=78]</p> | <p>Hoyberg 1993 [8weeks, N=107]</p> | <p>Huttunen 1995 [8weeks, N=98]</p> |
| SER | | | | <p>Hale 2000 [8weeks, N=617]</p> | | |
| ZOT | <p>Cooper 1999a [8weeks, N=106]</p> | | | <p>Barnas 1987 [7weeks, N=30] Fleischhacker 1989 [6weeks, N=40] Klieser 1996 [4weeks, N=65] Petit 1996 [8weeks, N=126] Knoll CTR (StudyZT4002) [26weeks, N=125]</p> | <p>Dieterle 1999 [4weeks, N=40]</p> | |

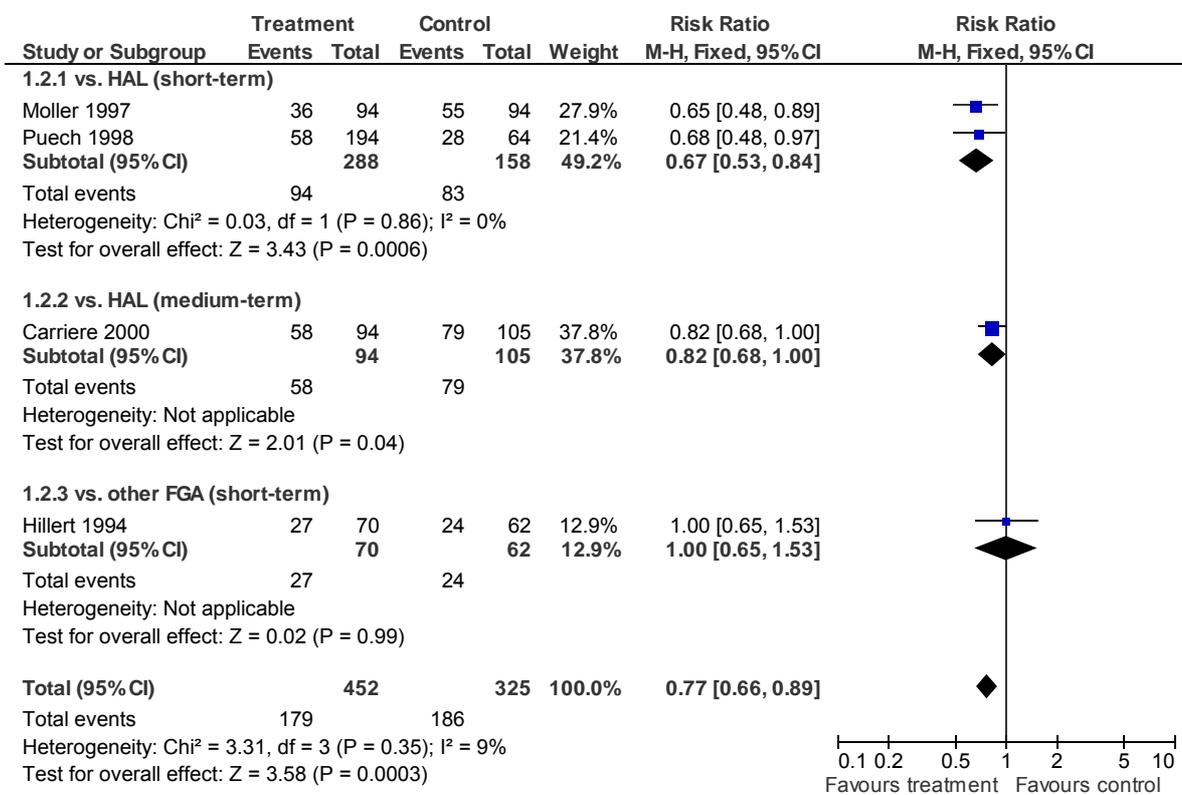
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1 Amisulpride versus FGA (phase: acute treatment) (critical outcomes)

1.1 Mortality: 1. Suicide

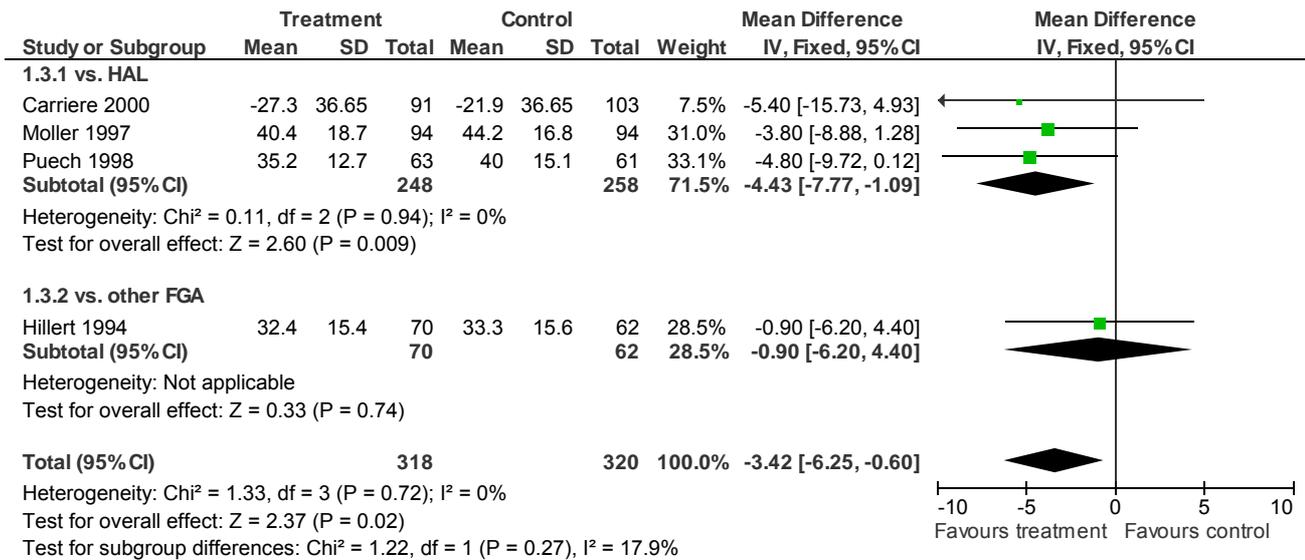


1.2 Global state: 2. Non-response (CGI) (short-to-medium-term)

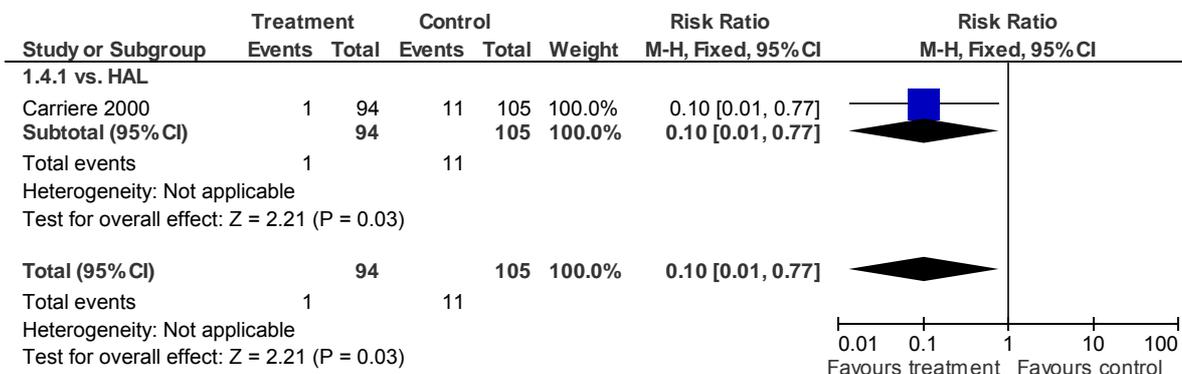


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.3 Mental state: 1. BPRS total (endpoint/change) (short-to-medium-term)

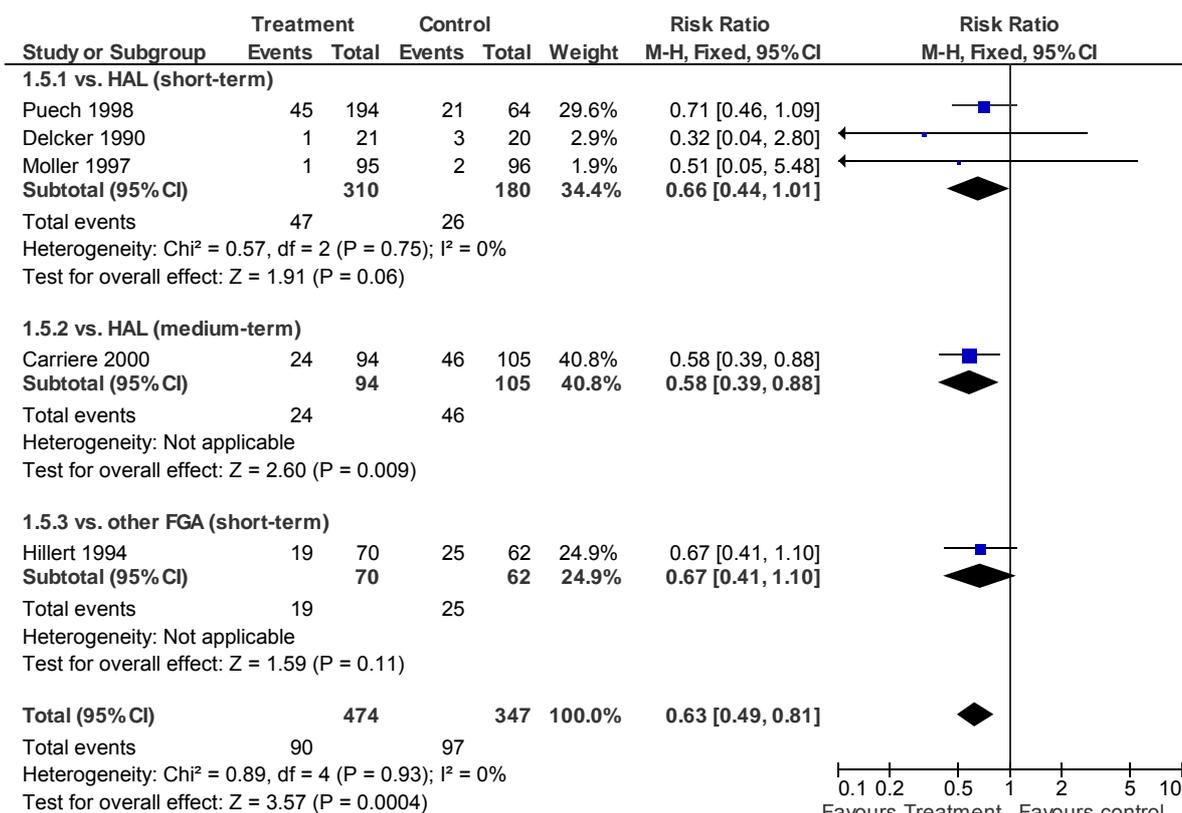


1.4 Mental state: 2. Depression (medium-term)

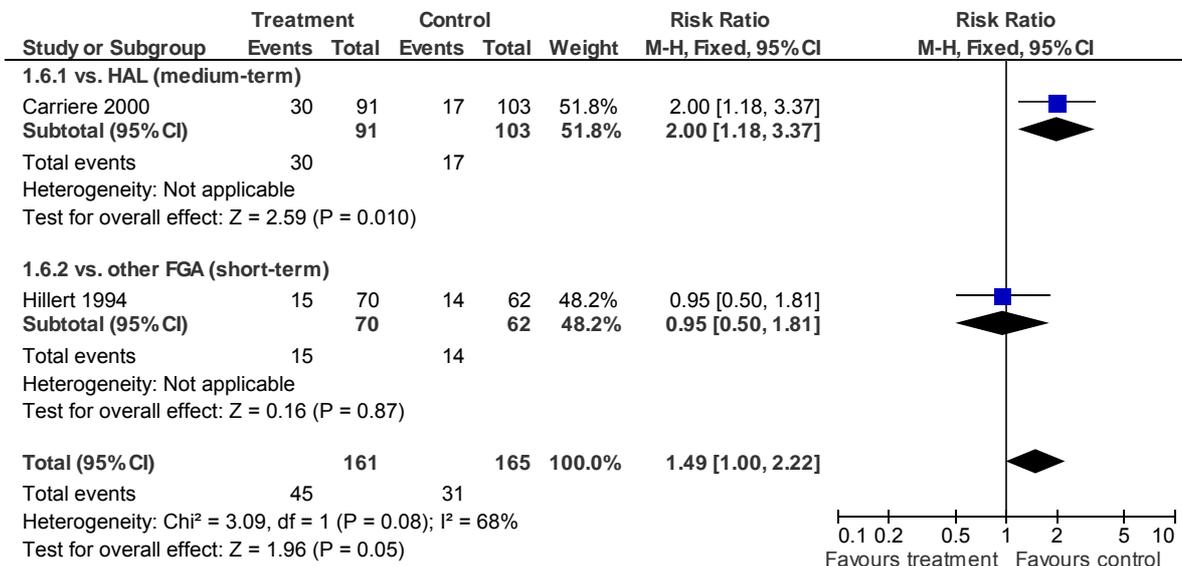


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.5 Leaving the study early: 1. Any reason (short-to-medium-term)

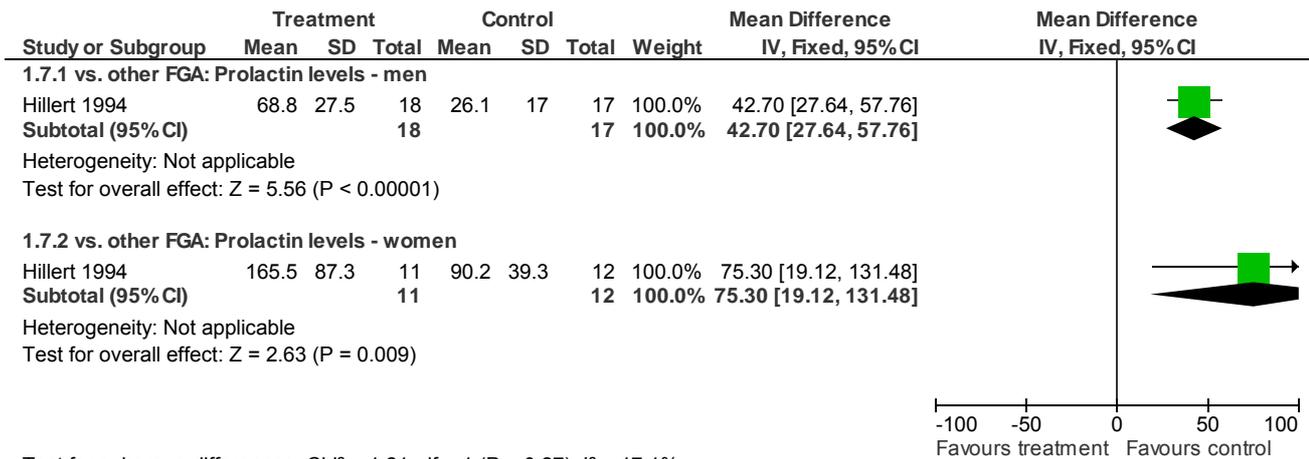


1.6 AE: 1. Metabolic SEs - weight gain (short-to-medium-term)

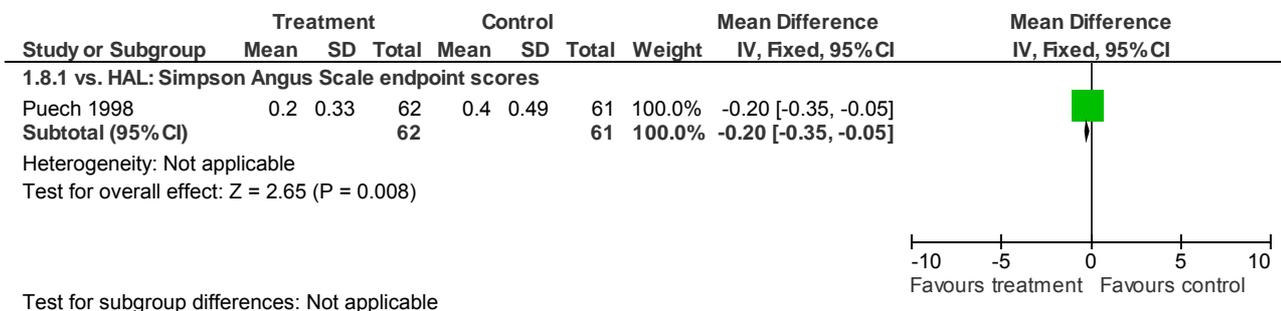


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

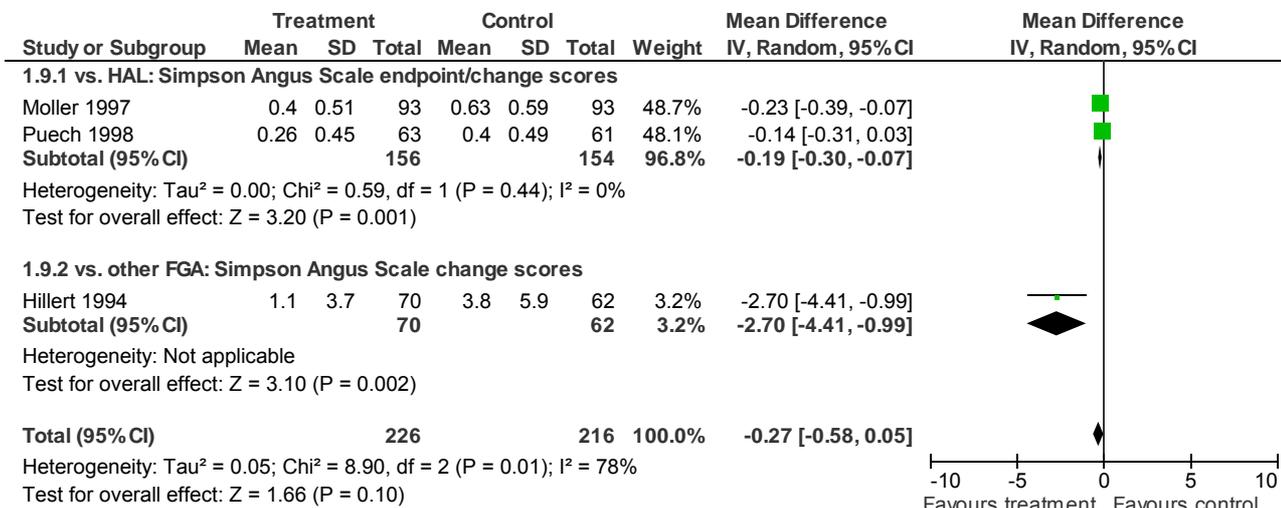
1.7 AE: 1. Metabolic SEs - prolactin-related (short term)



1.8 AE: 2. Neurologic SEs (<500 mg/day amisulpride) (short-term)

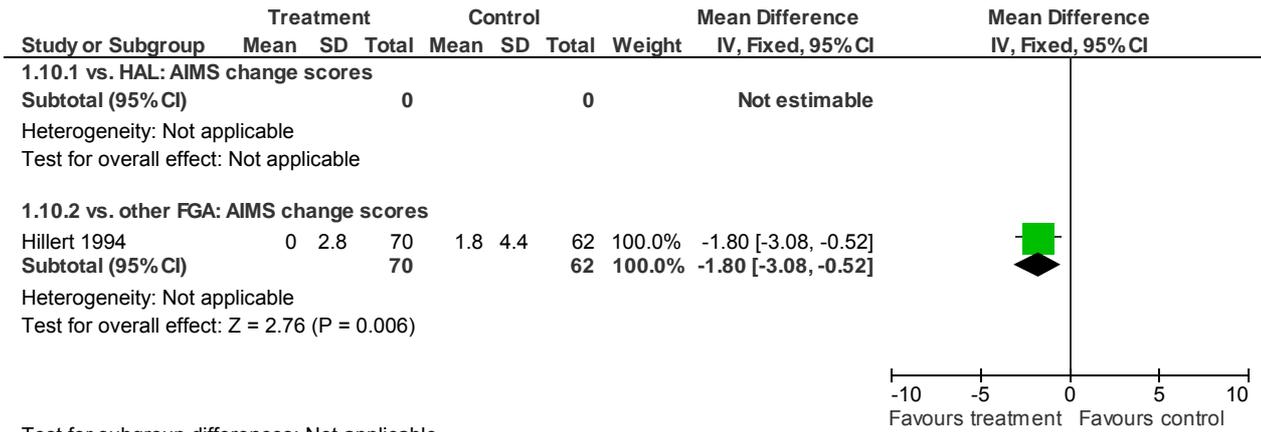


1.9 AE: 2. Neurologic SEs (>500 mg/day amisulpride) (short-term)



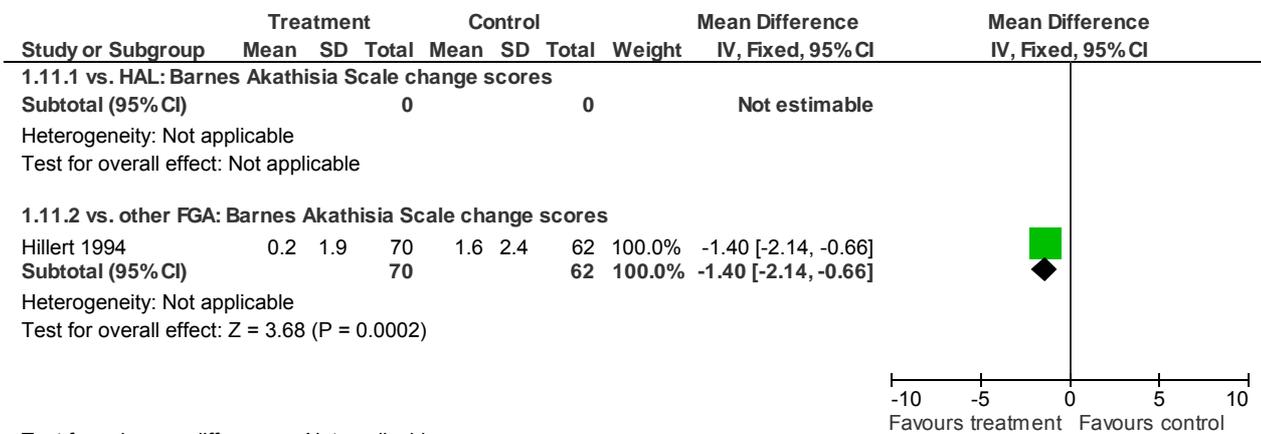
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.10 AE: 2. Neurologic SEs - EPS (>500 mg/day amisulpride) (short-term)



Test for subgroup differences: Not applicable

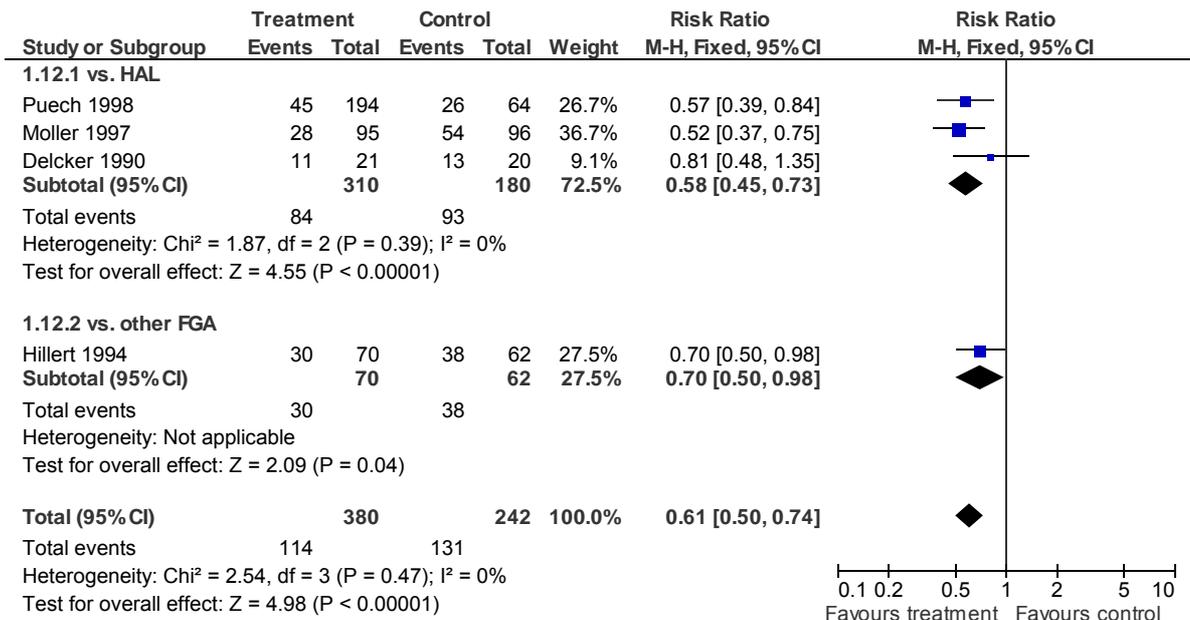
1.11 AE: 2. Neurologic SEs - akathisia (>500 mg/day amisulpride) (short-term)



Test for subgroup differences: Not applicable

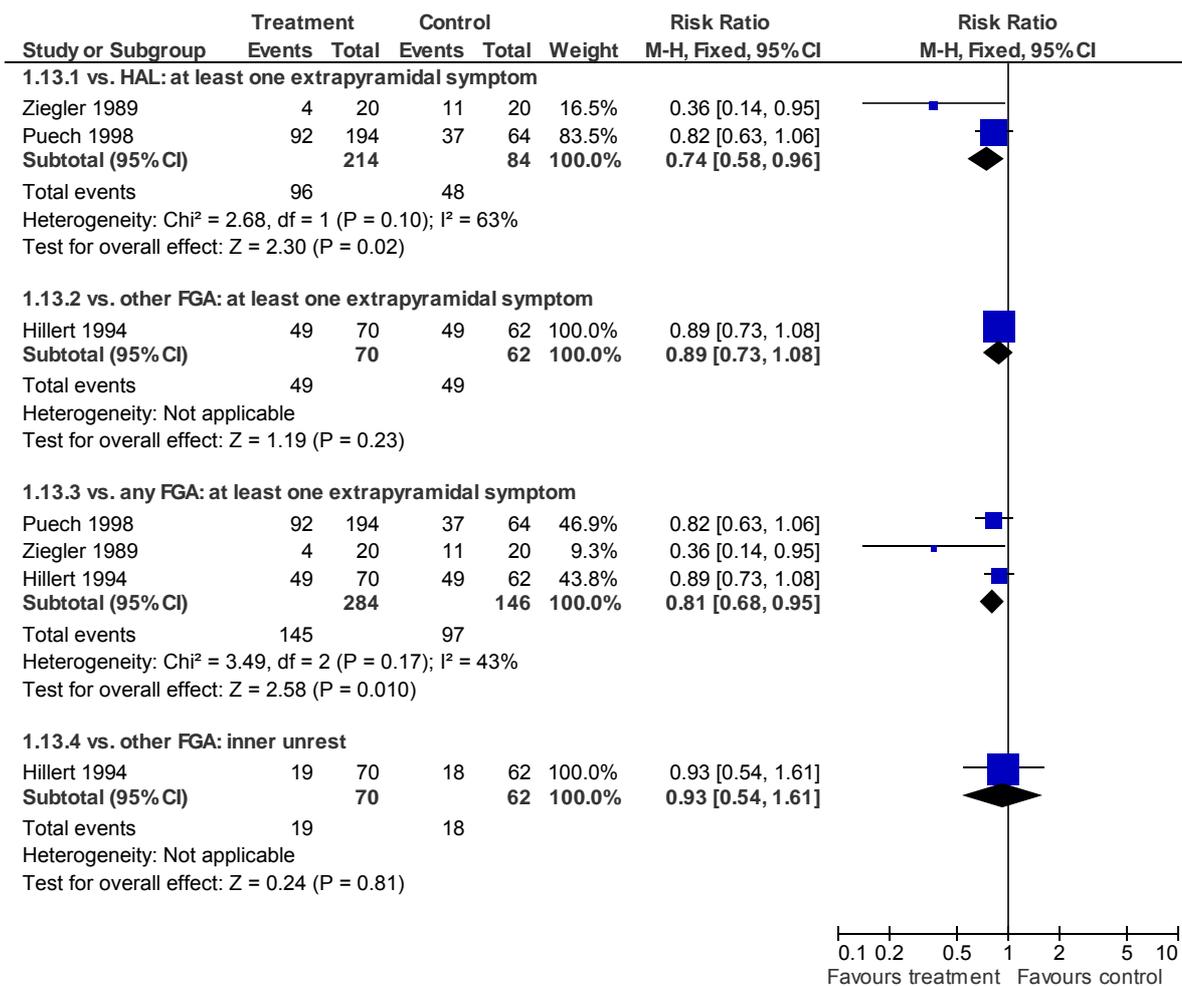
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.12 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



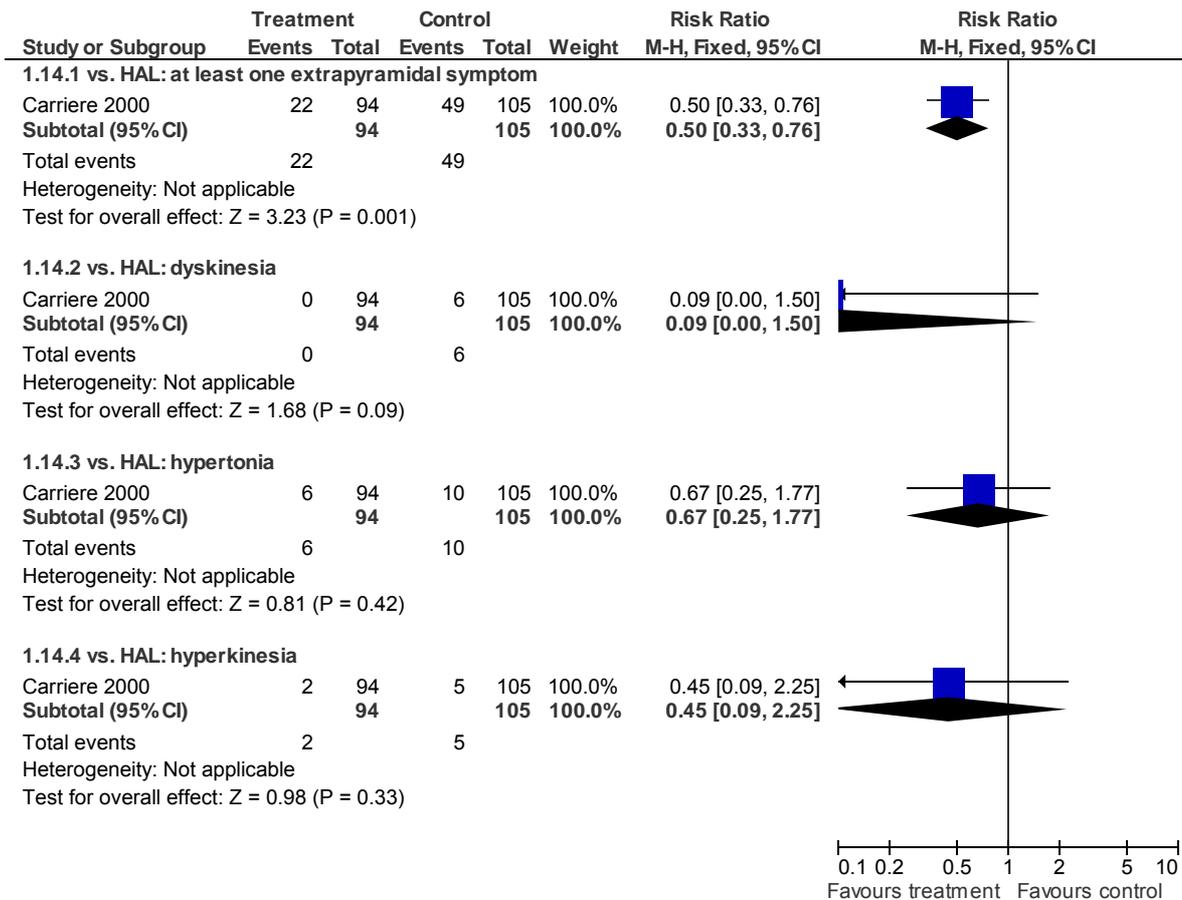
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.13 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



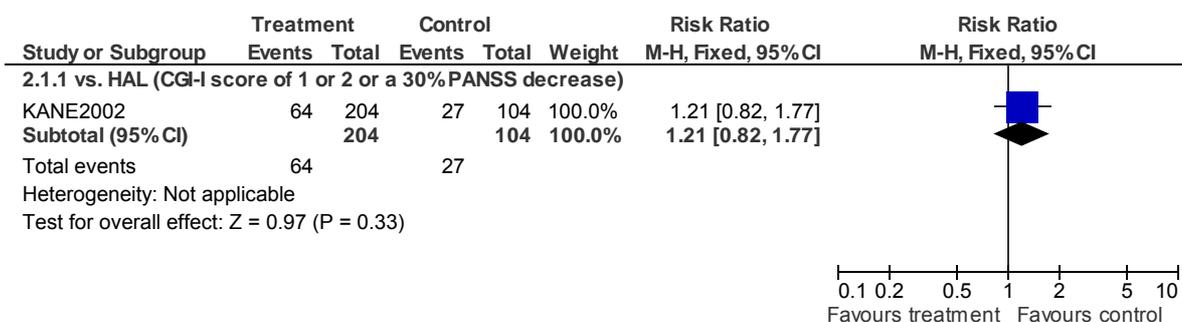
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

1.14 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



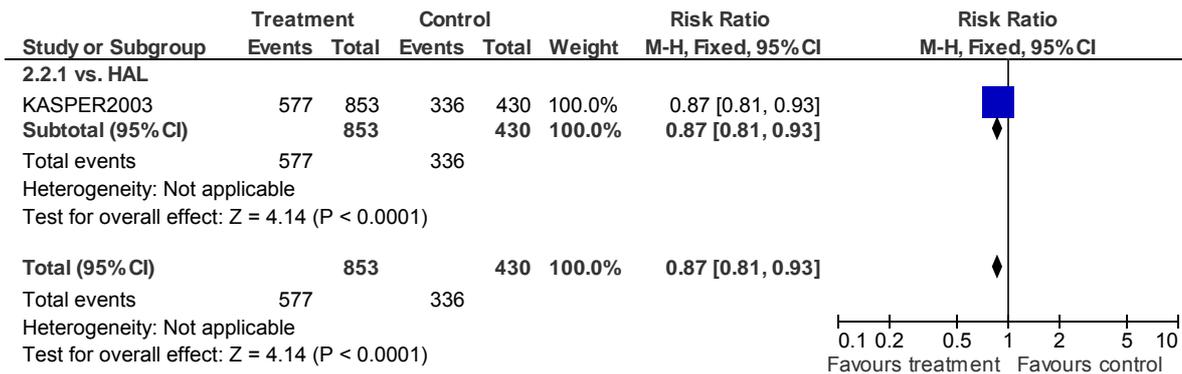
2 Aripiprazole versus FGA (phase: acute treatment) (critical outcomes)

2.1 Global state: 3. No important clinical response by 6-8 weeks

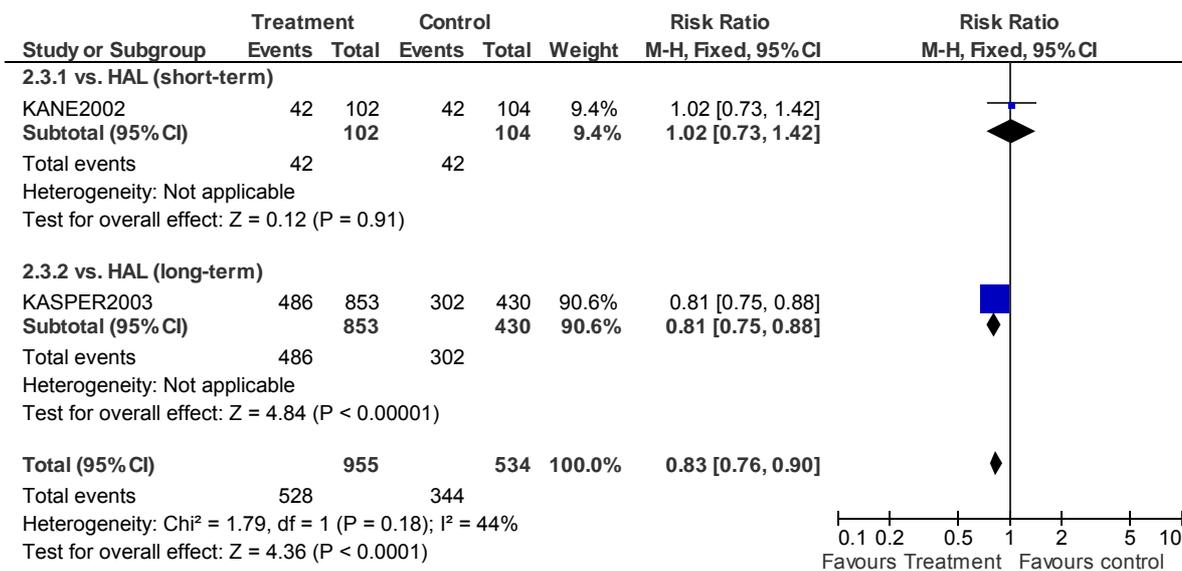


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

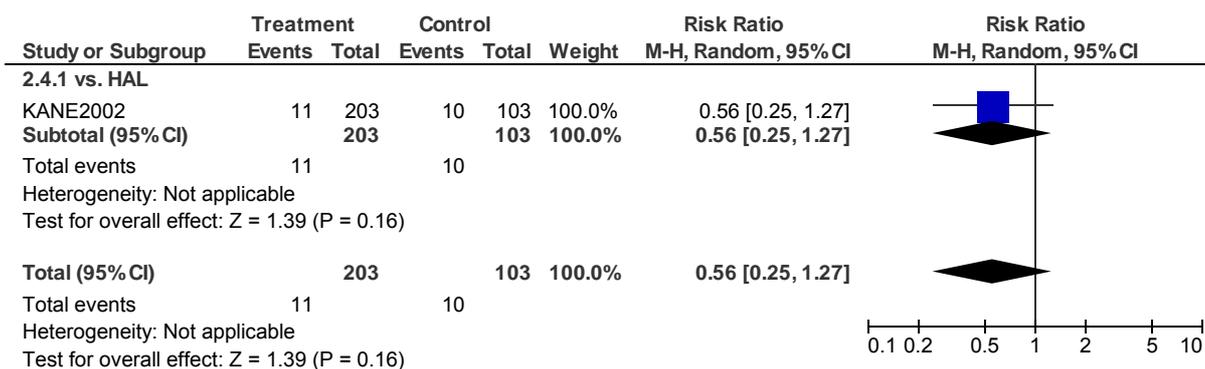
2.2 Mental state: 1. Non-remission (RSWG criteria) (long-term)



2.3 Leaving the study early: 1. Any reason (short-to-long-term)

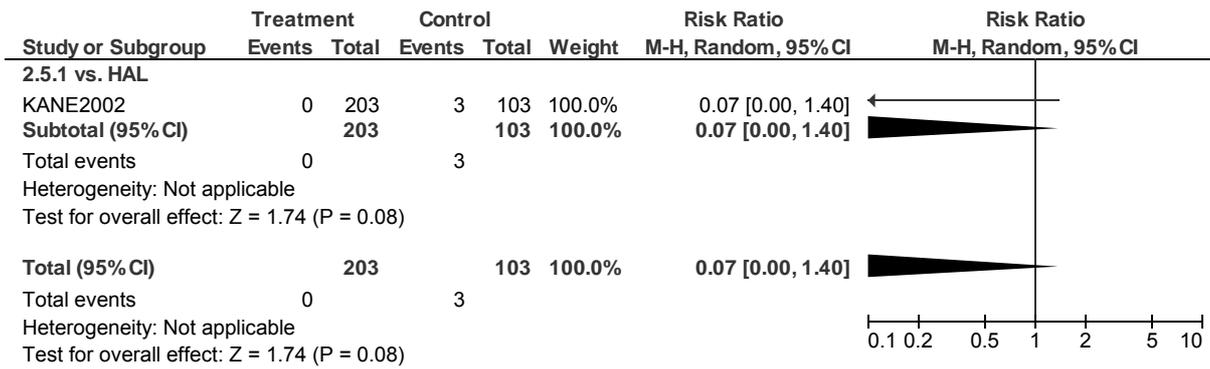


2.4 AE: 1. Metabolic SEs - Weight gain (>= 7% increase from baseline) (short-term)

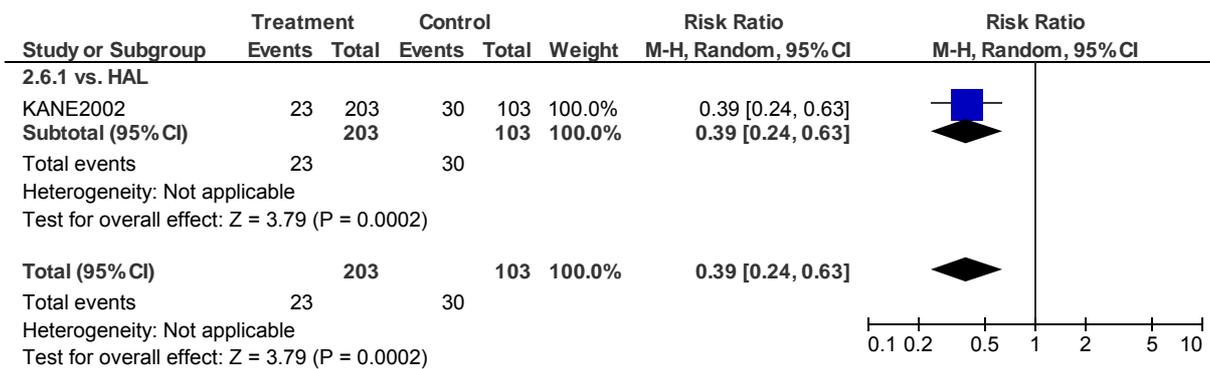


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

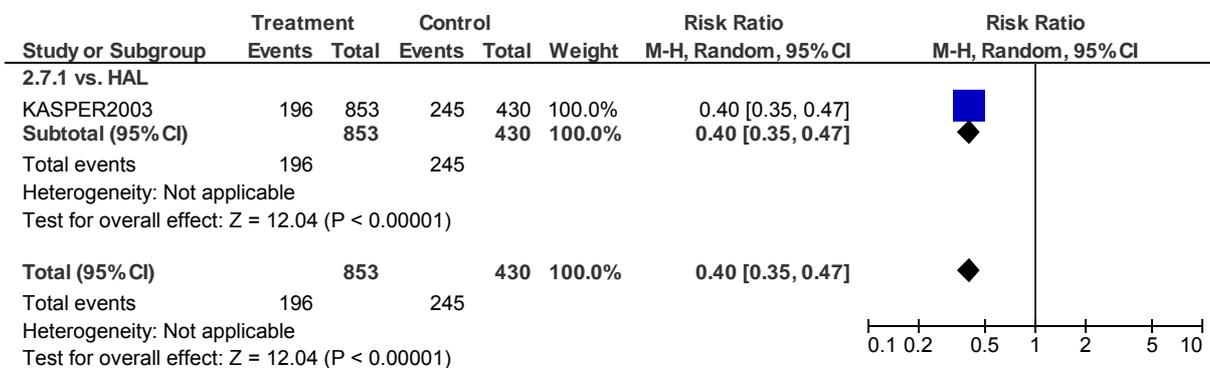
2.5 AE: 1. Metabolic SEs - Clinically sig. increase in QTc interval (short-term)



2.6 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

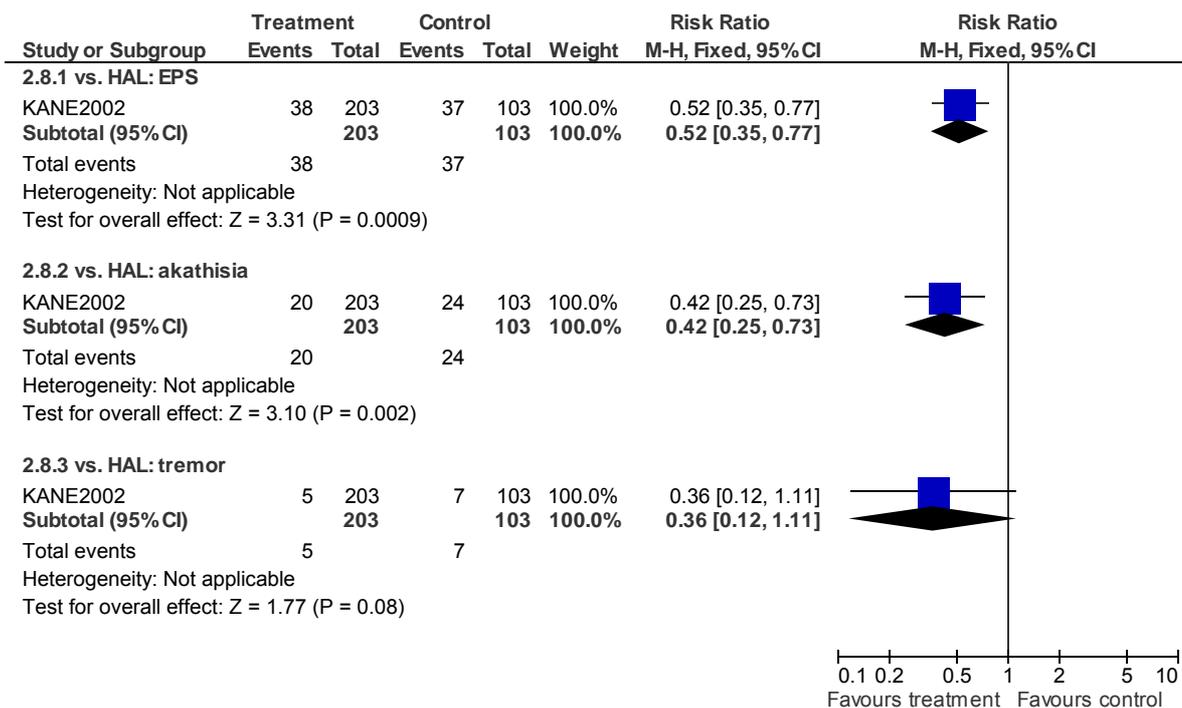


2.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)

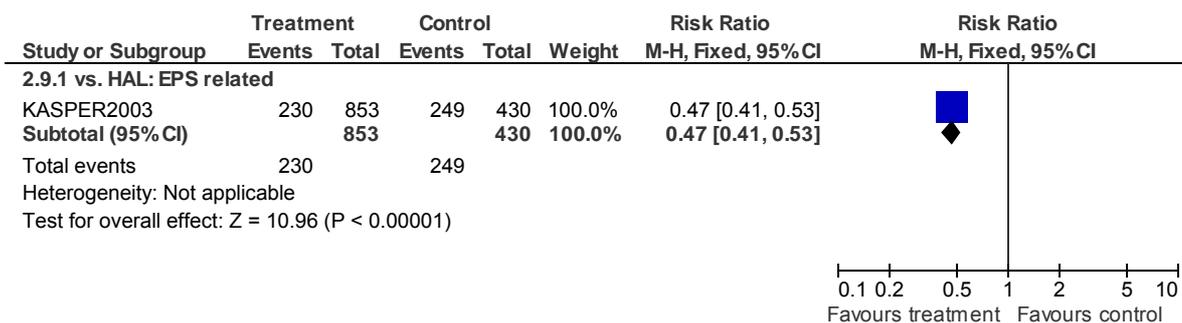


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

2.8 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



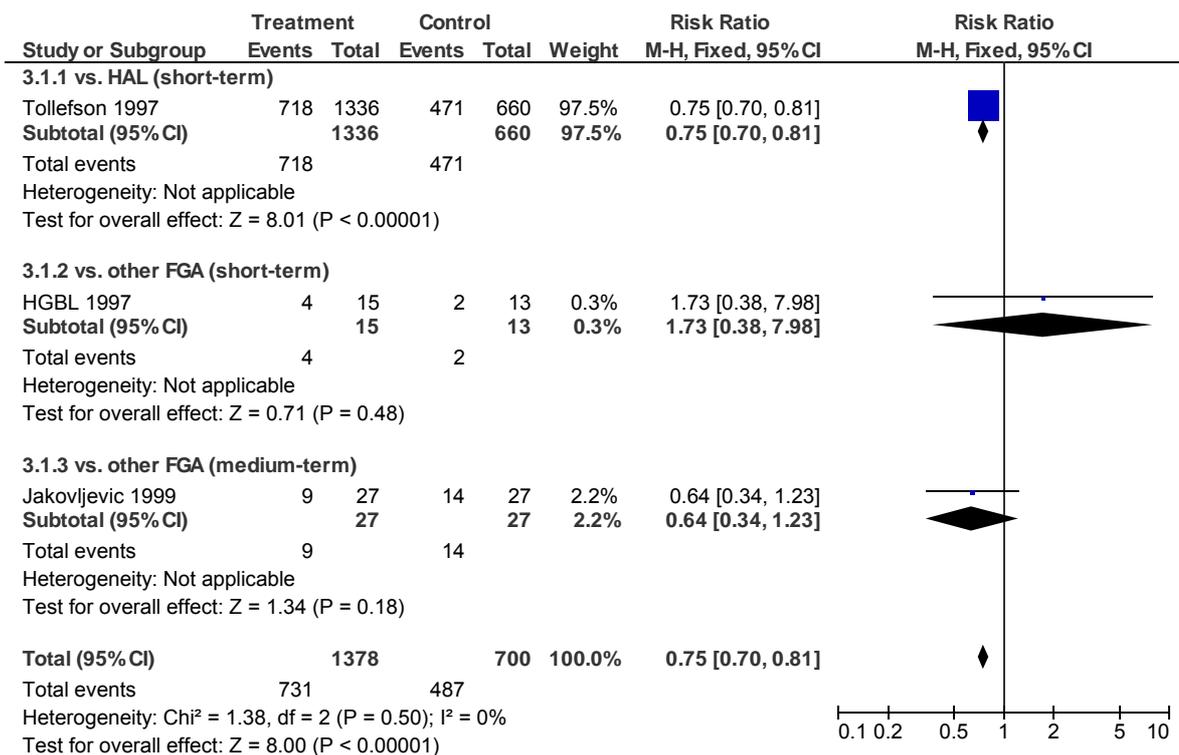
2.9 AE: 2. Neurologic SEs (treatment-emergent) (long-term)



3 Olanzapine versus FGA (phase: acute treatment) (critical outcomes)

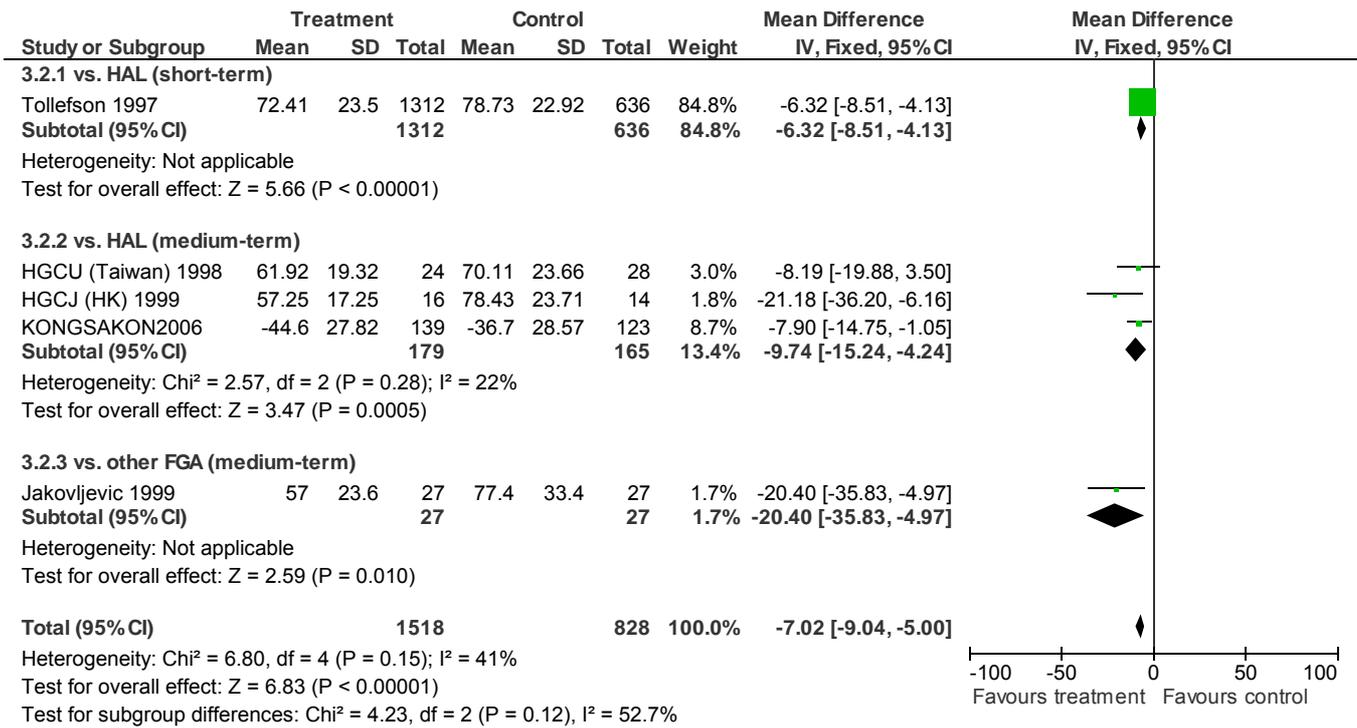
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.1 Global state: 1. No important clinical response (short-term)

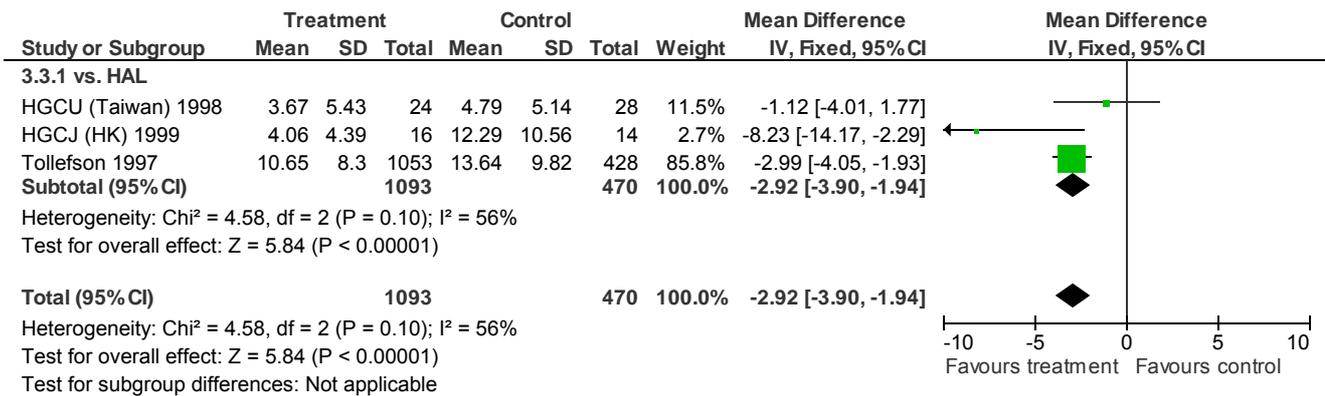


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.2 Mental state: 1. PANSS total (endpoint/change from baseline) (short-to-medium-term)

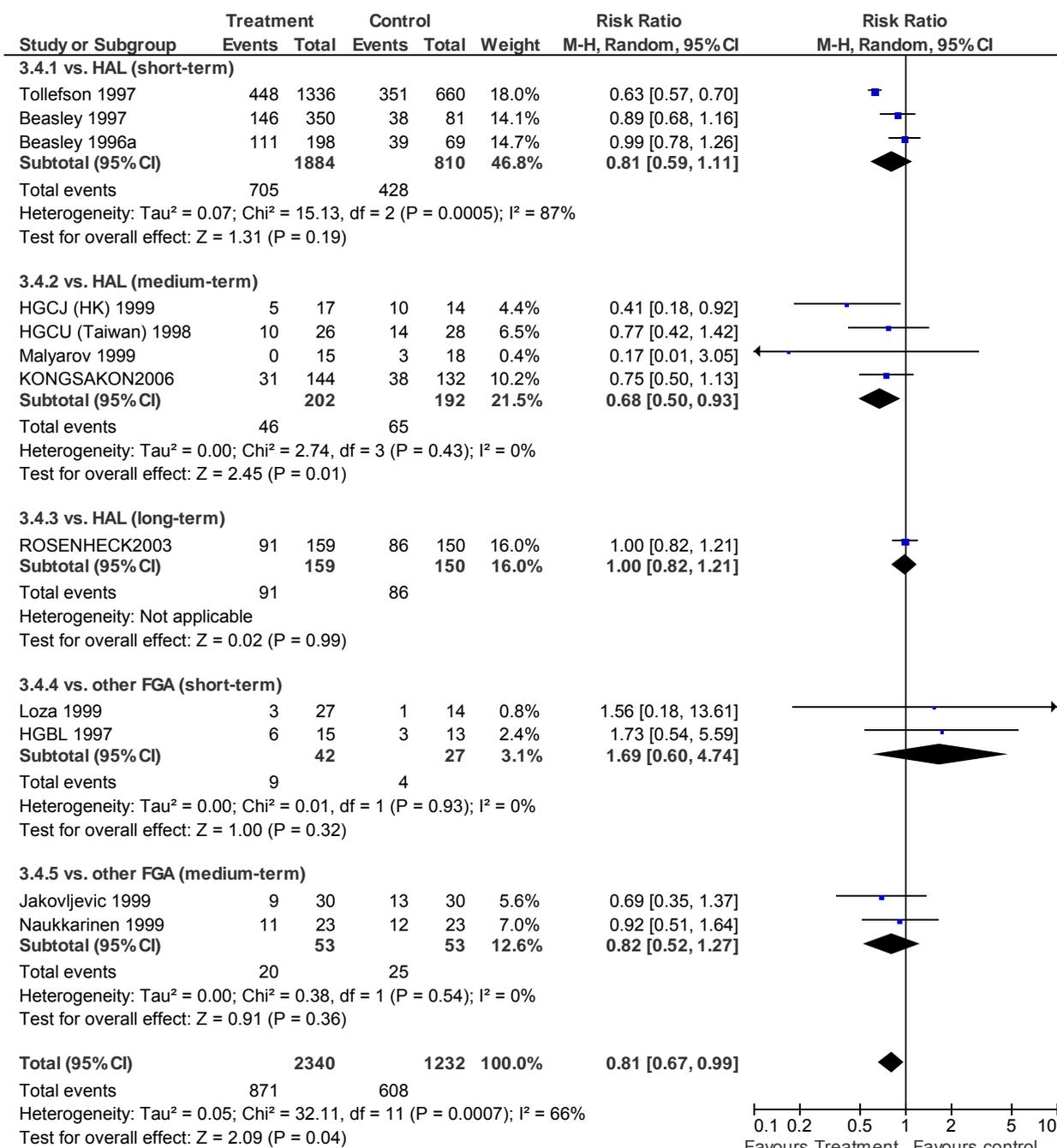


3.3 Mental state:2. Depression (MADRS, endpoint, high-poor) (short-term)



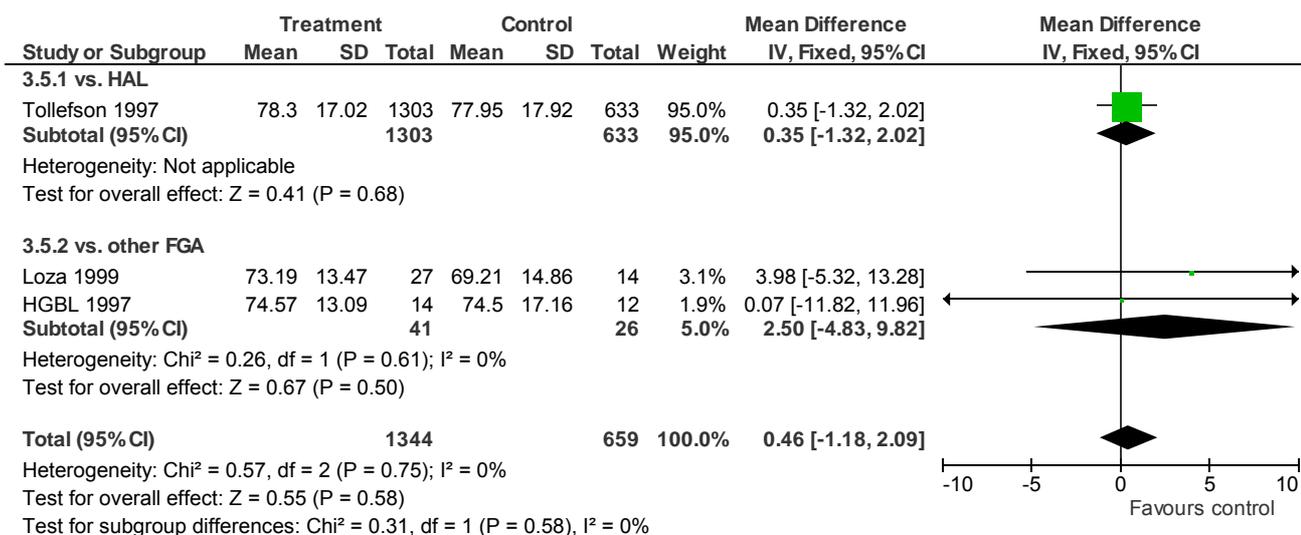
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.4 Leaving the study early: 1. Any reason (short-to-long-term)

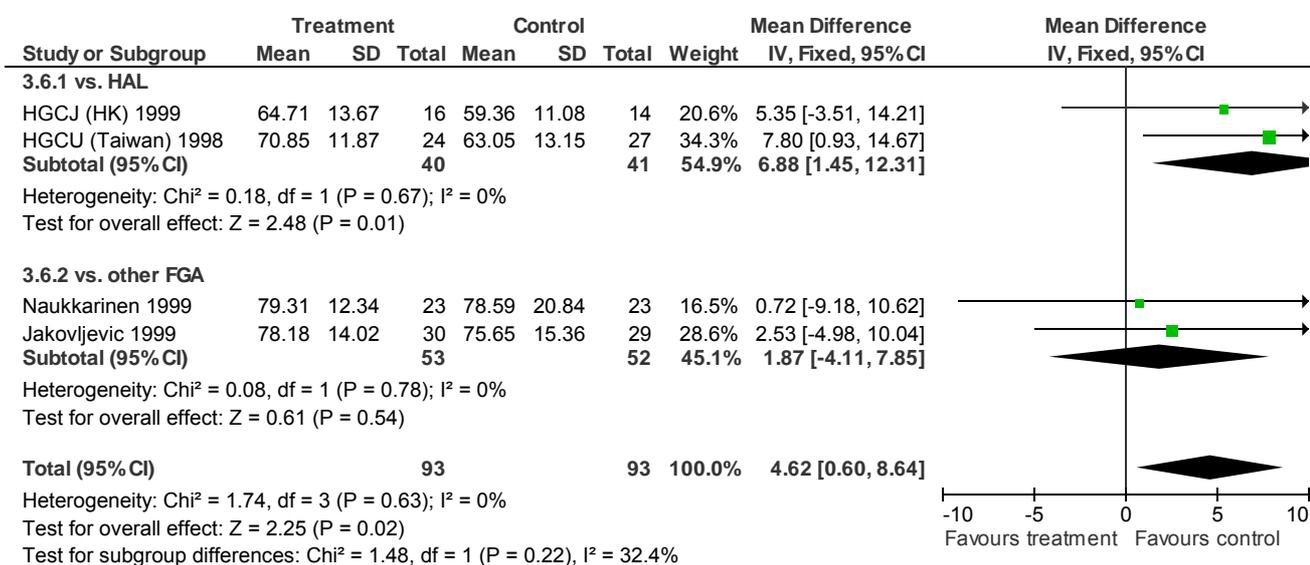


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

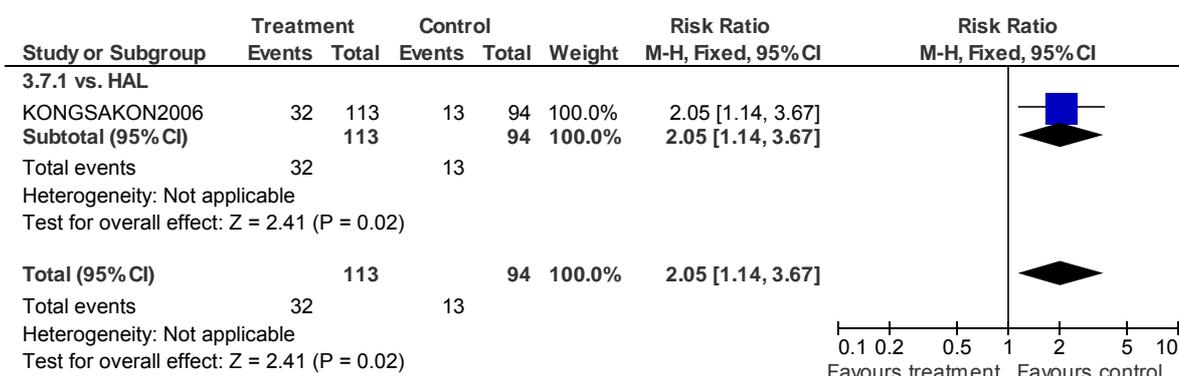
3.5 AE: 1. Metabolic SEs - weight (short-term)



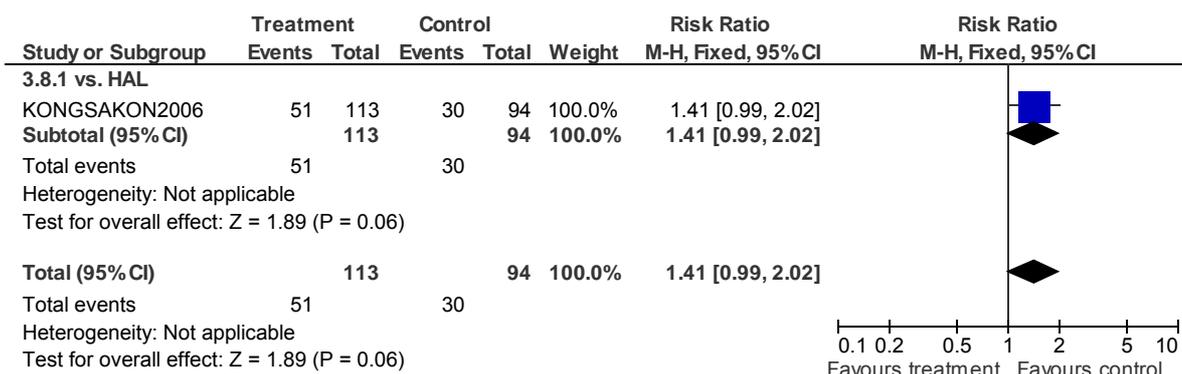
3.6 AE: 1. Metabolic SEs - weight (medium-term)



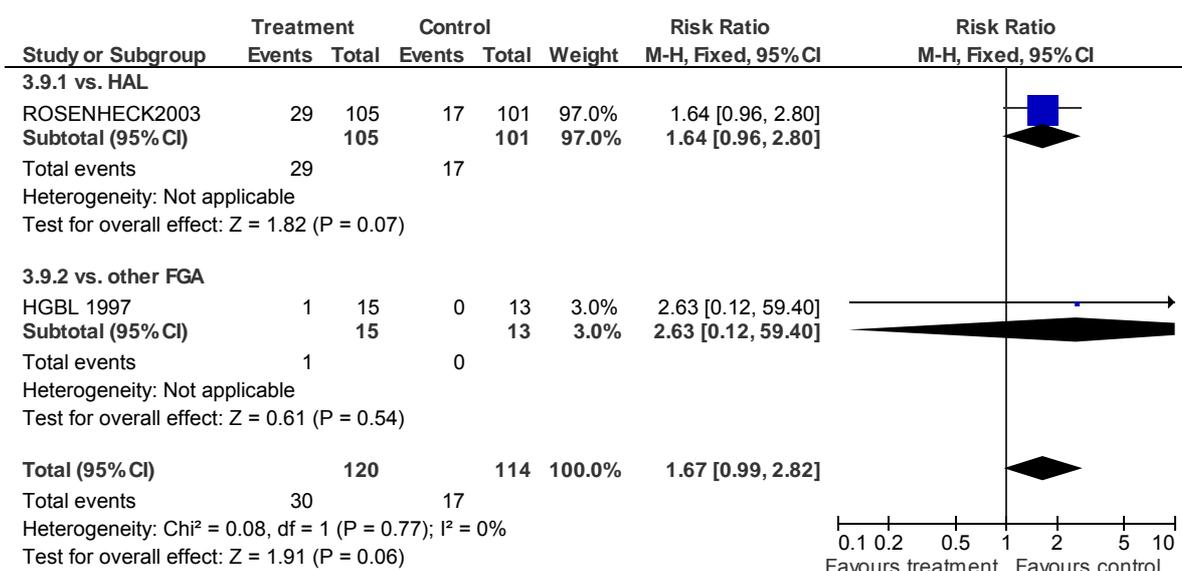
3.7 AE: 1. Metabolic SEs - weight gain (>=7% increase from baseline) (short-term)



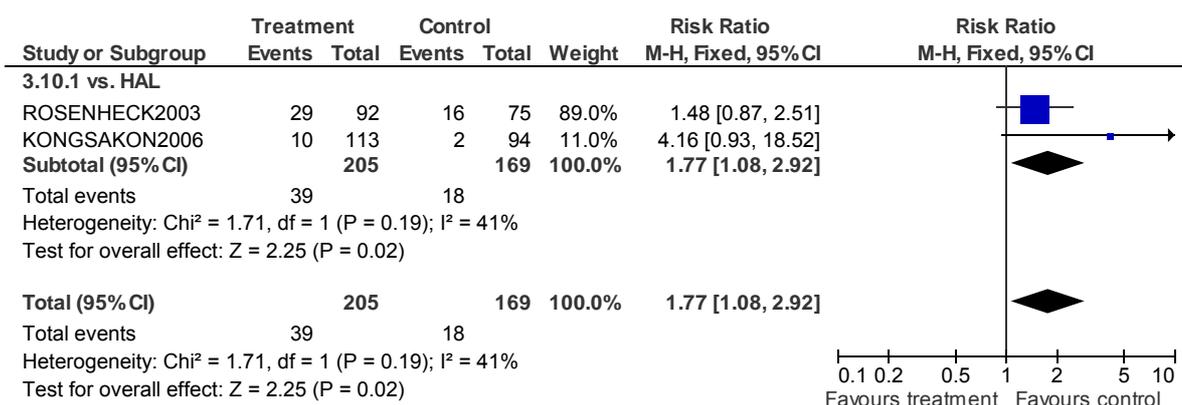
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.8 AE: 1. Metabolic SEs - weight gain ($\geq 7\%$ increase from baseline) (medium-term)

3.9 AE: 1. Metabolic SEs - weight gain (related to study drug) (short-term)

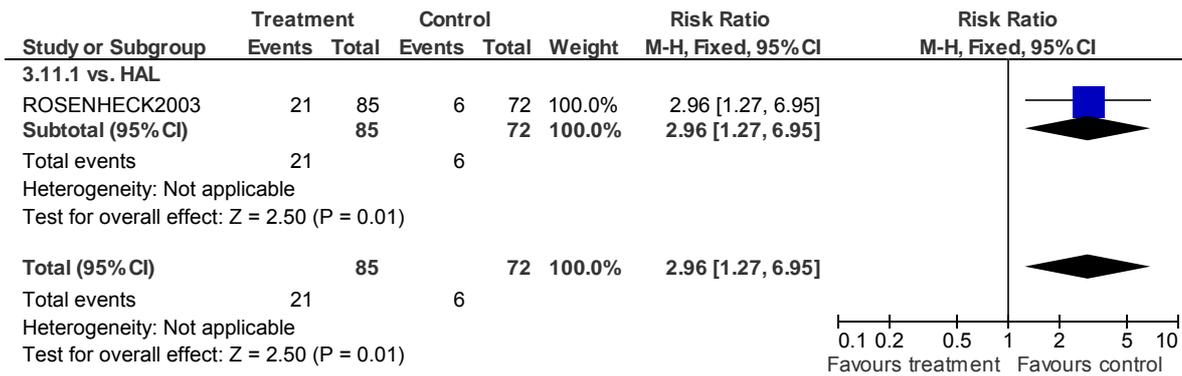


3.10 AE: 1. Metabolic SEs - weight gain (related to study drug) (medium-term)



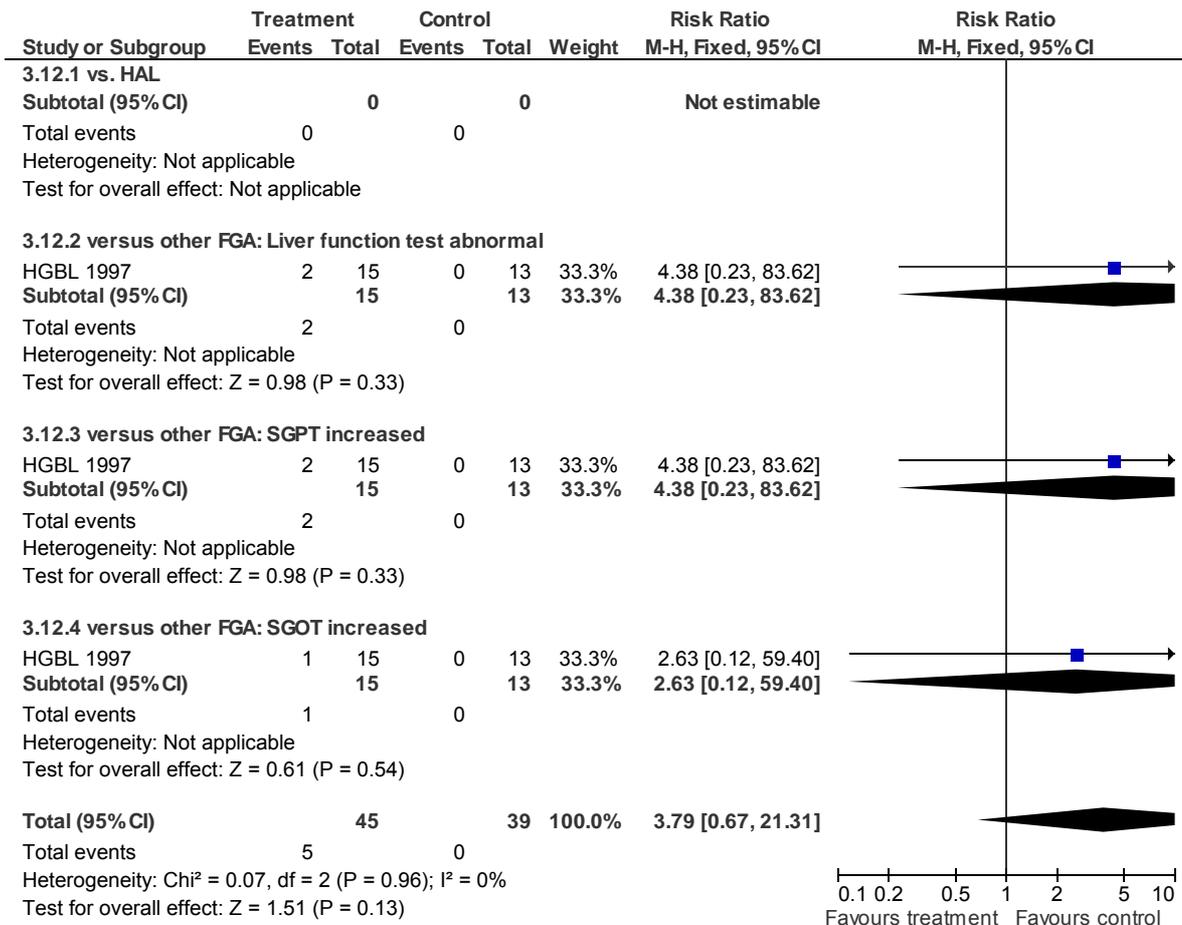
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.11 AE: 1. Metabolic SEs - weight gain (related to study drug) (long-term)



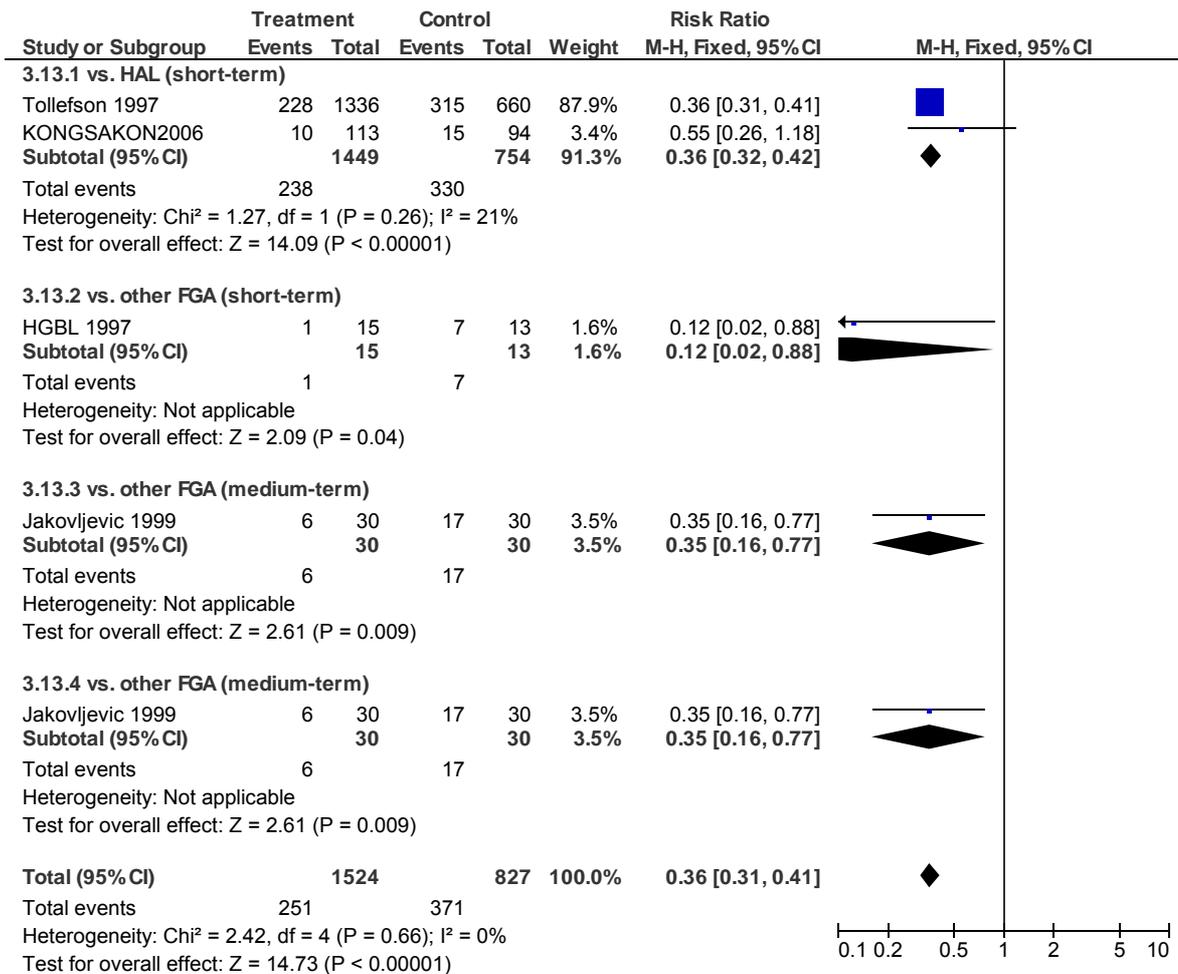
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.12 AE: 1. Metabolic SEs - treatment emergent (short-term)

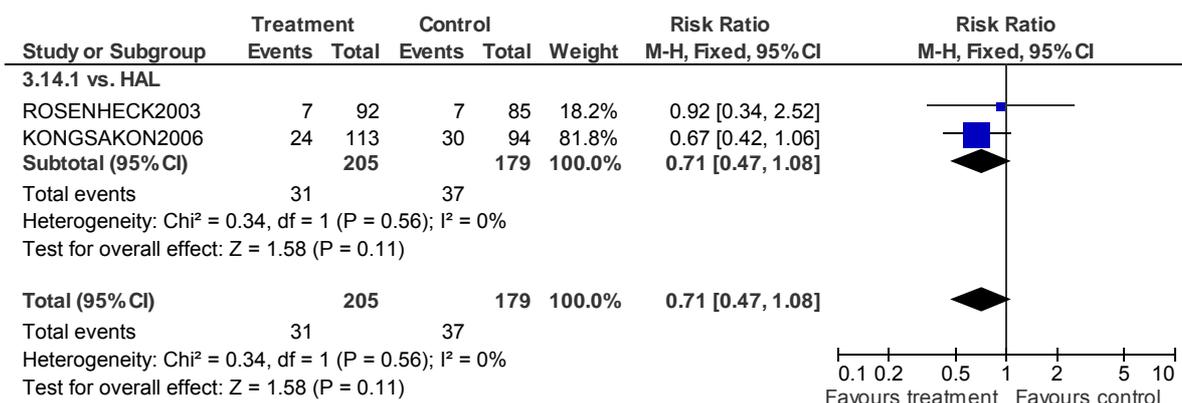


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.13 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-to-medium-term)

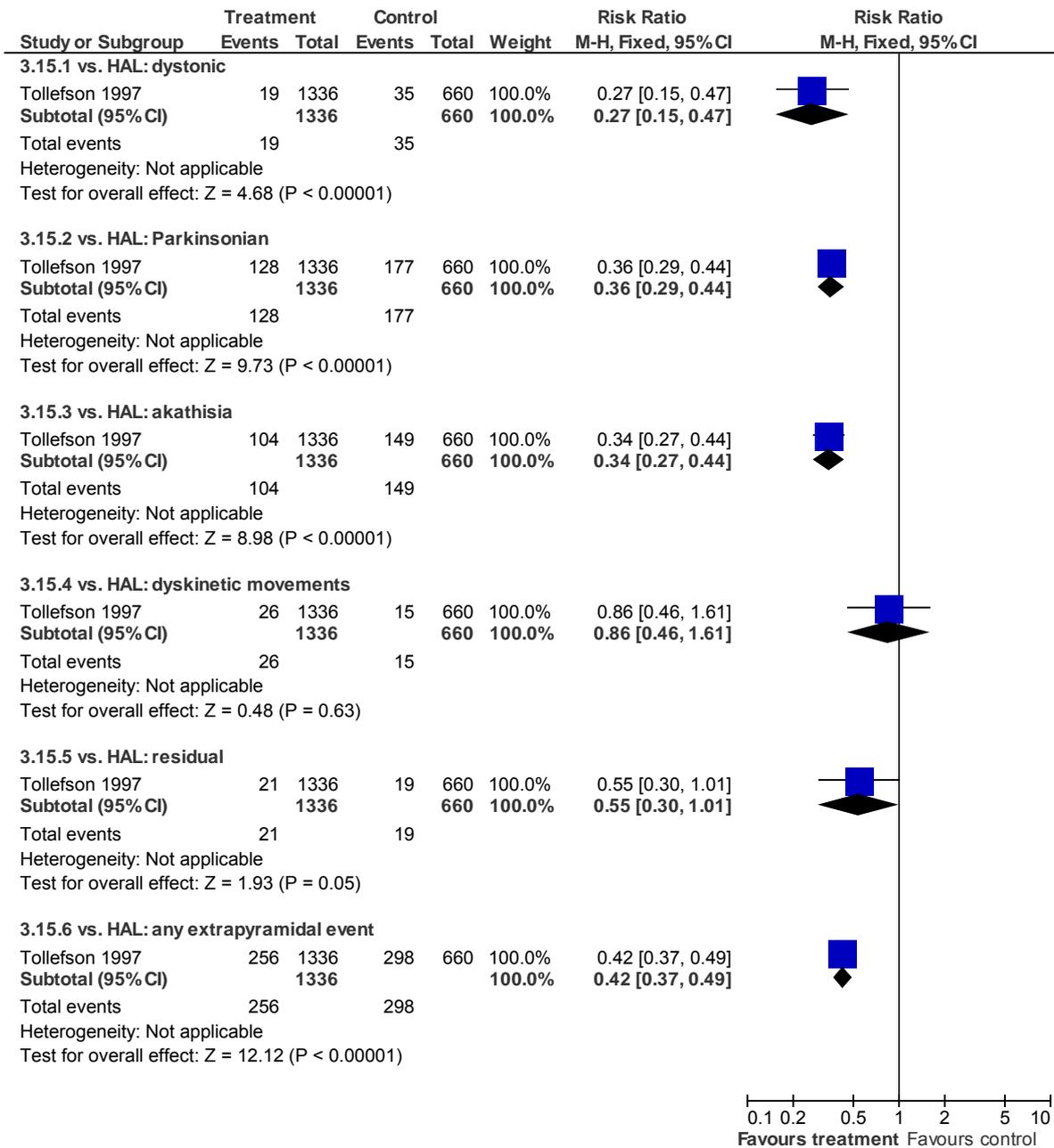


3.14 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)



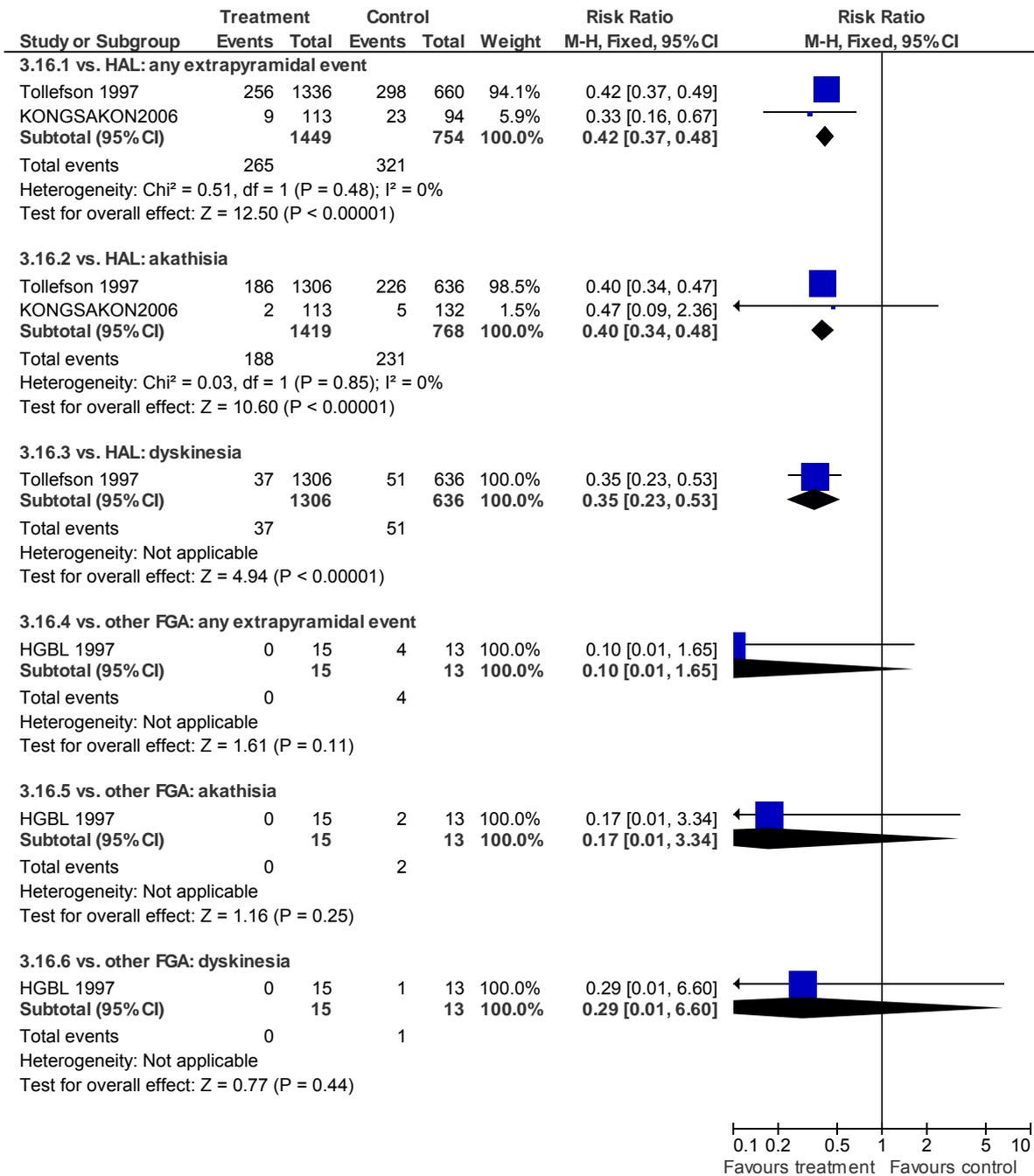
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.15 AE: 2. Neurologic SEs (treatment-emergent: COSTART) (short-term)



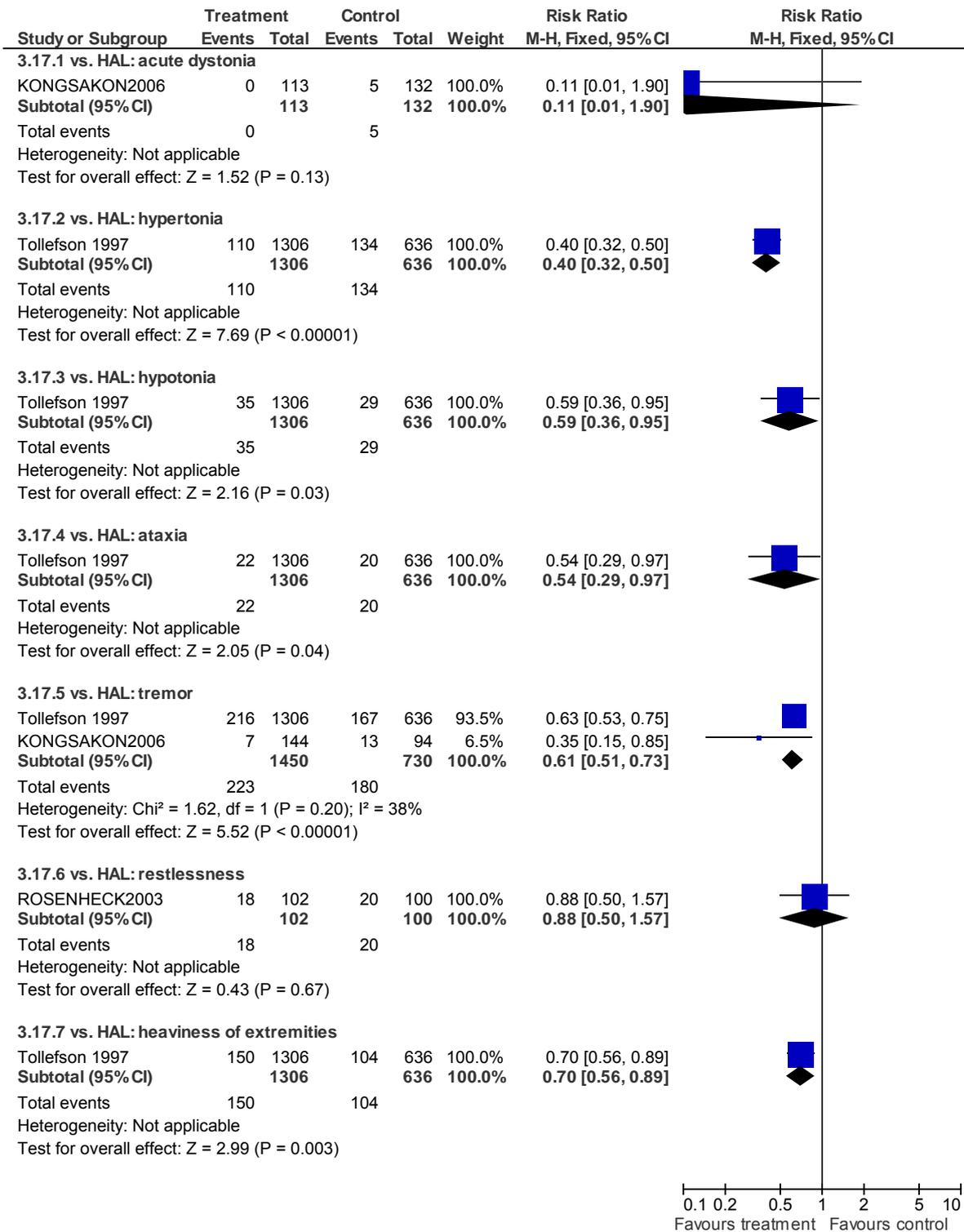
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.16 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



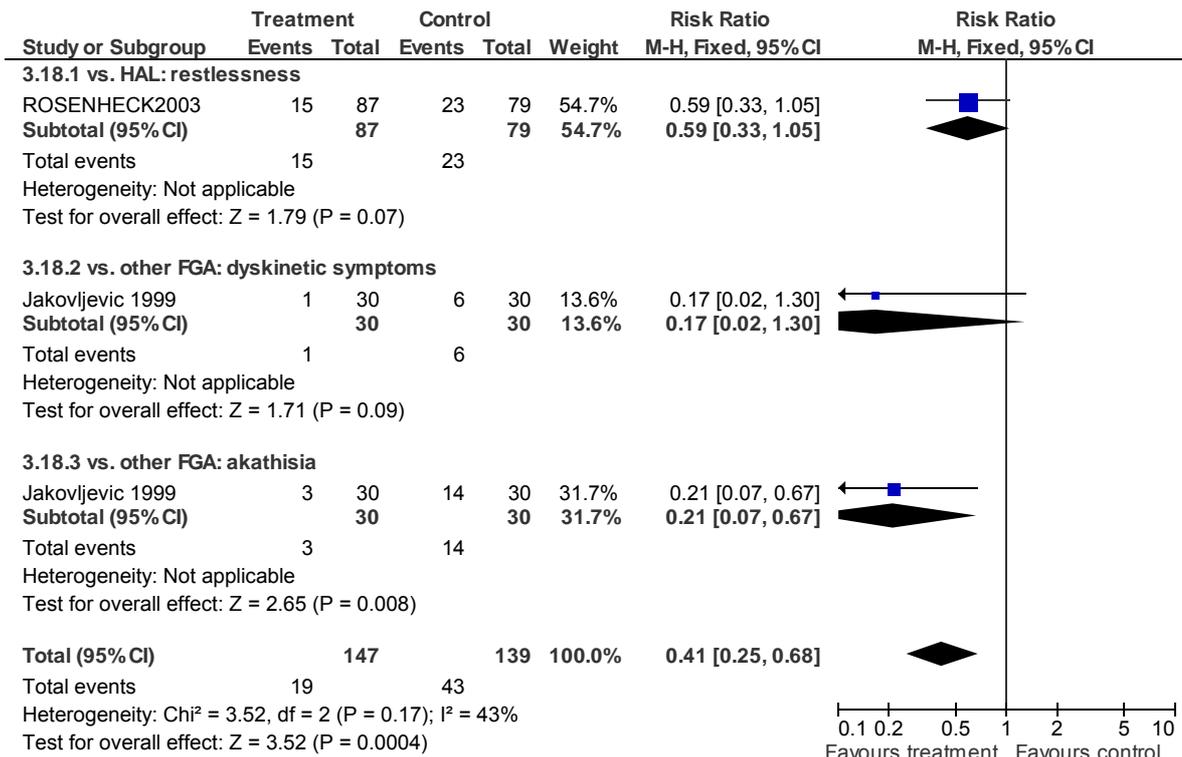
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.17 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

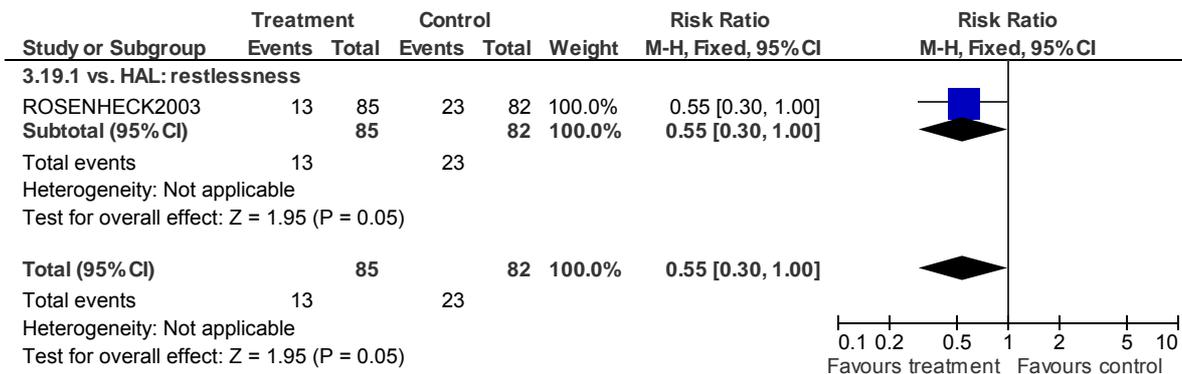


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.18 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

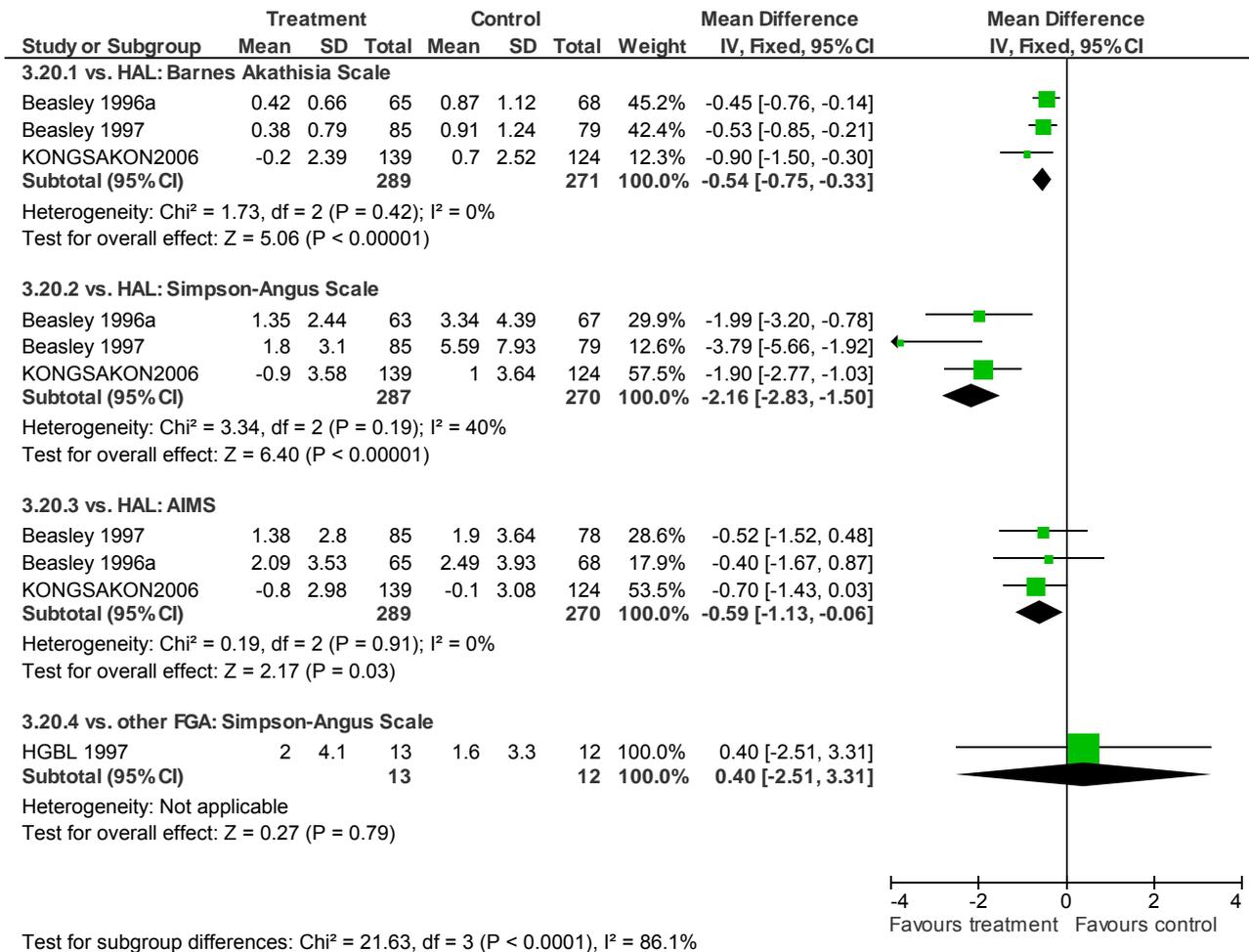


3.19 AE: 2. Neurologic SEs (treatment-emergent) (long-term)



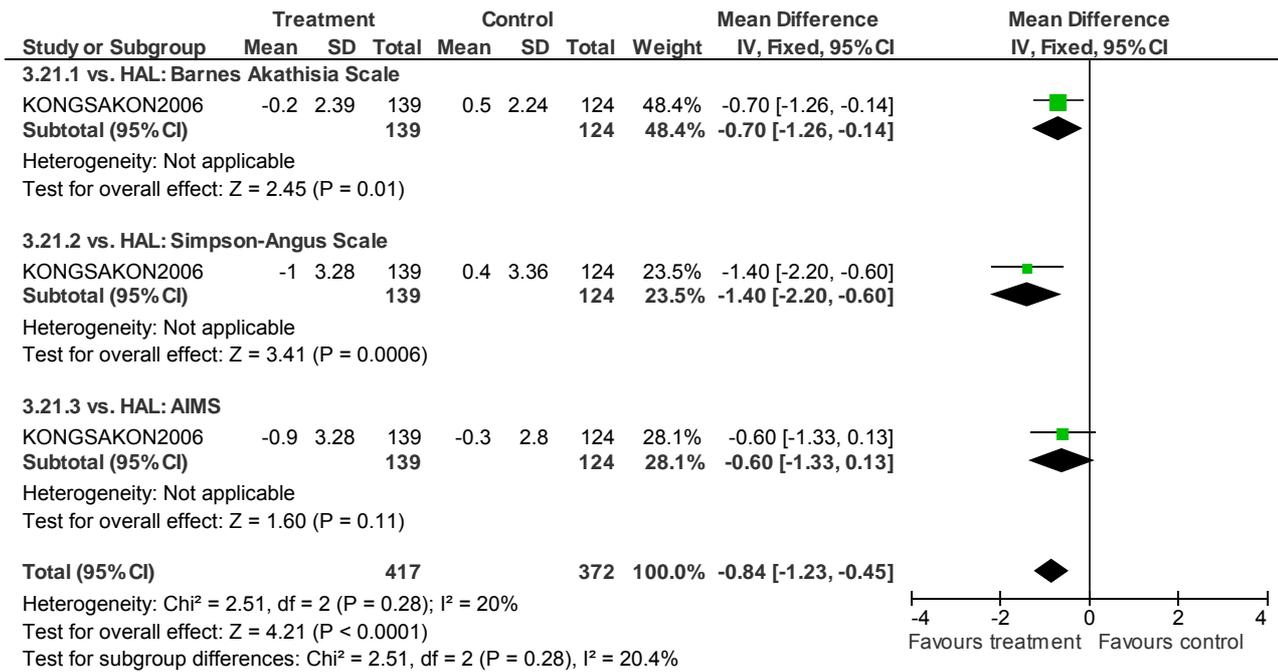
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.20 AE: 2. Neurologic SEs (treatment-emergent) (endpoint/change from baseline) (short-term)



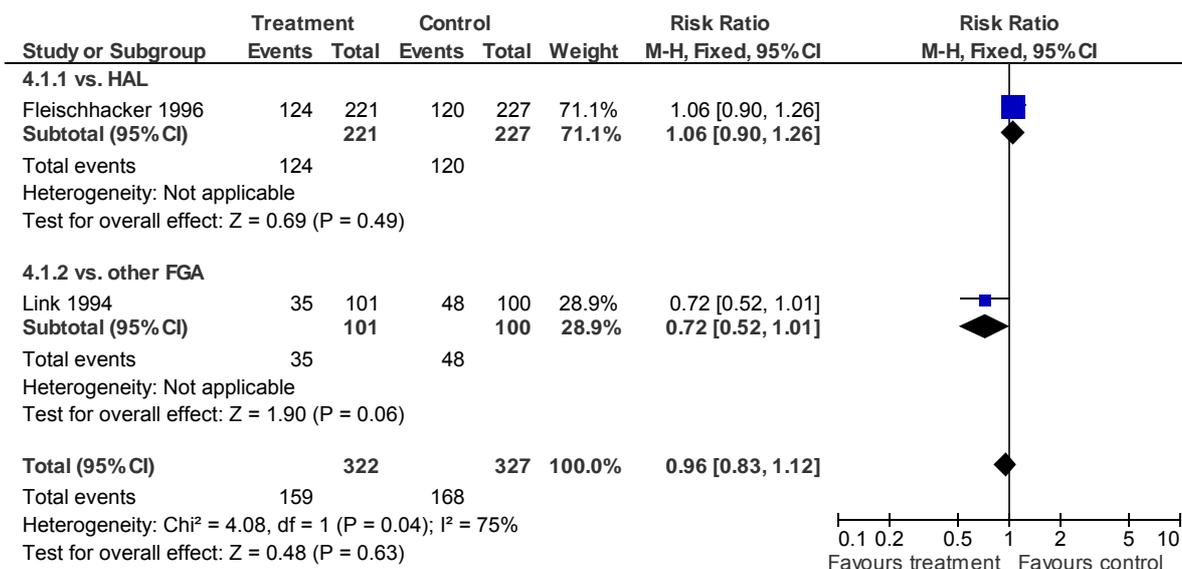
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

3.21 AE: 2. Neurologic SEs (treatment-emergent) (change from baseline) (medium-term)



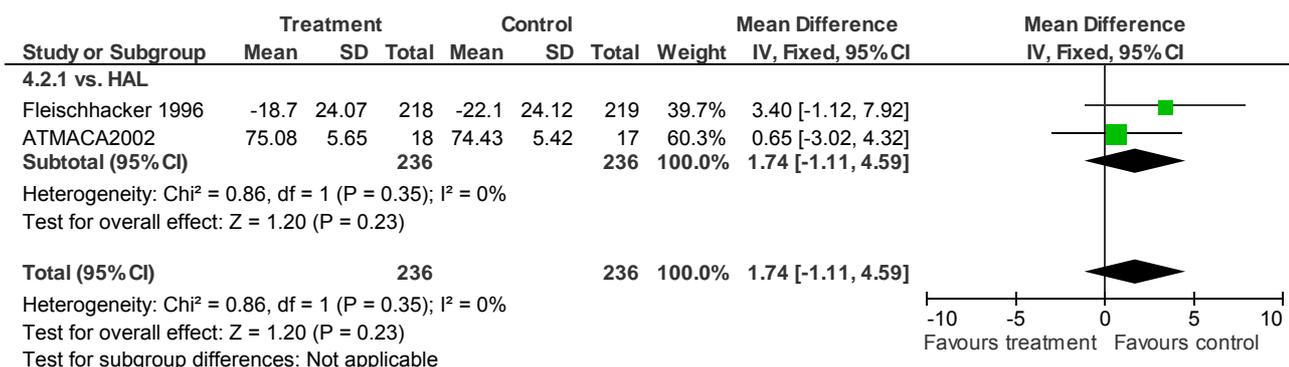
4 Quetiapine versus FGA (phase: acute treatment) (critical outcomes)

4.1 Global state: 2. Not improved to a clinically important degree (CGI) (short-term)

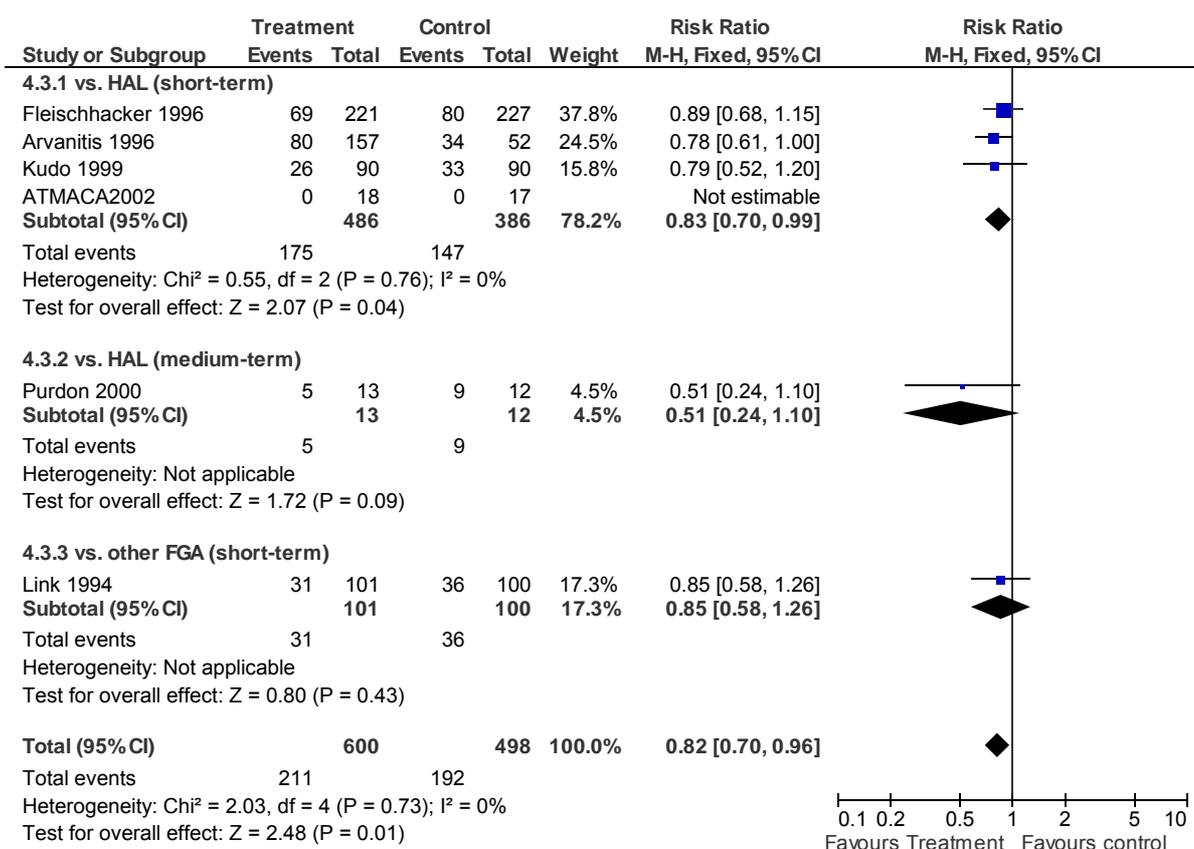


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

4.2 Mental state: 1. PANSS total (endpoint/change from baseline) (short-term)

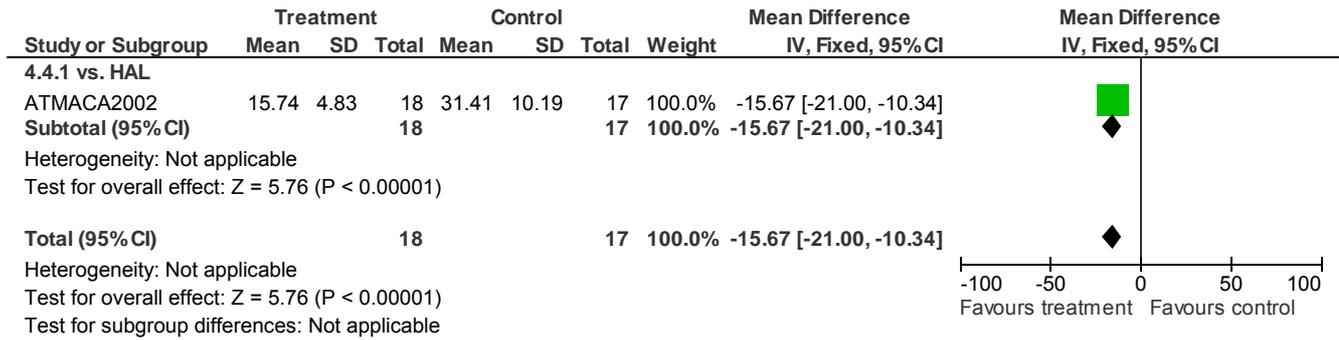


4.3 Leaving the study early: 1. Any reason (short-to-medium-term)

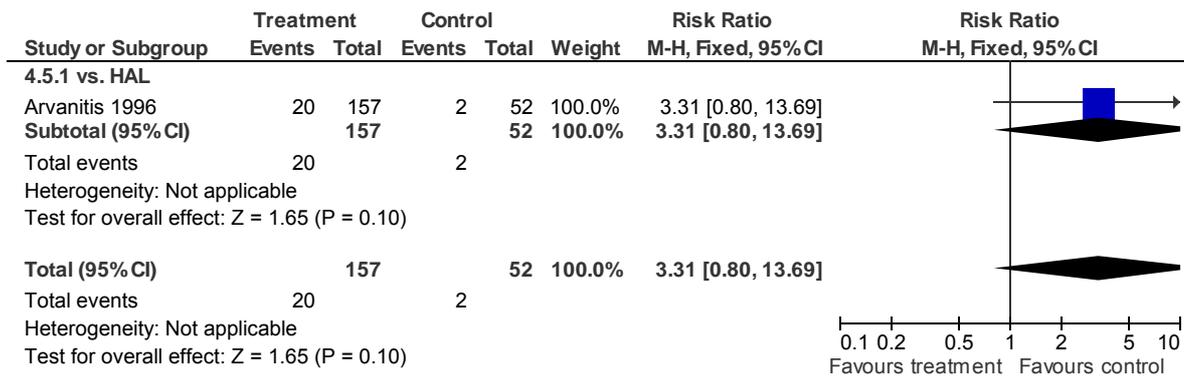


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

4.4 AE: 1. Metabolic SEs - prolactin levels (ng/mL) (short-term)

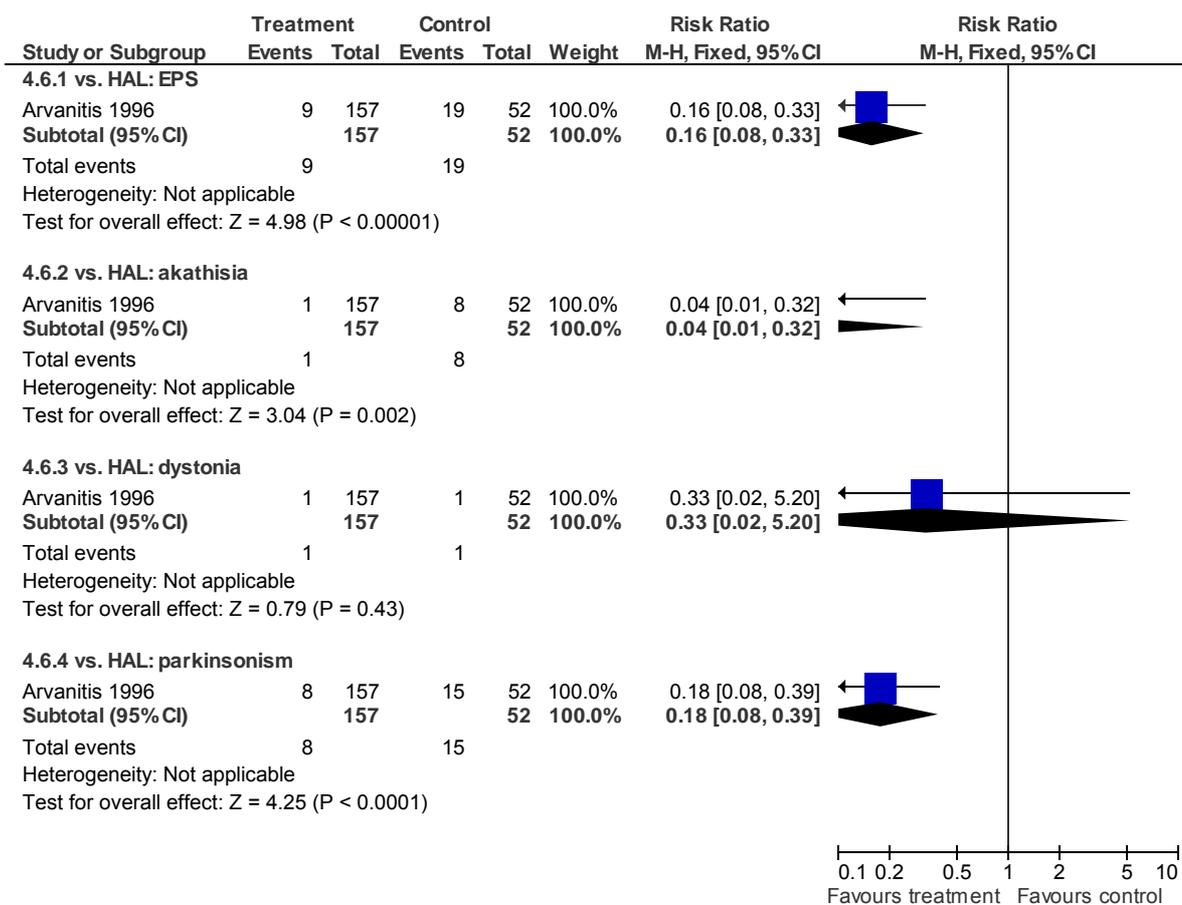


4.5 AE: 1. Metabolic SEs - weight gain (>=7% increase from baseline) (short-term)

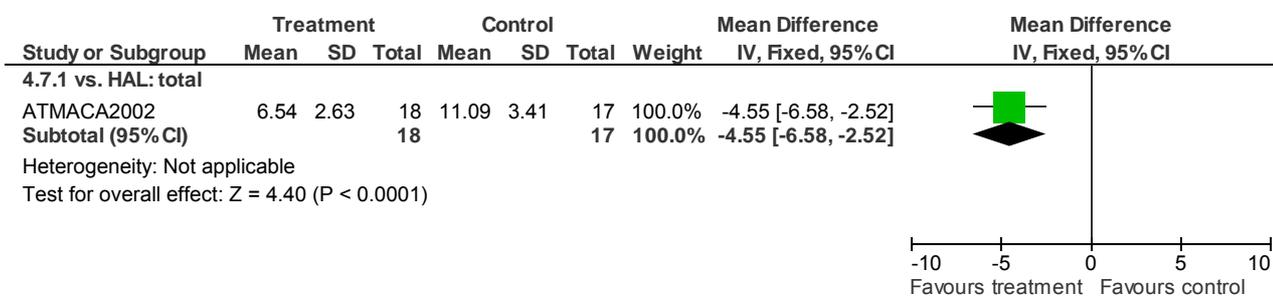


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

4.6 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



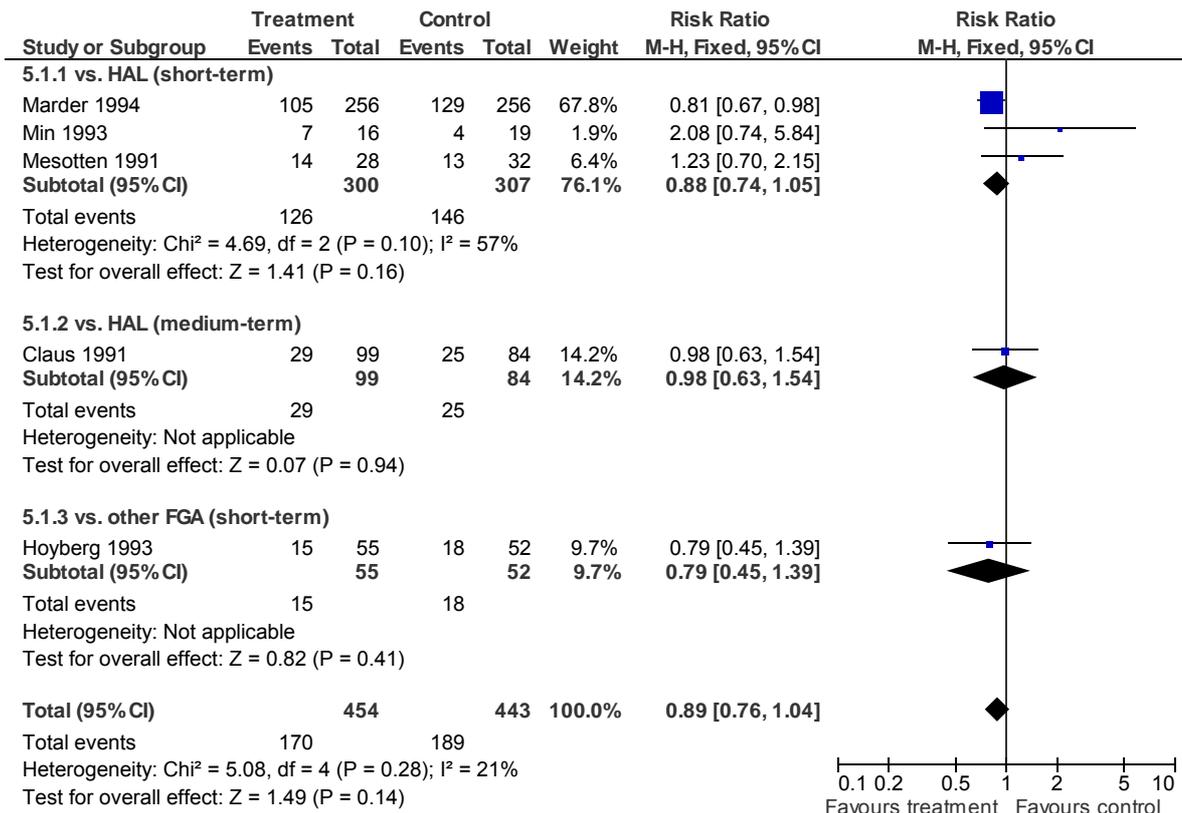
4.7 AE: 2. Neurologic SEs - change in ESRS (high score = poor) (short-term)



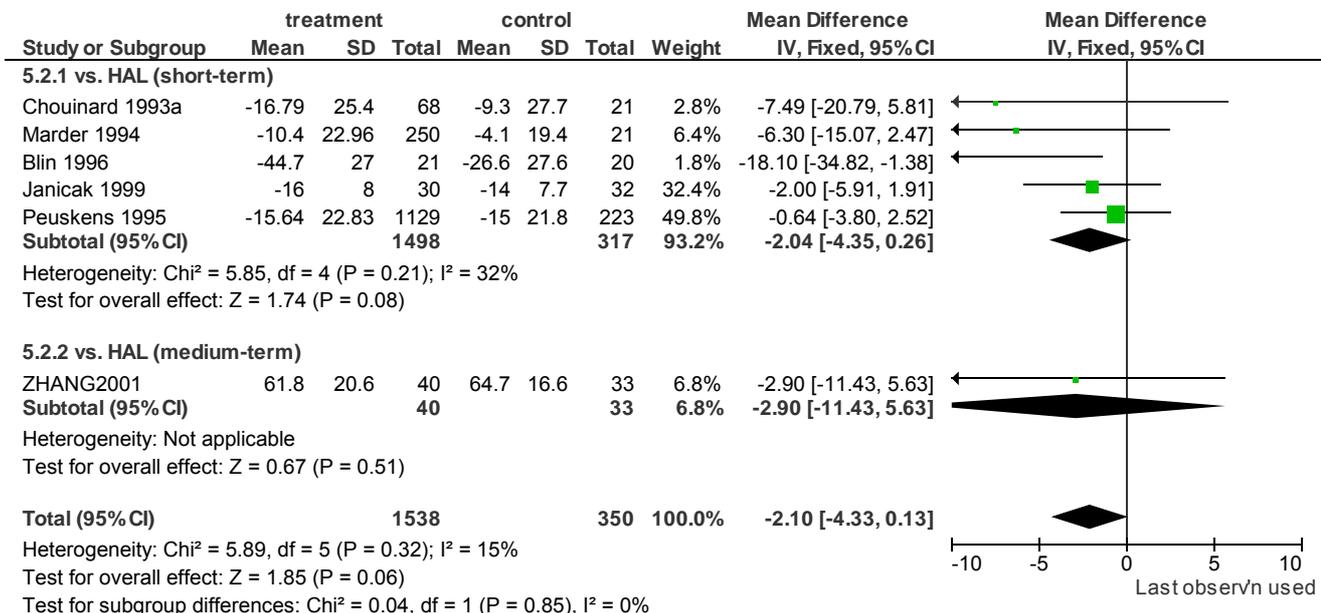
5 Risperidone versus FGA (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.1 Global state: 2. Not improved to a clinically important degree (CGI) (short-to-medium-term)

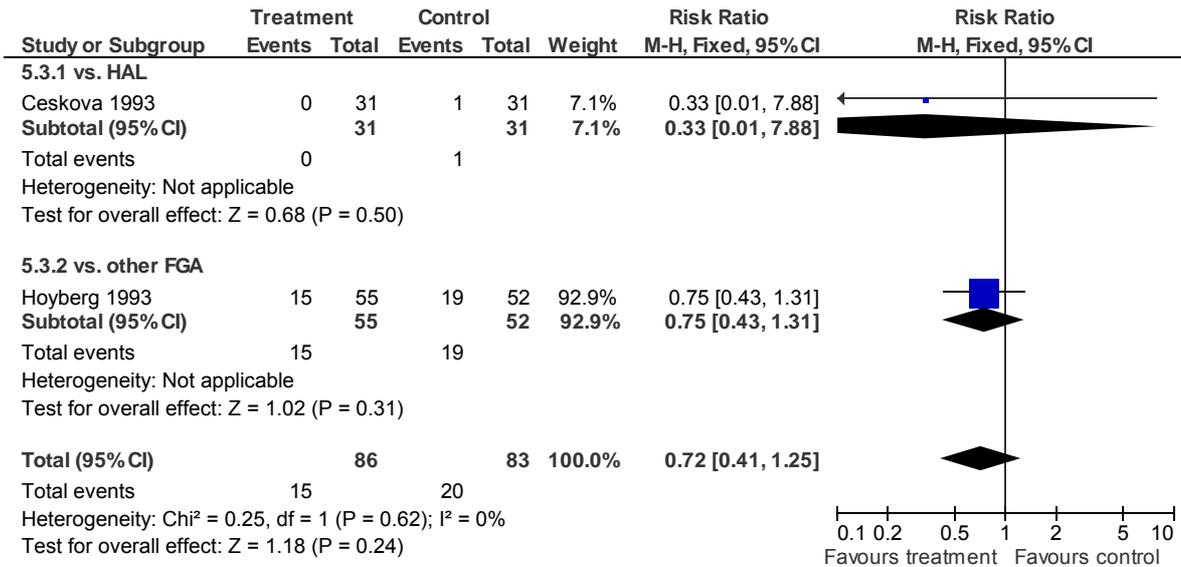


5.2 Mental state: 1. PANSS total (endpoint/change from baseline) (short-to-medium-term)



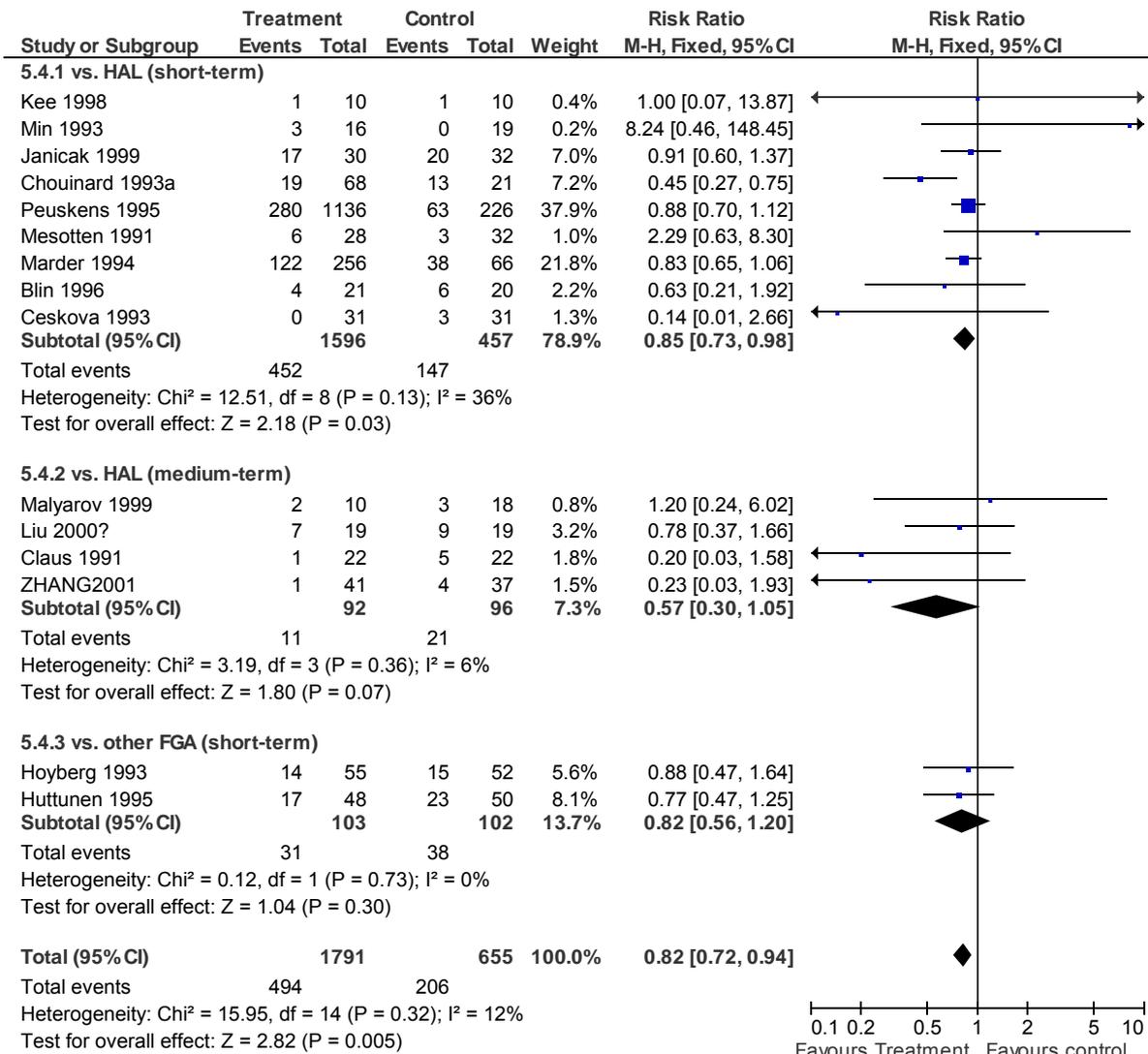
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.3 Mental state: 3. Depression (short-term)



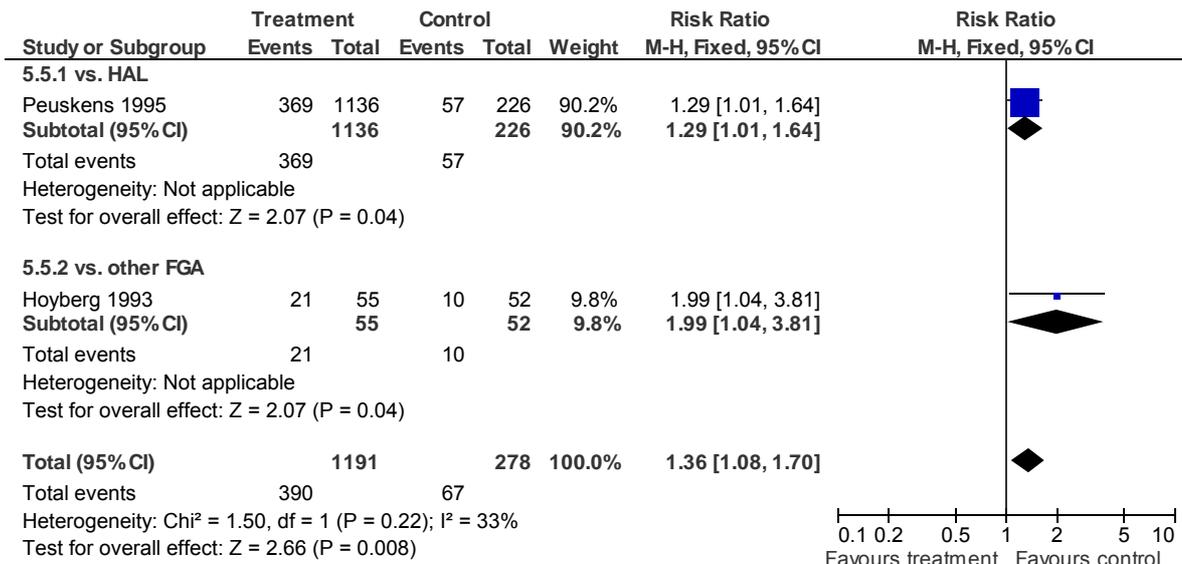
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.4 Leaving the study early: 1. Any reason (short-to-medium-term)

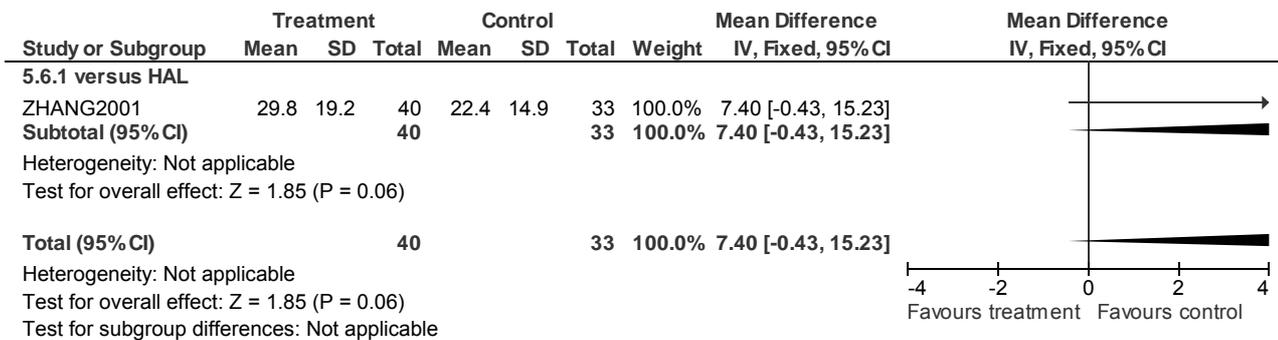


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.5 AE: 1. Metabolic SEs - weight gain (short-term)

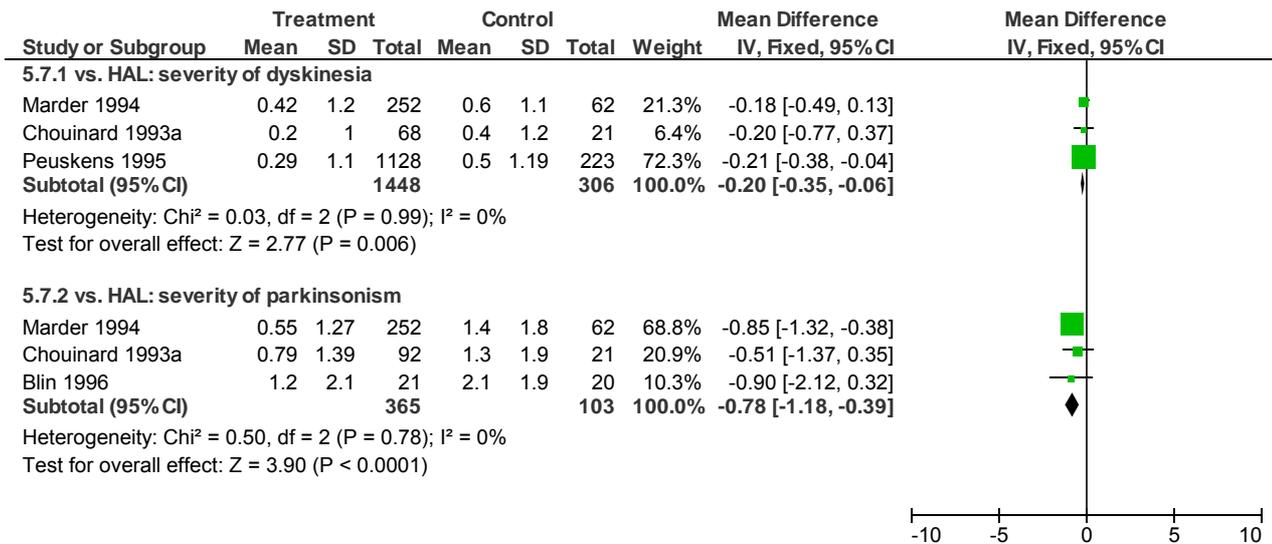


5.6 AE: 1. Metabolic side-effect - Serum Prolactin (endpt mean) (medium-term)



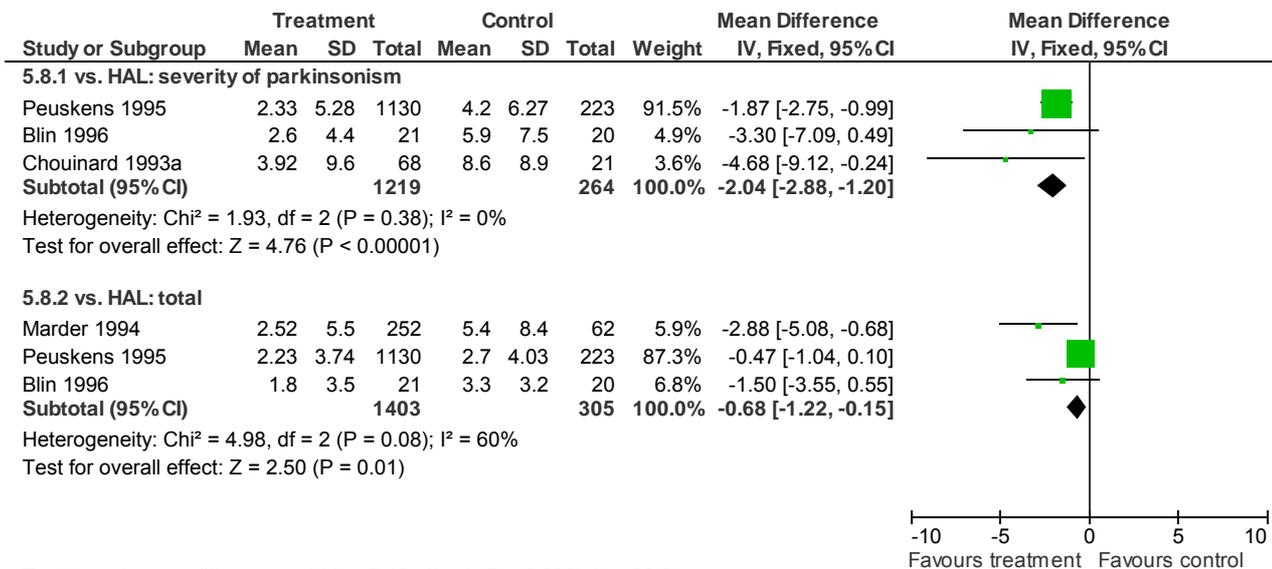
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.7 AE: 2. Neurologic SEs - change in CGI (high score = poor) (short-term)



Test for subgroup differences: Chi² = 7.39, df = 1 (P = 0.007), I² = 86.5%

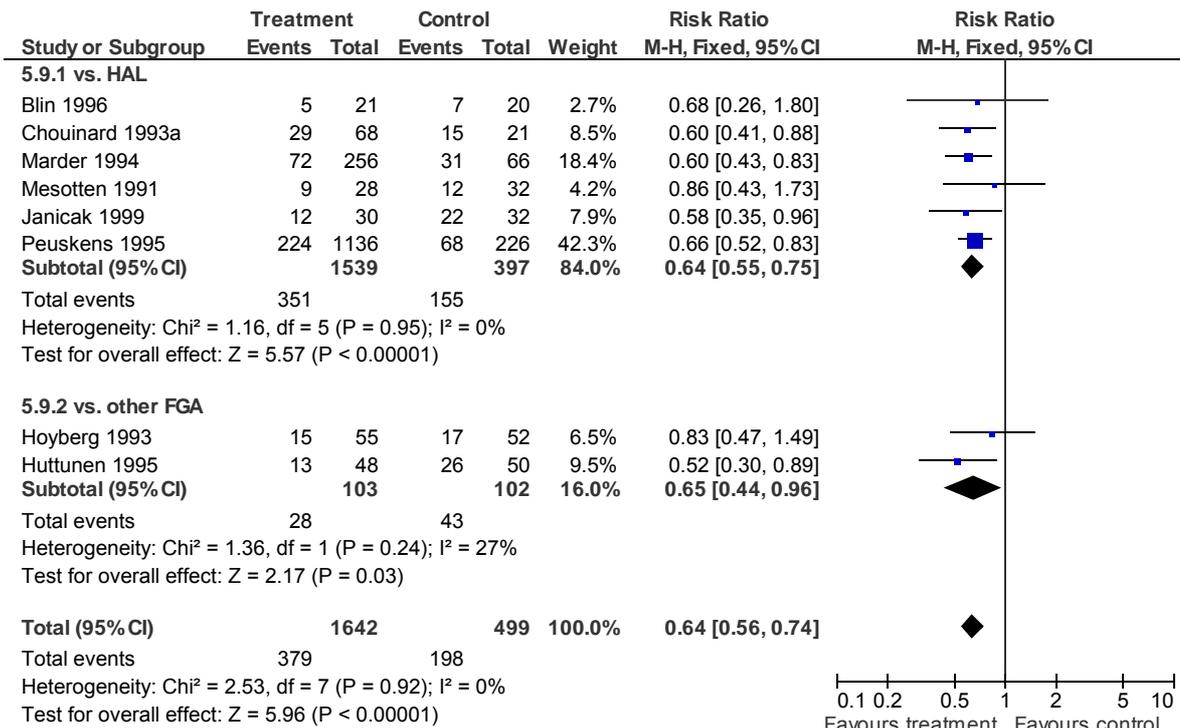
5.8 AE: 2. Neurologic SEs - change in ESRS (high score = poor) (short-term)



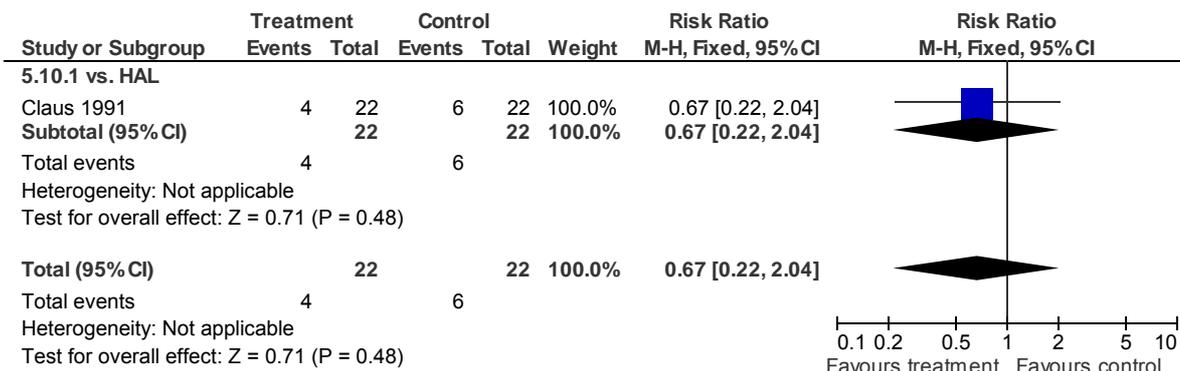
Test for subgroup differences: Chi² = 7.15, df = 1 (P = 0.008), I² = 86.0%

Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.9 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

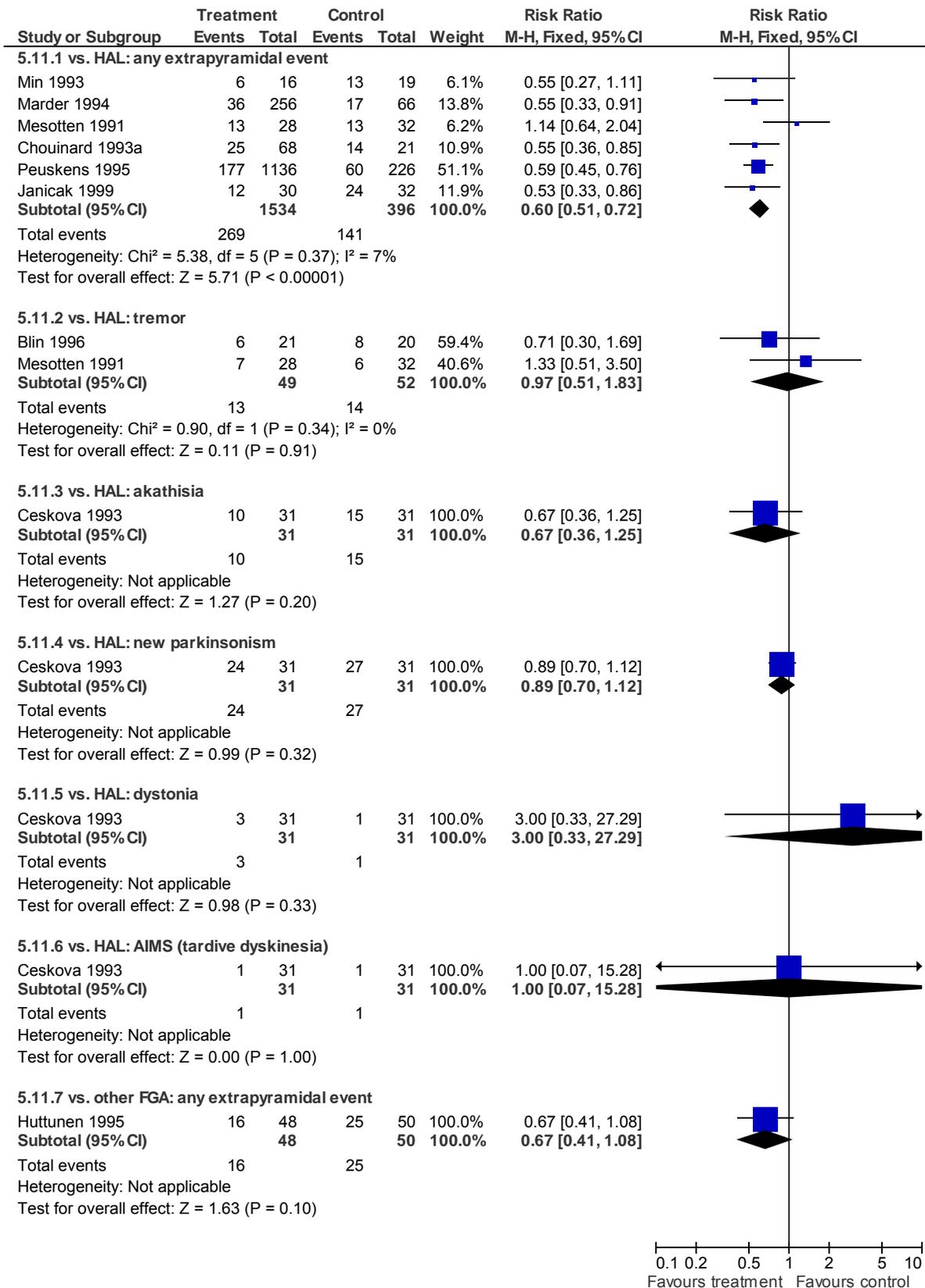


5.10 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)



Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

5.11 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

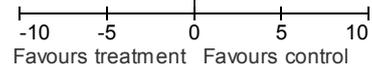


6 Sertindole versus HAL (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.1 Global state: 1. CGI-Severity endpoint score (short-term)

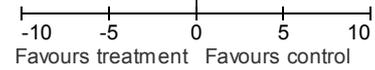
| Study or Subgroup | Treatment | | | Control | | | Weight | Mean Difference IV, Fixed, 95% CI | Mean Difference IV, Fixed, 95% CI |
|---|-----------|----|------------|---------|----|------------|--------|--------------------------------------|--------------------------------------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| 6.1.1 sertindole 8mg | | | | | | | | | |
| Hale 2000 | 3.1 | 0 | 120 | 3 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 120 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.1.2 sertindole 16mg | | | | | | | | | |
| Hale 2000 | 3 | 0 | 127 | 3 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 127 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.1.3 sertindole 20mg | | | | | | | | | |
| Hale 2000 | 3.1 | 0 | 128 | 3 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 128 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.1.4 sertindole 24mg | | | | | | | | | |
| Hale 2000 | 3 | 0 | 117 | 3 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 117 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| Test for subgroup differences: Not applicable | | | | | | | | | |



Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

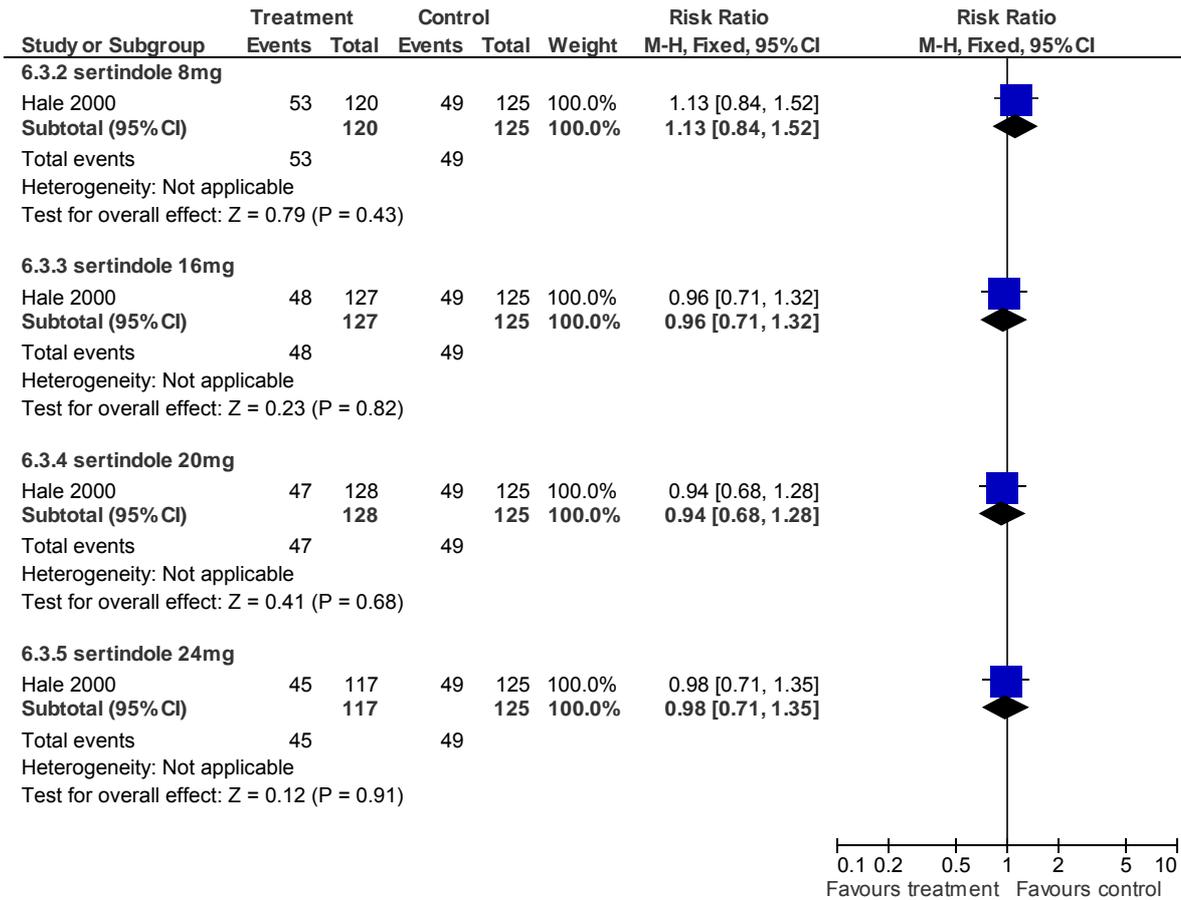
6.2 Mental state: 1. PANSS total endpoint score (short-term)

| Study or Subgroup | Treatment | | | Control | | | Weight | Mean Difference IV, Fixed, 95% CI | Mean Difference IV, Fixed, 95% CI |
|---|-----------|----|------------|---------|----|------------|--------|--------------------------------------|--------------------------------------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| 6.2.1 sertindole 8mg | | | | | | | | | |
| Hale 2000 | 51.5 | 0 | 120 | 46.6 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 120 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.2.2 sertindole 16mg | | | | | | | | | |
| Hale 2000 | 48.3 | 0 | 127 | 46.6 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 127 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.2.3 sertindole 20mg | | | | | | | | | |
| Hale 2000 | 50 | 0 | 128 | 46.6 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 128 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| 6.2.4 sertindole 24mg | | | | | | | | | |
| Hale 2000 | 47.9 | 0 | 117 | 46.6 | 0 | 125 | | Not estimable | |
| Subtotal (95% CI) | | | 117 | | | 125 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| Test for subgroup differences: Not applicable | | | | | | | | | |



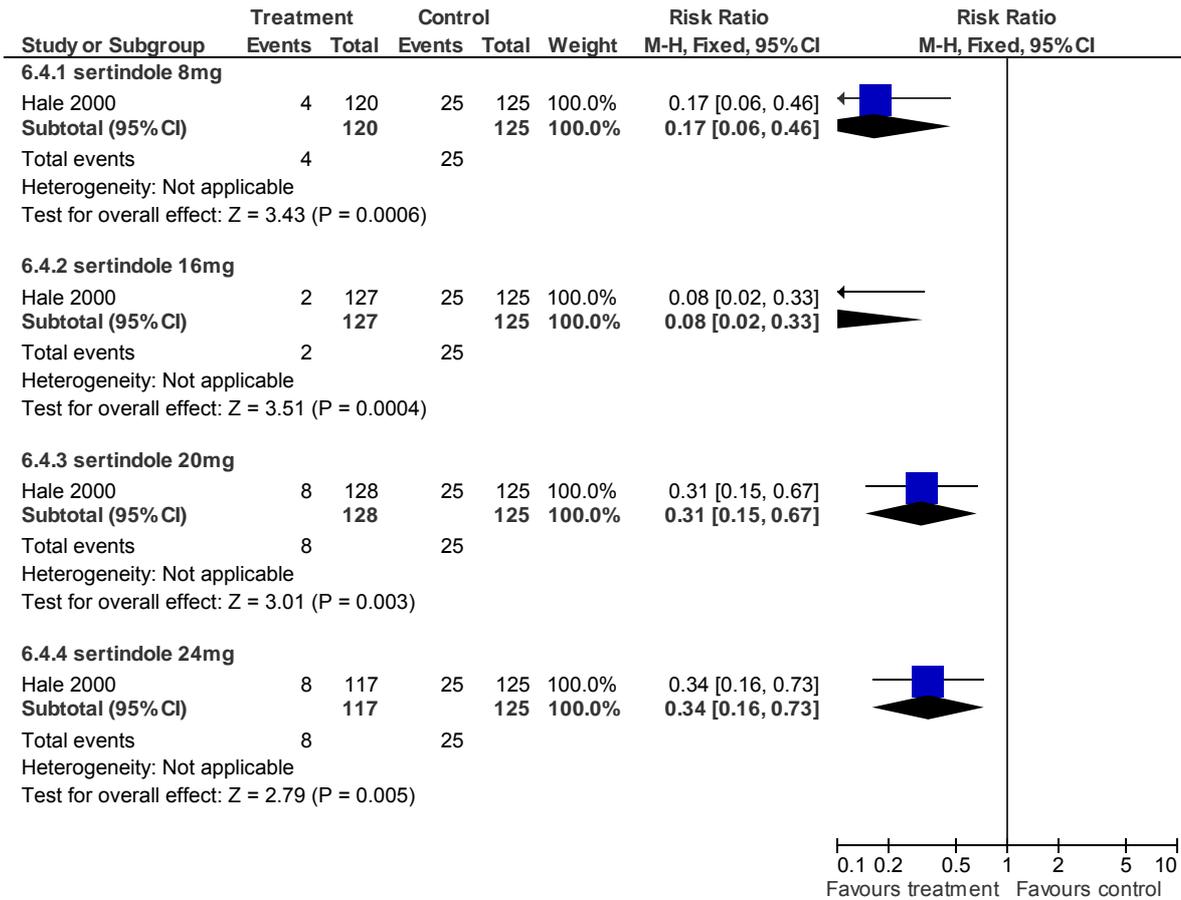
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.3 Leaving study early: 1. Any reason (short-term)



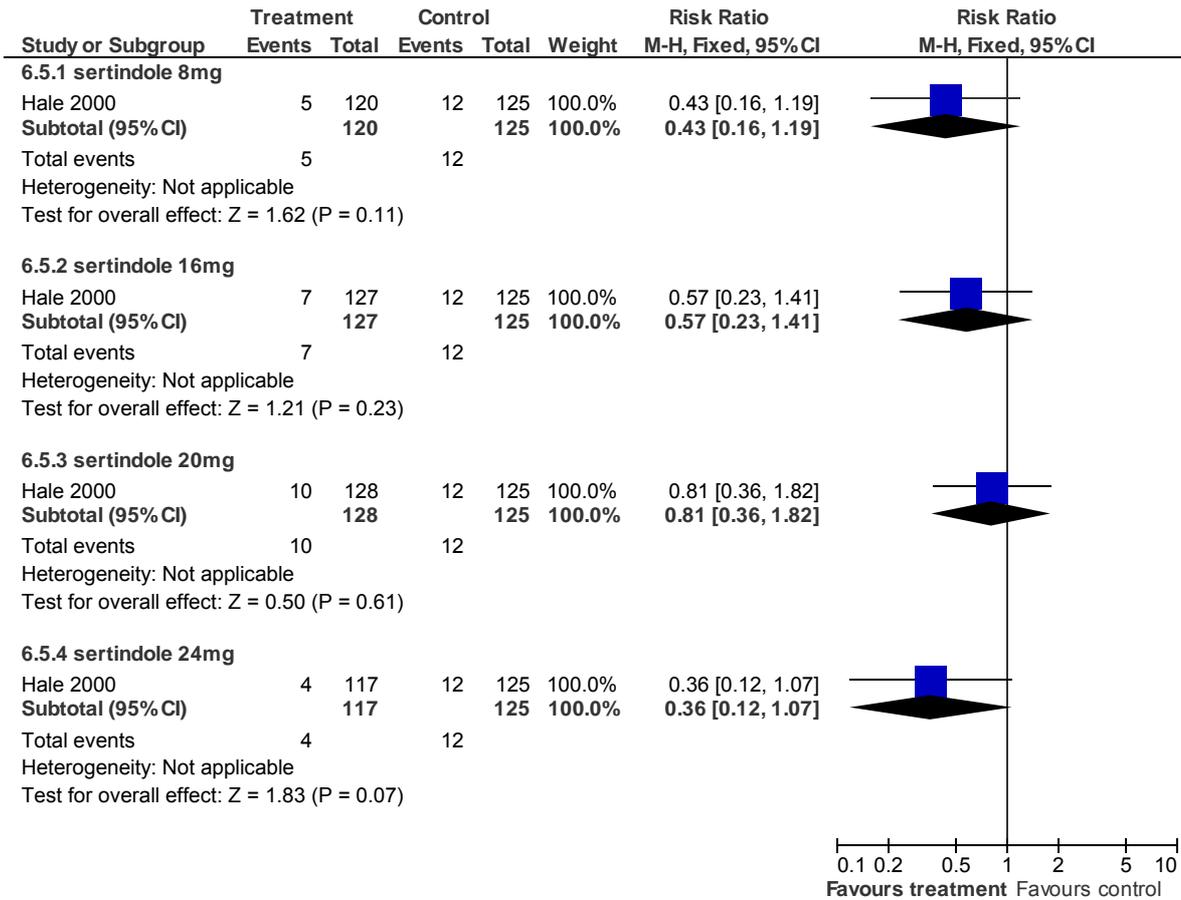
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.4 AE: 2. Neurologic SEs - Akathisia (short-term)



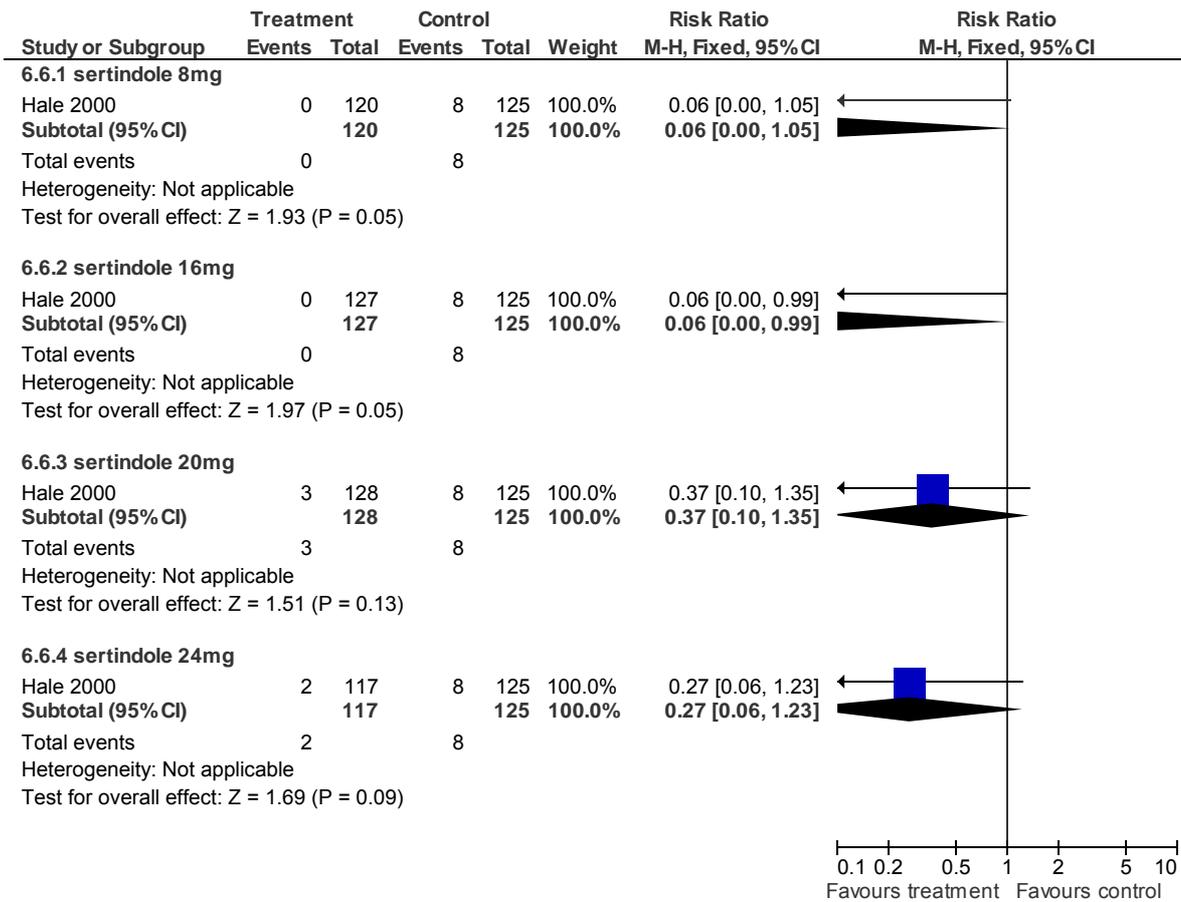
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.5 AE: 2. Neurologic SEs - Asthenia (short-term)



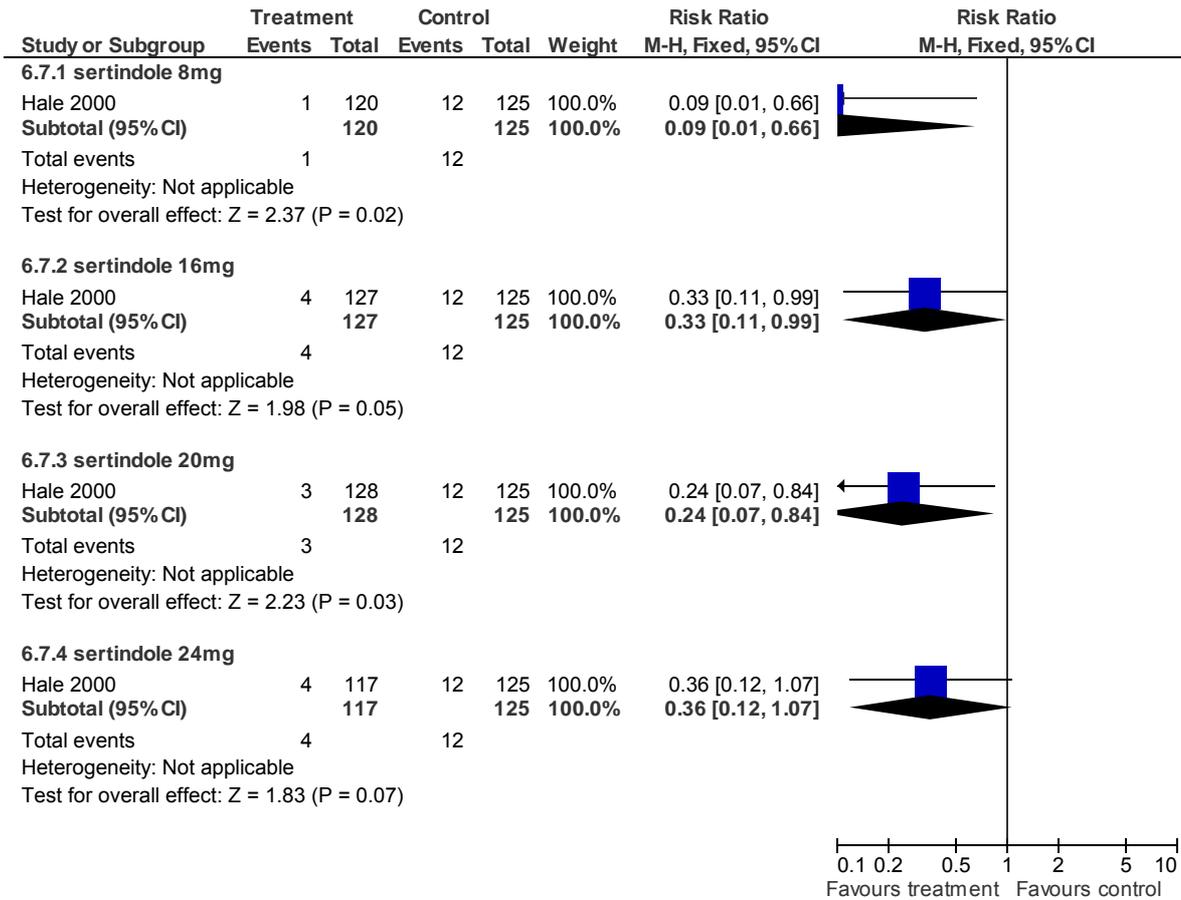
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.6 AE: 2. Neurologic SEs - Dystonia (short-term)



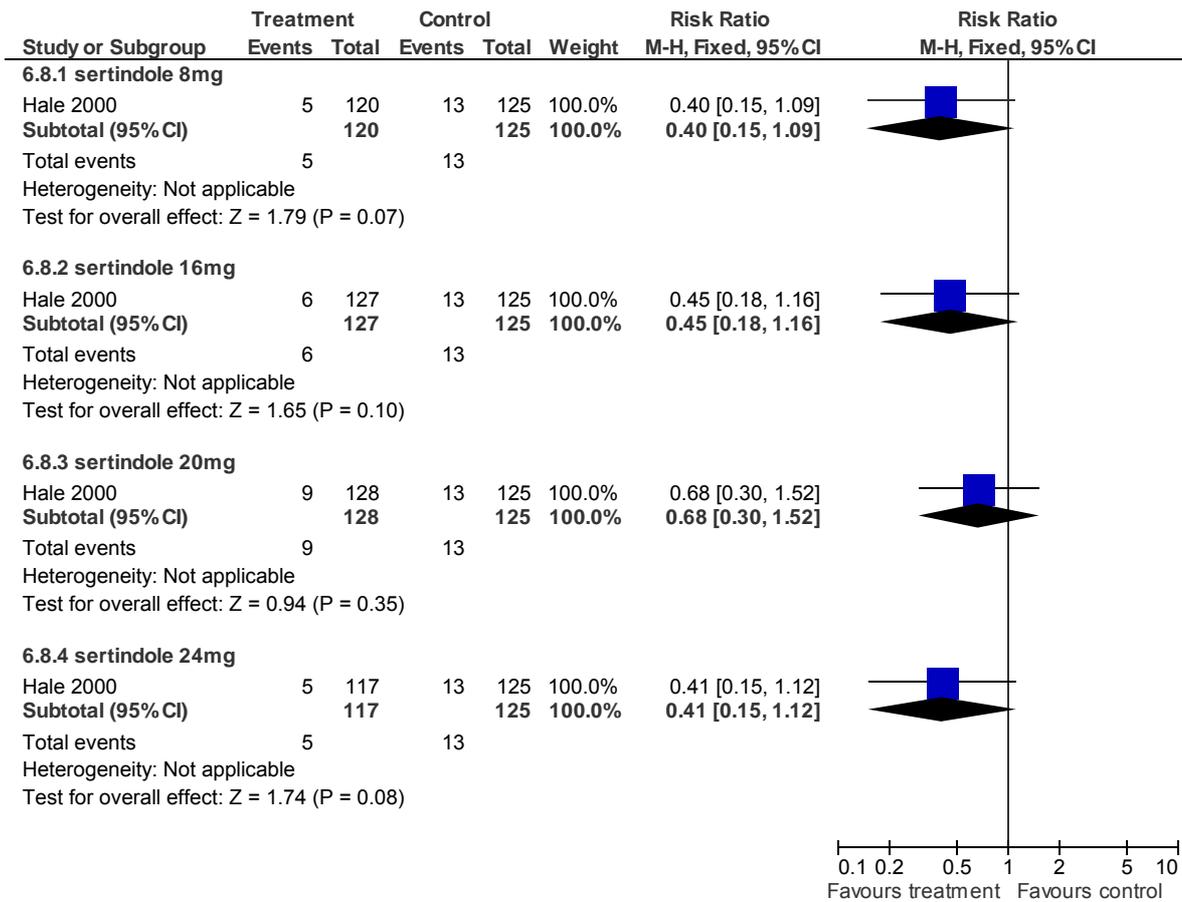
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.7 AE: 2. Neurologic SEs - Extrapyrimalidal syndrome (short-term)



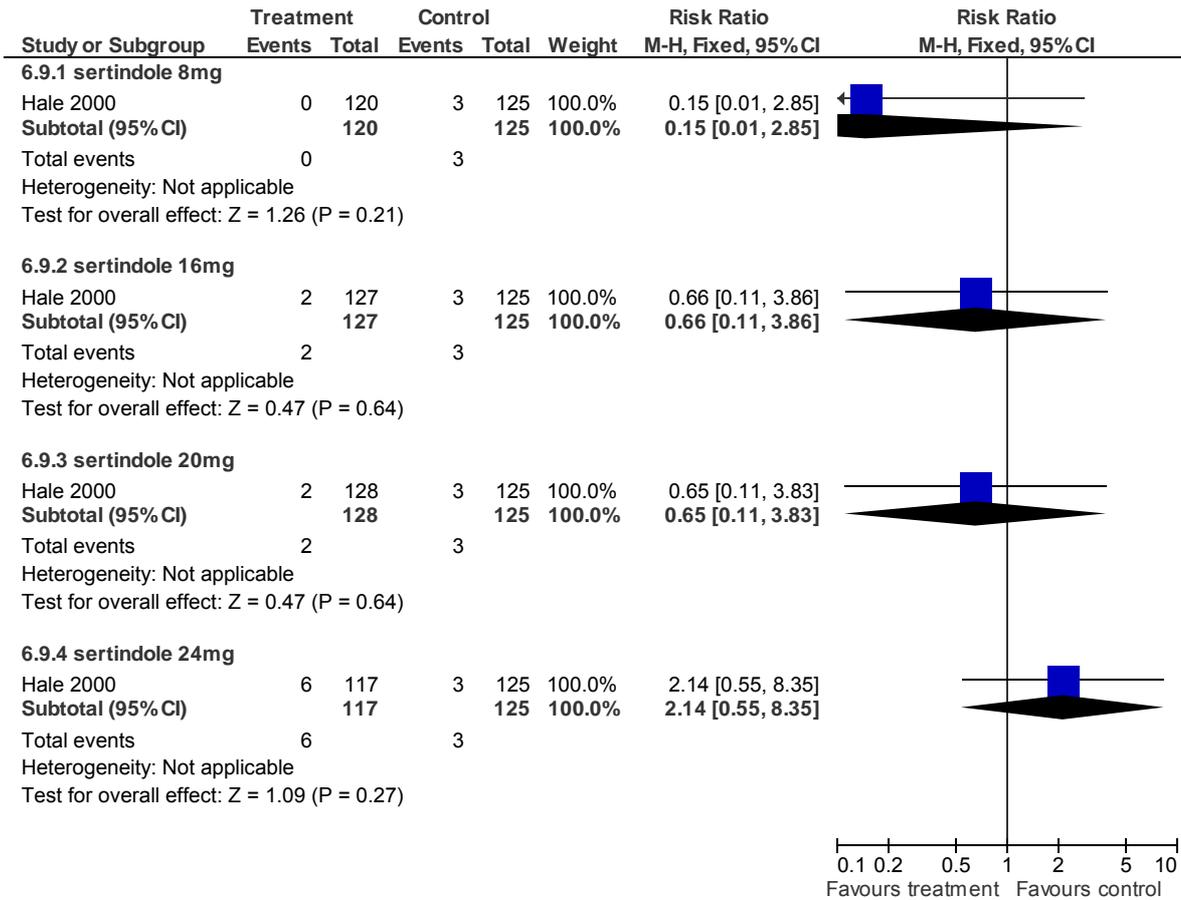
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.8 AE: 2. Neurologic SEs - Hypertonia (short-term)



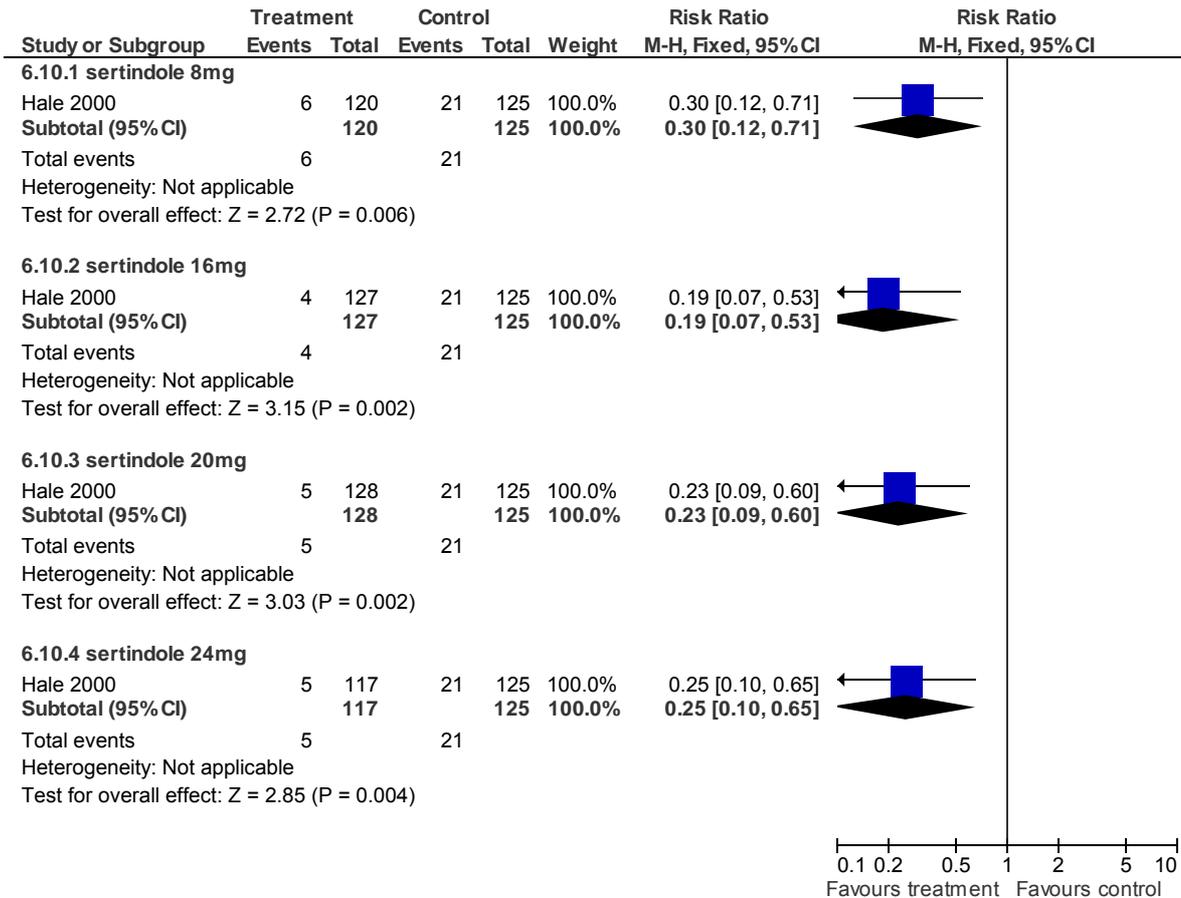
Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

6.9 AE: 2. Neurologic SEs - Hypokinesia (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

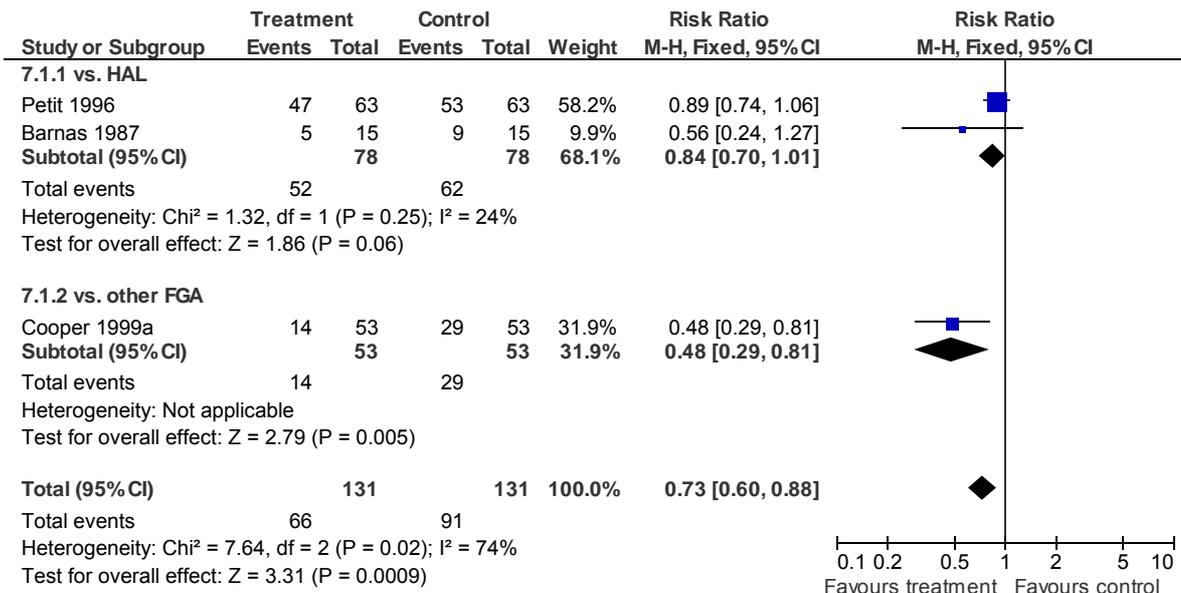
6.10 AE: 2. Neurologic SEs - Tremor (short-term)



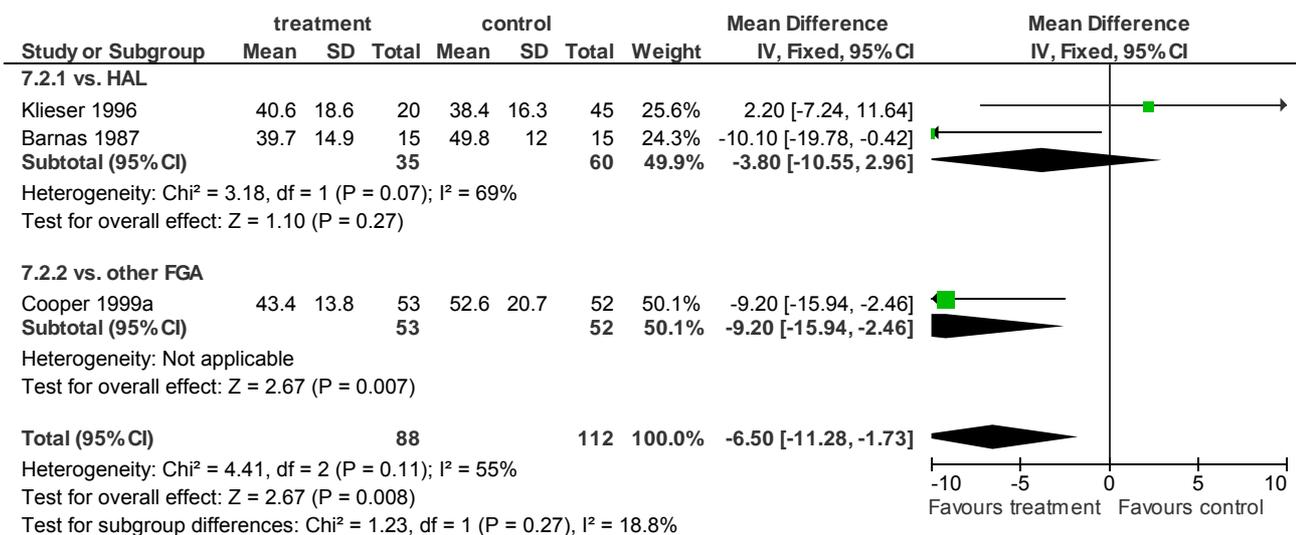
7 Zotepine versus FGA (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

7.1 Global state: 2. Not improved to a clinically important degree (CGI?) (short-term)

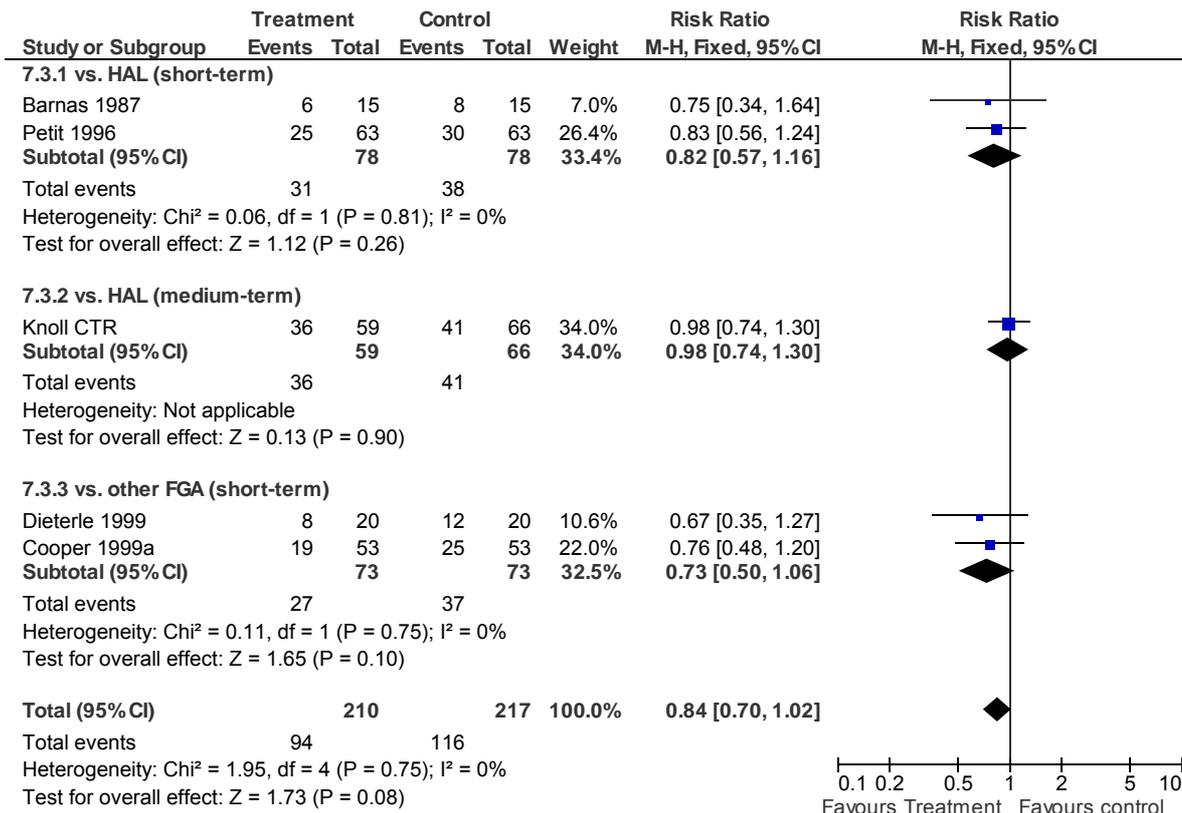


7.2 Mental state: 1. BPRS total (endpoint, high=poor) (short-term)

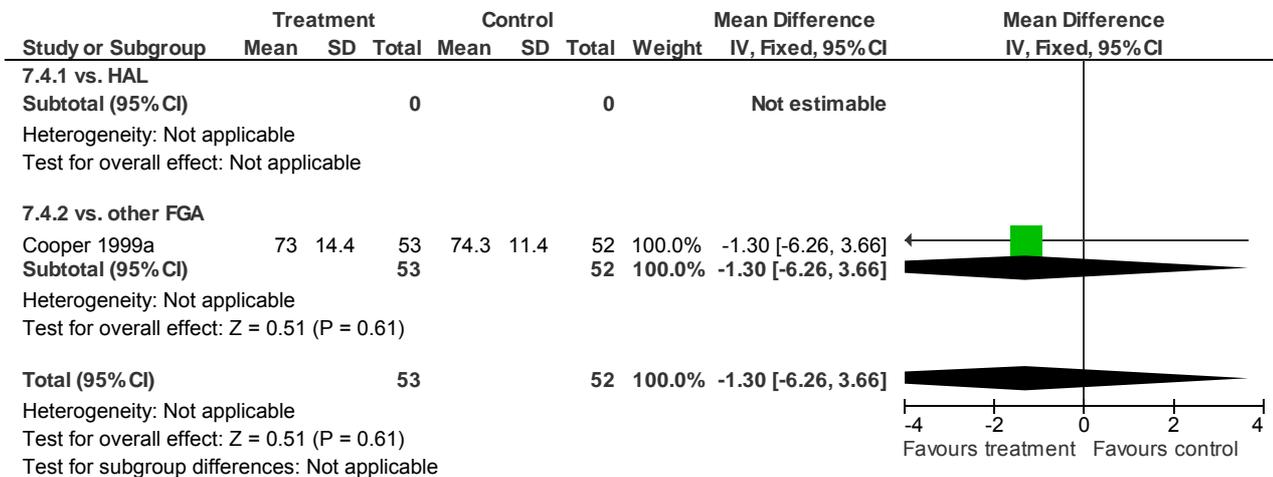


Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

7.3 Leaving the study early: 1. Any reason (short-to-medium-term)



7.4 AE: 1. Metabolic SEs - weight change (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

7.5 AE: 1. Metabolic SEs - weight change from baseline (kg) (medium-term)

| Study or Subgroup | Treatment | | | Control | | | Weight | Mean Difference IV, Fixed, 95% CI | Mean Difference IV, Fixed, 95% CI |
|---|-----------|----|-----------|---------|----|-----------|--------|--------------------------------------|--------------------------------------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| 7.5.1 vs. HAL | | | | | | | | | |
| Knoll CTR | 2.5 | 0 | 59 | 0.5 | 0 | 66 | | Not estimable | |
| Subtotal (95% CI) | | | 59 | | | 66 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| Total (95% CI) | | | 59 | | | 66 | | Not estimable | |
| Heterogeneity: Not applicable | | | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | | | |
| Test for subgroup differences: Not applicable | | | | | | | | | |

7.6 AE: 1. Metabolic SEs - treatment emergent (short-term)

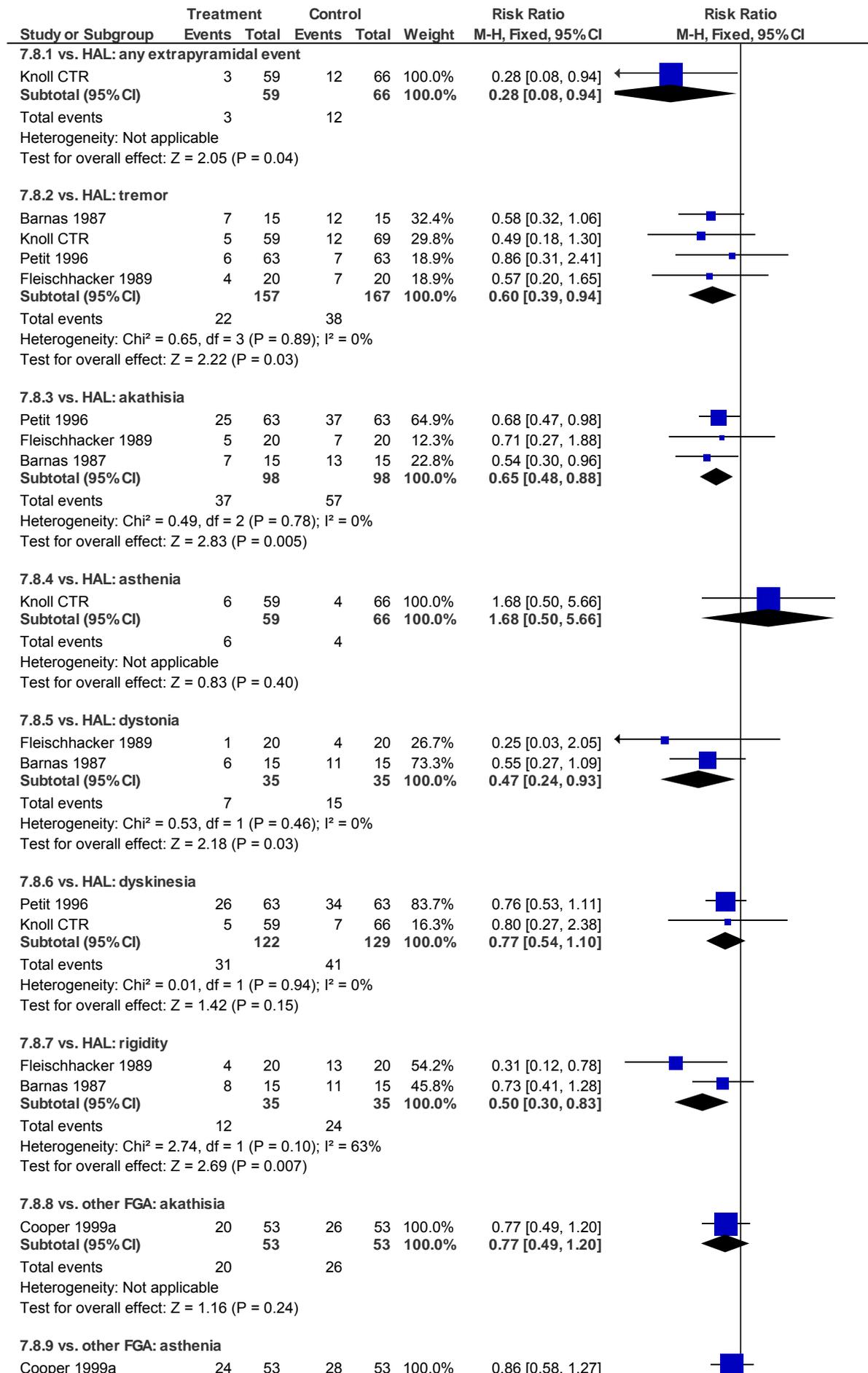
| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio M-H, Fixed, 95% CI | Risk Ratio M-H, Fixed, 95% CI |
|---|-----------|------------|---------|------------|---------------|----------------------------------|----------------------------------|
| | Events | Total | Events | Total | | | |
| 7.6.1 vs. HAL: liver function abnormalities | | | | | | | |
| Fleischhacker 1989 | 12 | 20 | 6 | 20 | 8.3% | 2.00 [0.94, 4.27] | |
| Petit 1996 | 30 | 63 | 32 | 63 | 44.4% | 0.94 [0.66, 1.34] | |
| Barnas 1987 | 12 | 15 | 8 | 15 | 11.1% | 1.50 [0.88, 2.57] | |
| Subtotal (95% CI) | | 98 | | 98 | 63.9% | 1.17 [0.89, 1.55] | |
| Total events | 54 | | 46 | | | | |
| Heterogeneity: Chi ² = 4.23, df = 2 (P = 0.12); I ² = 53% | | | | | | | |
| Test for overall effect: Z = 1.14 (P = 0.26) | | | | | | | |
| 7.6.2 vs. other FGA: liver function abnormalities | | | | | | | |
| Cooper 1999a | 22 | 53 | 26 | 53 | 36.1% | 0.85 [0.56, 1.29] | |
| Subtotal (95% CI) | | 53 | | 53 | 36.1% | 0.85 [0.56, 1.29] | |
| Total events | 22 | | 26 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Z = 0.78 (P = 0.44) | | | | | | | |
| Total (95% CI) | | 151 | | 151 | 100.0% | 1.06 [0.84, 1.33] | |
| Total events | 76 | | 72 | | | | |
| Heterogeneity: Chi ² = 5.86, df = 3 (P = 0.12); I ² = 49% | | | | | | | |
| Test for overall effect: Z = 0.46 (P = 0.65) | | | | | | | |

7.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio M-H, Fixed, 95% CI | Risk Ratio M-H, Fixed, 95% CI |
|--|-----------|-----------|---------|------------|---------------|----------------------------------|----------------------------------|
| | Events | Total | Events | Total | | | |
| 7.7.1 vs. HAL | | | | | | | |
| Petit 1996 | 42 | 63 | 62 | 63 | 68.6% | 0.68 [0.57, 0.81] | |
| Barnas 1987 | 8 | 15 | 13 | 15 | 14.4% | 0.62 [0.37, 1.03] | |
| Klieser 1996 | 6 | 20 | 25 | 45 | 17.0% | 0.54 [0.26, 1.11] | |
| Subtotal (95% CI) | | 98 | | 123 | 100.0% | 0.65 [0.54, 0.77] | |
| Total events | 56 | | 100 | | | | |
| Heterogeneity: Chi ² = 0.56, df = 2 (P = 0.76); I ² = 0% | | | | | | | |
| Test for overall effect: Z = 4.71 (P < 0.00001) | | | | | | | |
| Total (95% CI) | | 98 | | 123 | 100.0% | 0.65 [0.54, 0.77] | |
| Total events | 56 | | 100 | | | | |
| Heterogeneity: Chi ² = 0.56, df = 2 (P = 0.76); I ² = 0% | | | | | | | |
| Test for overall effect: Z = 4.71 (P < 0.00001) | | | | | | | |

Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

7.8 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus FGA)

| | | | | |
|--|----|----|--------|-------------------|
| Subtotal (95% CI) | 53 | 53 | 100.0% | 0.86 [0.58, 1.27] |
| Total events | 24 | 28 | | |
| Heterogeneity: Not applicable | | | | |
| Test for overall effect: $Z = 0.77$ ($P = 0.44$) | | | | |

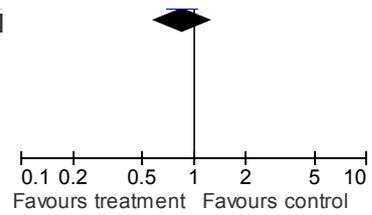


Table 3: Studies included in the acute treatment review (SGA versus SGA)

| Treatment | versus Comparator | | | | | | | | |
|-----------|--|-----|--|---|----------------------------------|---|-----|--|-----|
| | AMI | ARI | OLZ | PAL | QUE | RIS | SER | ZIP | ZOT |
| AMI | | | MARTIN2002 [24weeks, N=377] WAGNER2005 [8weeks, N=52] | | | Fleurot 1997 [8weeks, N=228] HWANG2003 [6weeks, N=47] Lecrubier 2000 [26weeks, N=310] | | | |
| ARI | | | | | | CHAN2007 [4weeks, N=83] POTKIN2003 A [4weeks, N=404] | | ZIMBROFF2007 [4weeks, N=256] | |
| OLZ | MARTIN2002 [24weeks, N=377] WAGNER2005 [8weeks, N=52] | | | DAVIDSON2007 (9 mg) [6weeks, N=618] KANE2007A [6weeks, N=250] MARDER2007 (6 mg) [6weeks, N=222] | RIEDEL2007B [8weeks, N=52] | Conley 2001 [8weeks, N=377] Gureje 1998 [30weeks, N=65] Malyarov 1999 [26weeks, N=25] Tran 1997 [28weeks, N=339] S036 [6weeks, | | BREIER2005 [28weeks, N=548] R-0548 (SIMPSON2004) [6weeks, N=269] | |

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

| | | | | | | | | | |
|------------|--|---|---|--|---------------------------------|---------------------------------|-----------------------------------|--|-----------------------------------|
| | | | | | | N=122] | | | |
| PAL | | | DAVIDSON2007 (9 mg) [6weeks, N=618] KANE2007A [6weeks, N=250] MARDER2007 (6 mg) [6weeks, N=222] | | | | | | |
| QUE | | | RIEDEL2007B [8weeks, N=52] | | | ZHONG2006 [8weeks, N=673] | | | |
| RIS | Fleurot 1997 [8weeks, N=228] HWANG2003 [6weeks, N=47] Lecrubier 2000 [26weeks, N=310] HWANG2003 [6weeks, N=47] | CHAN2007 [4weeks, N=83] POTKIN2003 A [4weeks, N=404] | Conley 2001 [8weeks, N=377] Gureje 1998 [30weeks, N=65] Malyarov 1999 [26weeks, N=25] Tran 1997 [28weeks, N=339] S036 [6weeks, | | ZHONG2006 [8weeks, N=673] | | AZORIN2006 [12weeks, N=187] | 128-302 (ADDINGTO N2004) [8weeks, N=296] | Klieser 1996 [4weeks, N=59] |

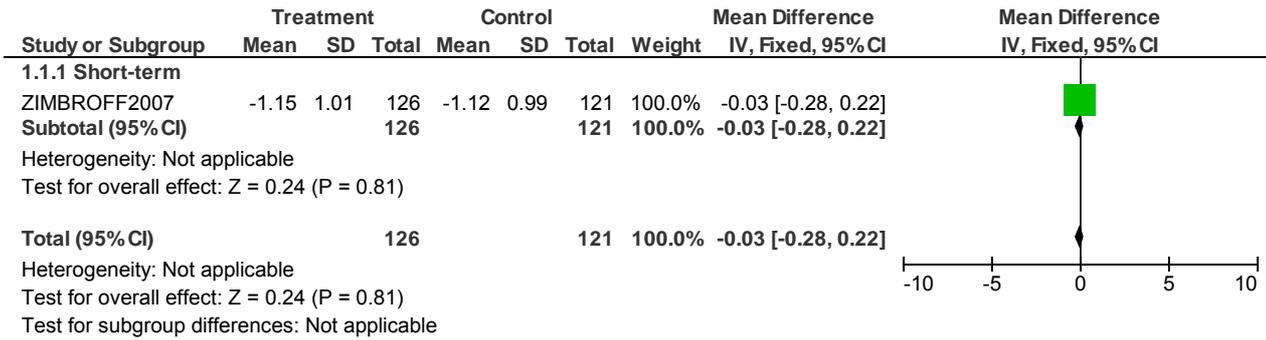
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

| | | | | | | | | | |
|------------|--|--|---|--|--|--|--|--|--|
| | | | N=122] | | | | | | |
| SER | | | | | | AZORIN2006 [12weeks, N=187] | | | |
| ZIP | | | BREIER2005 [28weeks, N=548] R-0548 (SIMPSON200 4) [6weeks, N=269] | | | 128-302 (ADDINGTO N2004) [8weeks, N=296] | | | |
| ZOT | | | | | | Klieser 1996 [4weeks, N=59] | | | |

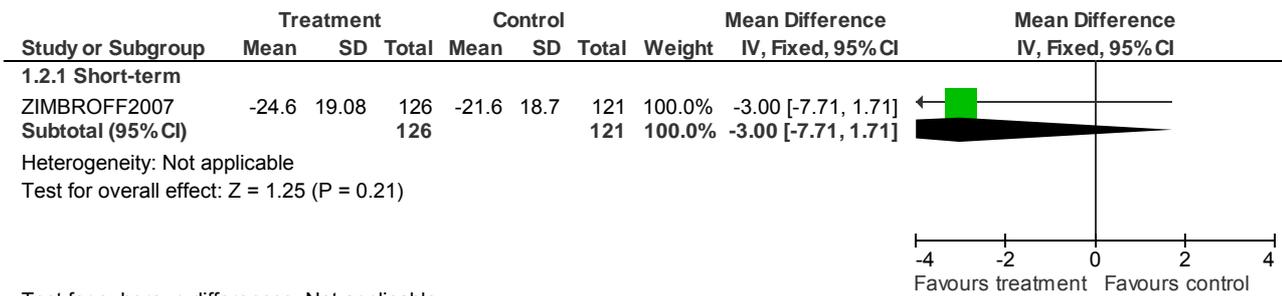
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

1 Aripiprazole versus Ziprasidone (phase: acute treatment) (critical outcomes)

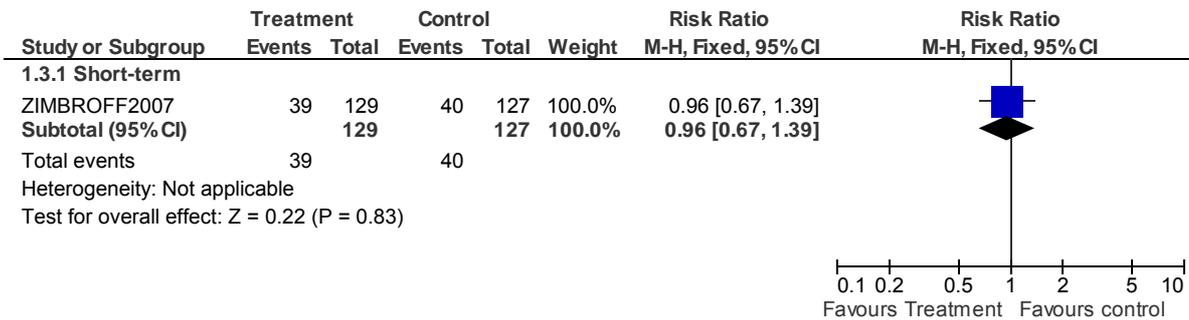
1.1 Global state: 1. CGI-S (change)



1.2 Mental state: 1. PANSS total (Change)

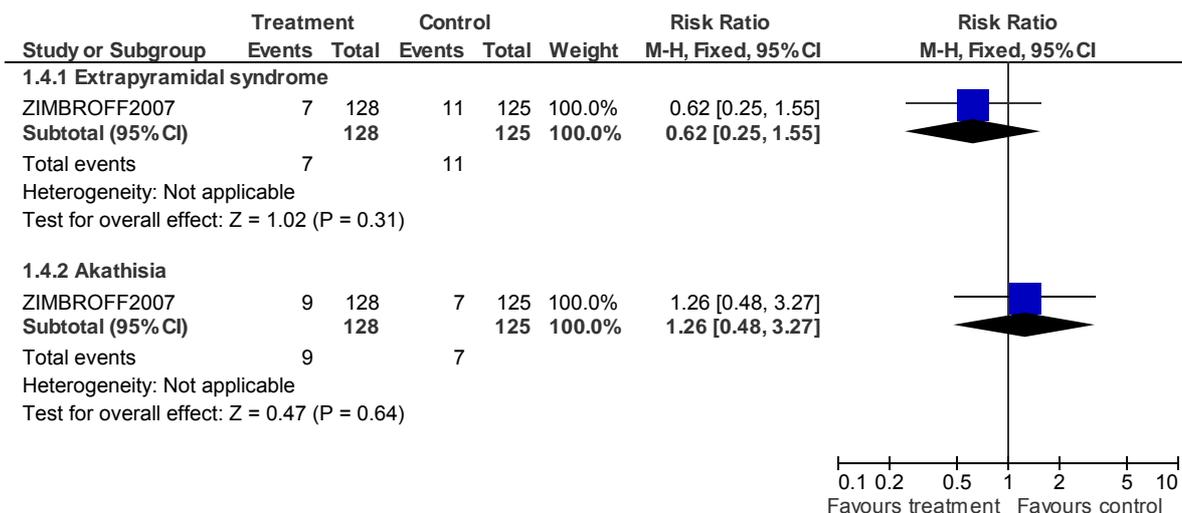


1.3 Leaving the study early: 1. Any reason

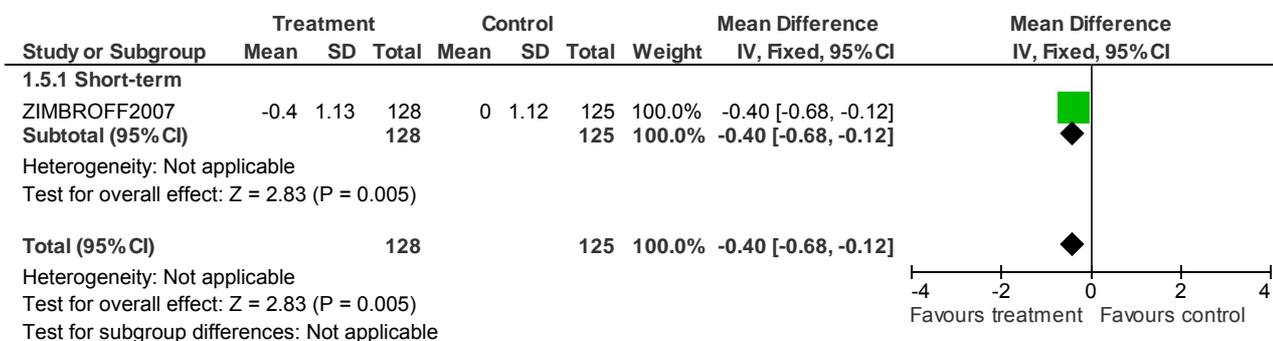


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

1.4 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

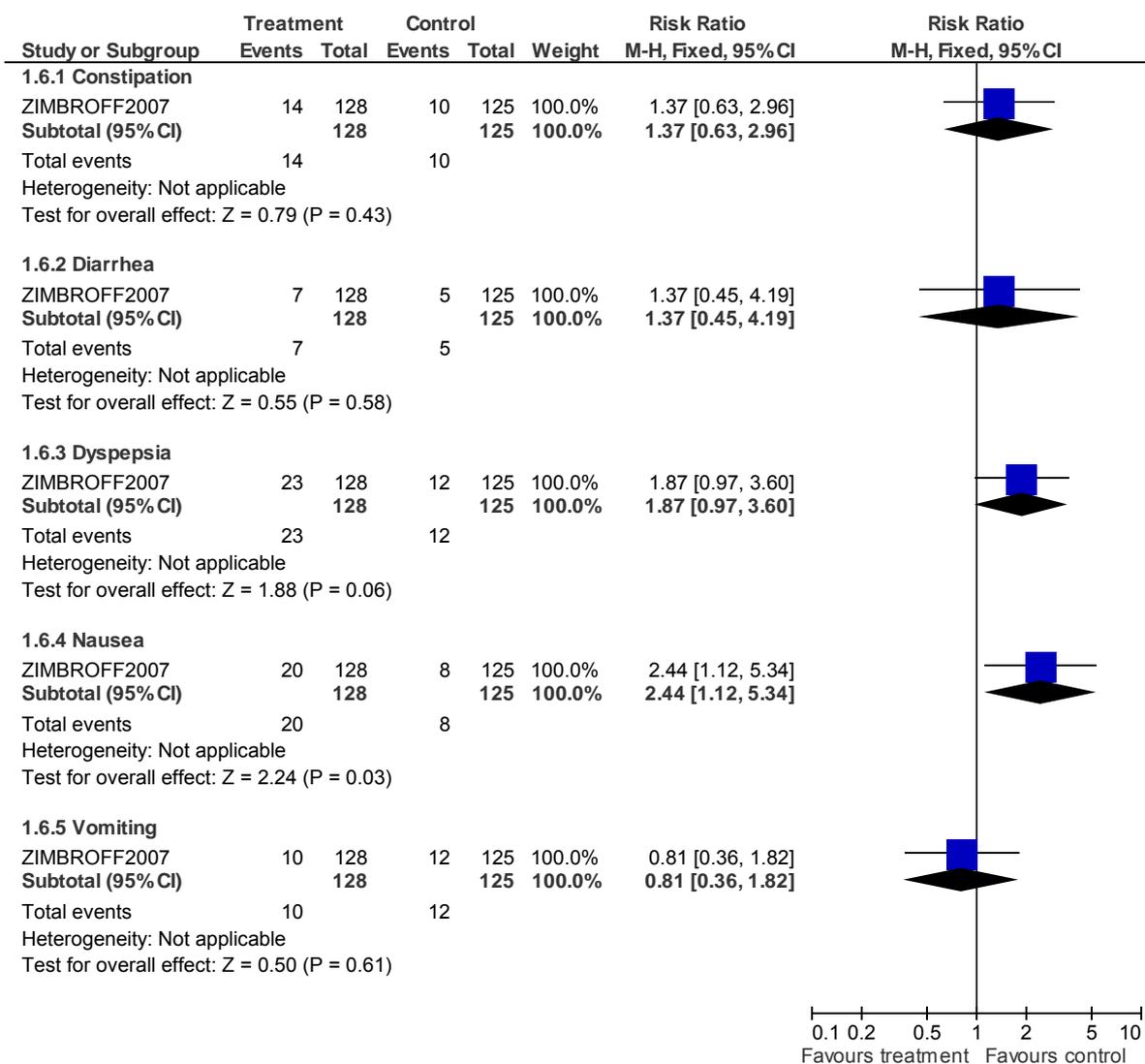


1.5 AE: 2. Neurologic SEs - AIMS Change

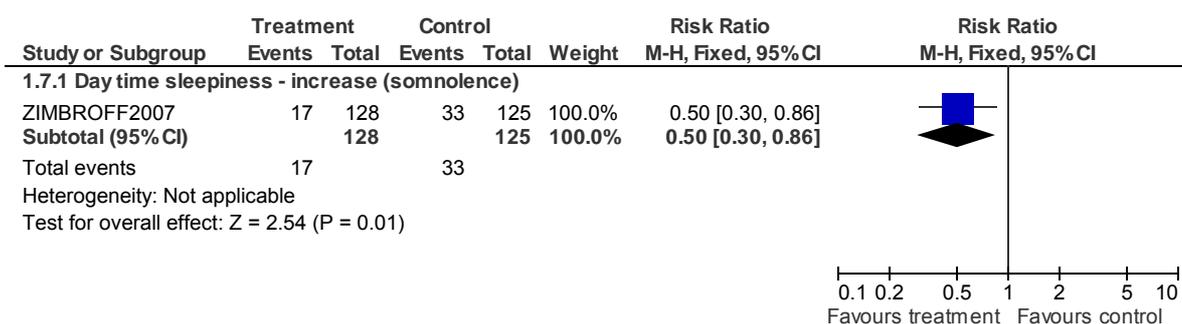


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

1.6 AE: 5. Gastrointestinal SEs (short-term)



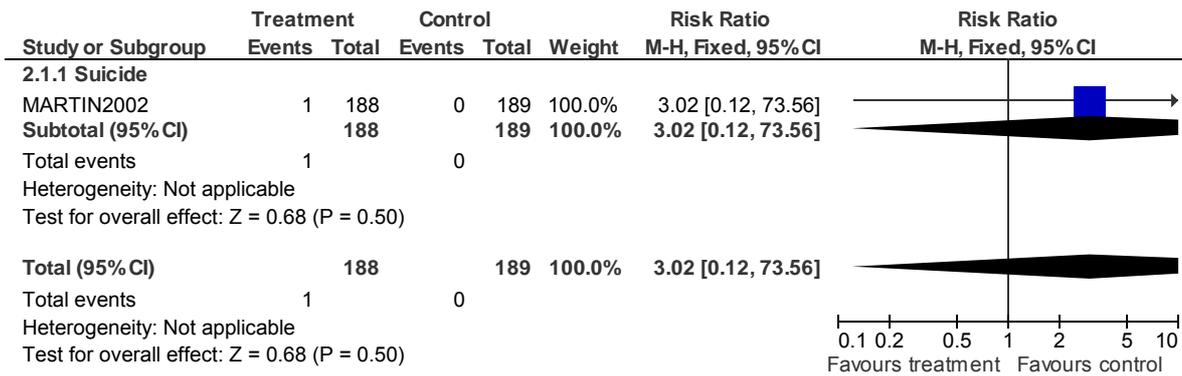
1.7 AE: 6. Sedation (short-term)



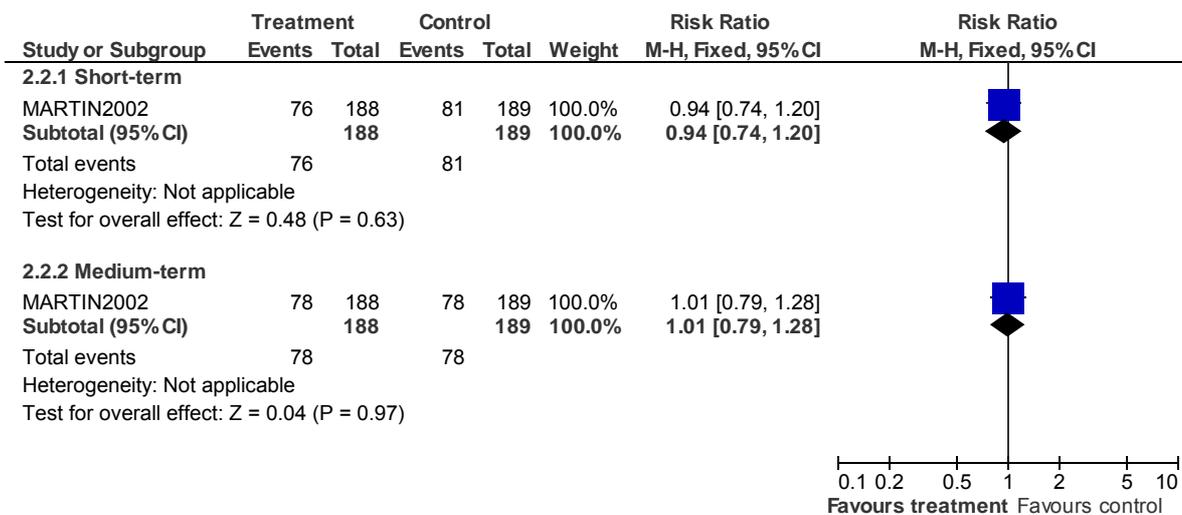
2 Olanzapine versus Amisulpride (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

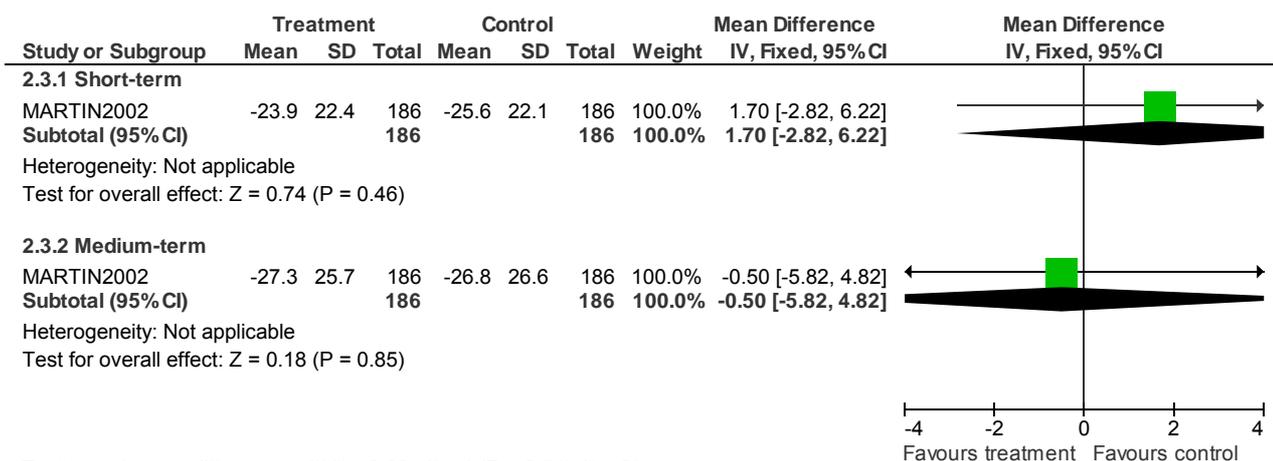
2.1 Mortality (medium-term)



2.2 Global state: 1. Not improved (CGI)



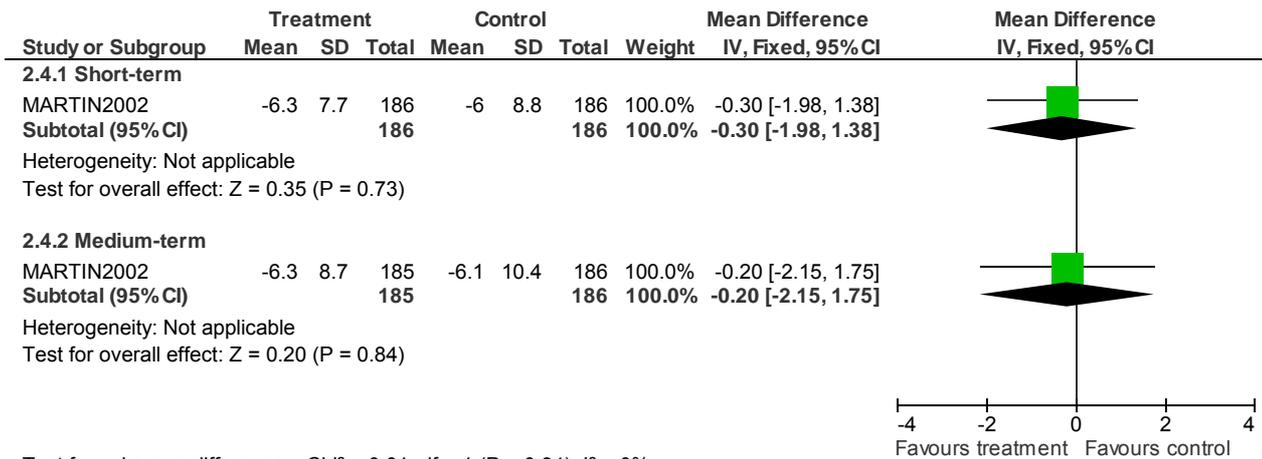
2.3 Mental state: 1. PANSS total (Change)



Test for subgroup differences: Chi² = 0.38, df = 1 (P = 0.54), I² = 0%

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

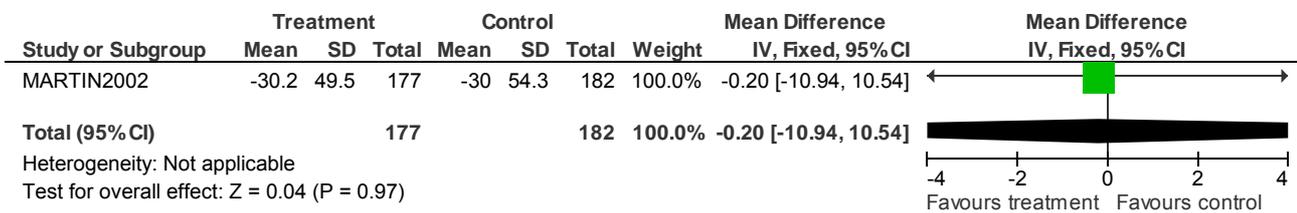
2.4 Mental state: 2. Depression MADRS (change) (short-term)



-4 -2 0 2 4
Favours treatment Favours control

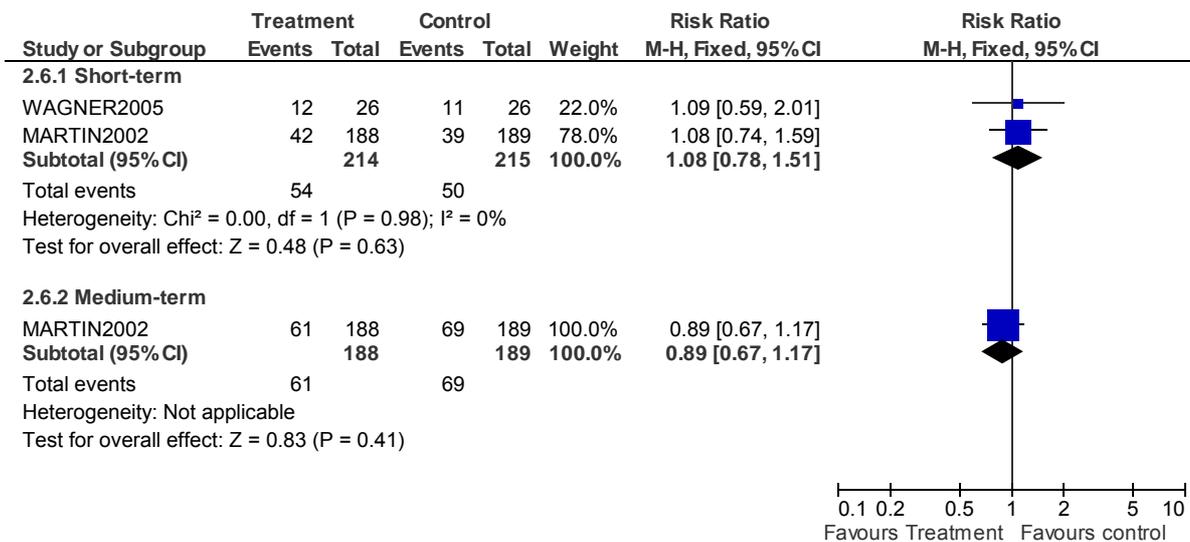
Test for subgroup differences: Chi² = 0.01, df = 1 (P = 0.94), I² = 0%

2.5 Psychosocial functioning: 1. Mean improvement % (SOFAS; signs reversed) (medium-term)



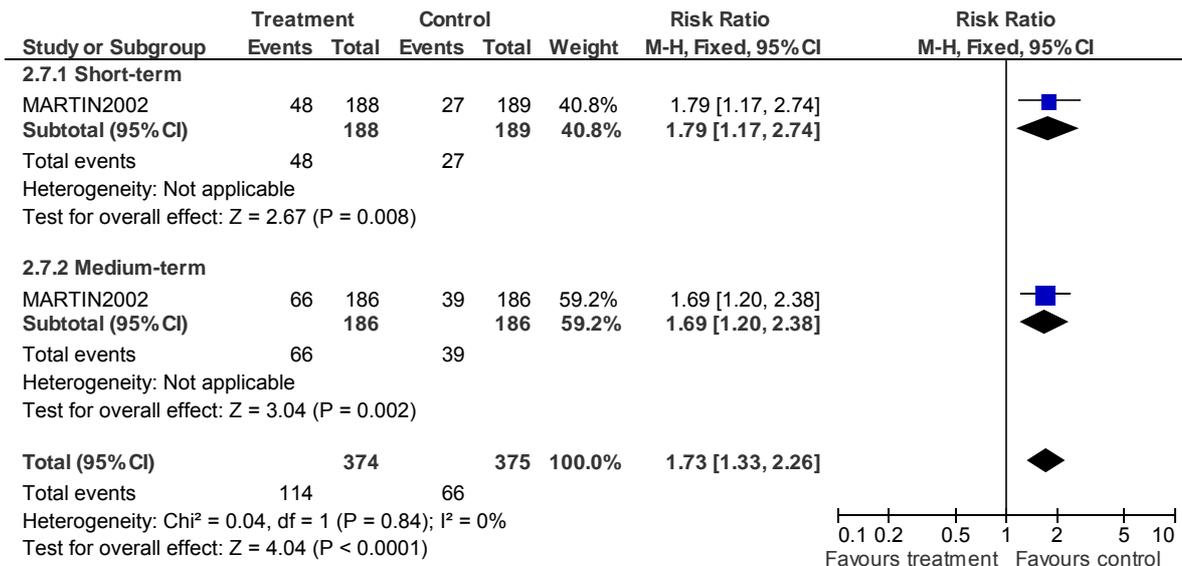
-4 -2 0 2 4
Favours treatment Favours control

2.6 Leaving the study early: 1. Any reason

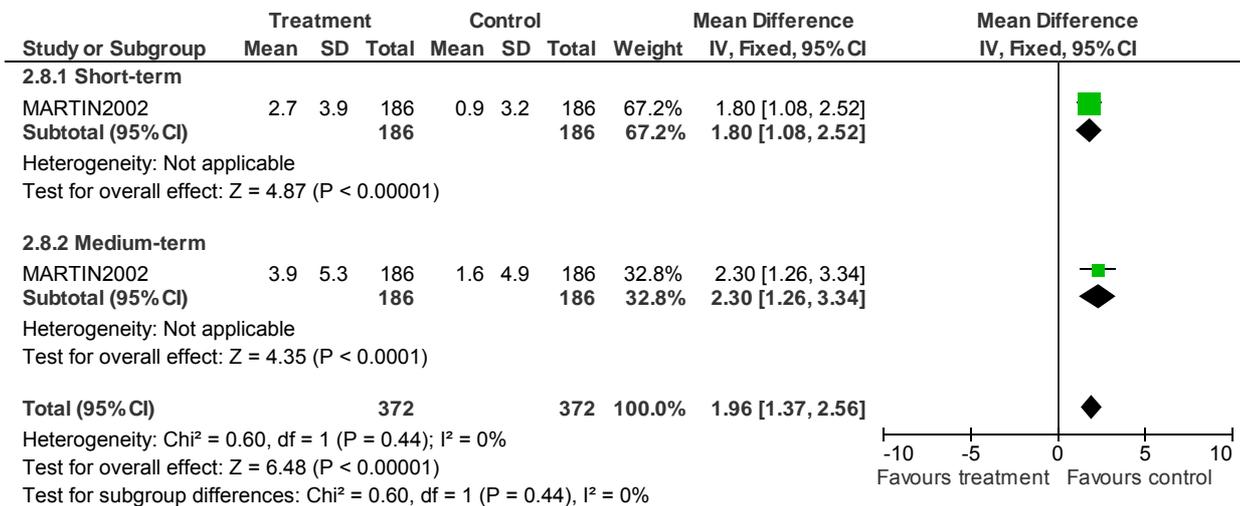


0.1 0.2 0.5 1 2 5 10
Favours Treatment Favours control

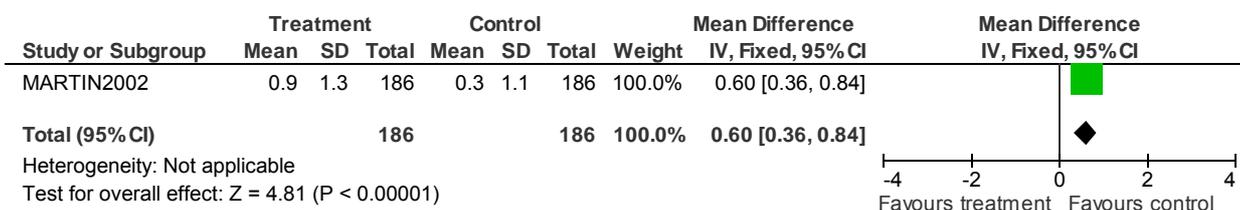
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

2.7 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline)

2.8 AE: 1. Metabolic SEs - Weight change from baseline (kg)

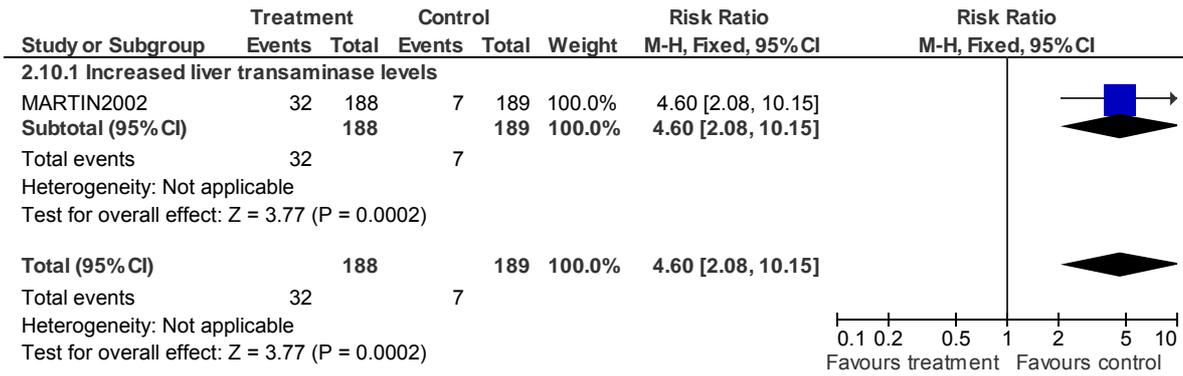


2.9 AE: 1. Metabolic SEs - BMI (change) (short-term)

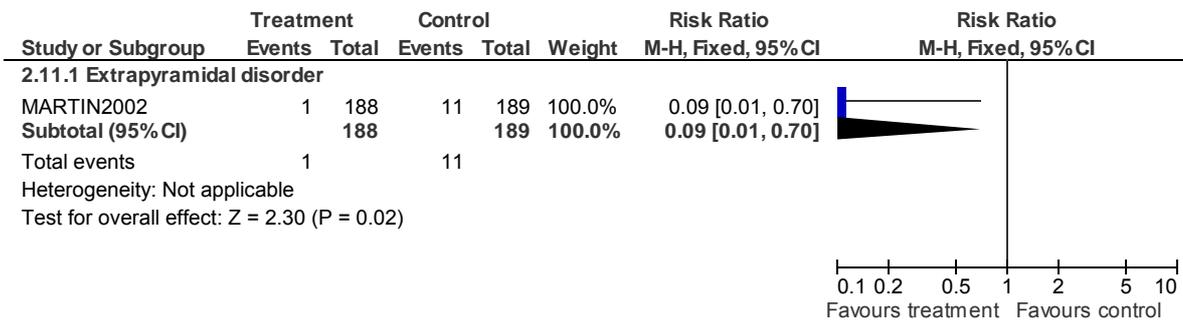


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

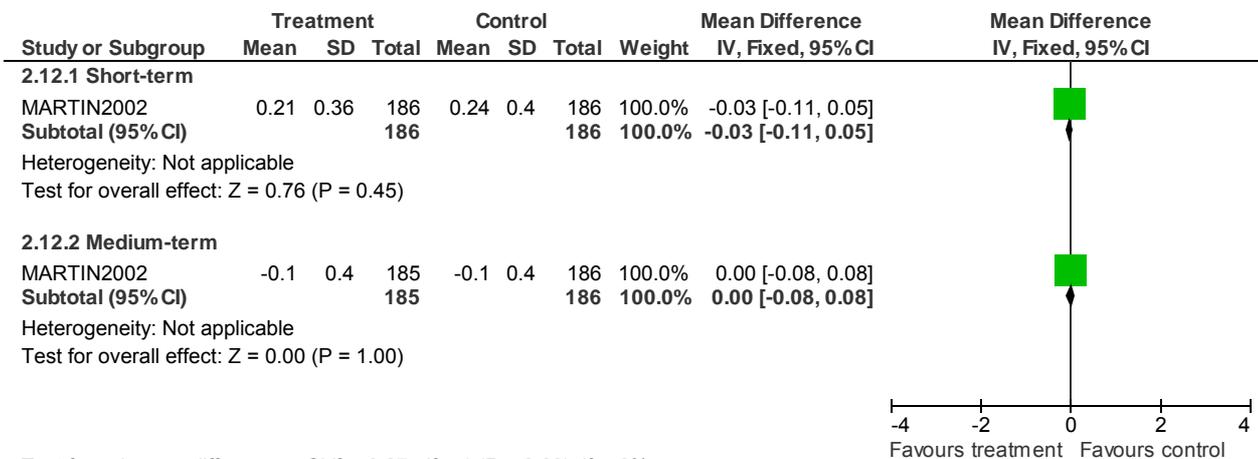
2.10 AE: 1. Metabolic SEs (short-term)



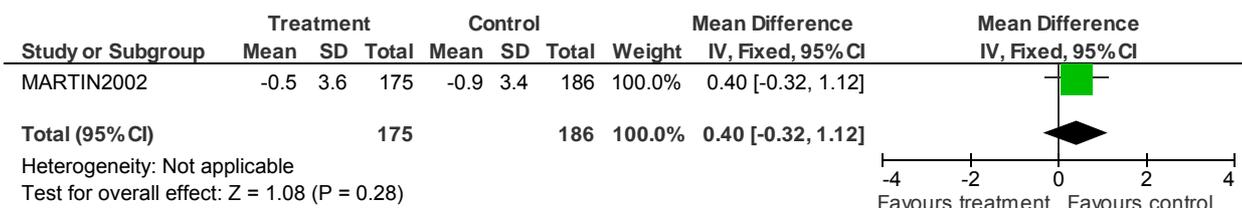
2.11 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



2.12 AE: 2. Neurologic SEs - Simpson-Angus Scale (endpt)



2.13 AE: 2. Neurologic SEs - AIMS Change (medium-term)

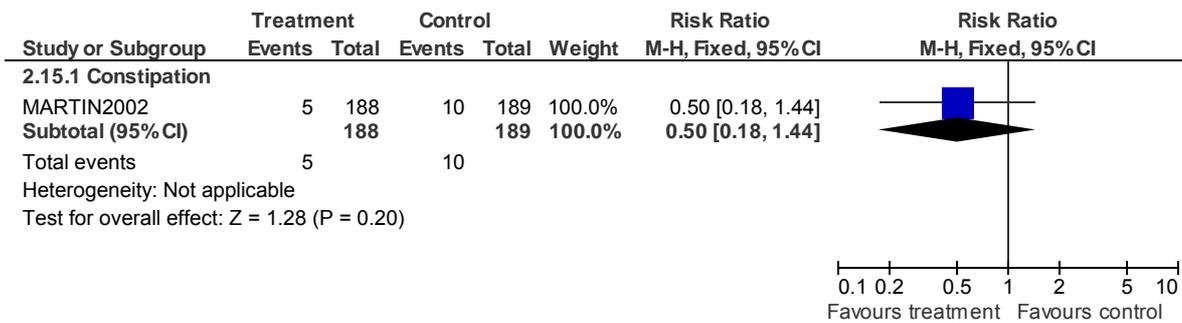


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

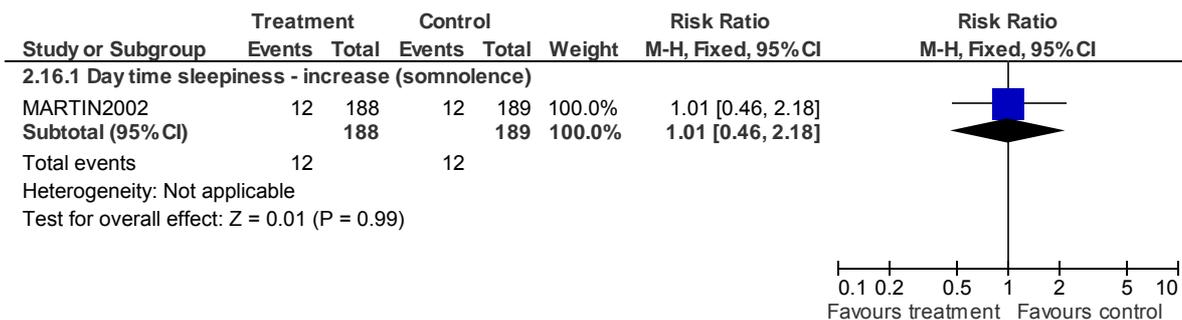
2.14 AE: 2. Neurologic SEs - Barnes Akathisia Scale (moderate/marked) (medium-term)



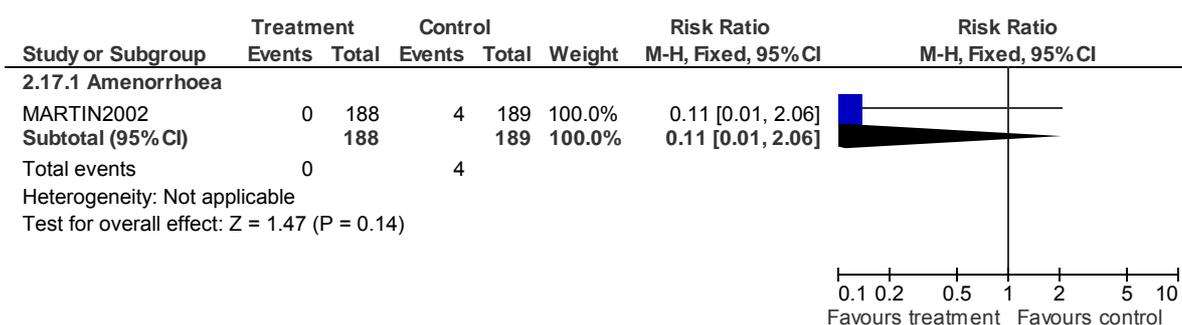
2.15 AE: 5. Gastrointestinal SEs (medium-term)



2.16 AE: 6. Sedation (medium-term)

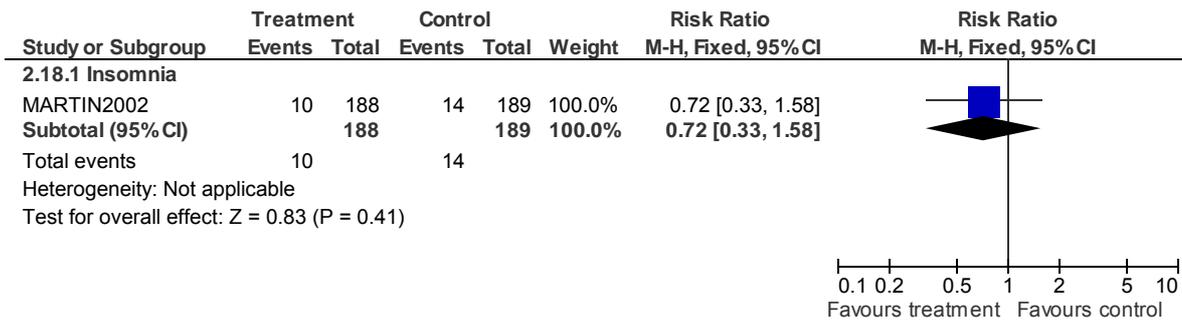


2.17 AE: 8. Menstrual problems (medium-term)



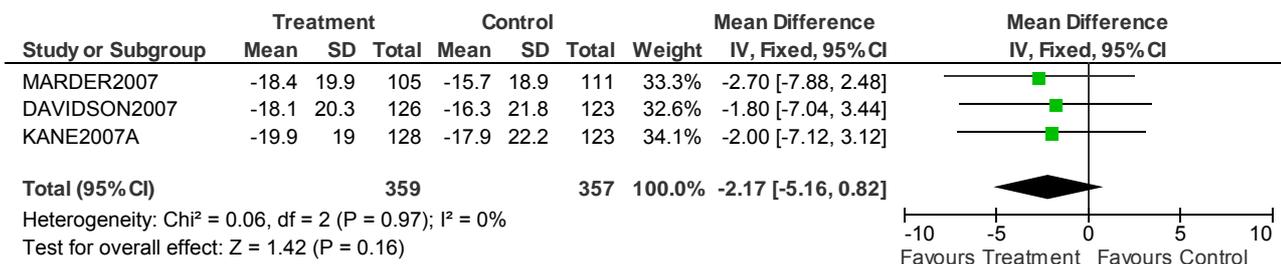
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

2.18 AE: 9. Other SEs (medium-term)

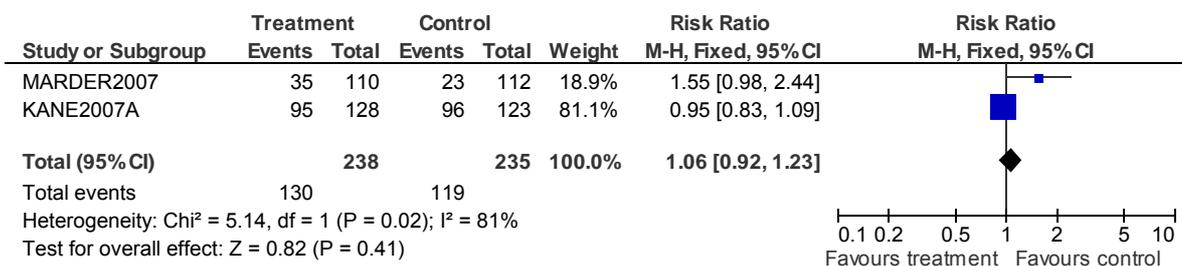


3 Olanzapine versus Paliperidone (phase: acute treatment) (critical outcomes)

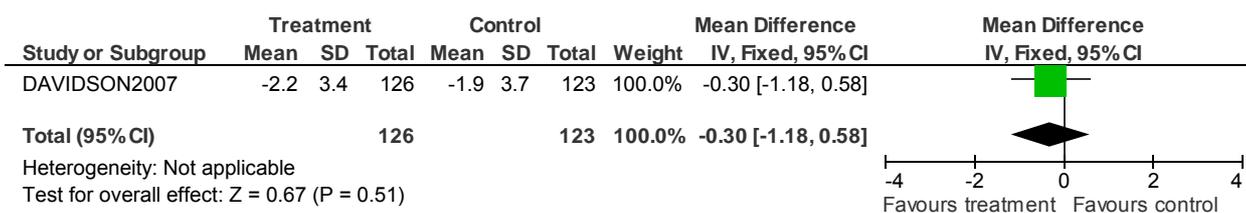
3.1 Mental state: 1. PANSS total (change from baseline) (short-term)



3.2 Mental state: 2. Non-response (<50% improvement in PANSS) (short-term)

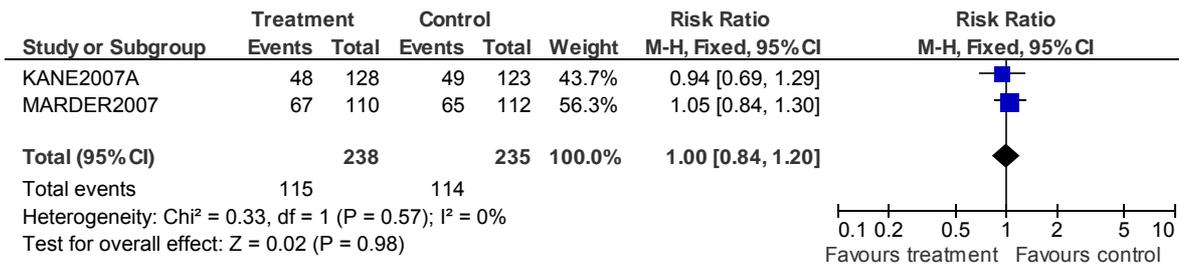


3.3 Mental state: 3. Depression (PANSS anxiety/depression factor scores)

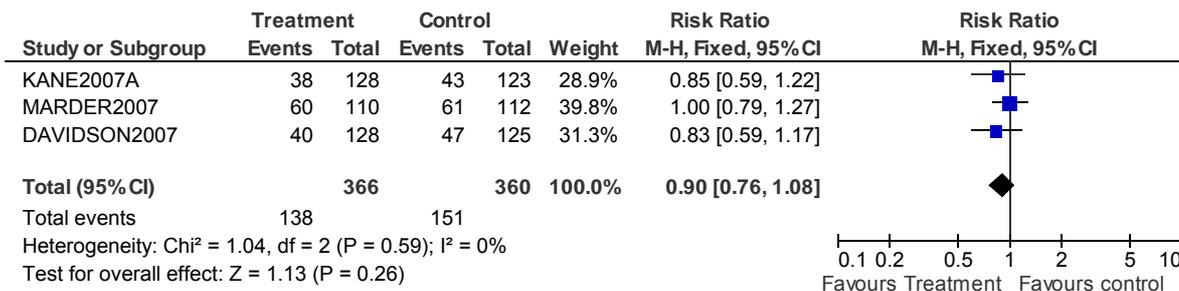


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

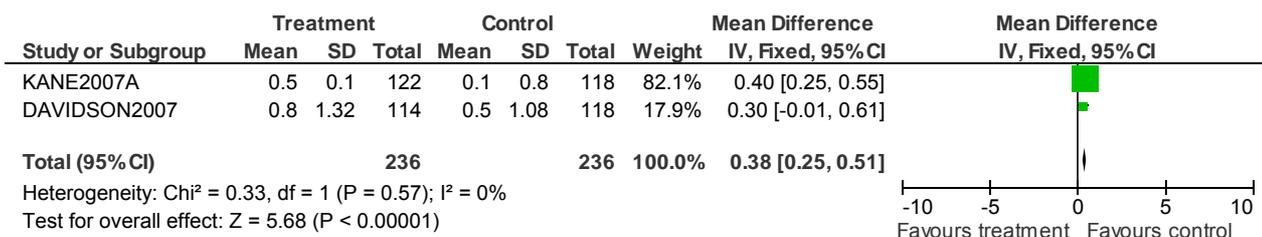
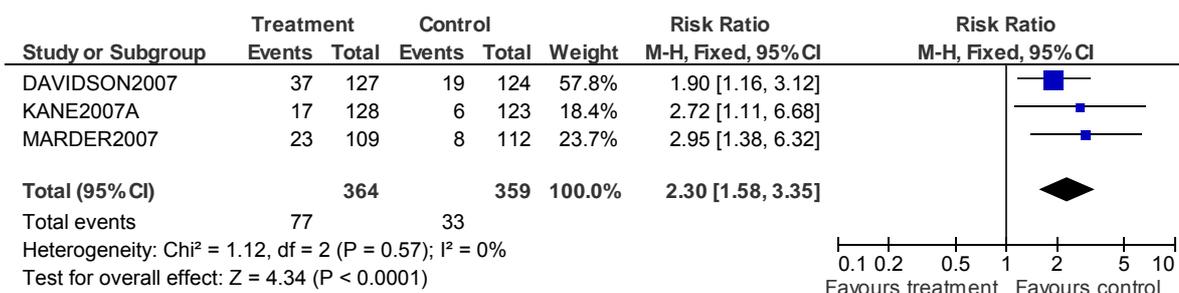
3.4 Psychosocial functioning: 1. No response (PSP scale)



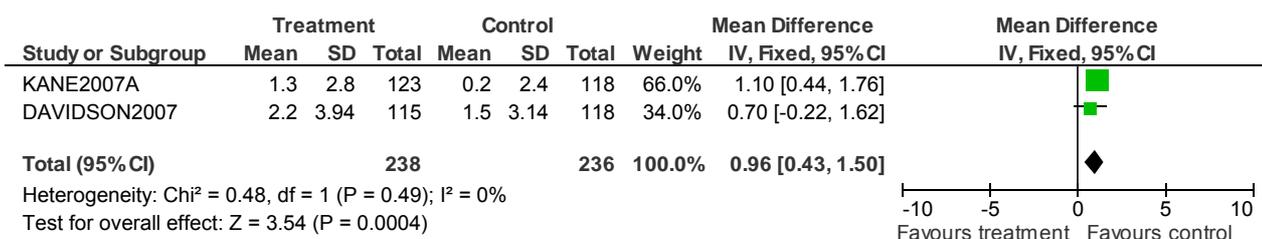
3.5 Leaving the study early: 1. Any reason (short-term)



3.6 AE: 1. Metabolic SEs - BMI (change from baseline) (short-term)

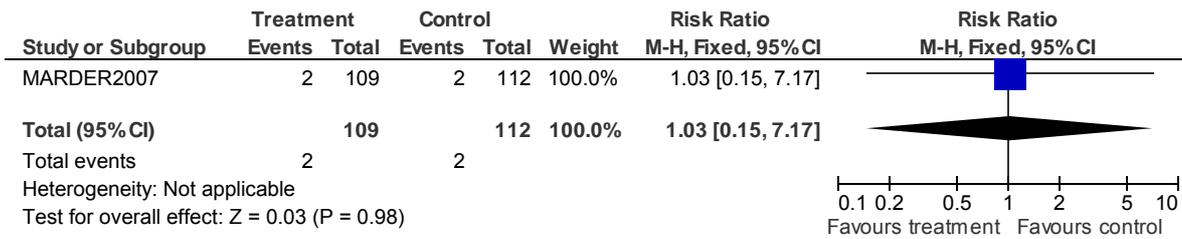
3.7 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline)

3.8 AE: 1. Metabolic SEs - Weight gain from baseline (kg) (short-term)

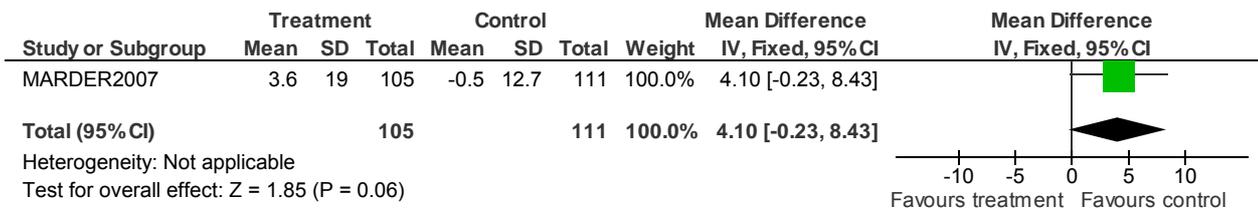


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

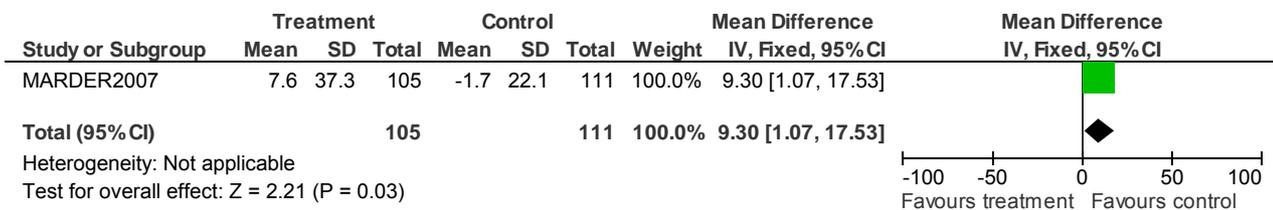
3.9 AE: 1. Metabolic SEs - Glucose-related AEs (incl. hyperglycemia, hypoglycemia, diabetes)



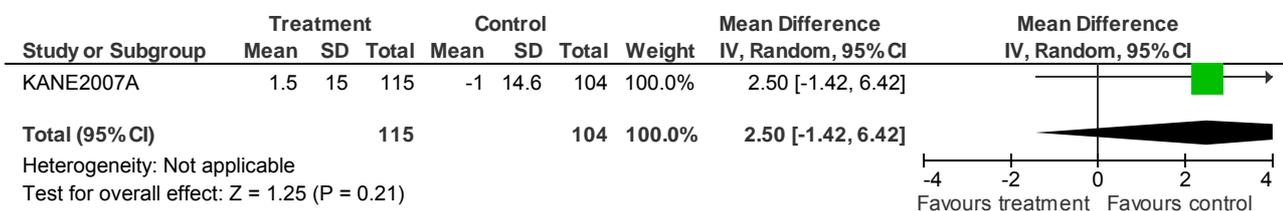
3.10 AE: 1. Metabolic SEs - Plasma levels of aspartate aminotransferase (change) (short-term)



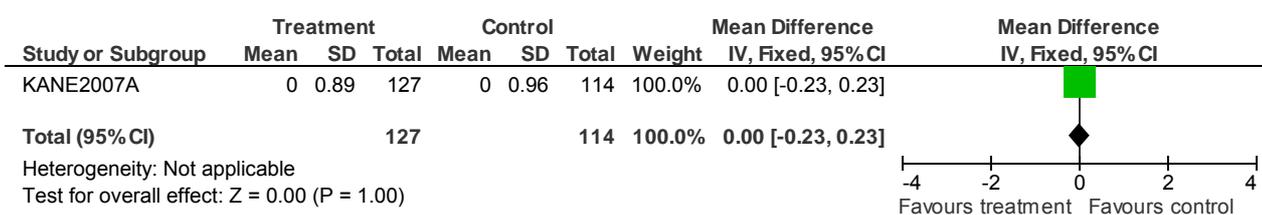
3.11 AE: 1. Metabolic SEs - Plasma levels of alanine aminotransferase (change from baseline) (short term)



3.12 AE: 1. Metabolic SEs - Insulin (change) (short-term)

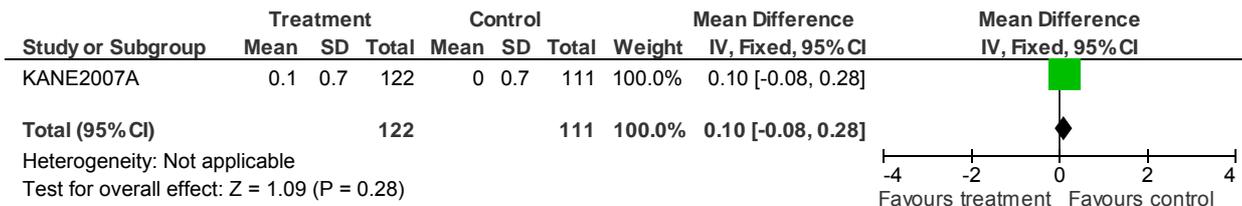


3.13 AE: 1. Metabolic SEs - Glucose (change) (short-term)

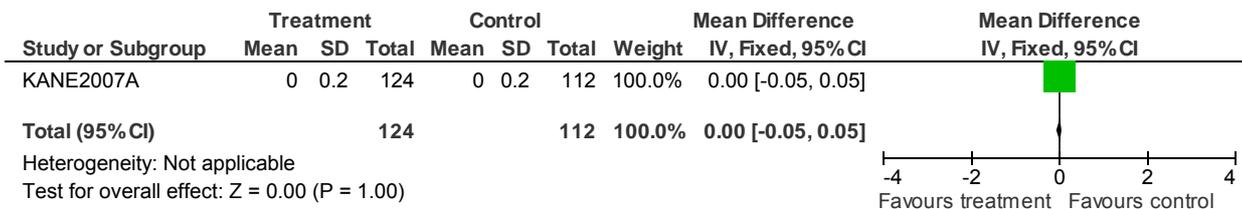


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

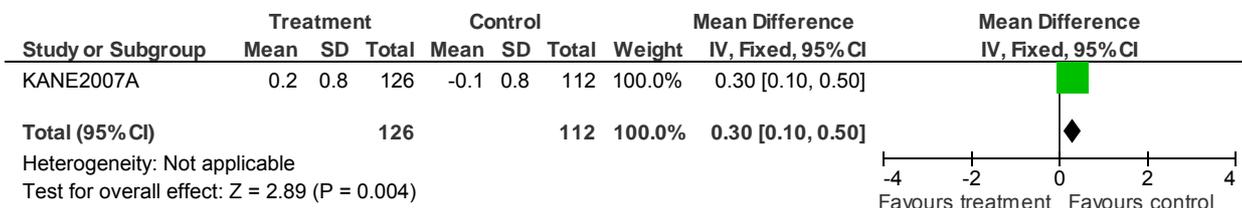
3.14 AE: 1. Metabolic SEs - LDL(change, mmol/L) (short-term)



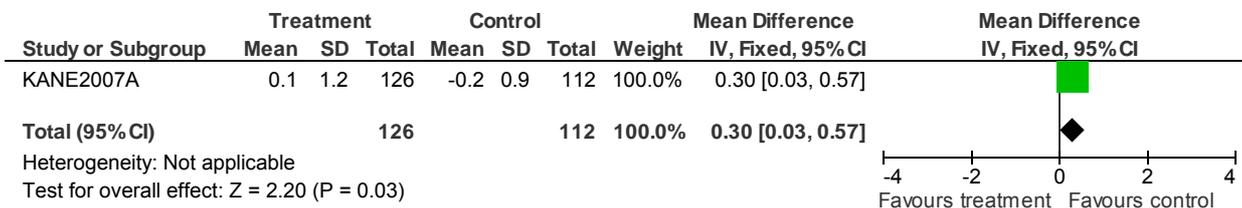
3.15 AE: 1. Metabolic SEs - HDL (change, mmol/L) (short-term)



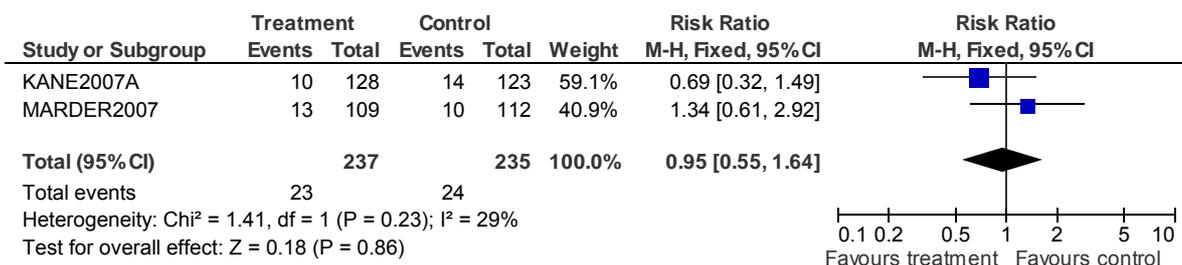
3.16 AE: 1. Metabolic SEs - Cholesterol (change, mmol/L) (short-term)



3.17 AE: 1. Metabolic SEs - Triclyerides (change, mmol/L) (short-term)

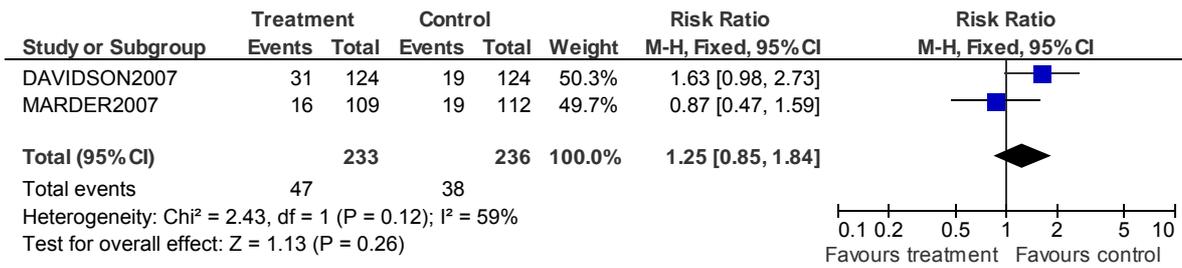


3.18 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)



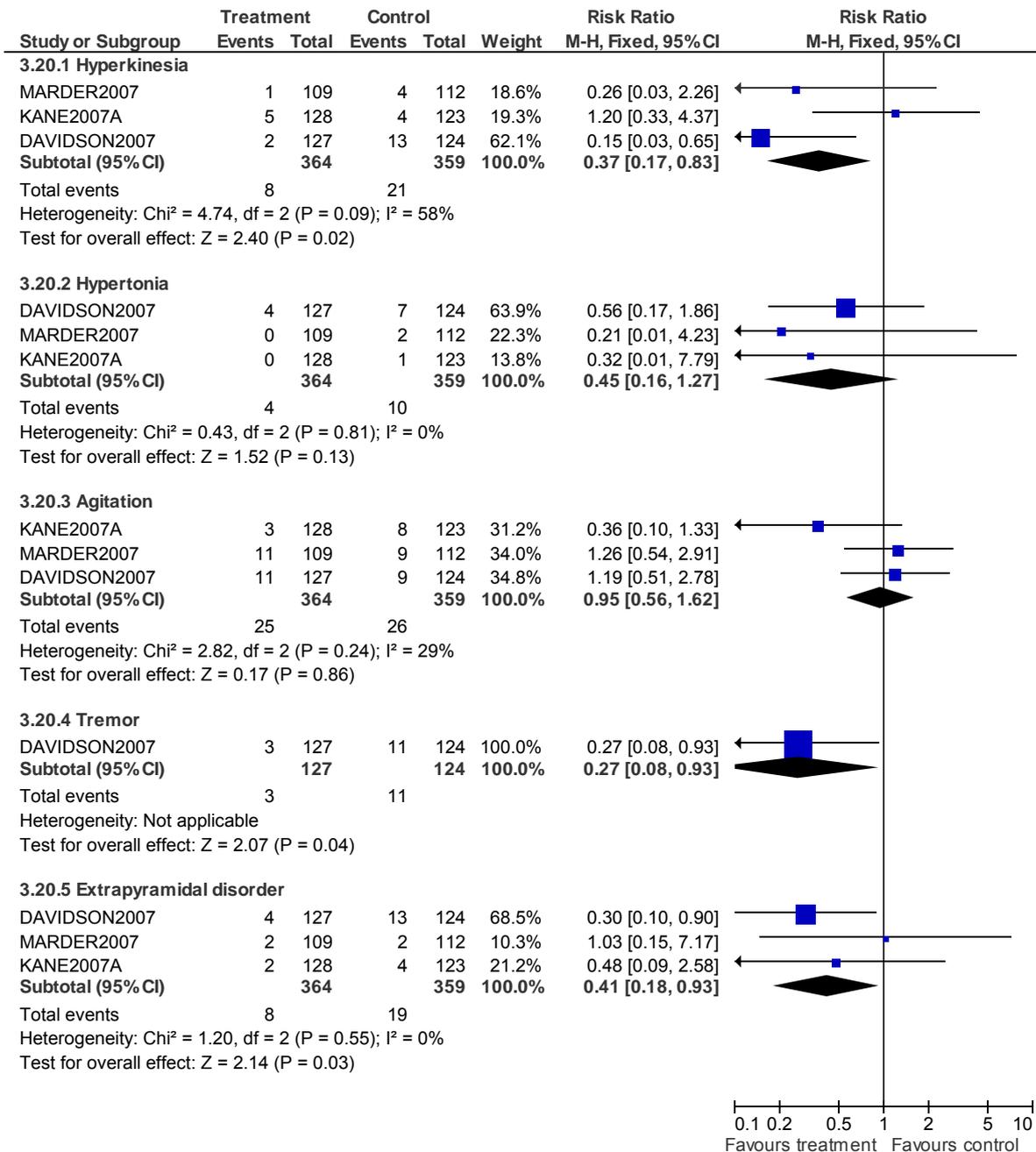
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.19 AE: 2. Neurologic SEs - Akathisia (not absent by BARS) (short-term)



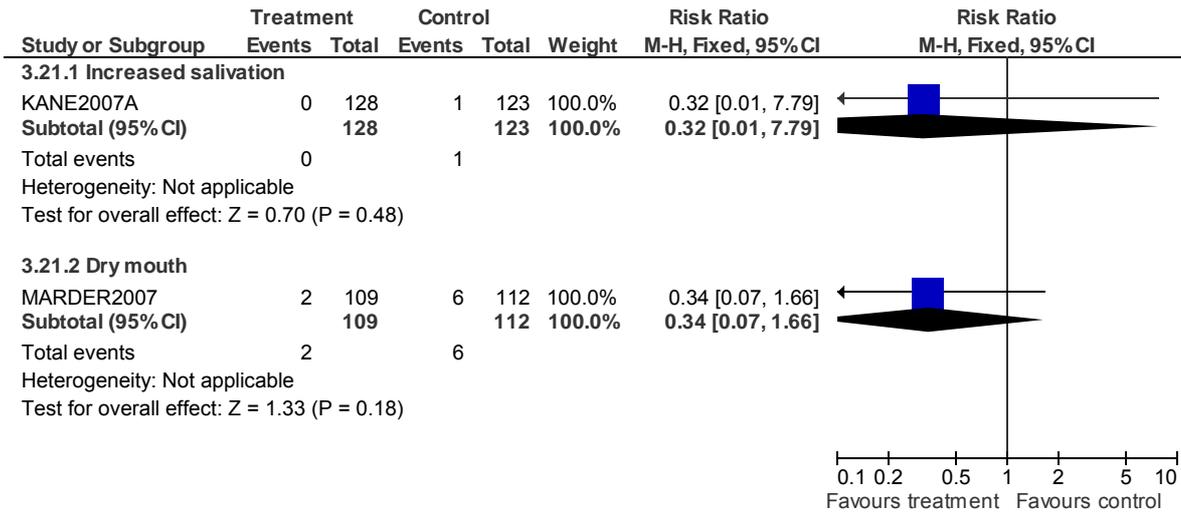
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.20 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



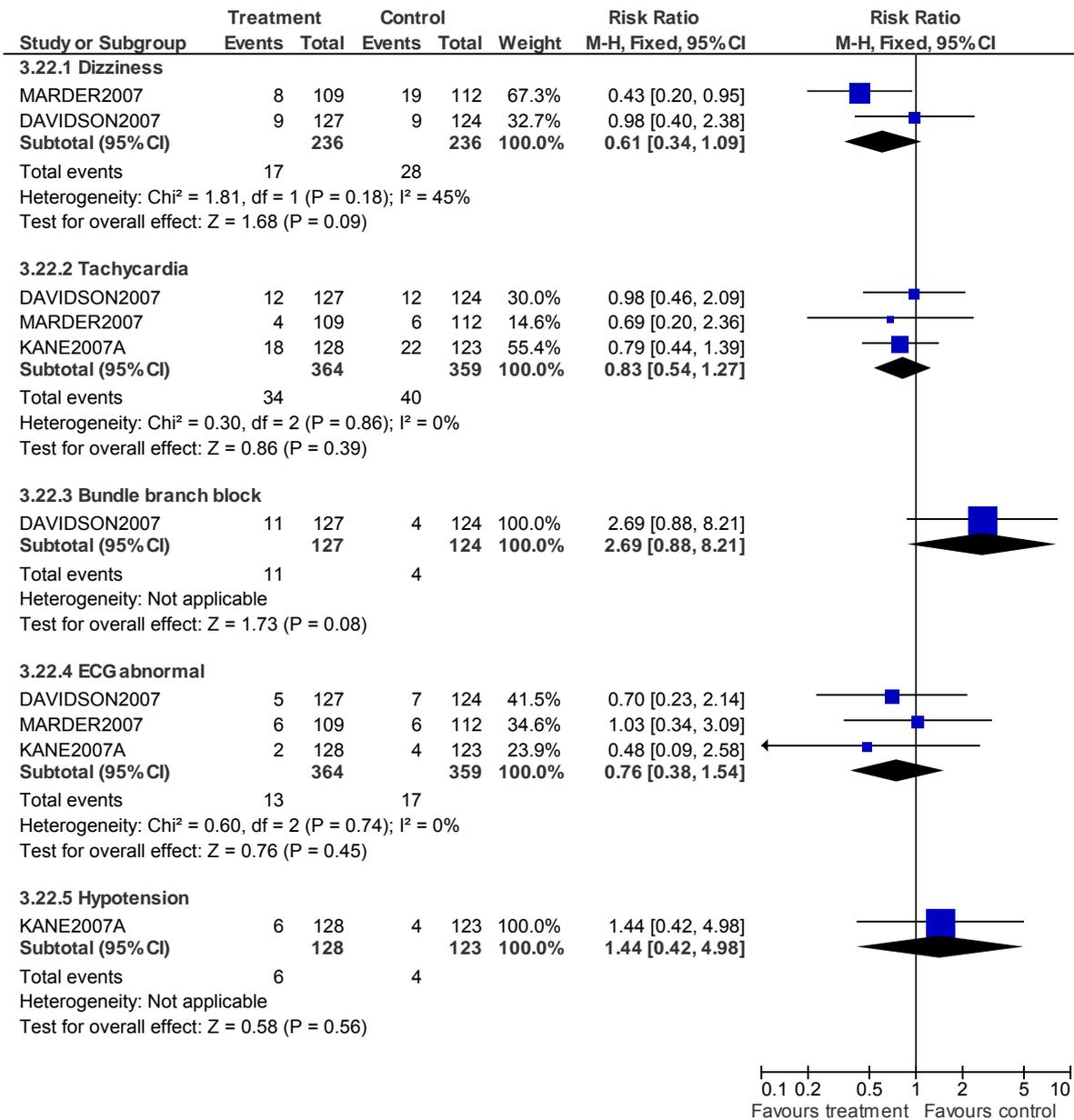
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.21 AE: 3. Autonomic SEs (short-term)

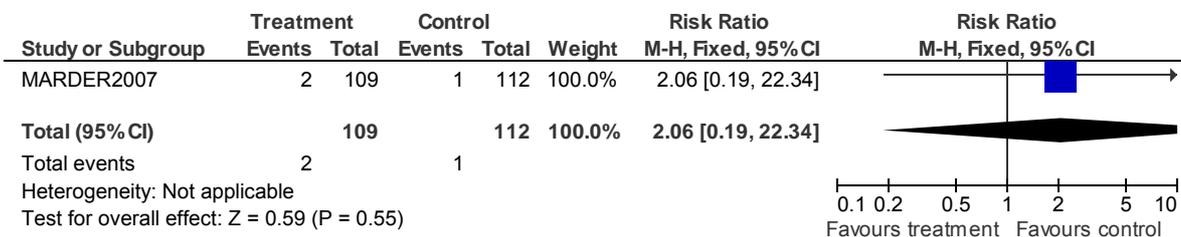


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.22 AE: 4. Cardiovascular SEs (short-term)

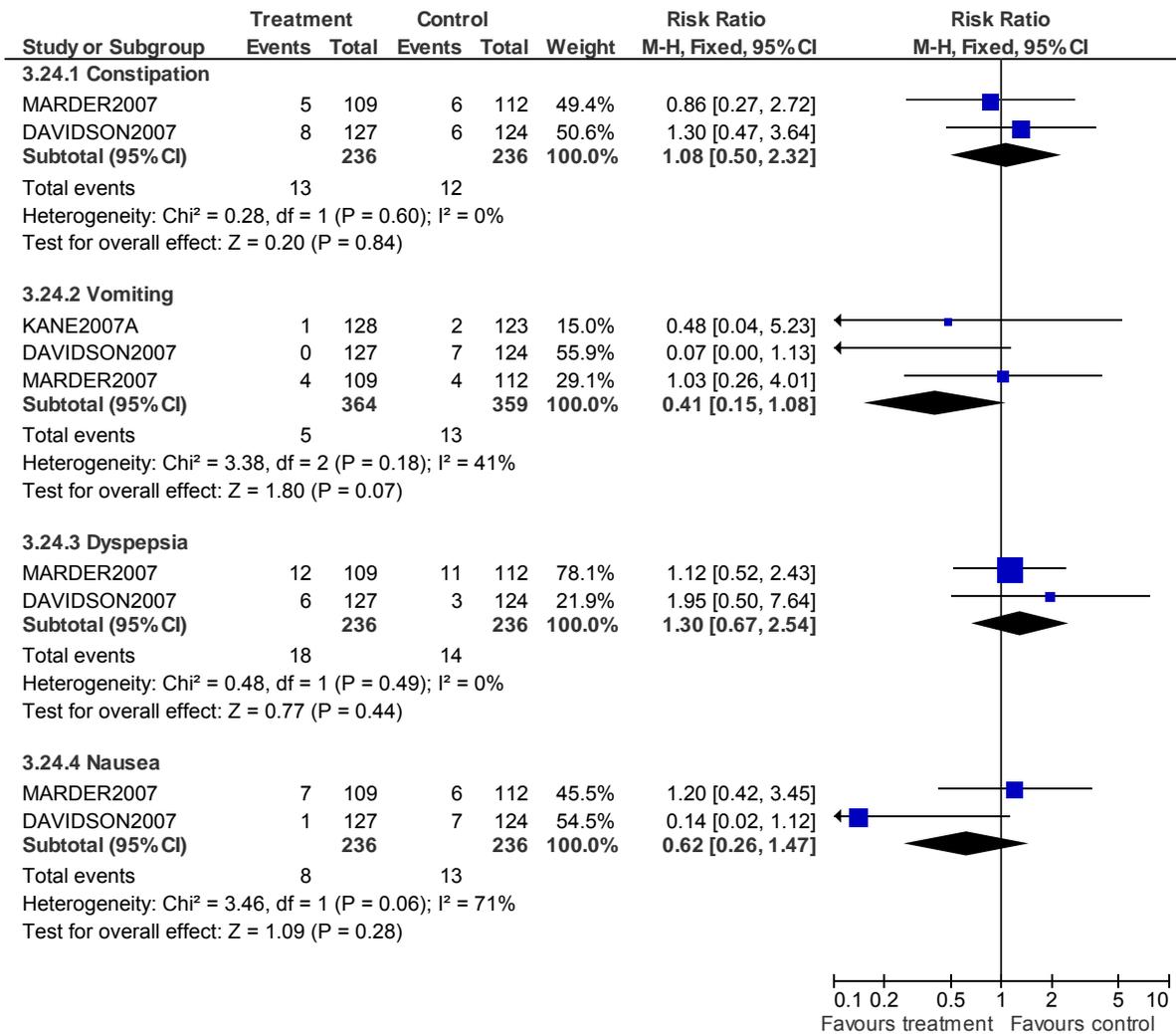


3.23 AE: 4. Cardiovascular SEs - Prolonged max postbaseline QTcLD (short-term)

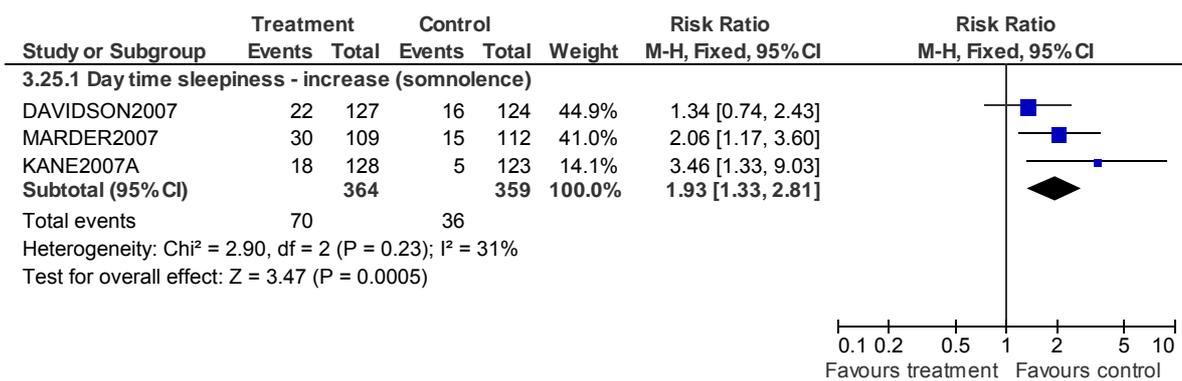


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.24 AE: 5. Gastrointestinal SEs (short-term)

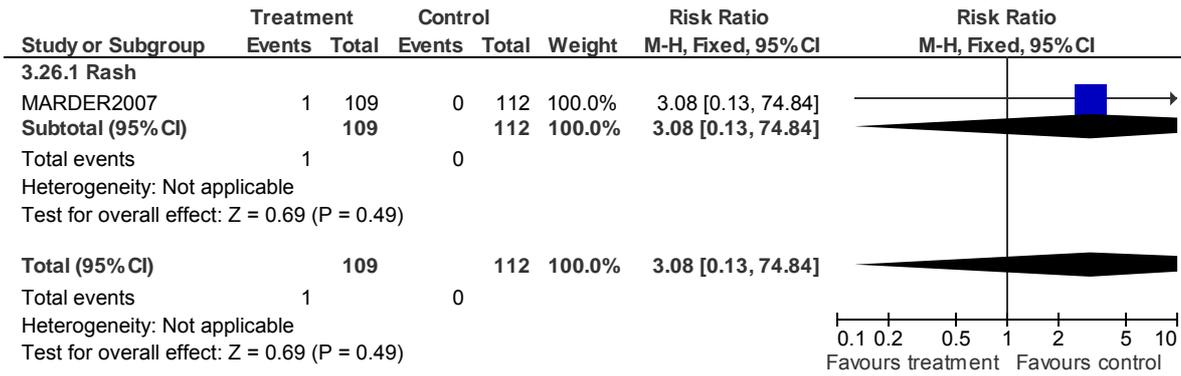


3.25 AE: 6. Sedation (short-term)



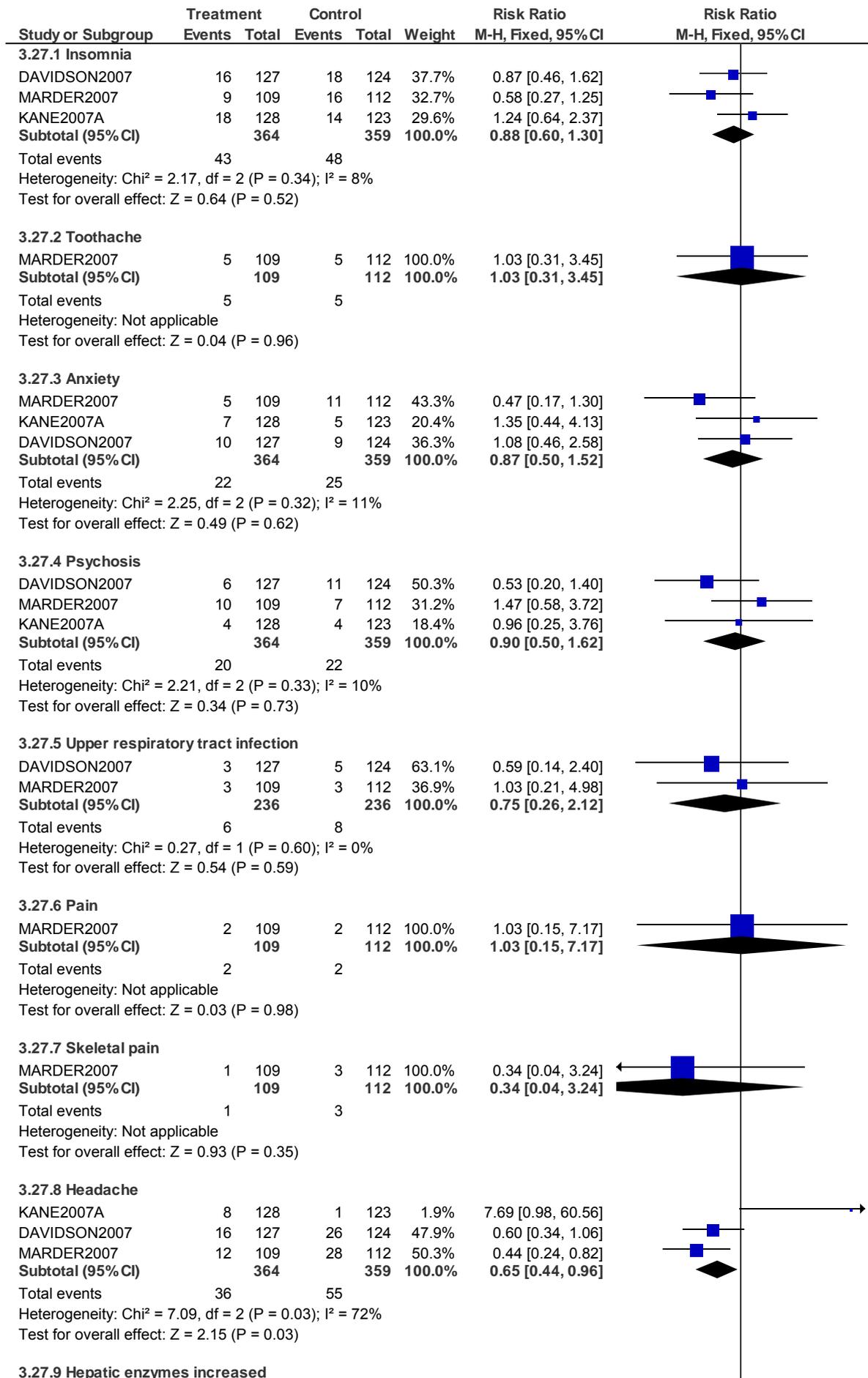
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

3.26 AE: 9. Dermatological system (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

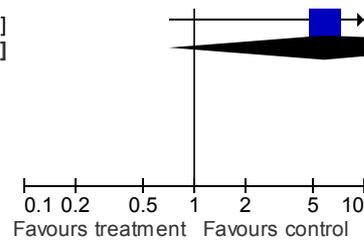
3.27 AE: 10. Other SEs (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

| | | | | | | |
|--------------------------|---|-----|---|-----|--------|---------------------------|
| DAVIDSON2007 | 6 | 127 | 1 | 124 | 100.0% | 5.86 [0.72, 47.96] |
| Subtotal (95% CI) | | 127 | | 124 | 100.0% | 5.86 [0.72, 47.96] |
| Total events | 6 | | 1 | | | |

Heterogeneity: Not applicable
 Test for overall effect: Z = 1.65 (P = 0.10)

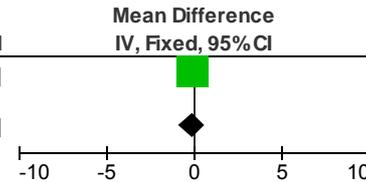


4 Olanzapine versus Quetiapine (phase: acute treatment) (critical outcomes)

4.1 Global state: 1. CGI-S (endpoint, high=poor) (short-term)

| Study or Subgroup | Treatment | | | Control | | | Weight | Mean Difference IV, Fixed, 95% CI | Mean Difference IV, Fixed, 95% CI |
|-----------------------|-----------|-----|-------|---------|----|-------|--------|--------------------------------------|--------------------------------------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| RIEDEL2007B | 3.94 | 1.2 | 17 | 4.06 | 1 | 16 | 100.0% | -0.12 [-0.87, 0.63] | |
| Total (95% CI) | | | 17 | | | 16 | 100.0% | -0.12 [-0.87, 0.63] | |

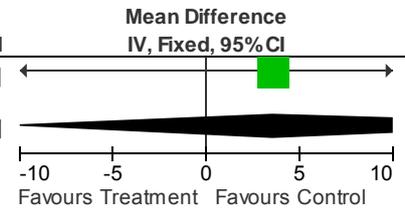
Heterogeneity: Not applicable
 Test for overall effect: Z = 0.31 (P = 0.75)



4.2 Mental state: 1. PANSS total (endpt mean lower=better) (short-term)

| Study or Subgroup | Treatment | | | Control | | | Weight | Mean Difference IV, Fixed, 95% CI | Mean Difference IV, Fixed, 95% CI |
|-----------------------|-----------|-------|-------|---------|-------|-------|--------|--------------------------------------|--------------------------------------|
| | Mean | SD | Total | Mean | SD | Total | | | |
| RIEDEL2007B | -17.88 | 20.71 | 17 | -21.5 | 23.39 | 16 | 100.0% | 3.62 [-11.49, 18.73] | |
| Total (95% CI) | | | 17 | | | 16 | 100.0% | 3.62 [-11.49, 18.73] | |

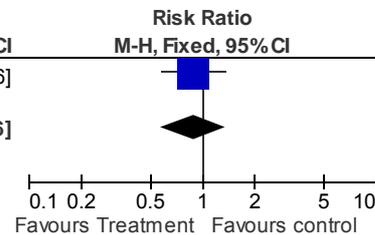
Heterogeneity: Not applicable
 Test for overall effect: Z = 0.47 (P = 0.64)



4.3 Leaving the study early: 1. Any reason (short-term)

| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio M-H, Fixed, 95% CI | Risk Ratio M-H, Fixed, 95% CI |
|-----------------------|-----------|-------|---------|-------|--------|----------------------------------|----------------------------------|
| | Events | Total | Events | Total | | | |
| RIEDEL2007B | 15 | 26 | 17 | 26 | 100.0% | 0.88 [0.57, 1.36] | |
| Total (95% CI) | | 26 | | 26 | 100.0% | 0.88 [0.57, 1.36] | |
| Total events | 15 | | 17 | | | | |

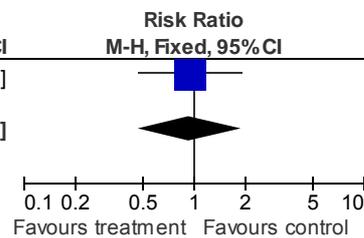
Heterogeneity: Not applicable
 Test for overall effect: Z = 0.57 (P = 0.57)



4.4 AE: 1. Metabolic SEs - Weight gain (> 7% increase from baseline) (short-term)

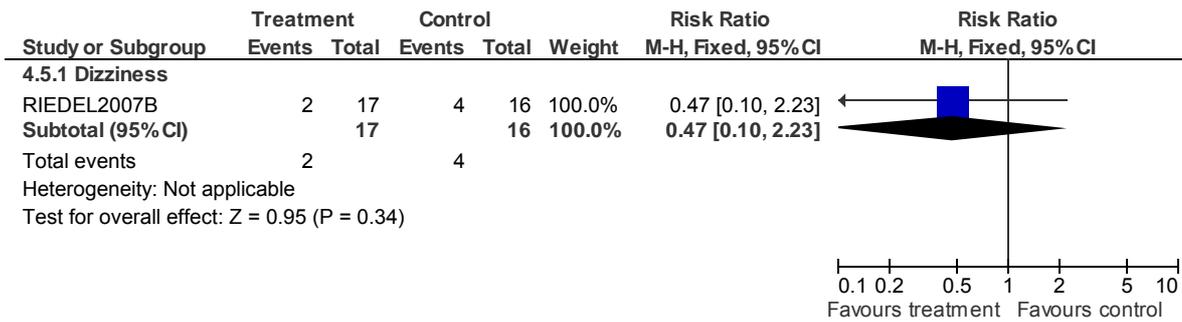
| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio M-H, Fixed, 95% CI | Risk Ratio M-H, Fixed, 95% CI |
|-----------------------|-----------|-------|---------|-------|--------|----------------------------------|----------------------------------|
| | Events | Total | Events | Total | | | |
| RIEDEL2007B | 8 | 17 | 8 | 16 | 100.0% | 0.94 [0.47, 1.90] | |
| Total (95% CI) | | 17 | | 16 | 100.0% | 0.94 [0.47, 1.90] | |
| Total events | 8 | | 8 | | | | |

Heterogeneity: Not applicable
 Test for overall effect: Z = 0.17 (P = 0.87)

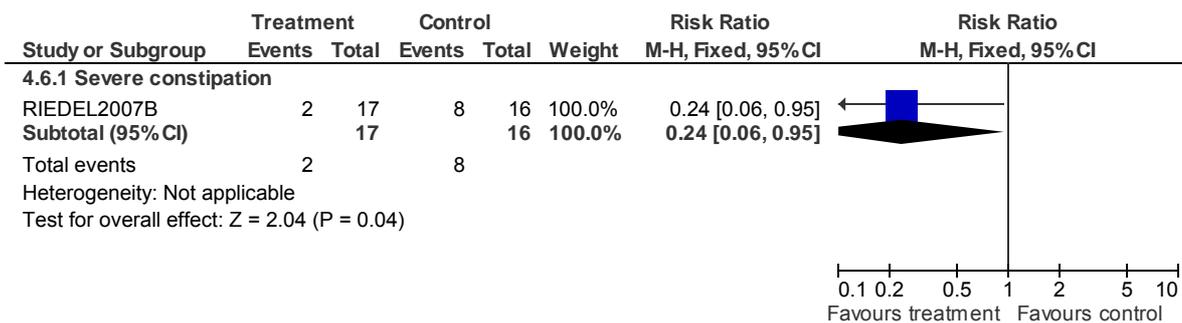


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

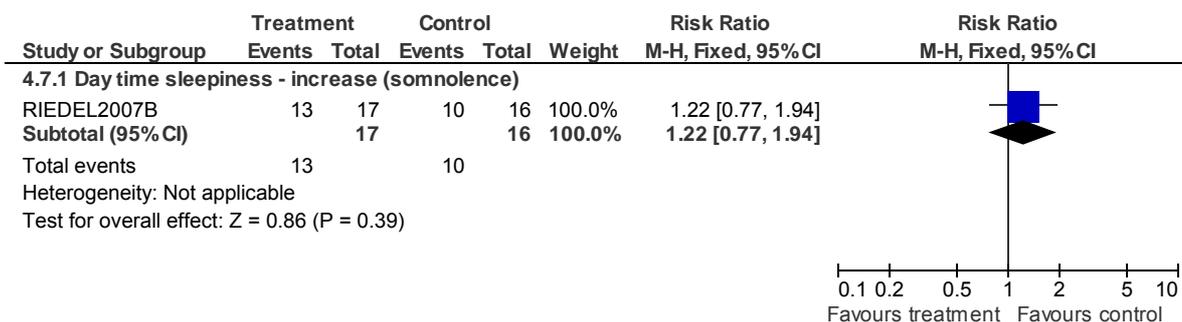
4.5 AE: 4. Cardiovascular SEs (short-term)



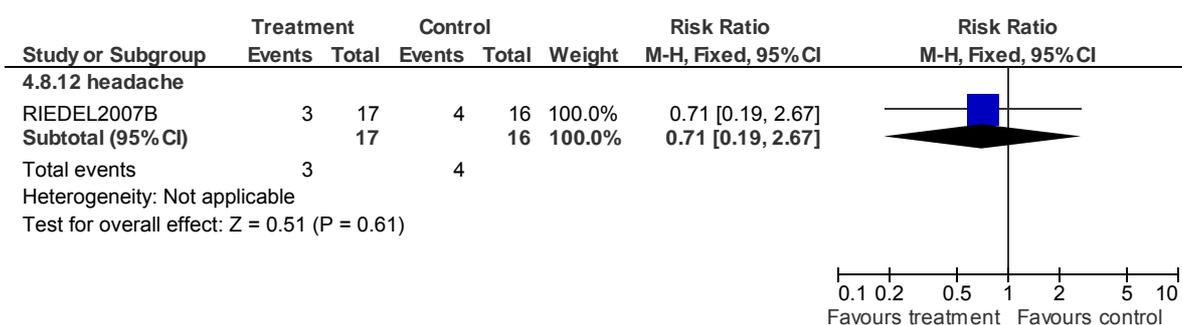
4.6 AE: 5. Gastrointestinal SEs (short-term)



4.7 AE: 6. Sedation (short-term)



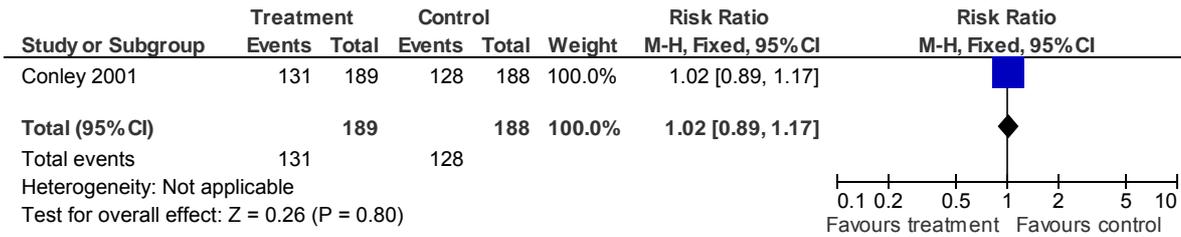
4.8 AE: 9. Other SEs (short-term)



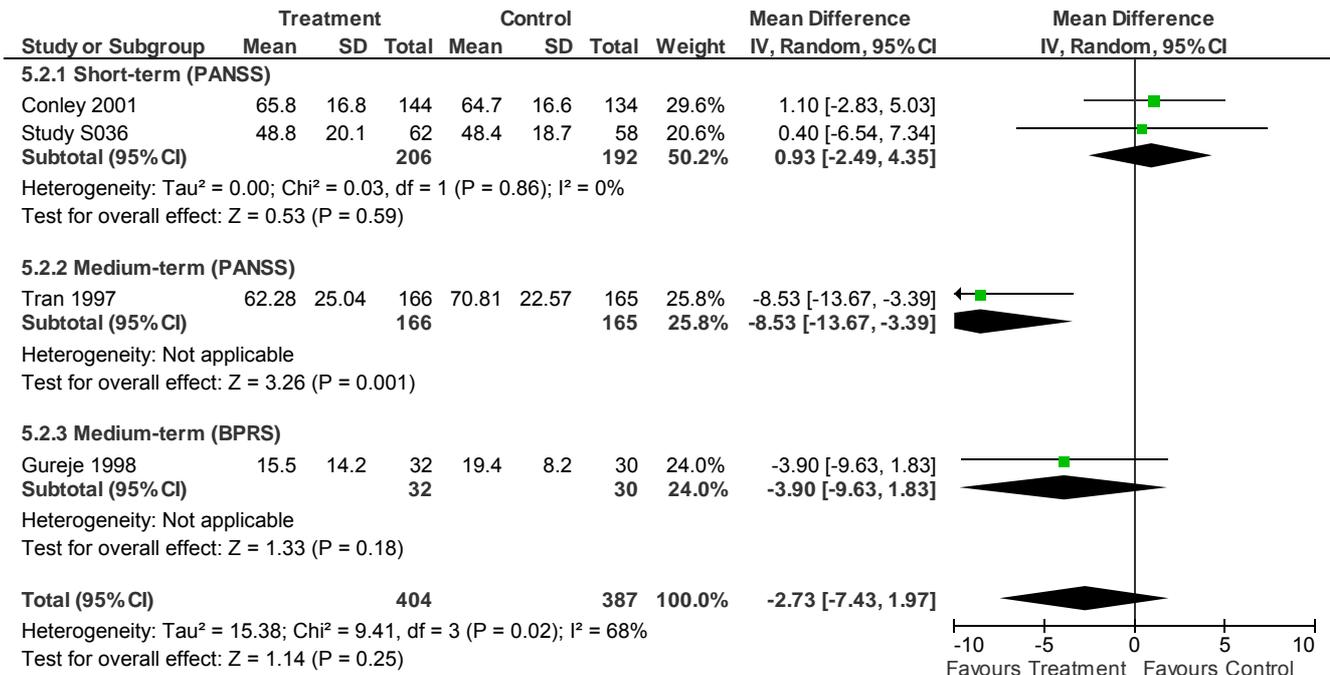
5 Olanzapine versus Risperidone (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.1 Global state: 1. Not improved (CGI) (short-term)

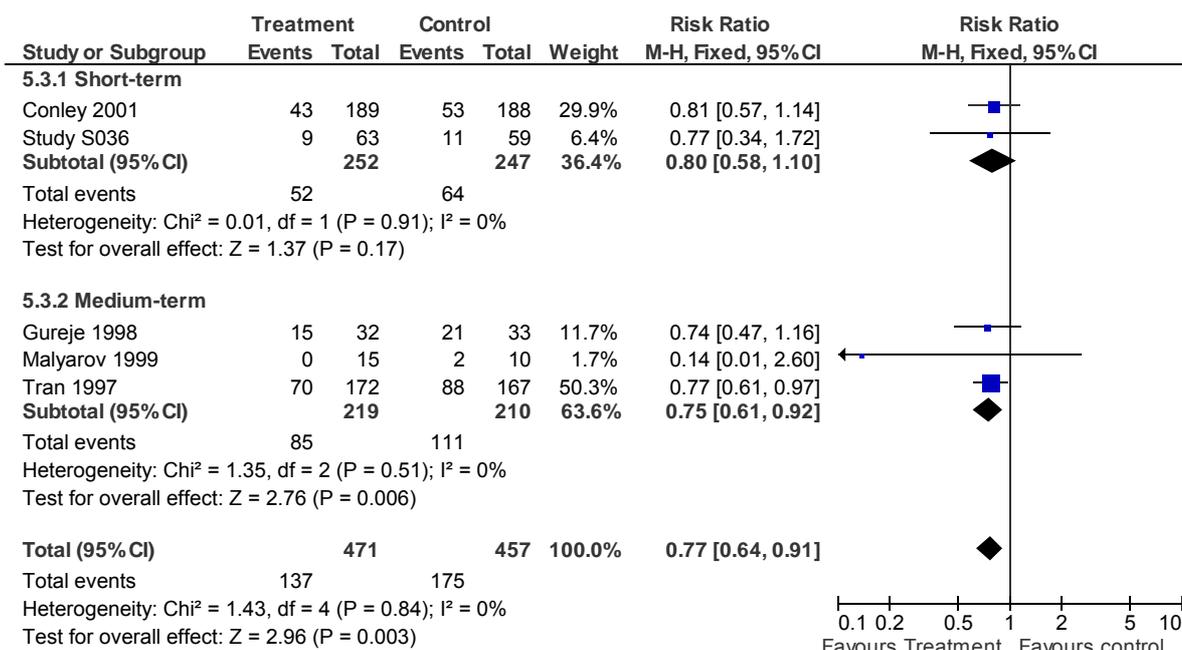


5.2 Mental state: 1. PANSS/BPRS total (endpoint, high=poor)

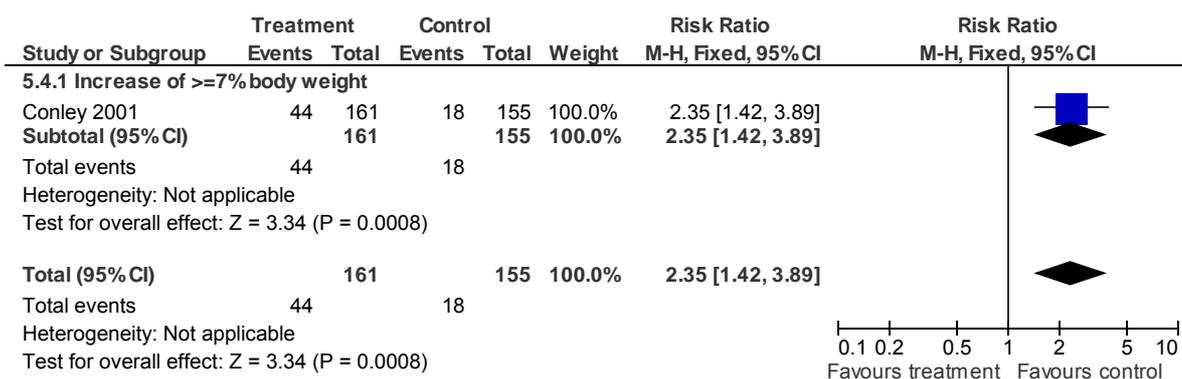


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.3 Leaving the study early: 1. Any reason

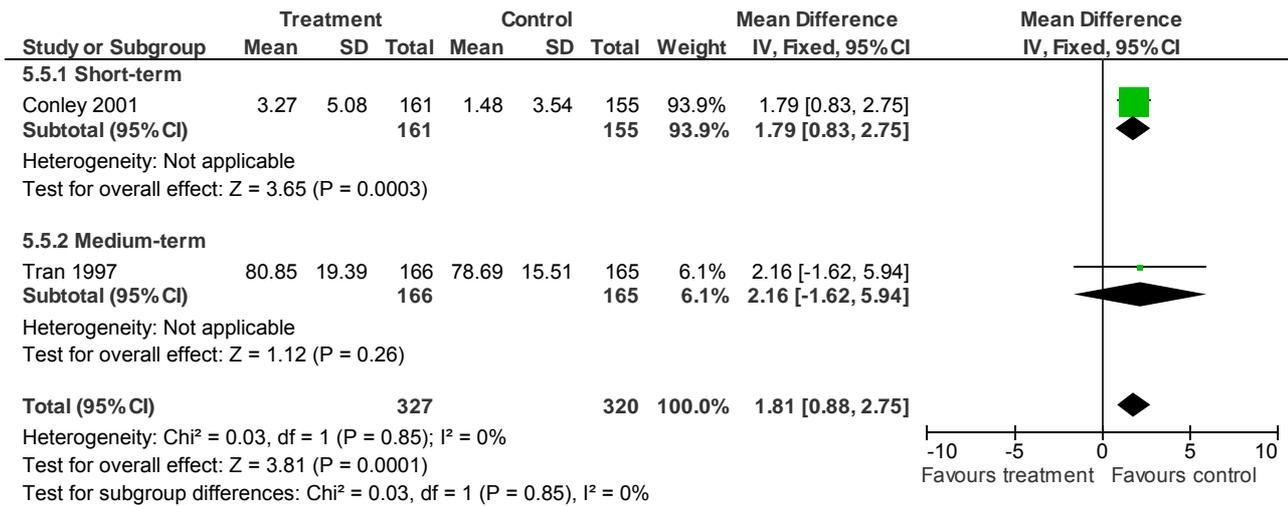


5.4 AE: 1. Metabolic SEs - Weight gain (short-term)

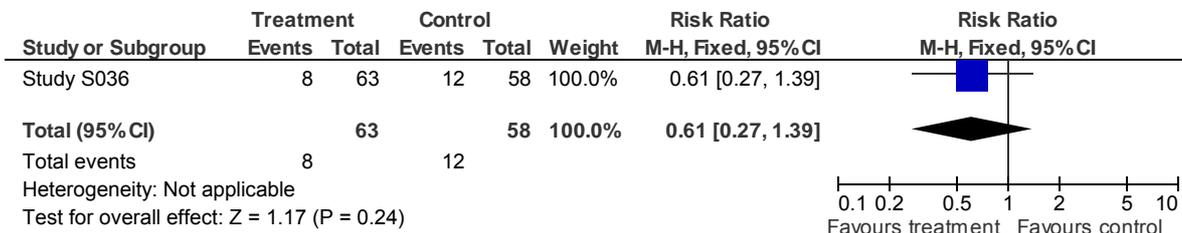


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.5 AE: 1. Metabolic SEs - Weight change from baseline (kg)



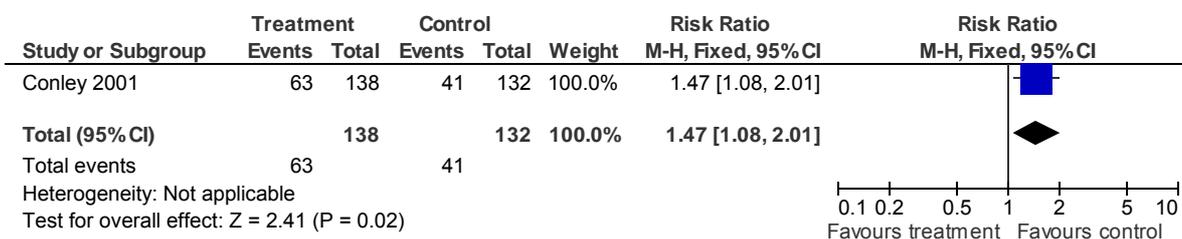
5.6 AE: 1. Metabolic SEs - Alanine transaminase (out of normal range) (short-term)



5.7 AE: 1. Metabolic SEs - LDL-C (>5% increase) (short-term)

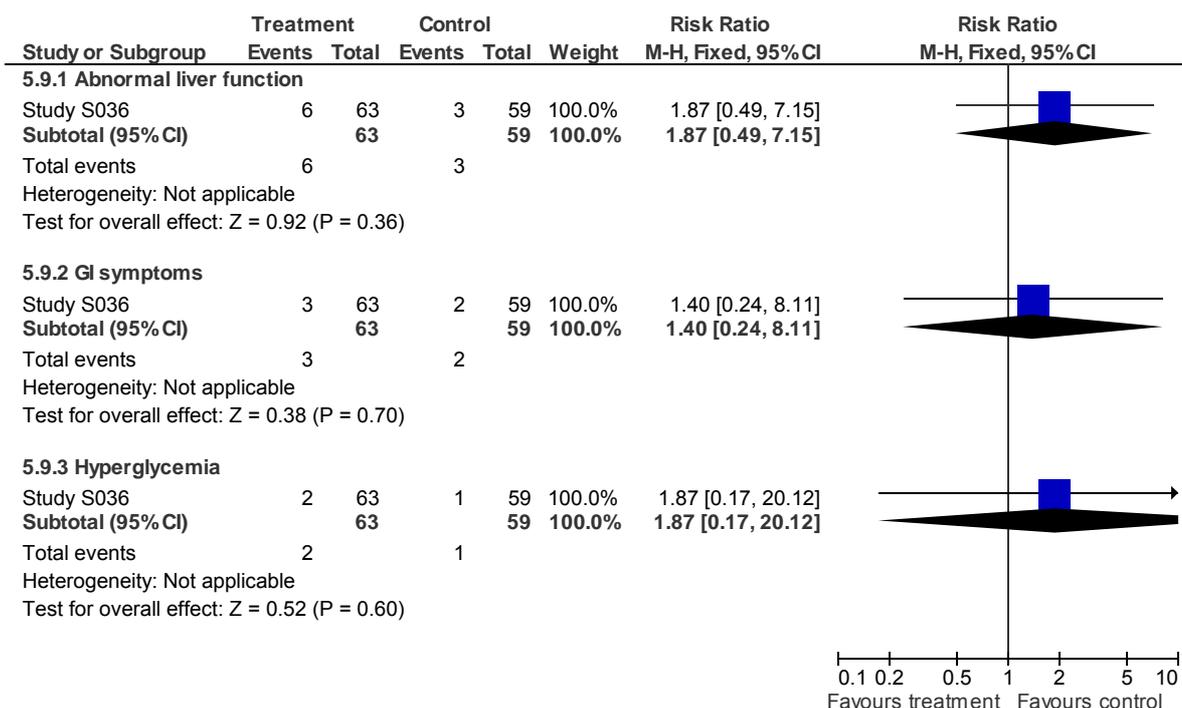


5.8 AE: 1. Metabolic SEs - Tryglicerides (>10% increase) (short-term)

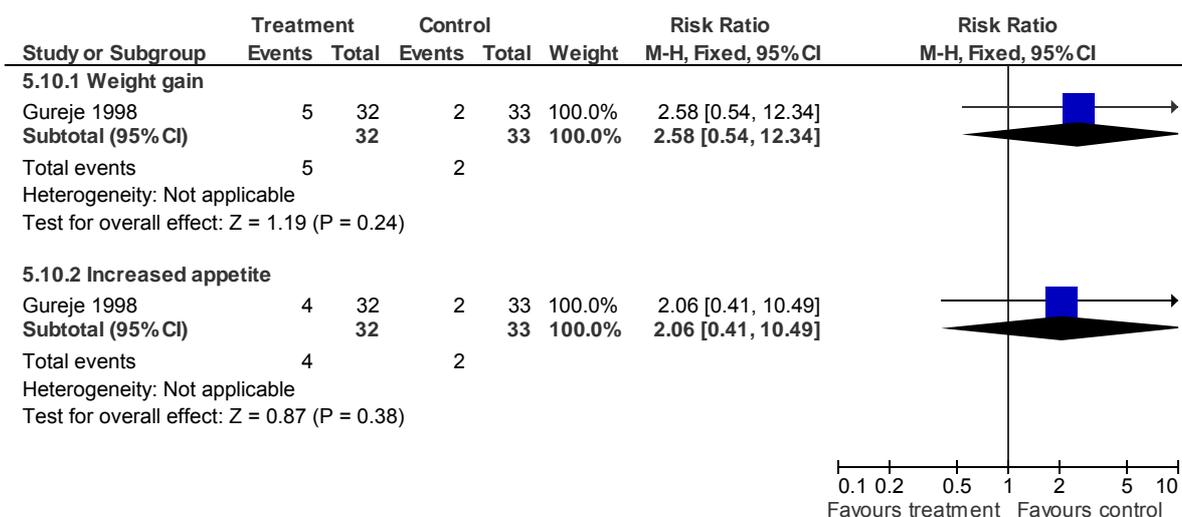


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

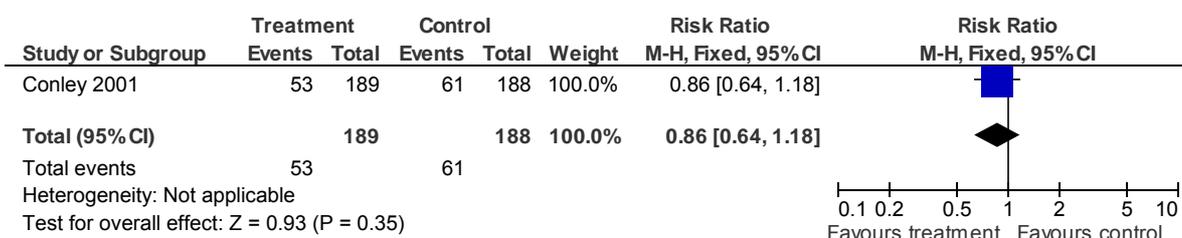
5.9 AE: 1. Metabolic SEs (treatment-emergent) (short-term)



5.10 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)

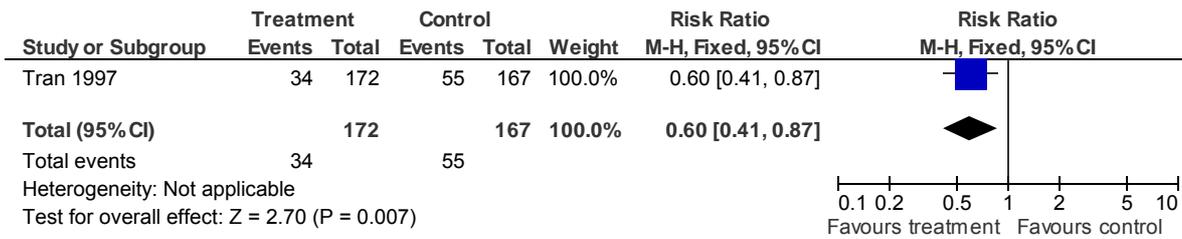


5.11 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)

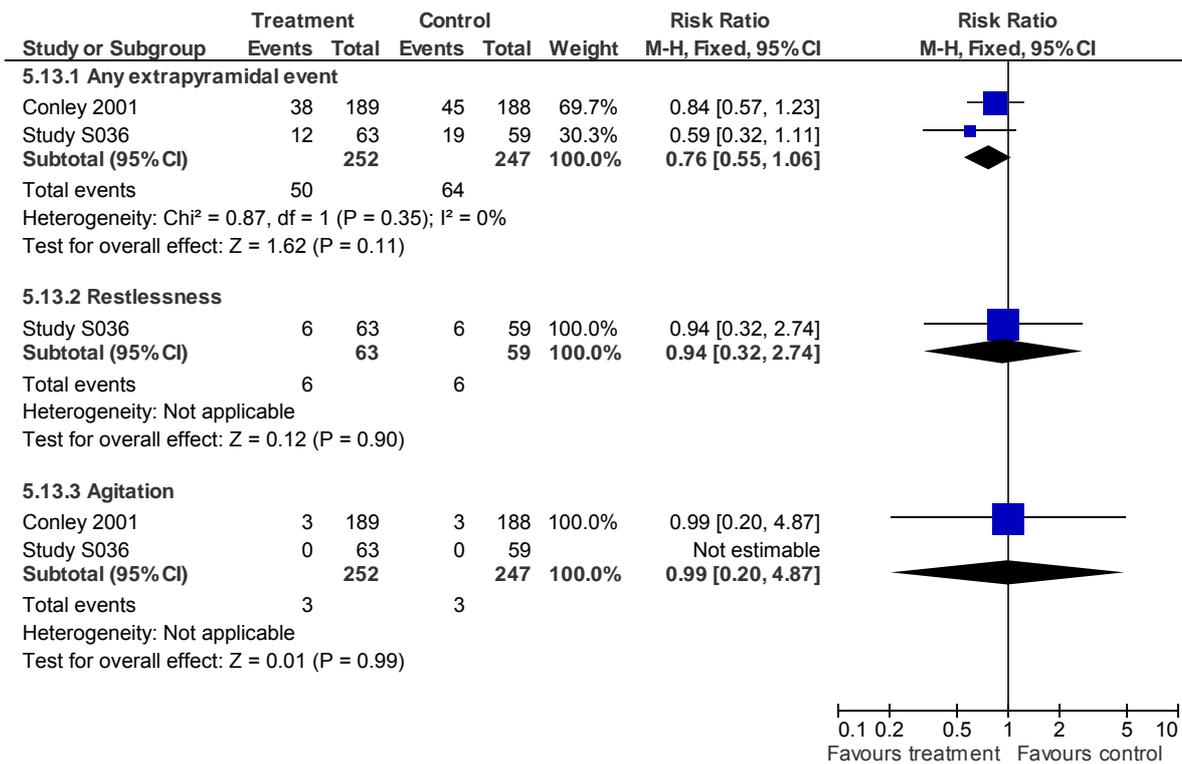


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.12 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (medium-term)

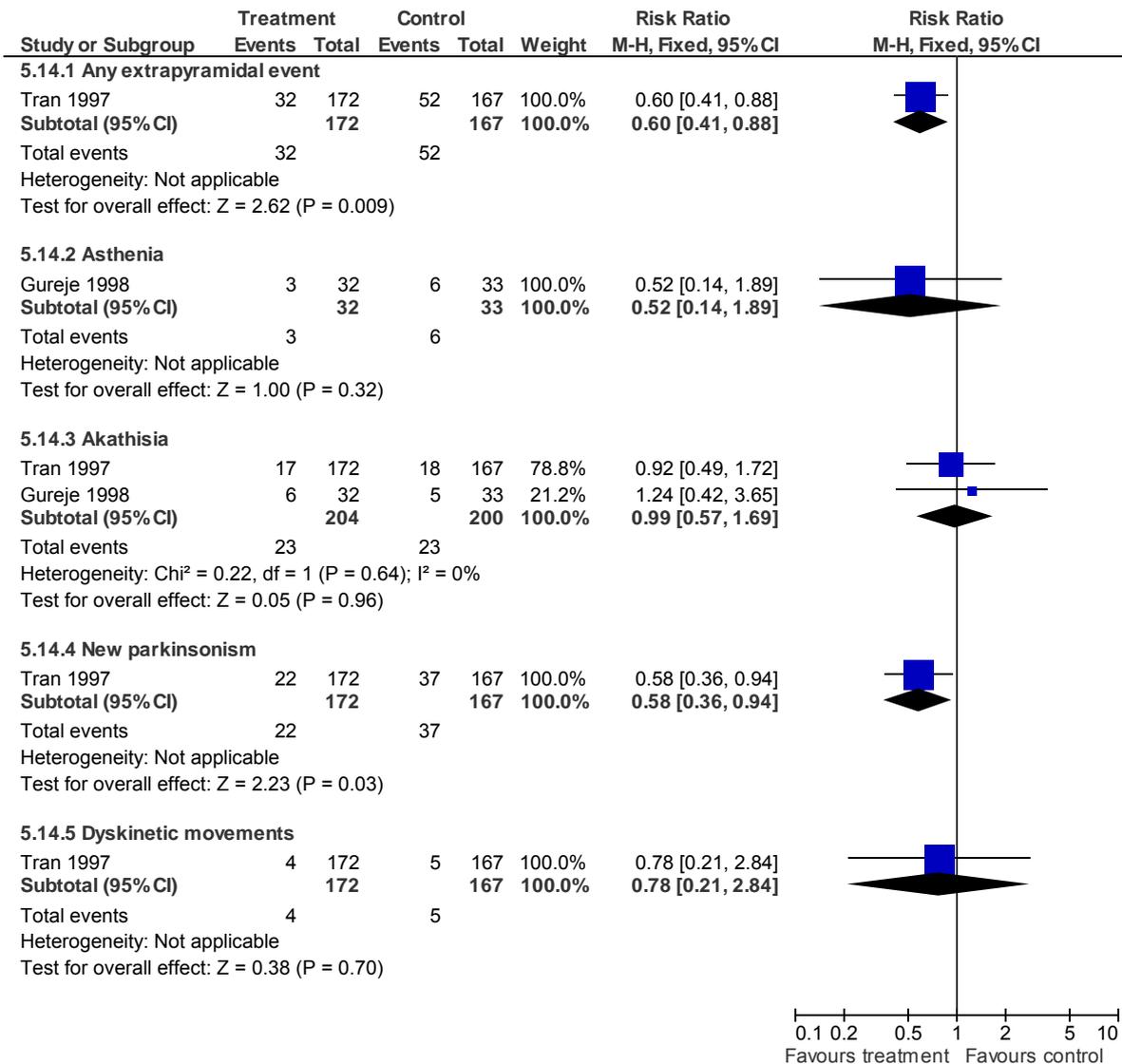


5.13 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

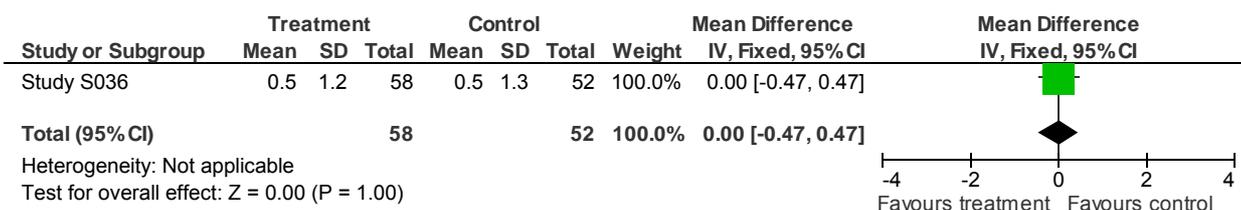


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

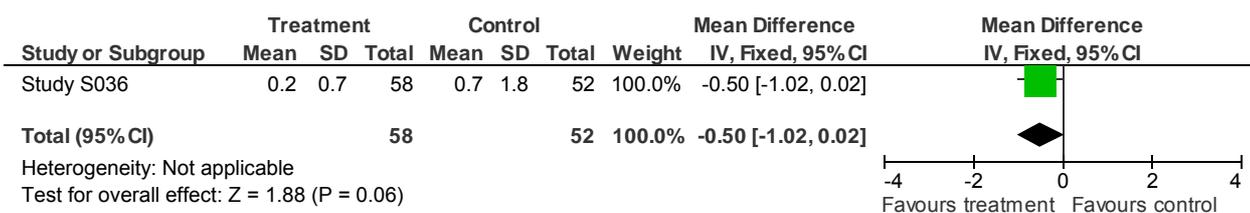
5.14 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



5.15 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; endpt mean) (short-term)

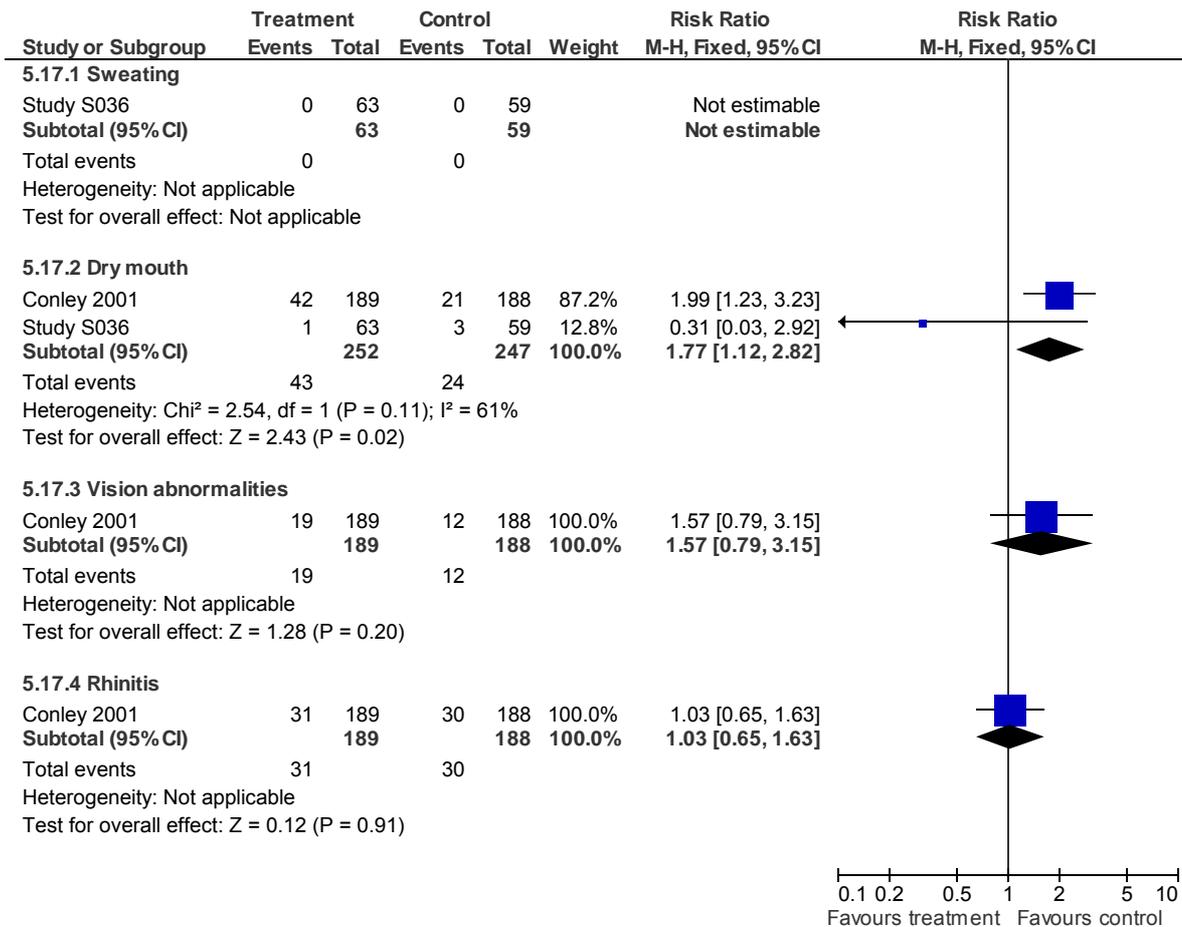


5.16 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; endpt mean) (short-term)

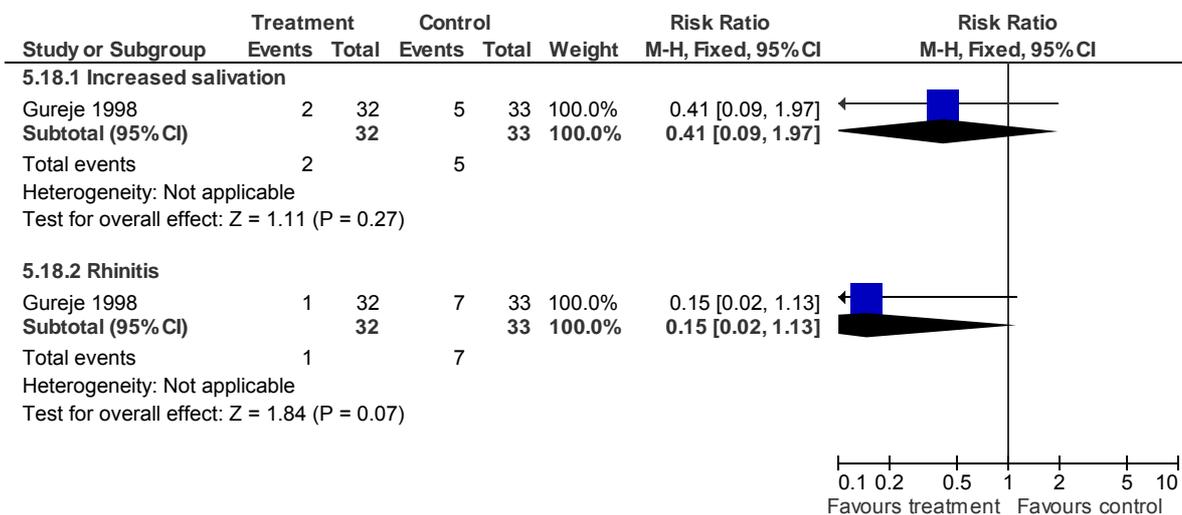


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.17 AE: 3. Autonomic SEs (short-term)

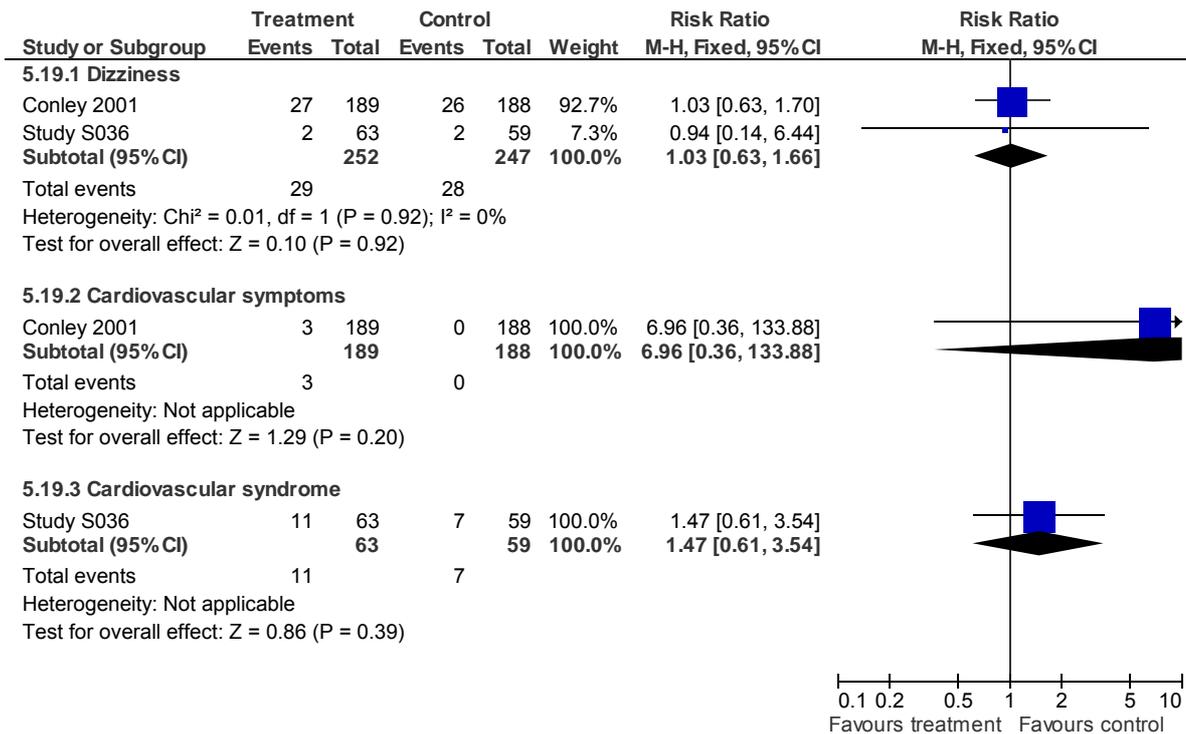


5.18 AE: 3. Autonomic SEs (medium-term)

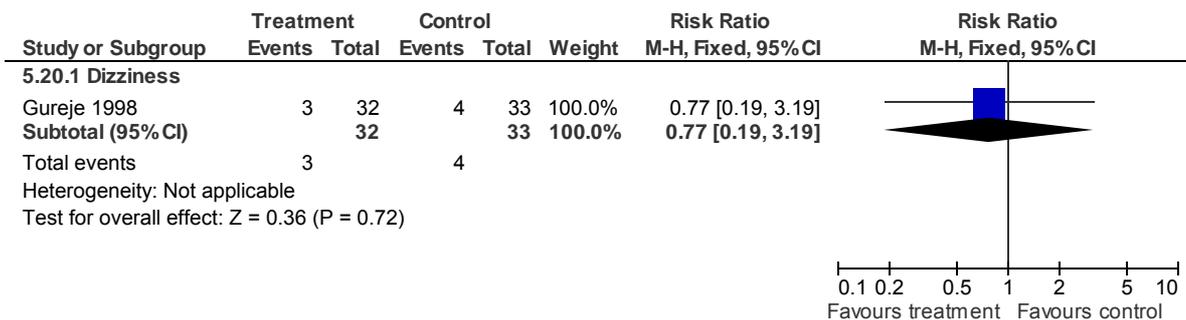


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.19 AE: 4. Cardiovascular SEs (short-term)

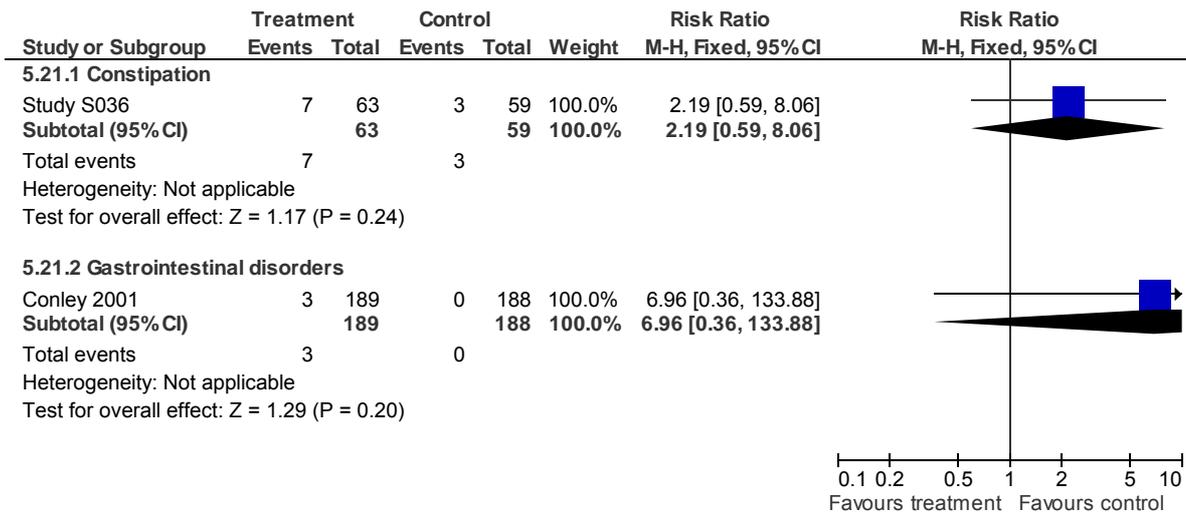


5.20 AE: 4. Cardiovascular SEs (medium-term)

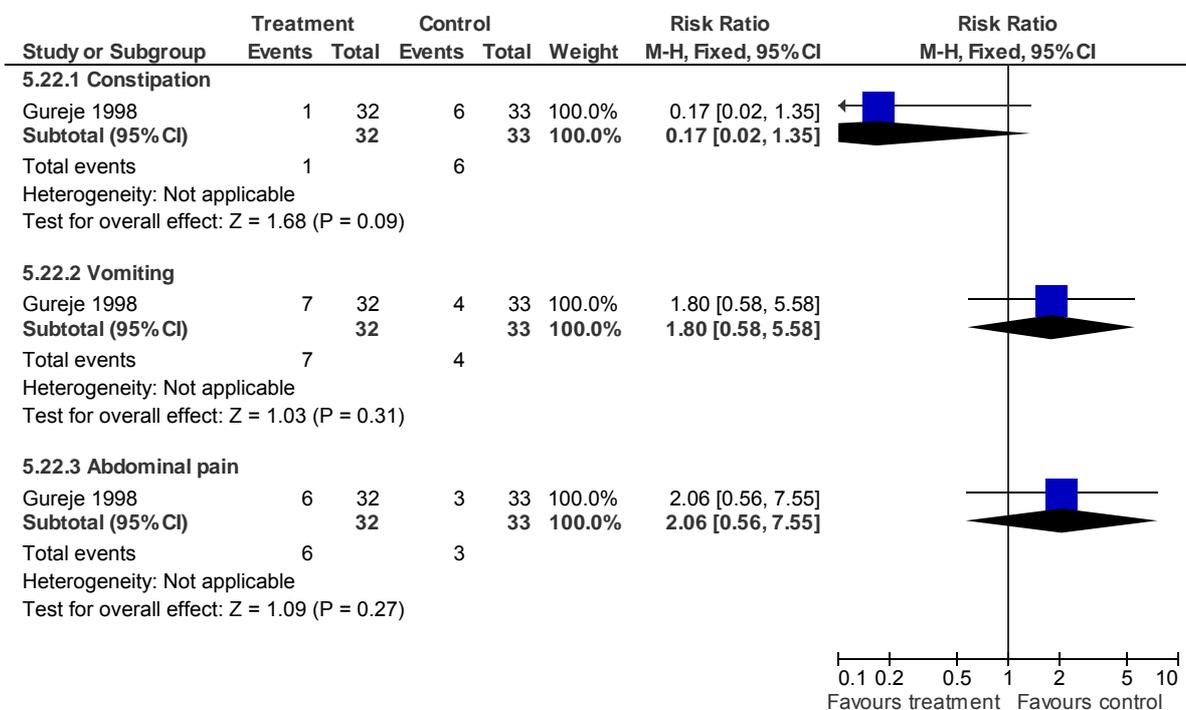


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.21 AE: 5. Gastrointestinal SEs (short-term)

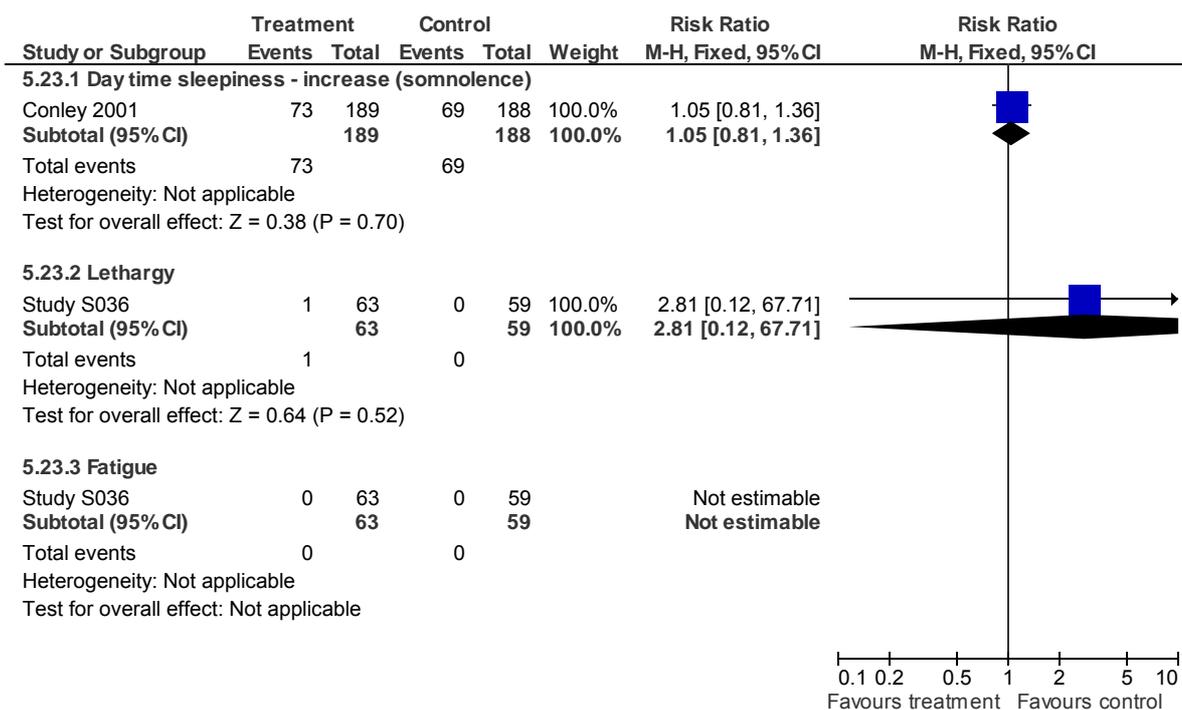


5.22 AE: 5. Gastrointestinal SEs (medium-term)

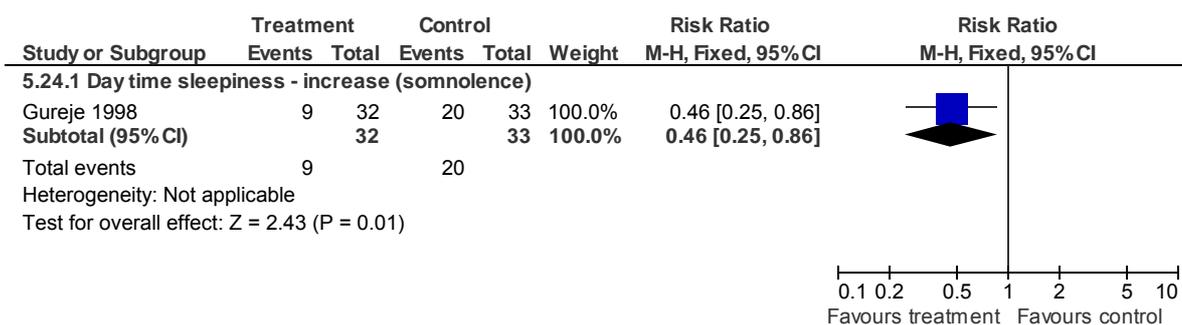


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

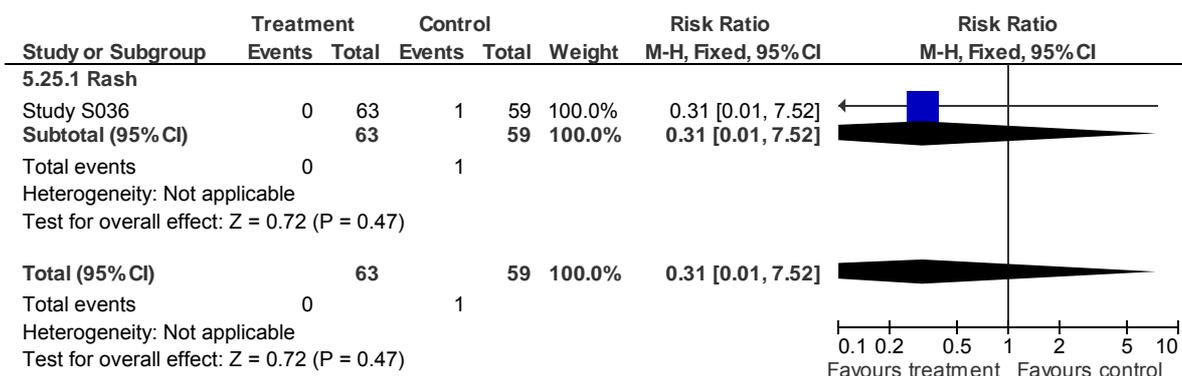
5.23 AE: 6. Sedation (short-term)



5.24 AE: 6. Sedation (medium-term)

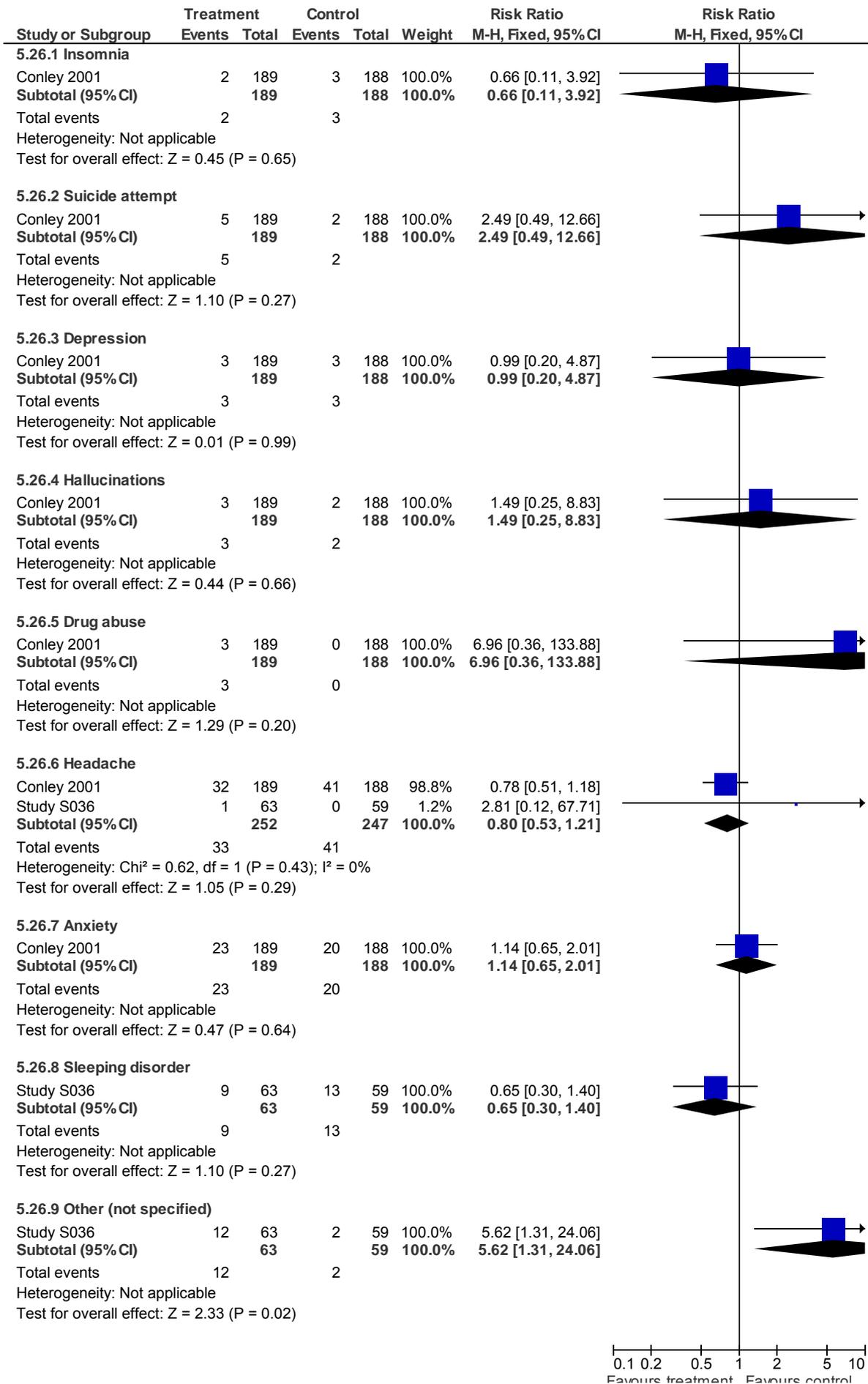


5.25 AE: 9. Dermatological system (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

5.26 AE: 10. Other SEs (short-term)

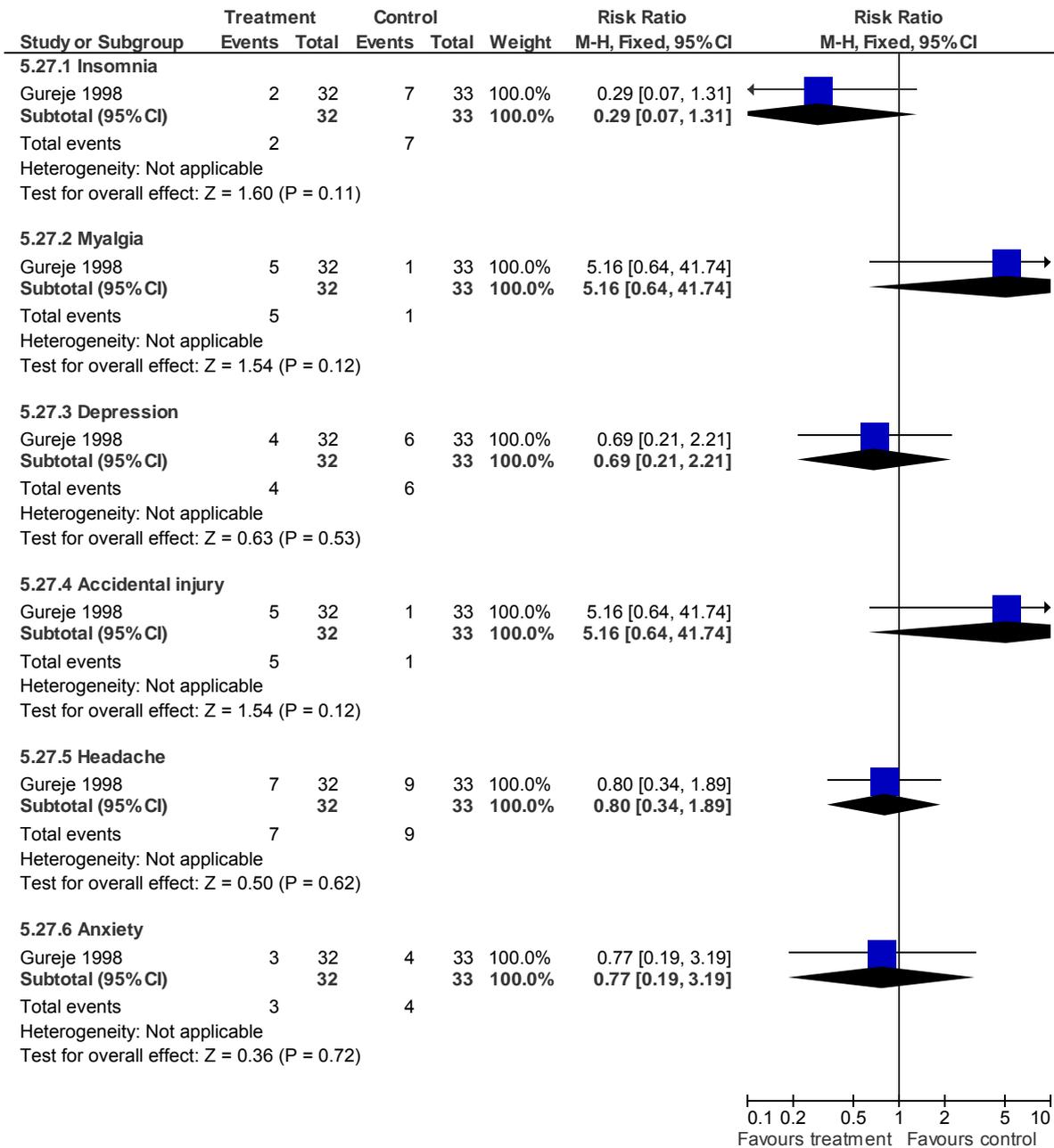


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

favours treatment favours control

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

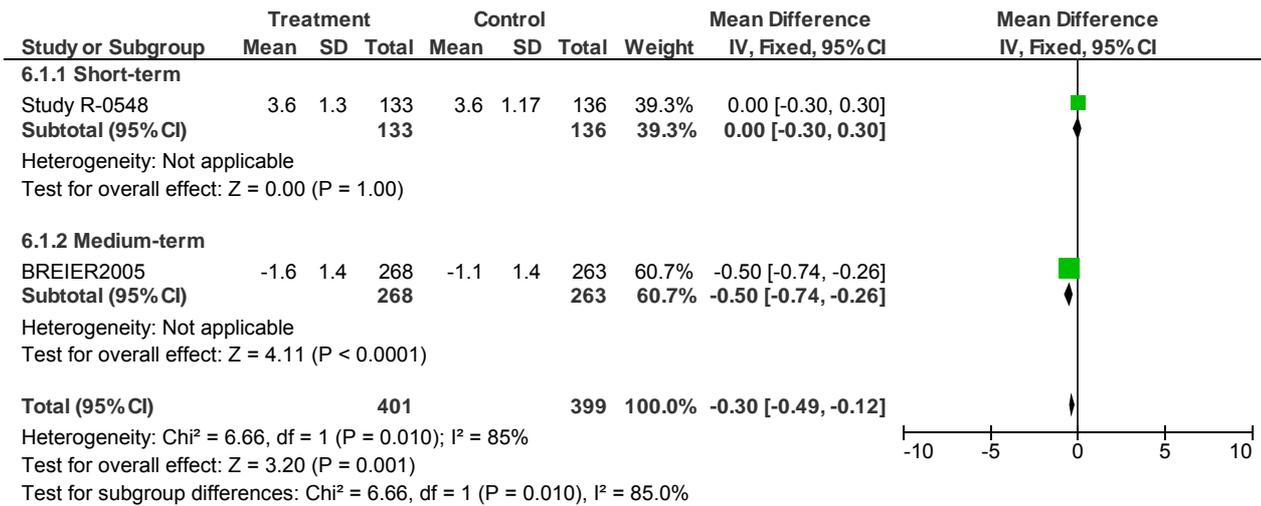
5.27 AE: 10. Other SEs (medium-term)



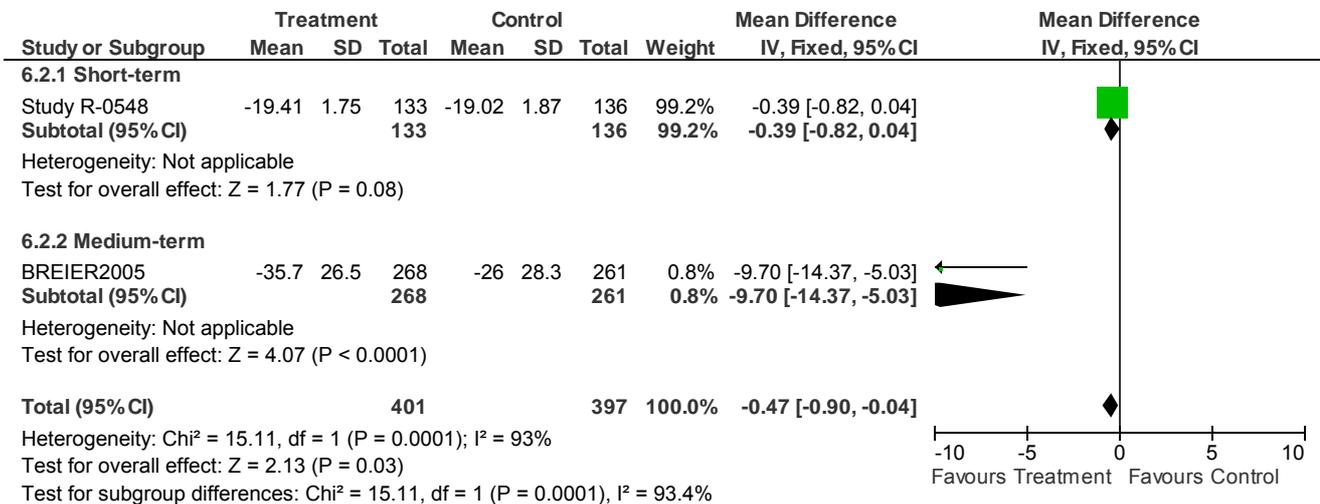
6 Olanzapine versus Ziprasidone (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

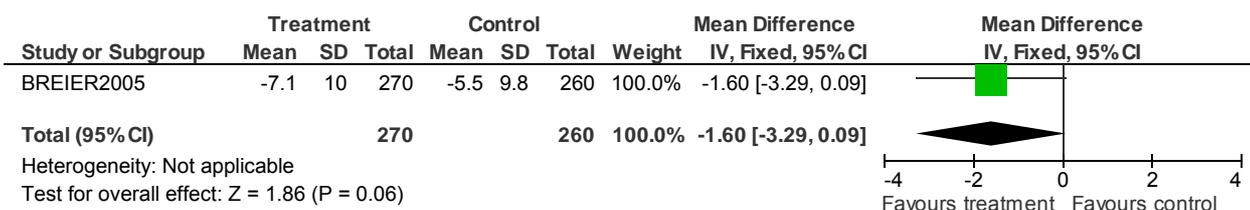
6.1 Global state: 1. CGI-S (endpoint/change)



6.2 Mental state: 1. PANSS total (change from baseline)

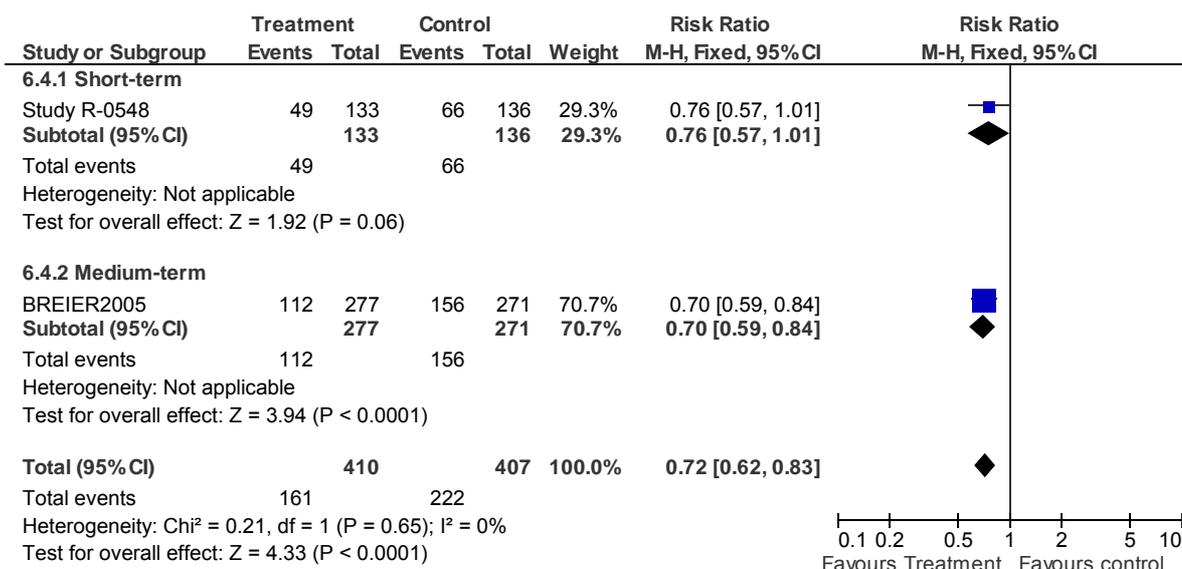


6.3 Mental state: 3. Depression (Montgomery-Asberg Dep Rating Scale) (medium-term)

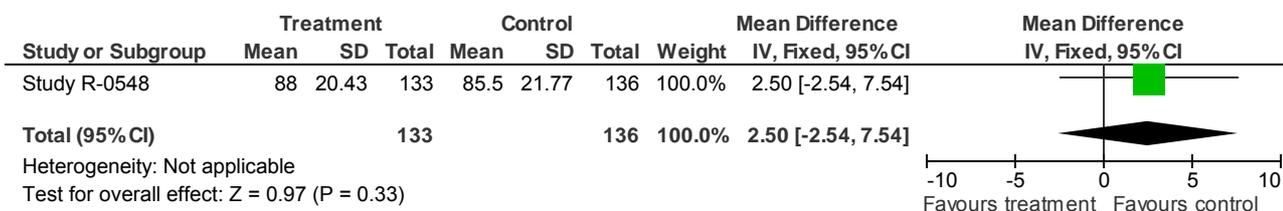


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

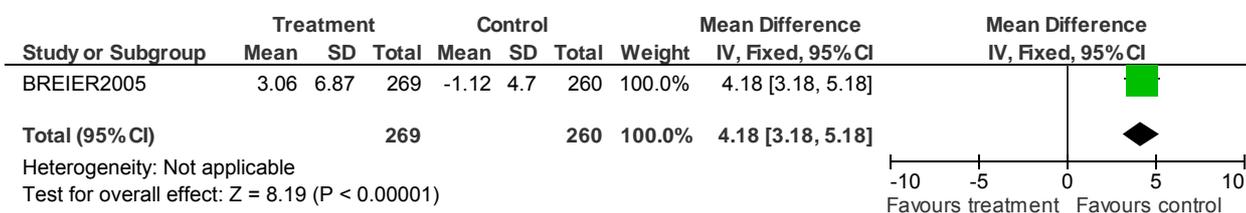
6.4 Leaving the study early: 1. Any reason (short-term)



6.5 AE: 1. Metabolic SEs - Weight (short-term)

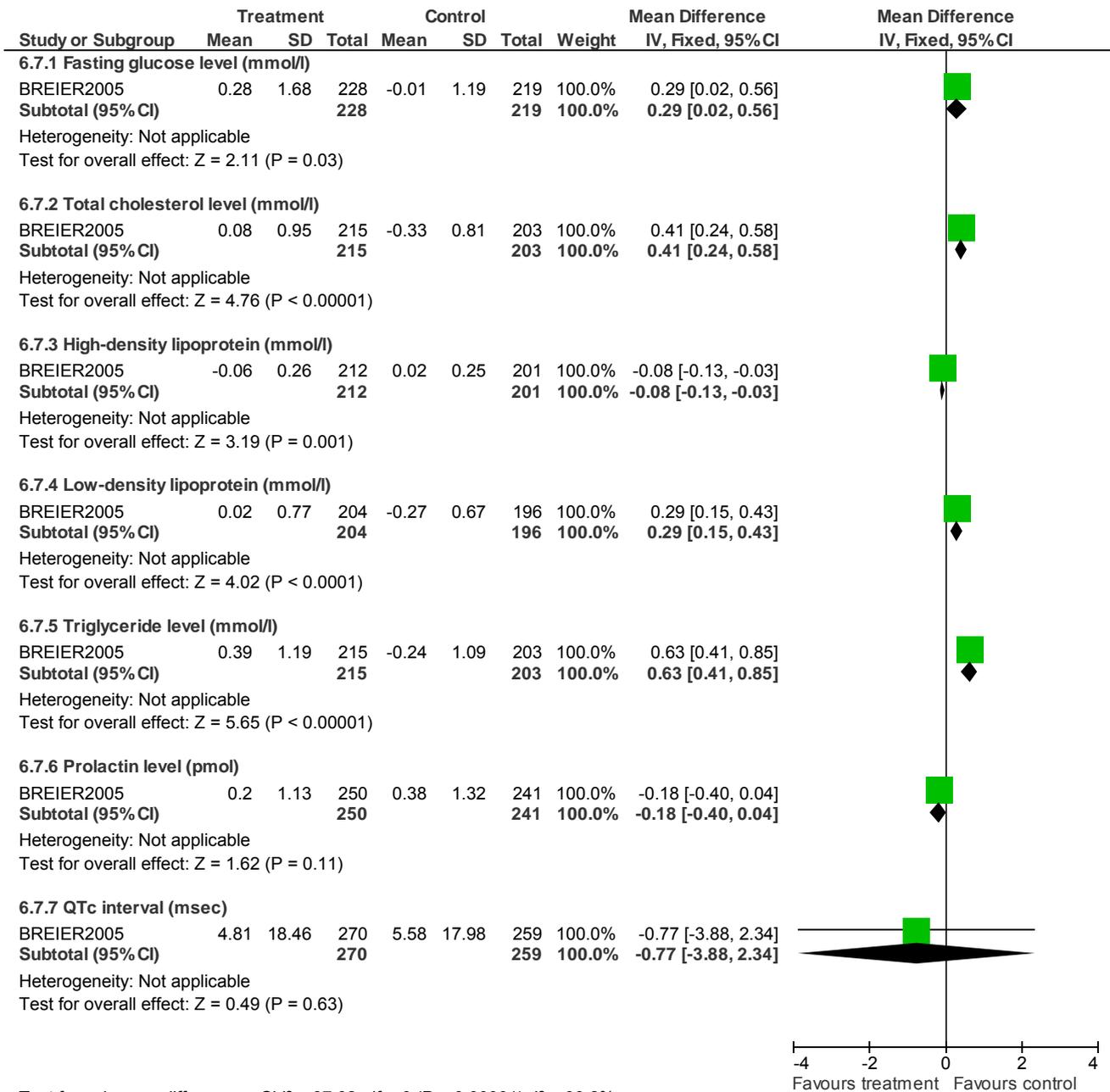


6.6 AE: 1. Metabolic SEs - Weight (medium-term)



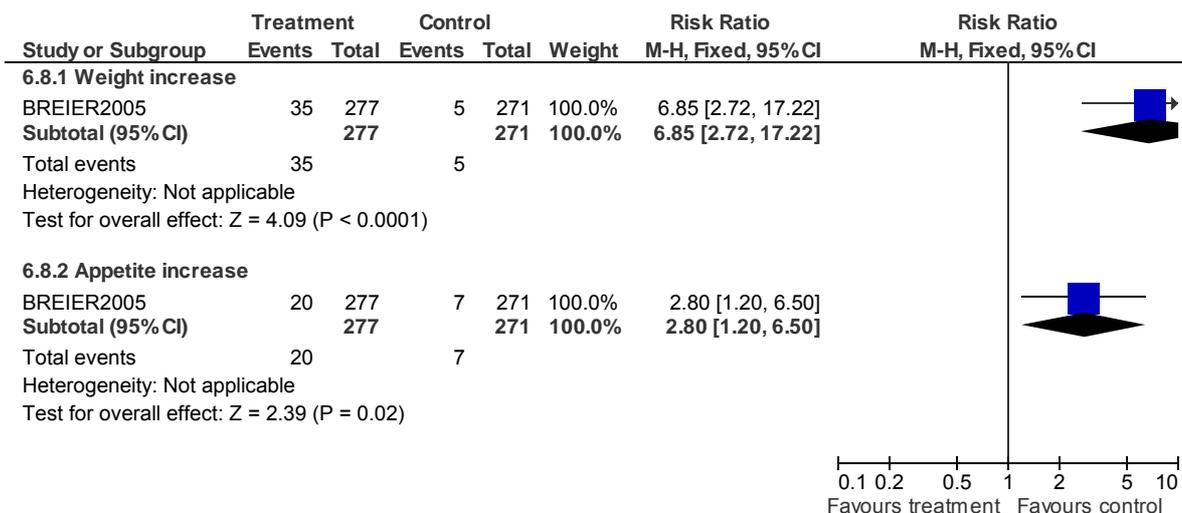
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.7 AE: 1. Metabolic SEs - Various (medium-term)

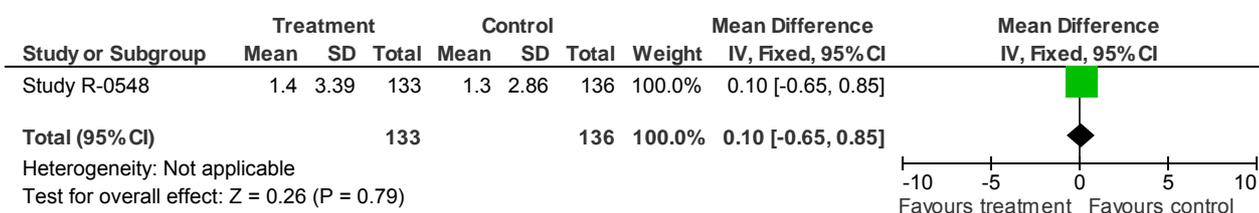


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

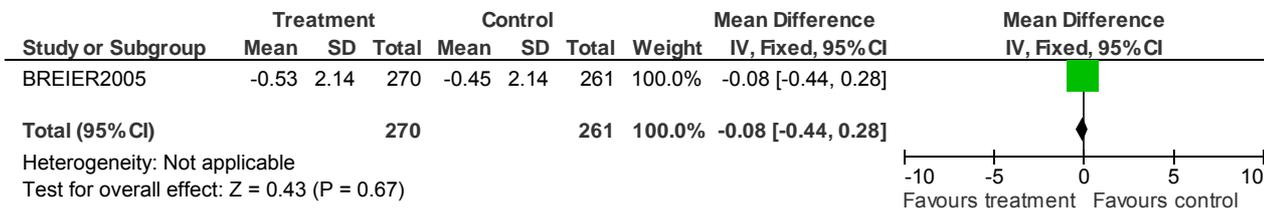
6.8 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)



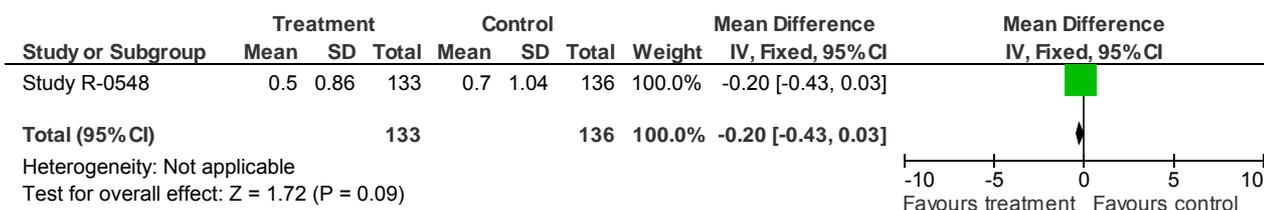
6.9 AE: 2. Neurologic SEs - Involuntary Movement Scale (AIMS; short-term)



6.10 AE: 2. Neurologic SEs - Involuntary Movement Scale (AIMS; medium-term)

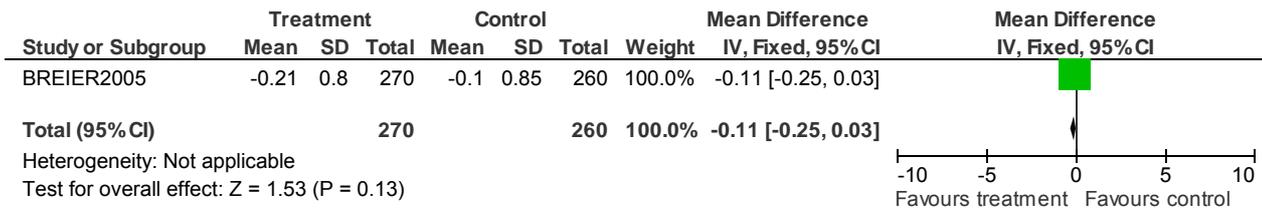


6.11 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; short-term)



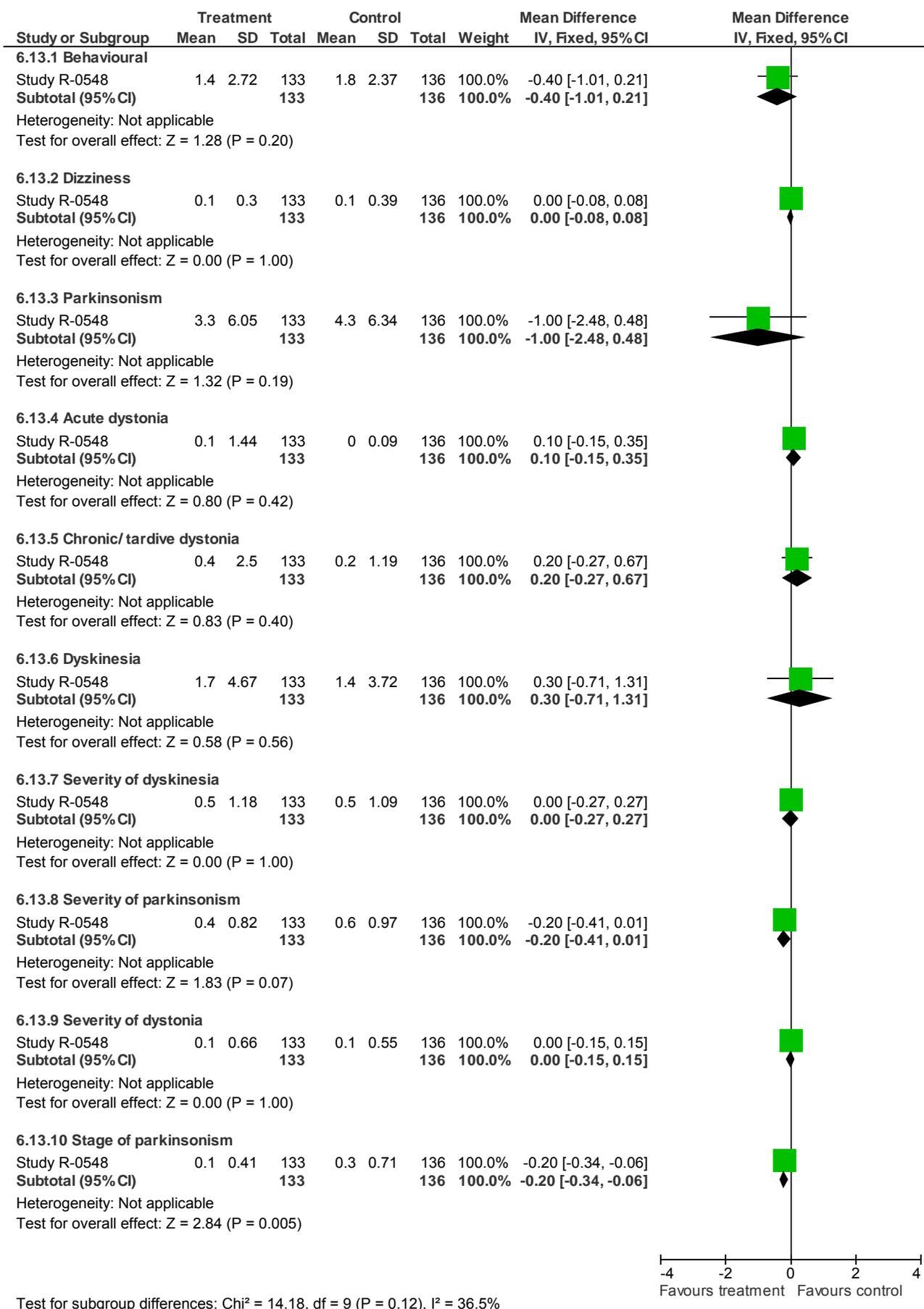
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.12 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; medium-term)



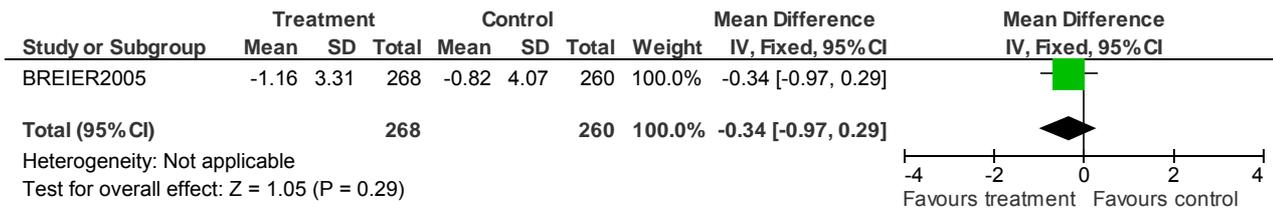
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.13 AE: 2. Neurologic SEs - Extrapyramidal side effect rating scales (ESRS) (short-term)



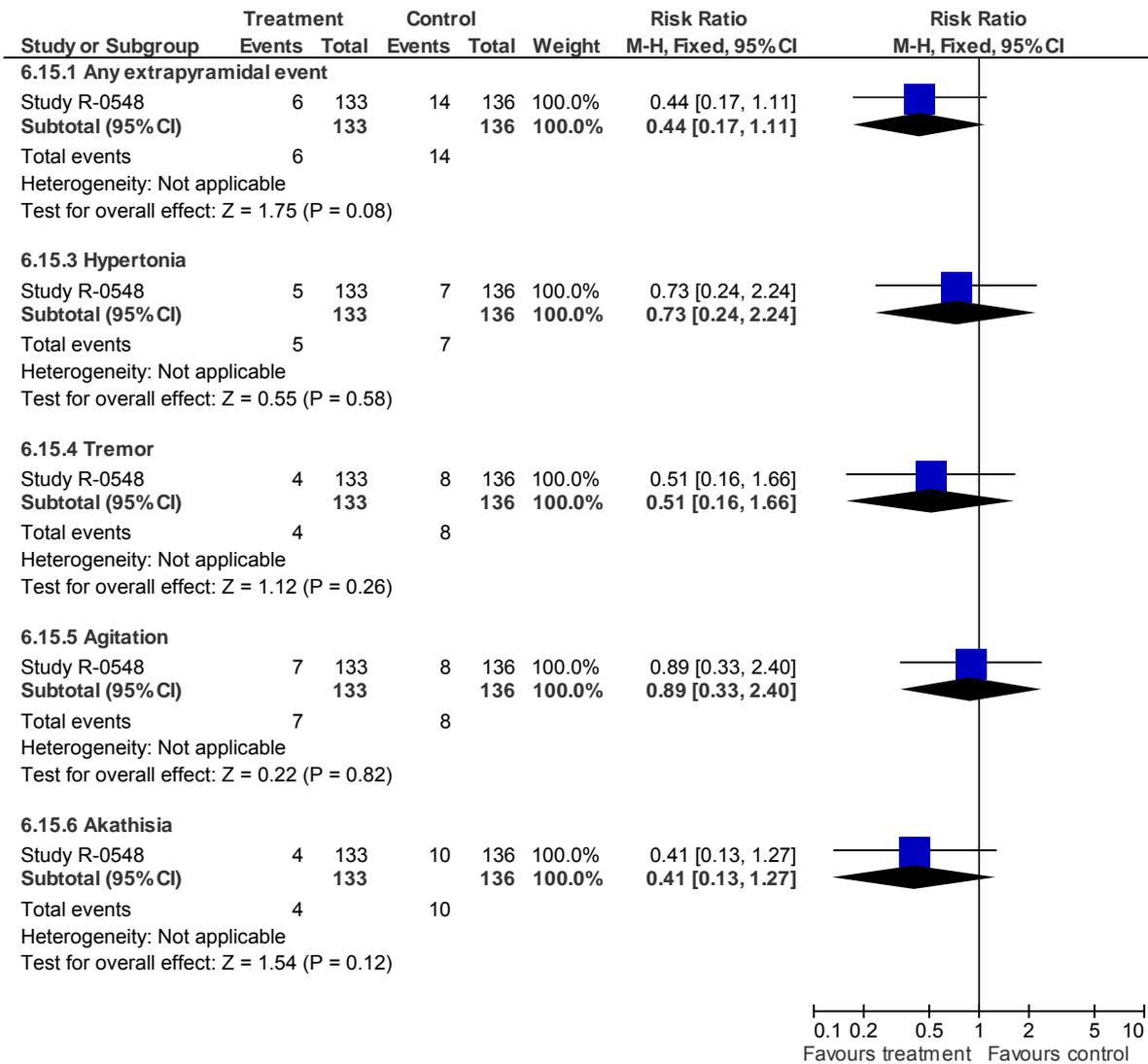
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.14 AE: 2. Neurologic SEs - Simpson-Angus Rating Scale (SAS) (medium-term)

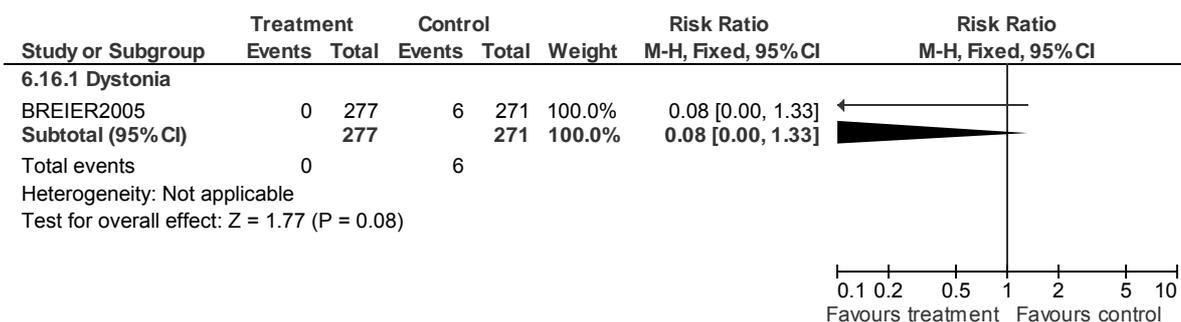


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.15 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

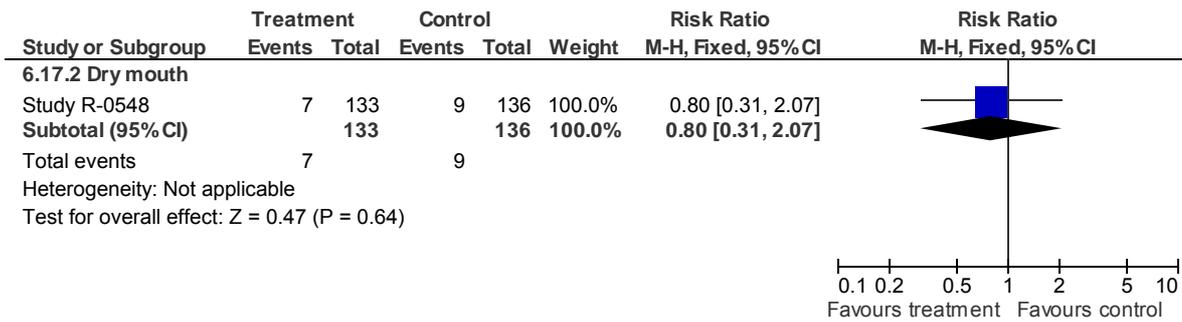


6.16 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

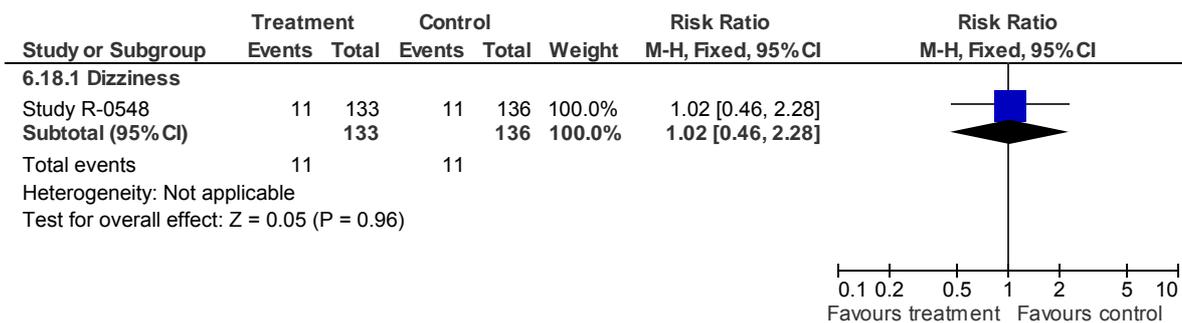


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

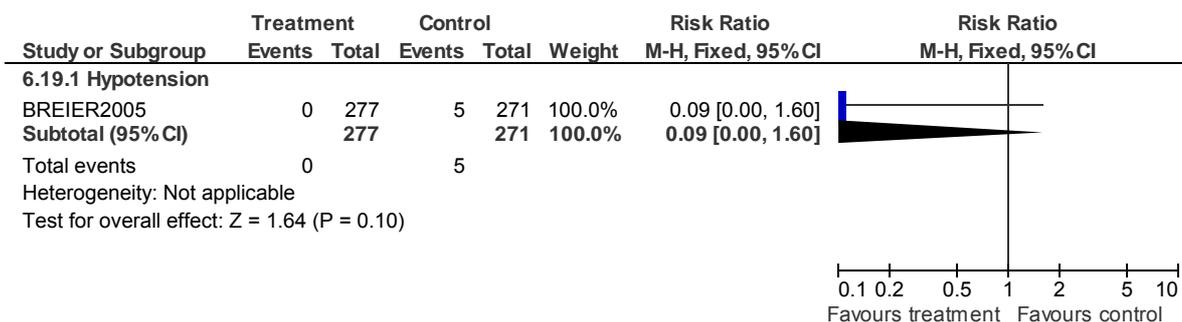
6.17 AE: 3. Autonomic SEs (short-term)



6.18 AE: 4. Cardiovascular SEs (short-term)

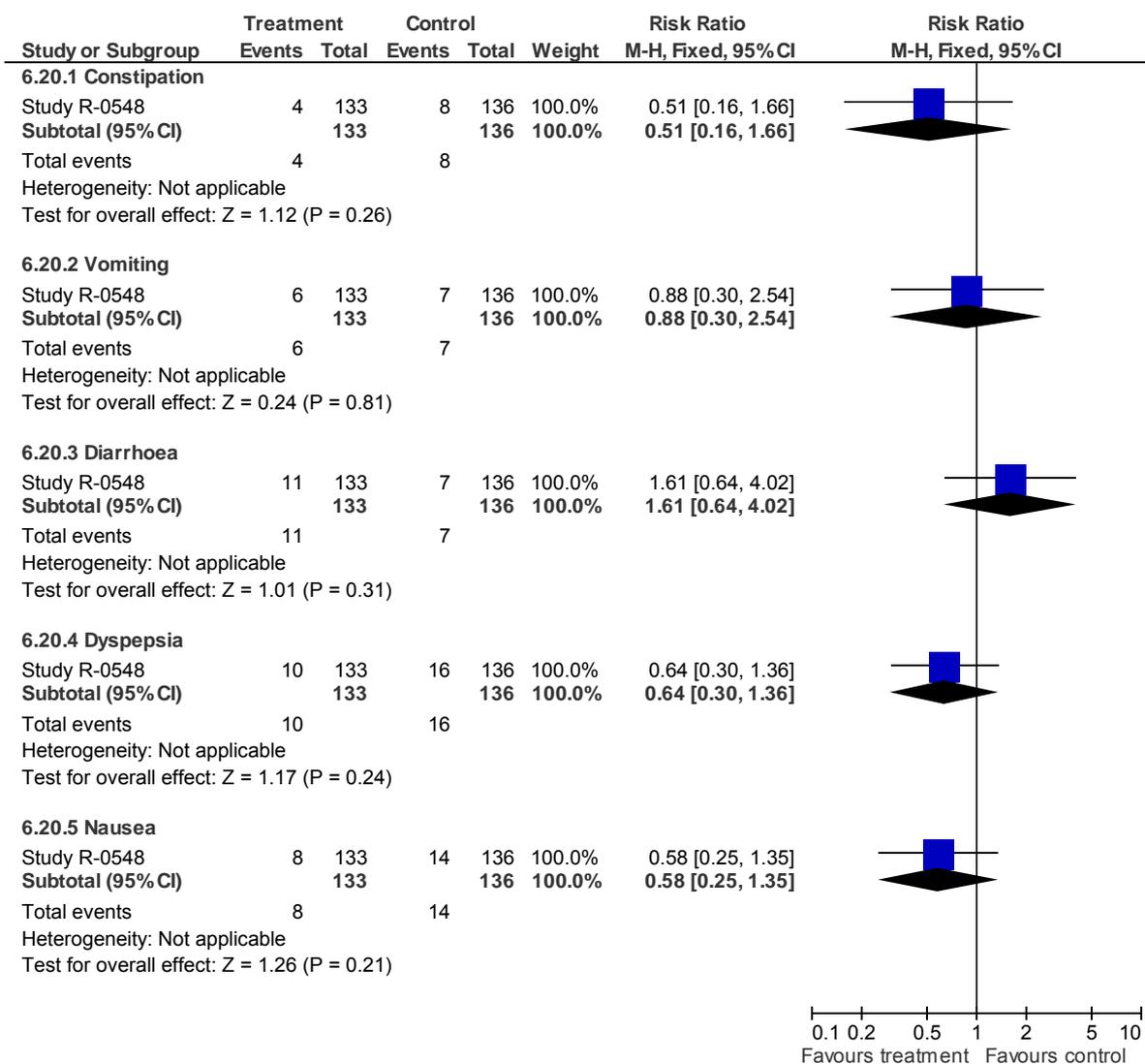


6.19 AE: 4. Cardiovascular SEs (medium-term)

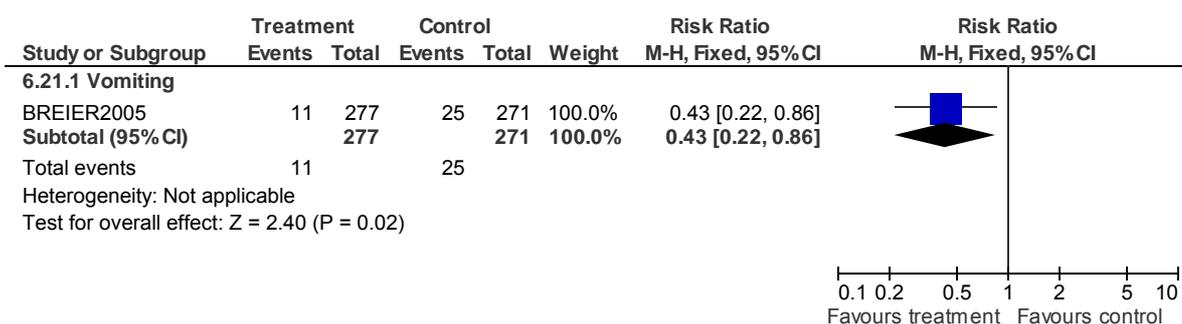


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.20 AE: 5. Gastrointestinal SEs (short-term)

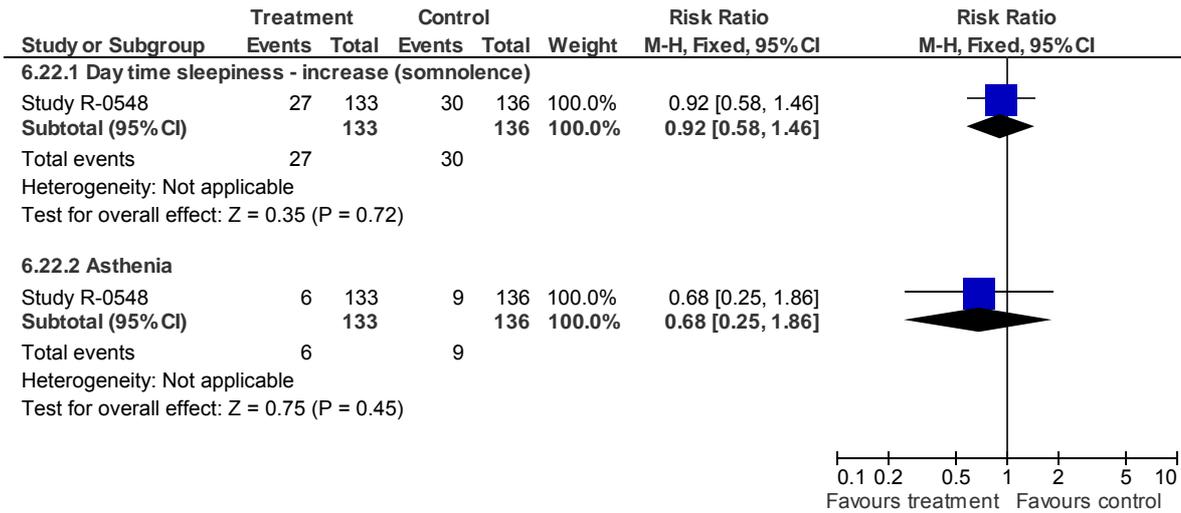


6.21 AE: 5. Gastrointestinal SEs (medium-term)



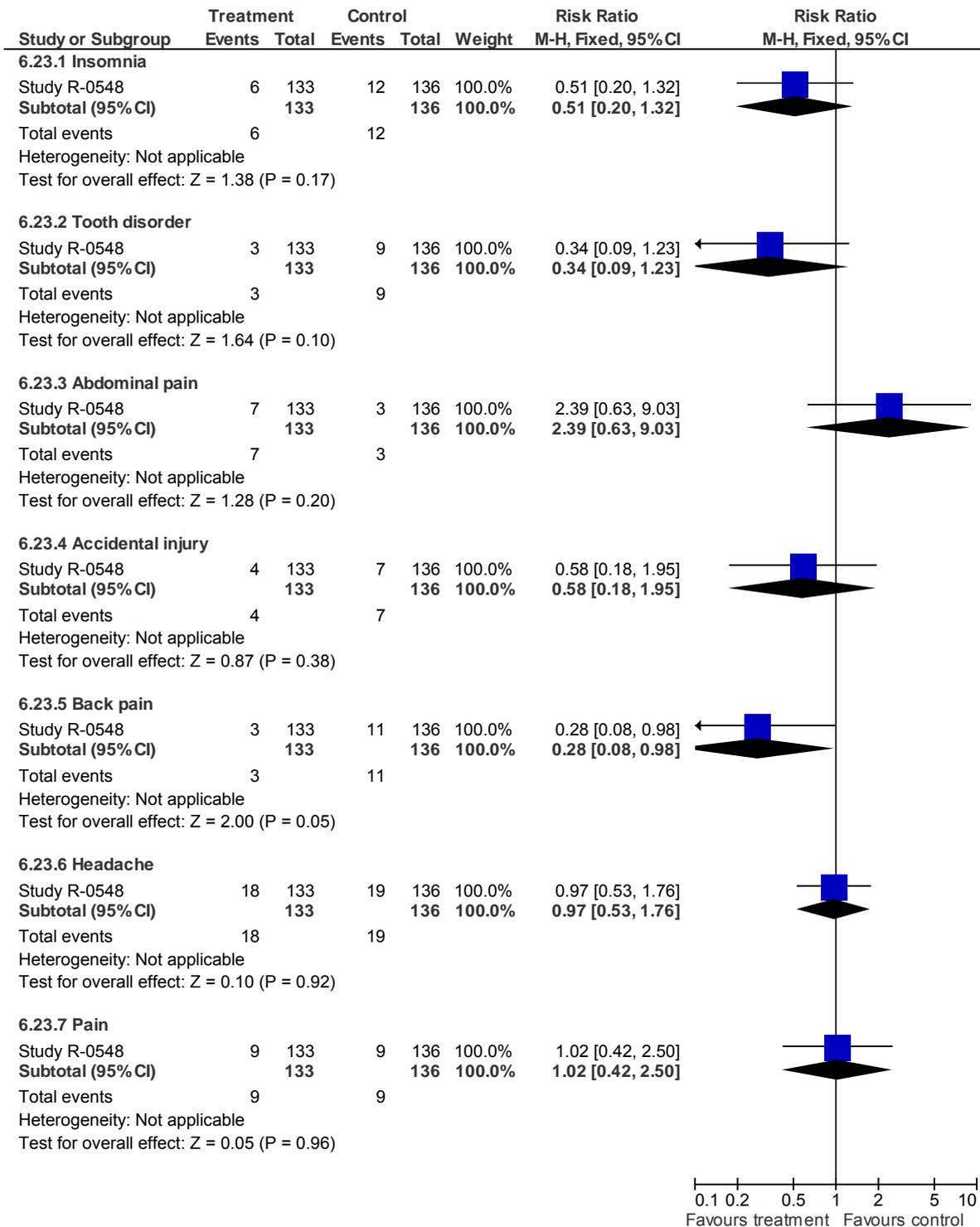
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.22 AE: 6. Sedation (short-term)



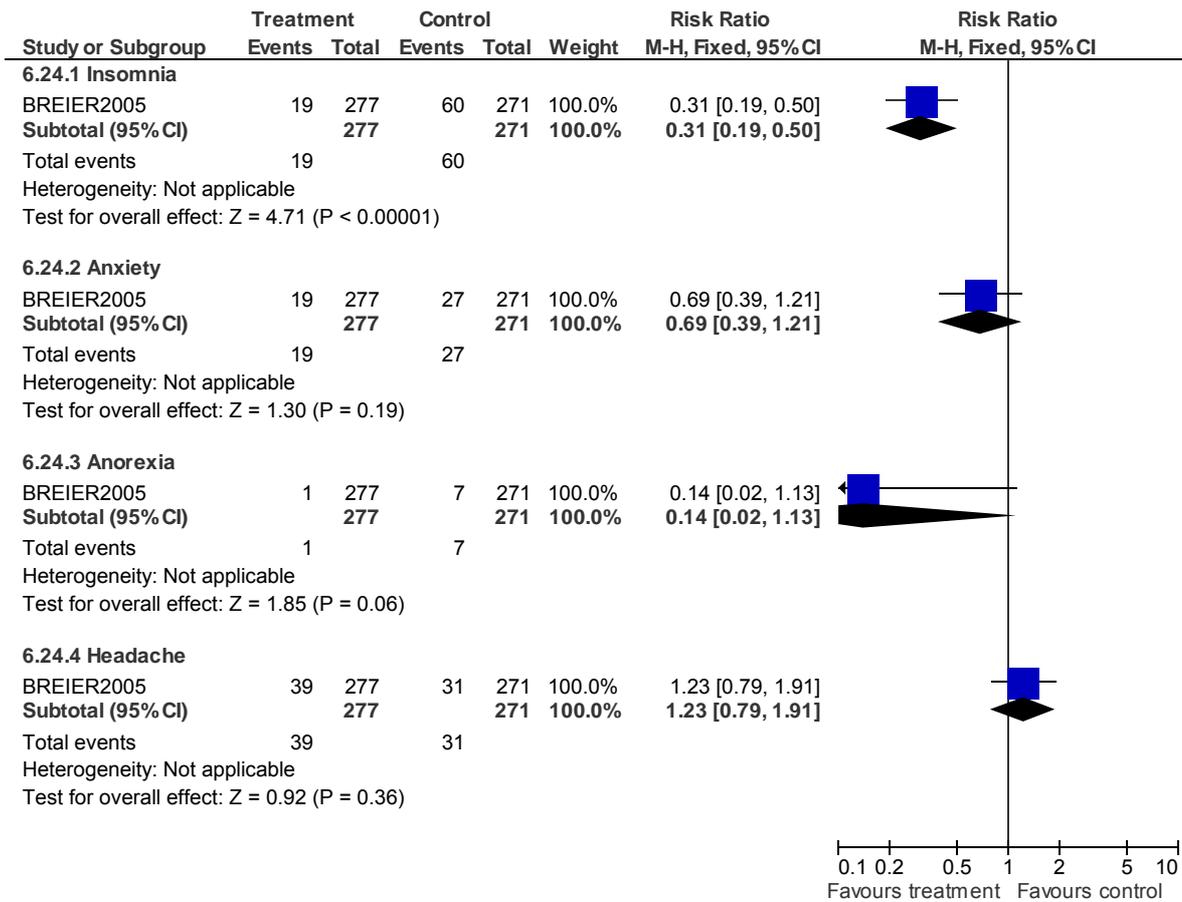
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

6.23 AE: 9. Other SEs (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

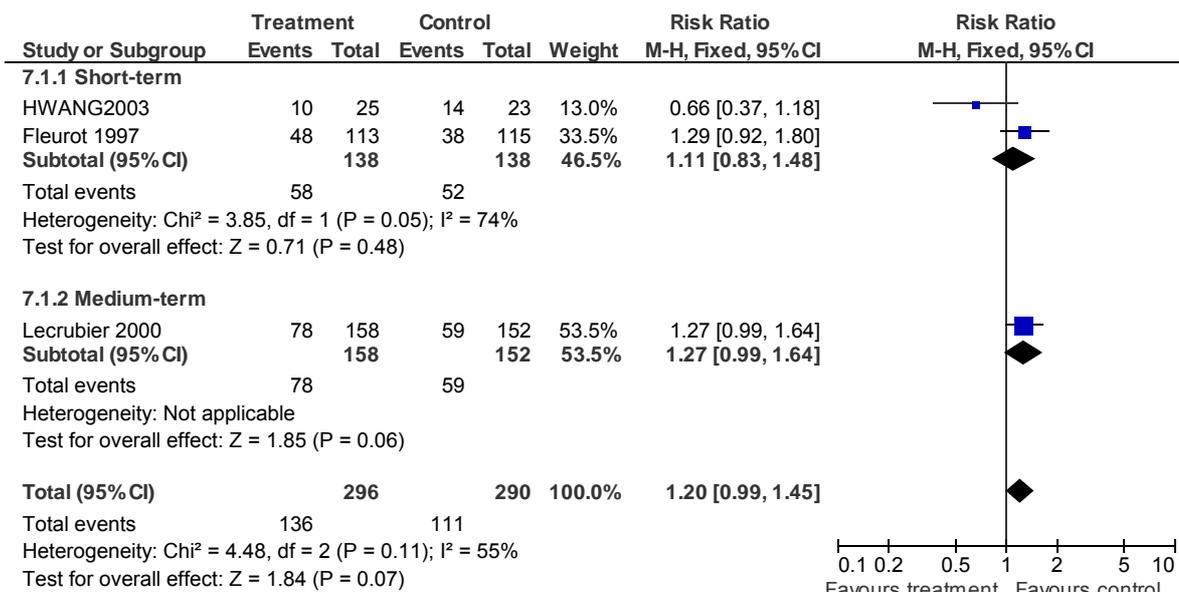
6.24 AE: 9. Other SEs (medium-term)



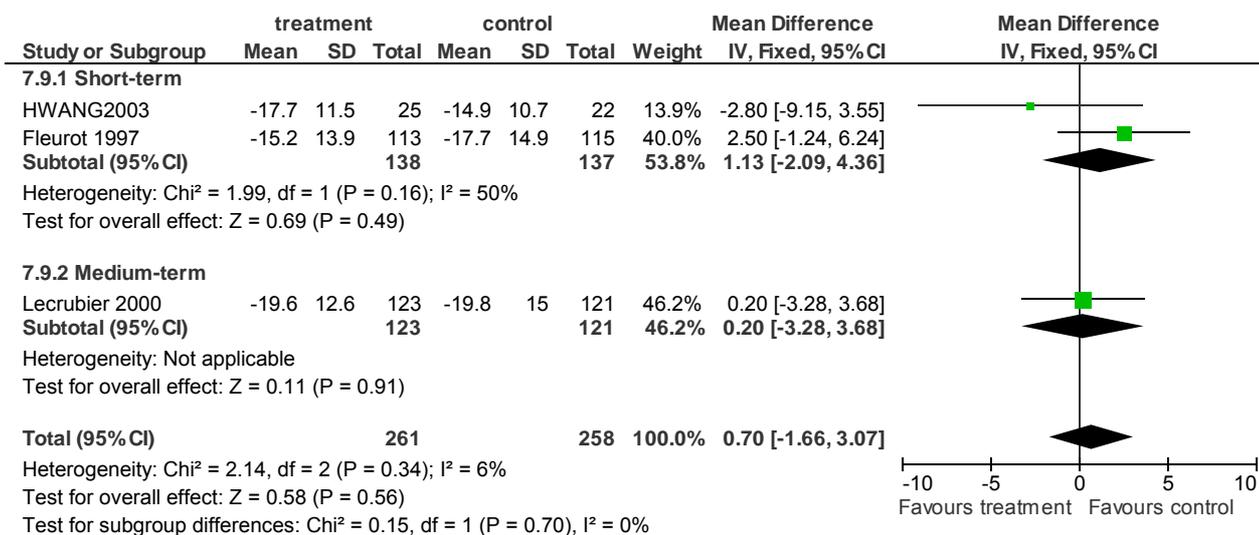
7 Risperidone versus Amisulpride (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

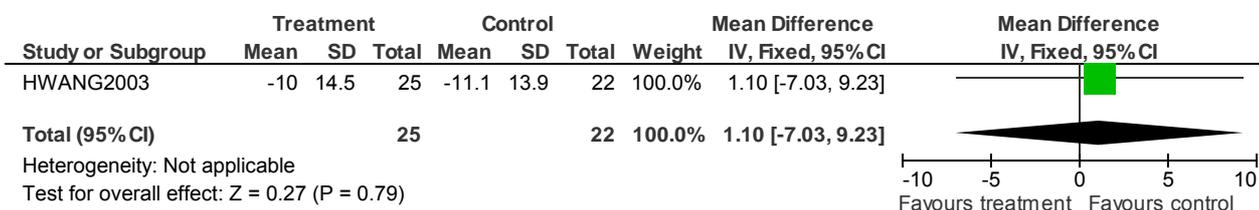
7.1 Global state: 1. Non-response (CGI) (short-to-medium-term)



7.9 Mental state: 1. BPRS total (change from baseline)



7.12 Psychosocial functioning: 1. SOFAS (Change from baseline) (short-term)(signs reversed)

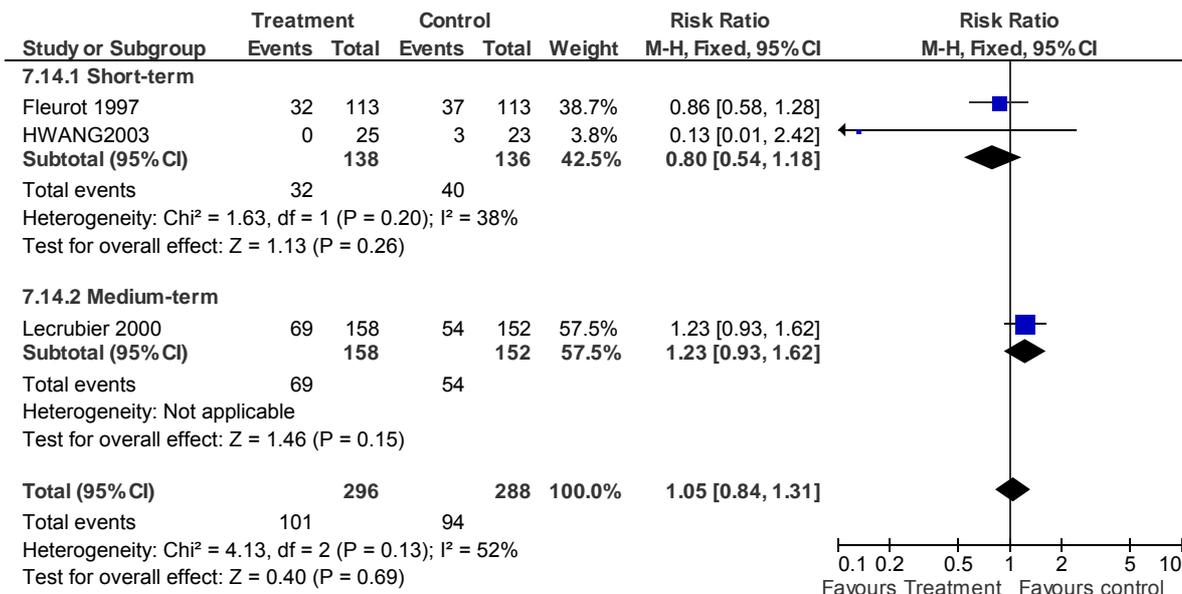


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

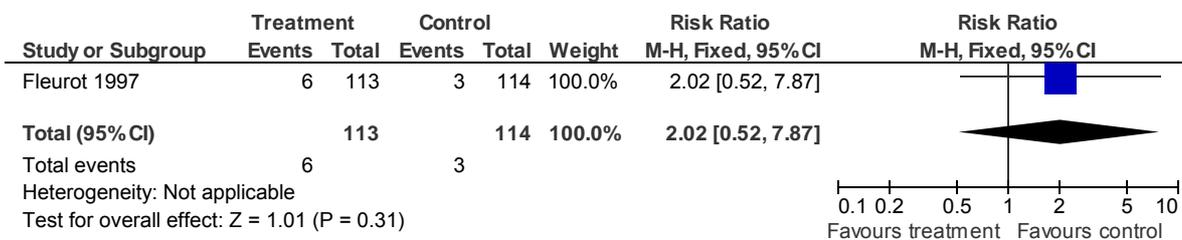
7.13 Psychosocial functioning: 2. No response (social functioning, <50% improvement on SOFA) (medium-term)



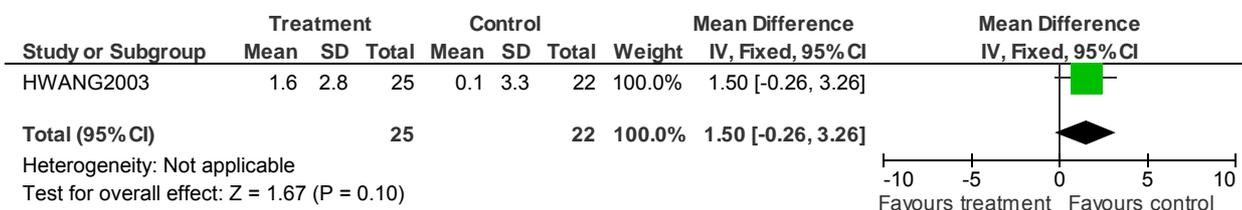
7.14 Leaving the study early: 1. Any reason (short-to-medium-term)



7.25 AE: 1. Metabolic SEs - Weight gain (short-term)

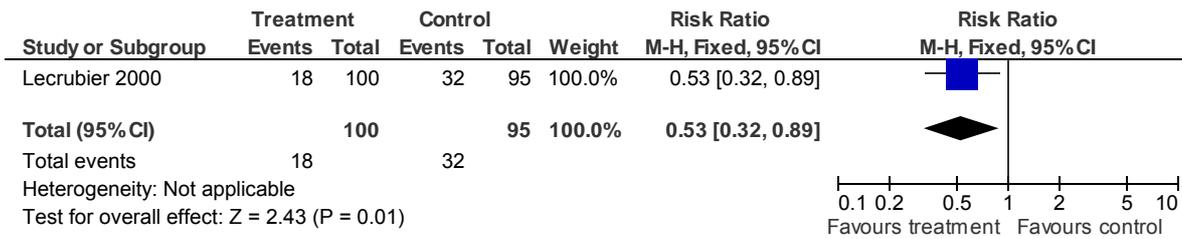


7.27 AE: 1. Metabolic SEs - Weight change from baseline (kg) (short-term)

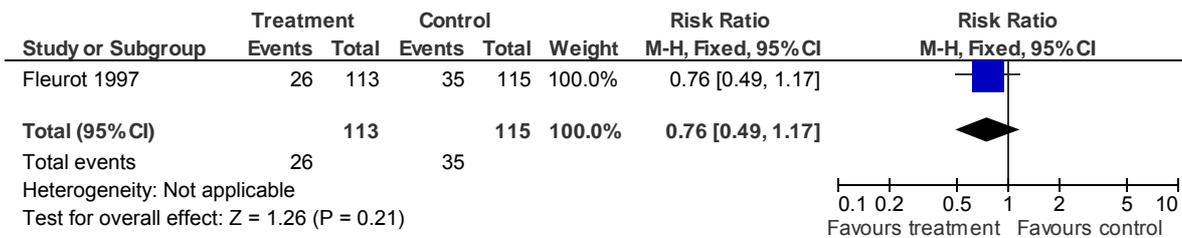


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

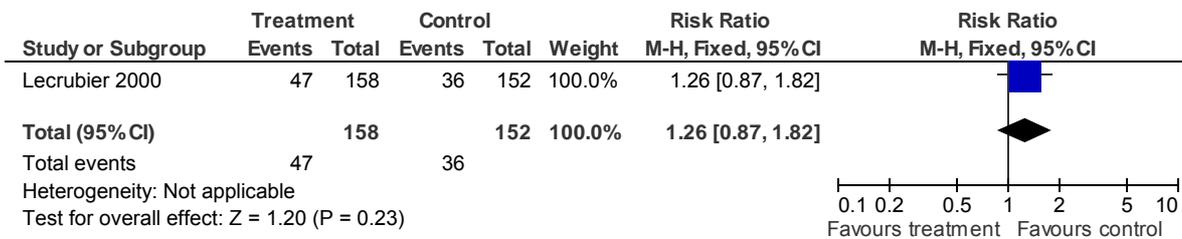
7.28 AE: 1. Metabolic SEs - Weight gain (>7% from baseline) (medium-term)



7.33 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)

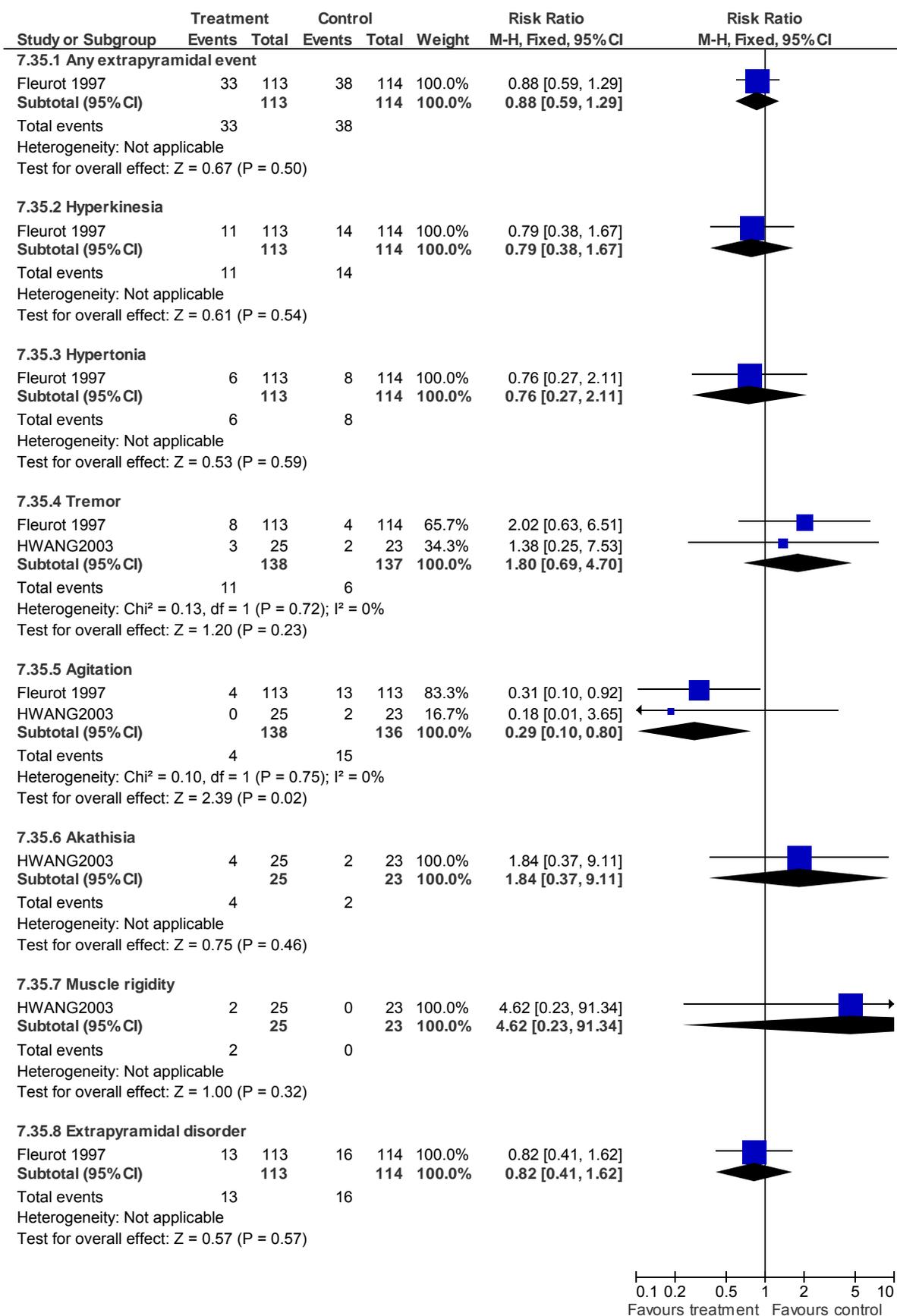


7.34 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (medium-term)



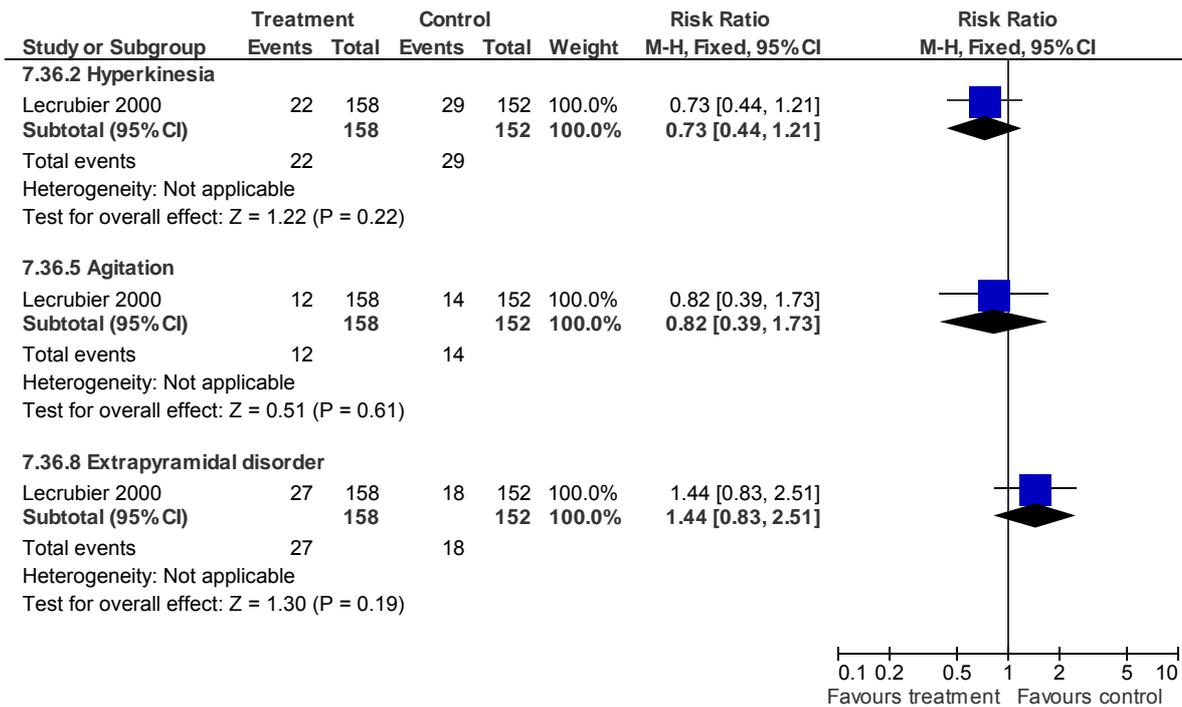
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

7.35 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

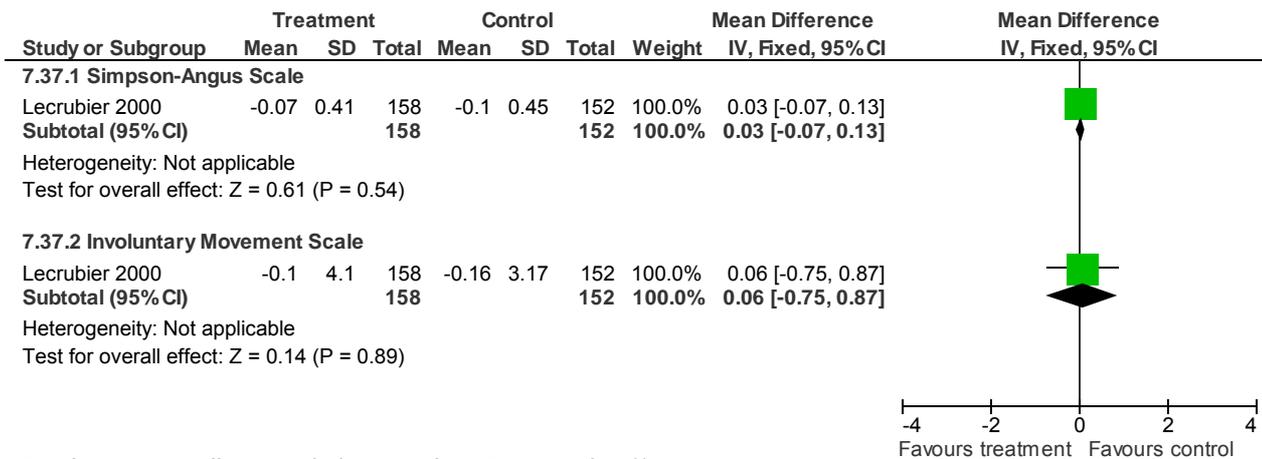


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

7.36 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



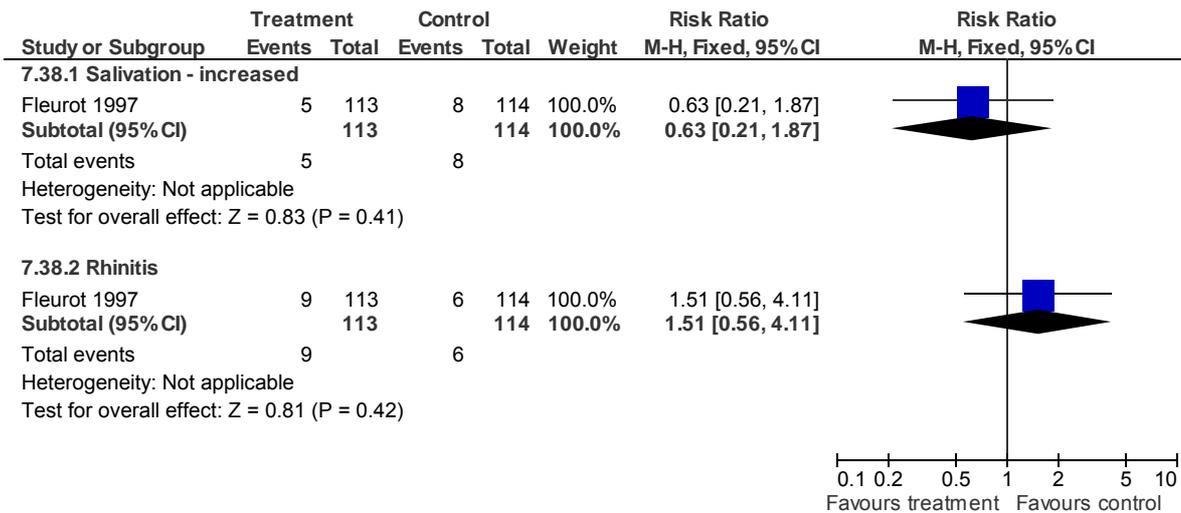
7.37 AE: 2. Neurologic SEs - SAS/ AIMS (change) (medium-term)



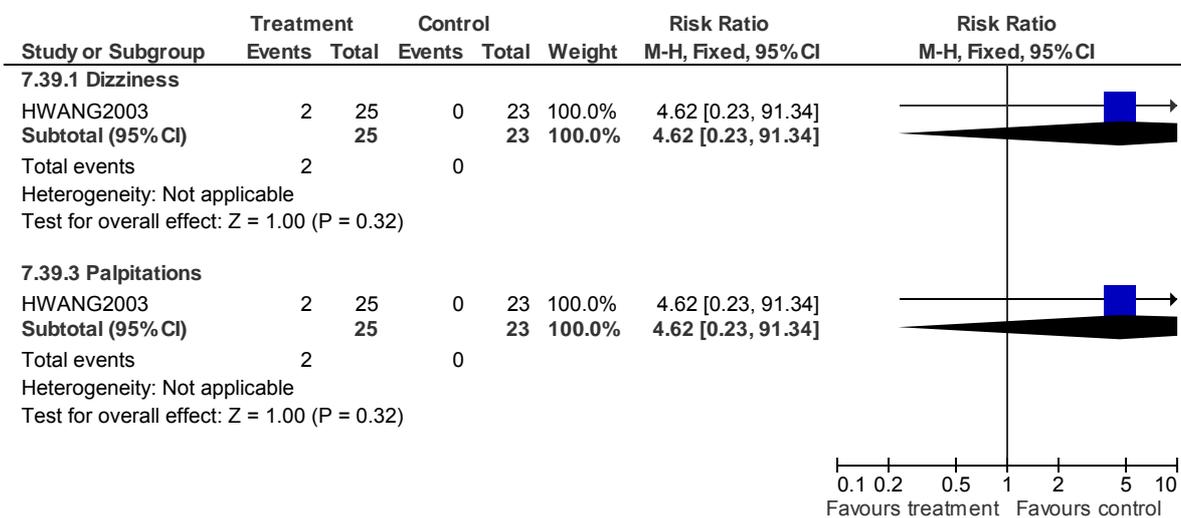
Test for subgroup differences: Chi² = 0.01, df = 1 (P = 0.94), I² = 0%

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

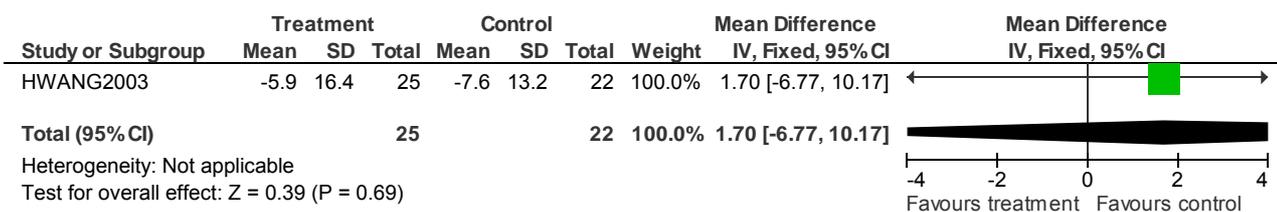
7.38 AE: 3. Autonomic SEs (short-term)



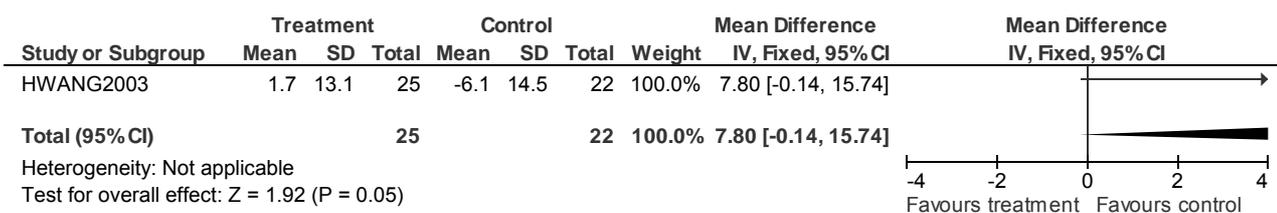
7.39 AE: 4. Cardiovascular SEs (short-term)



7.40 AE: 4. Cardiovascular - systolic blood pressure (change from baseline) (short-term)

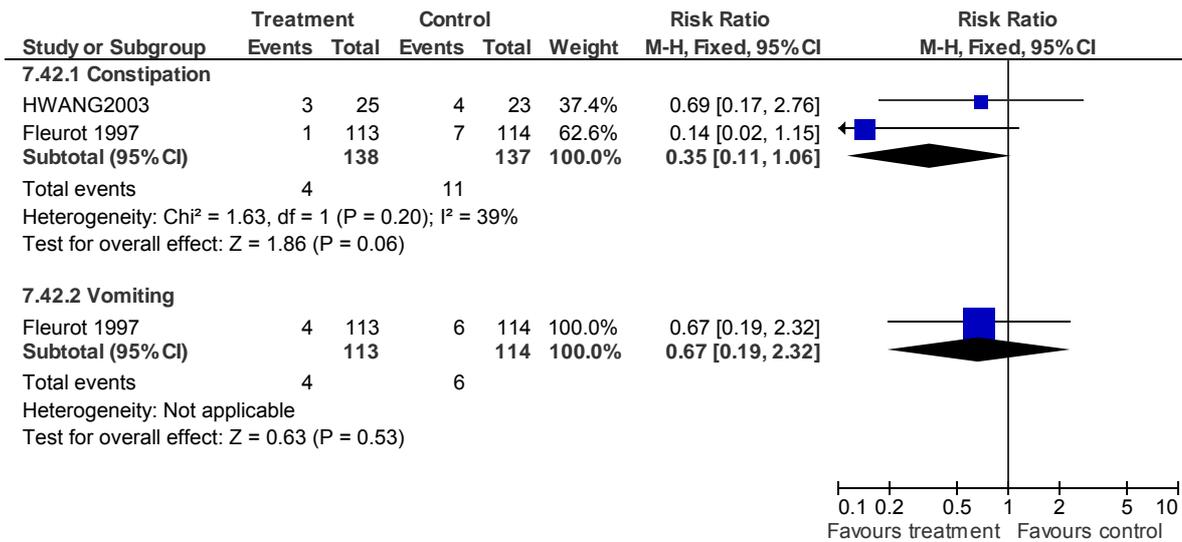


7.41 AE: 4. Cardiovascular - heart rate (change from baseline) (short-term)

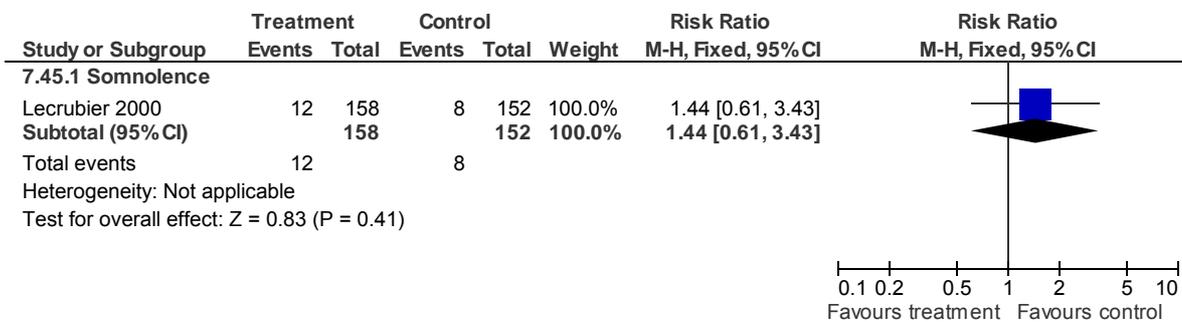


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

7.42 AE: 5. Gastrointestinal SEs (short-term)

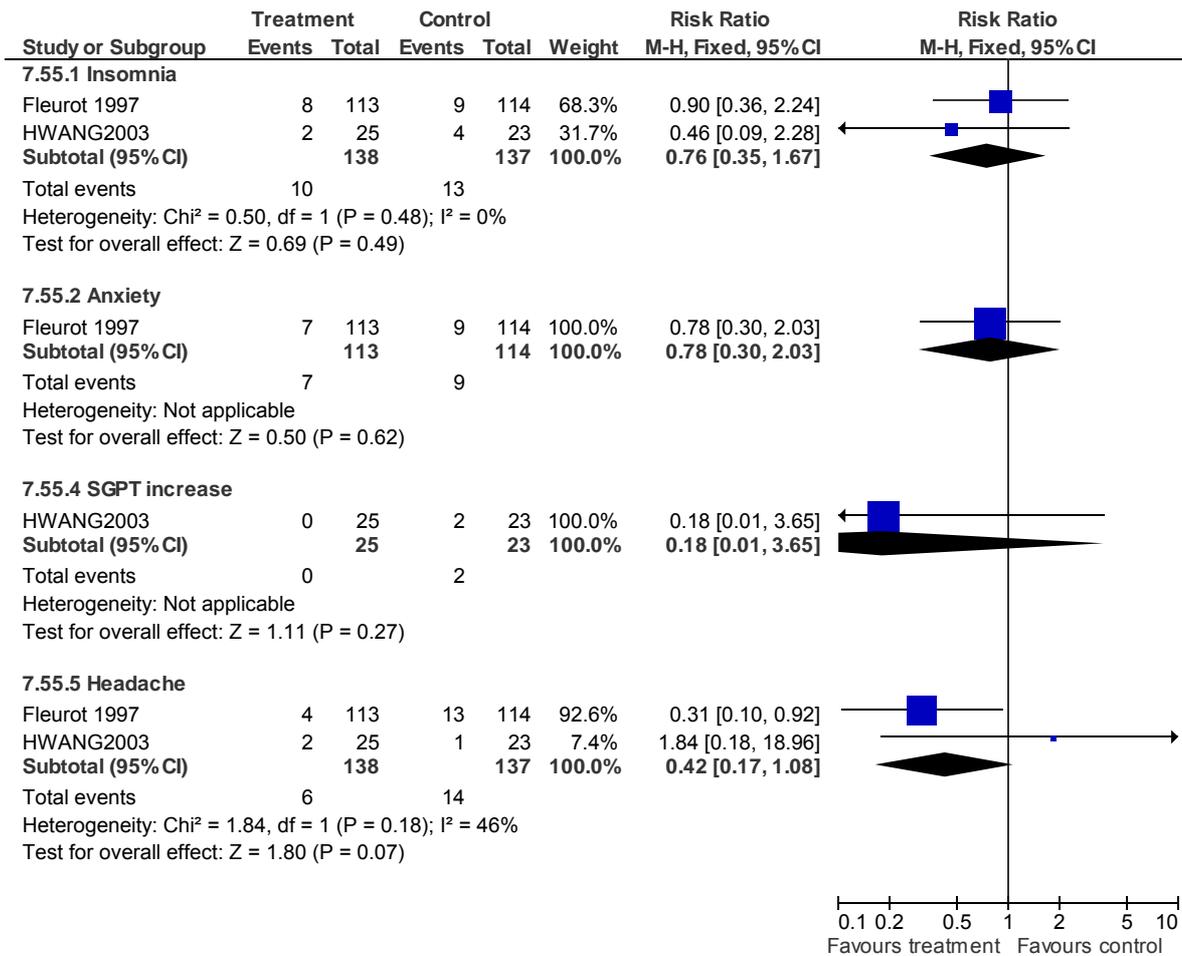


7.45 AE: 6. Sedation (medium-term)



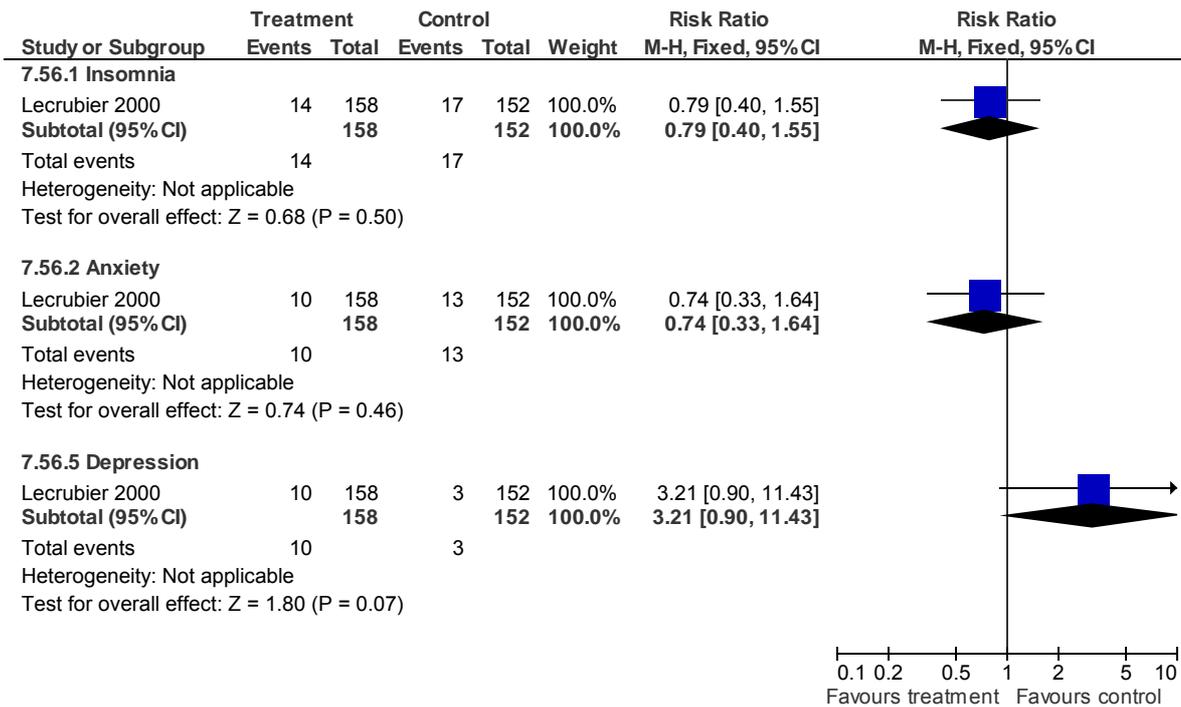
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

7.55 AE: 7. Other SEs (short-term)



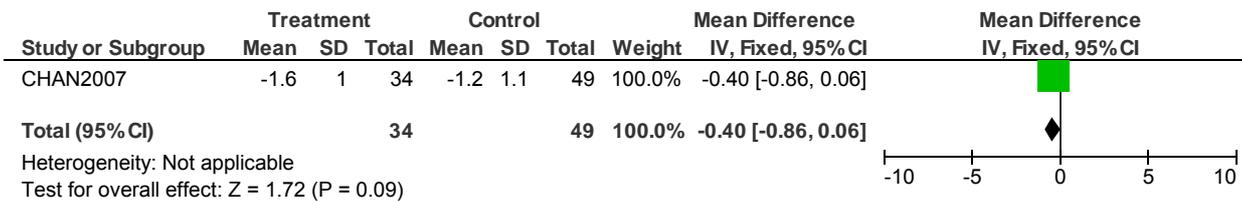
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

7.56 AE: 7. Other SEs (medium-term)

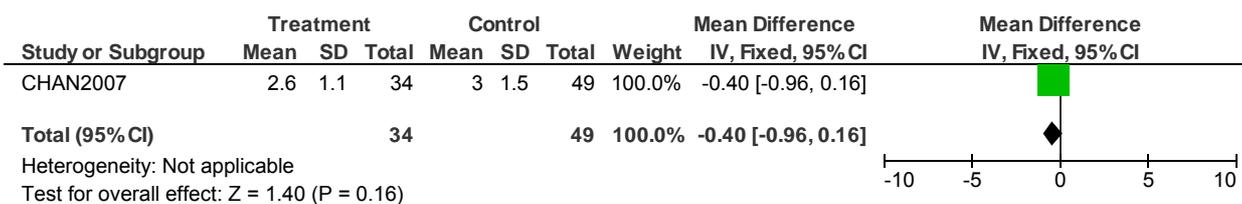


8 Risperidone versus Aripiprazole (phase: acute treatment) (critical outcomes)

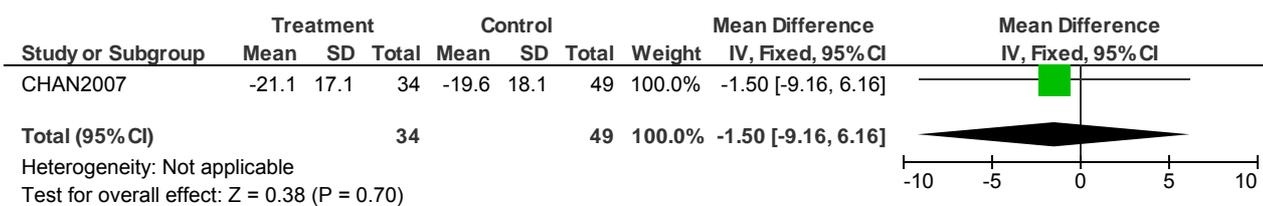
8.1 Global state: 1. CGI-S (Change from baseline) (short-term)



8.2 Global state: 1. CGI-I (Change from baseline) (short-term)

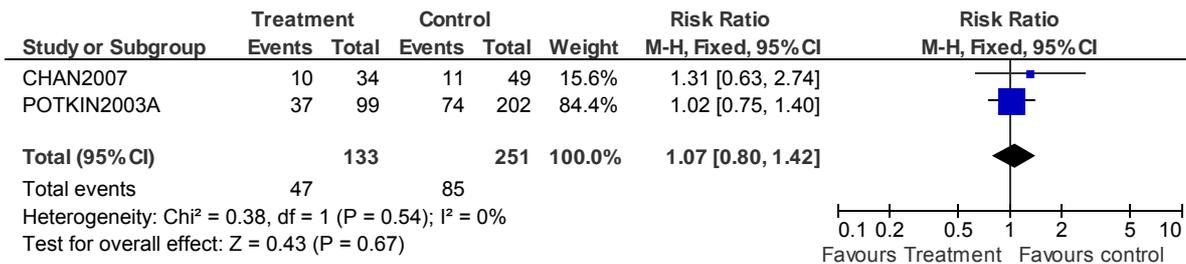


8.3 Mental state: 1. PANSS total (change from baseline) (short-term)

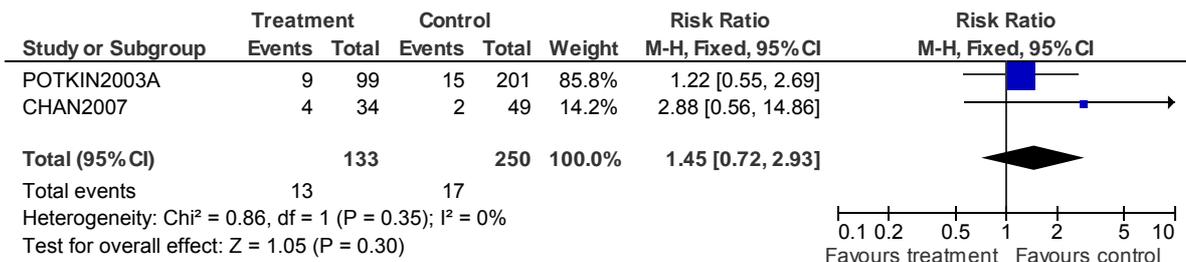


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

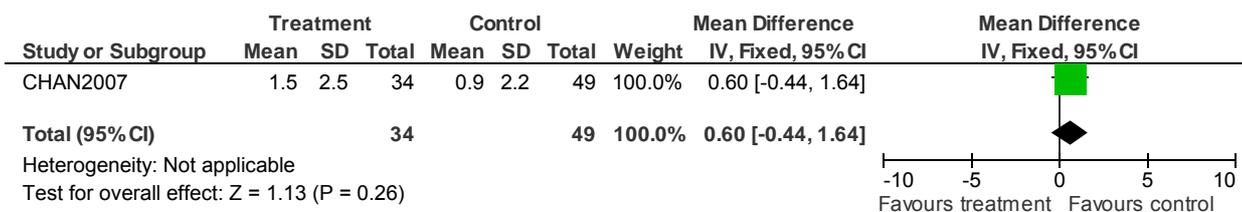
8.4 Leaving the study early: 1. Any reason (short-term)



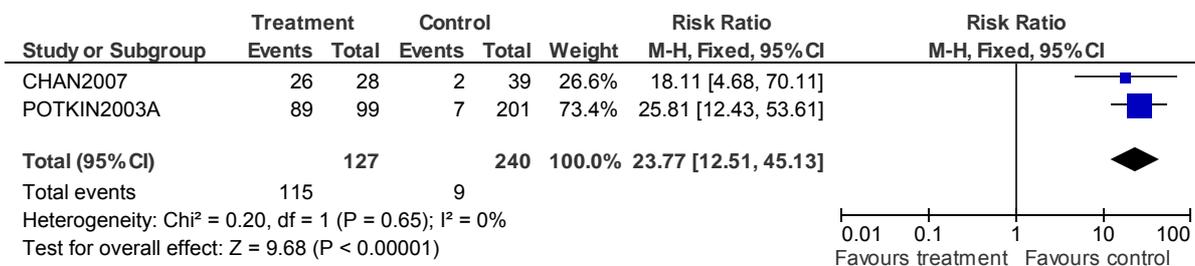
8.5 AE: 1. Metabolic SEs - Weight gain (>= 7% increase from baseline) (short-term)



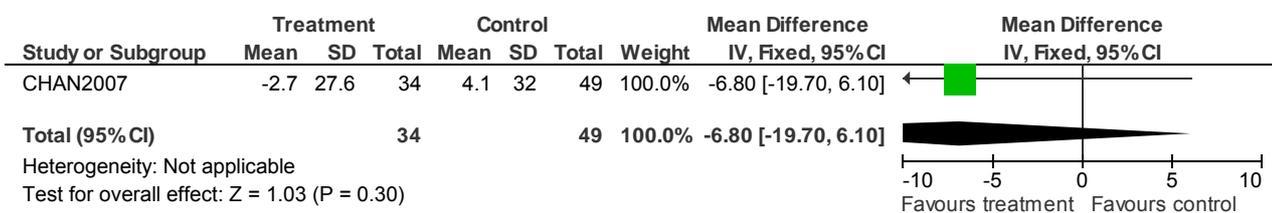
8.6 AE: 1. Metabolic SEs - Weight gain (short-term)



8.7 AE: 1. Metabolic SEs - Prolactin change (increased level above 23-25 ng/mL) (short-term)

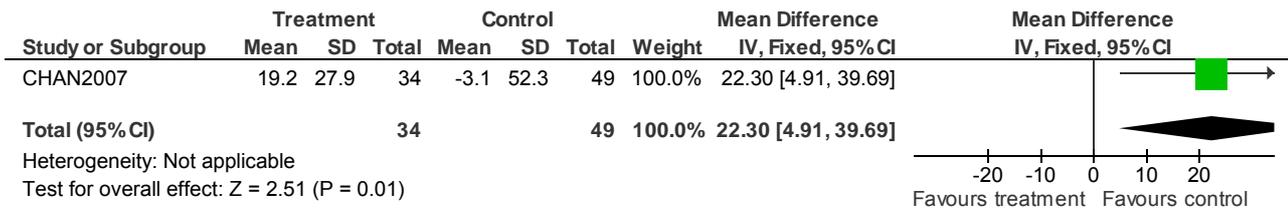


8.8 AE: 1. Metabolic SEs - Fasting glucose (change from baseline, mg/dL) (short-term)

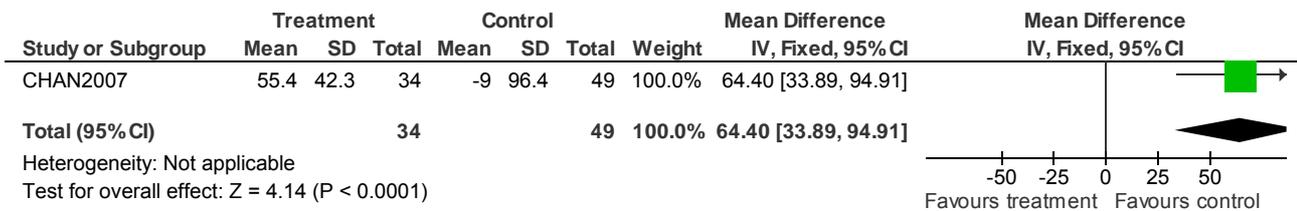


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

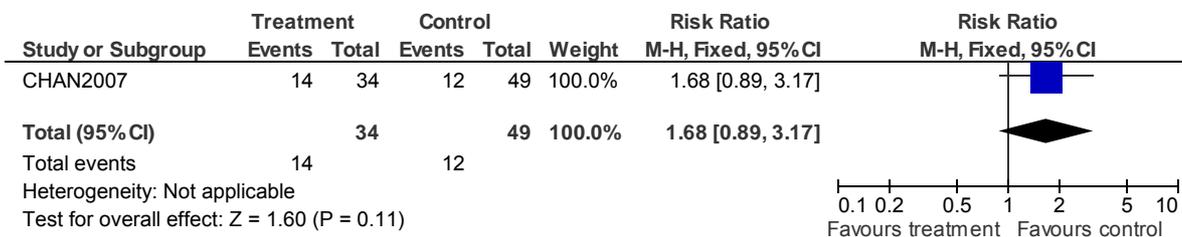
8.9 AE: 1. Metabolic SEs - Total cholesterol (change from baseline, mg/dL) (short-term)



8.10 AE: 1. Metabolic SEs - Serum prolactin (Change from baseline, mg/dL) (short-term)

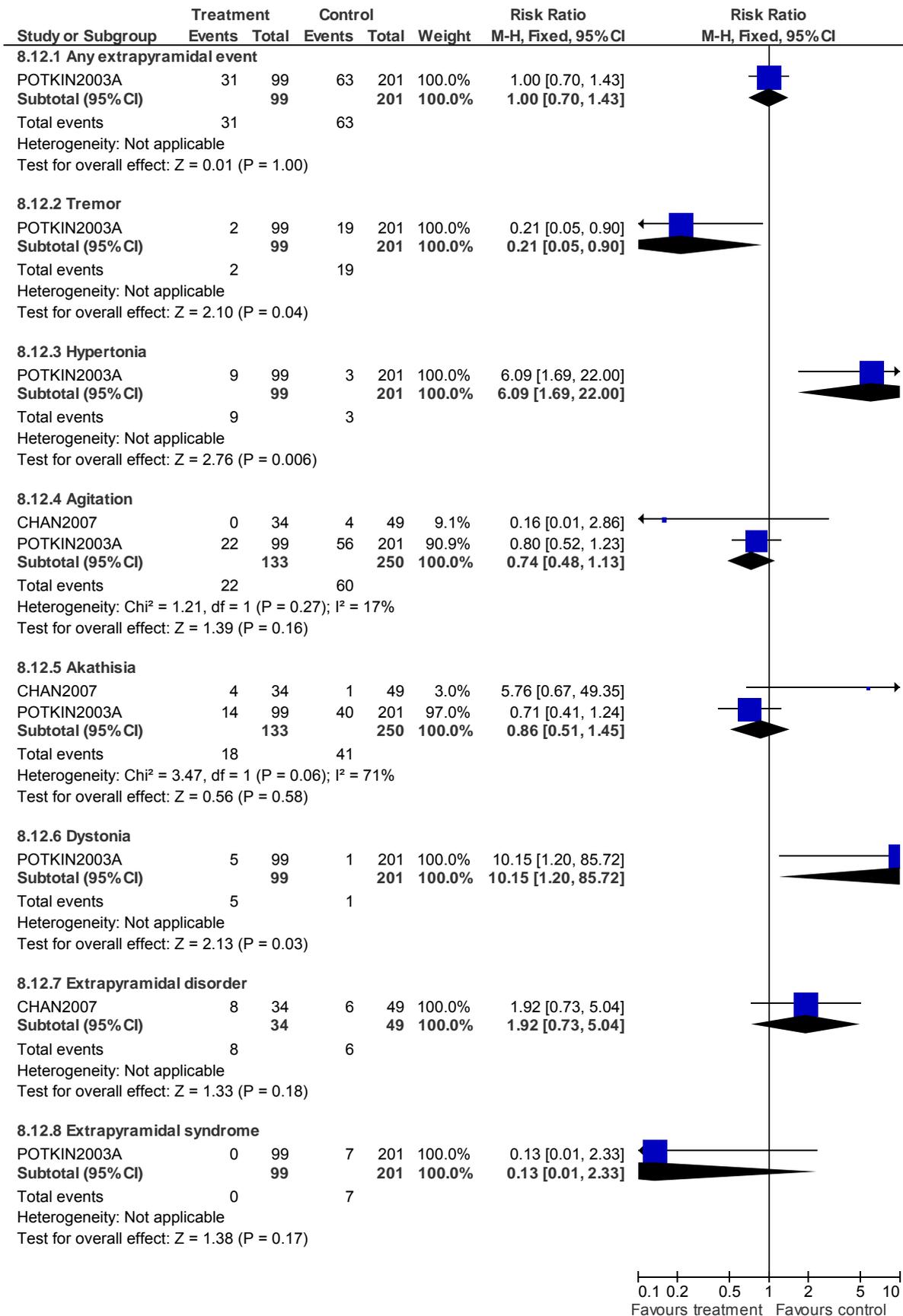


8.11 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)



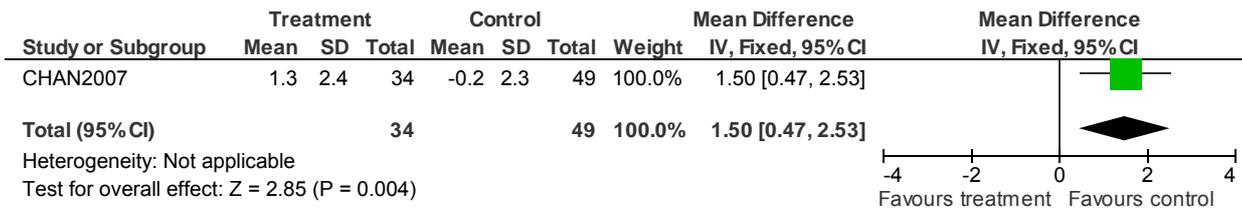
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.12 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

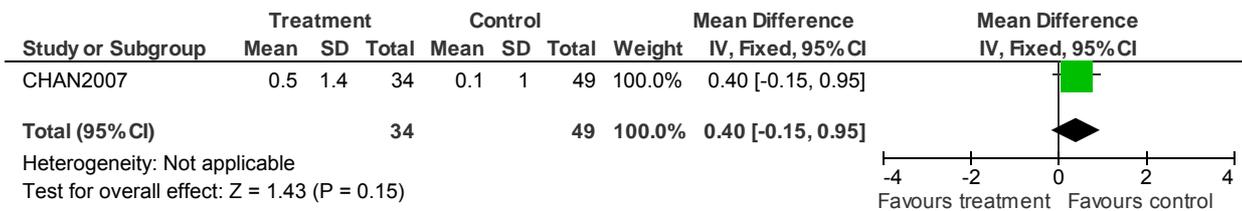


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

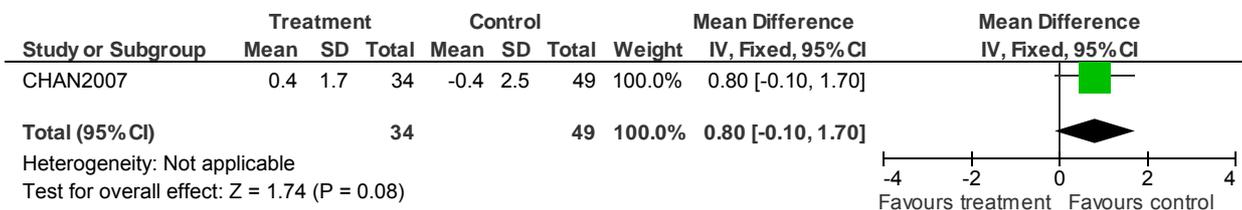
8.13 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; change from baseline) (short-term)



8.14 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; change from baseline) (short-term)

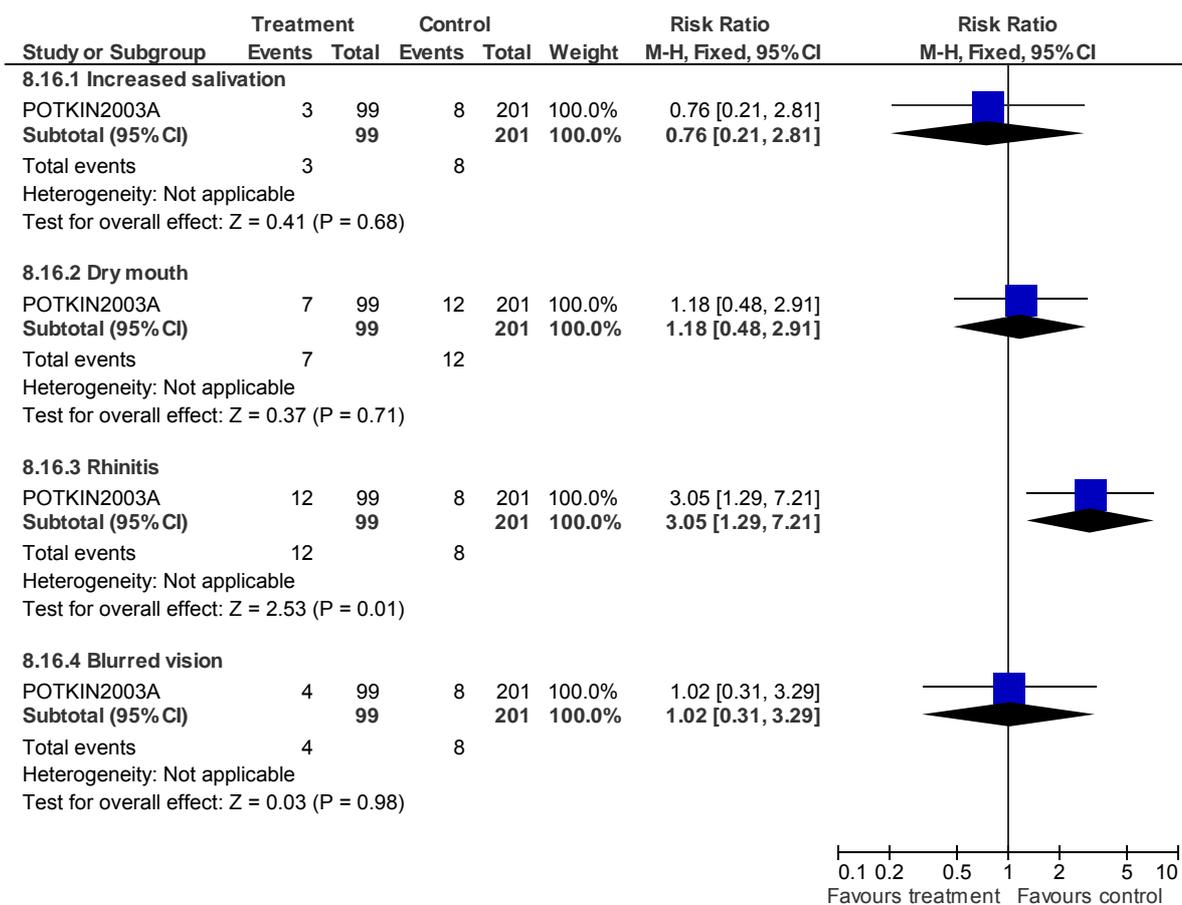


8.15 AE: 2. Neurologic SEs - Involuntary Movement Scale (AIMS; change from baseline) (short-term)

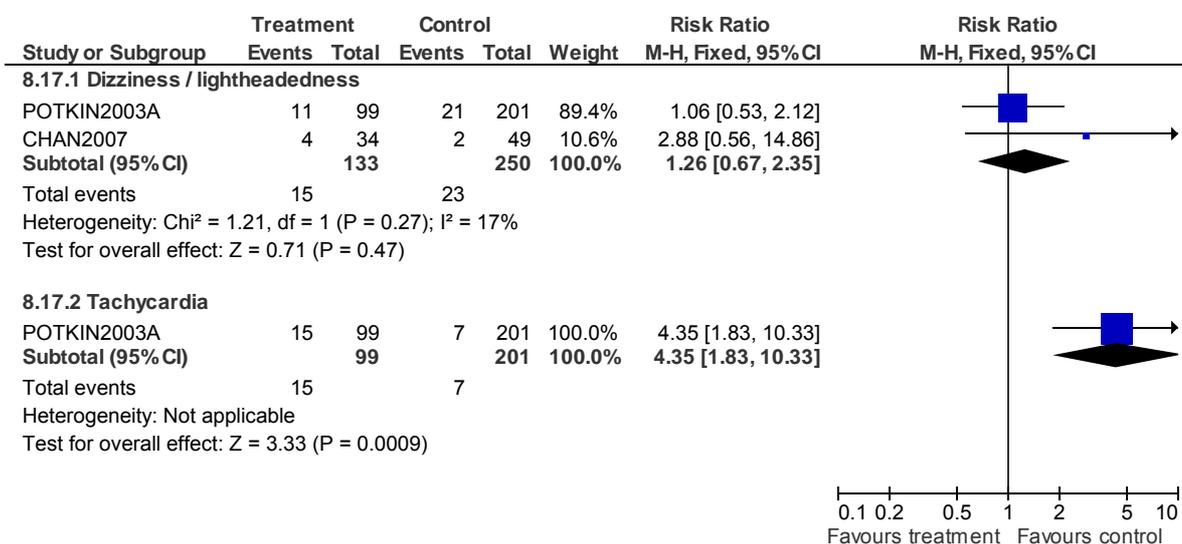


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.16 AE: 3. Autonomic SEs (short-term)

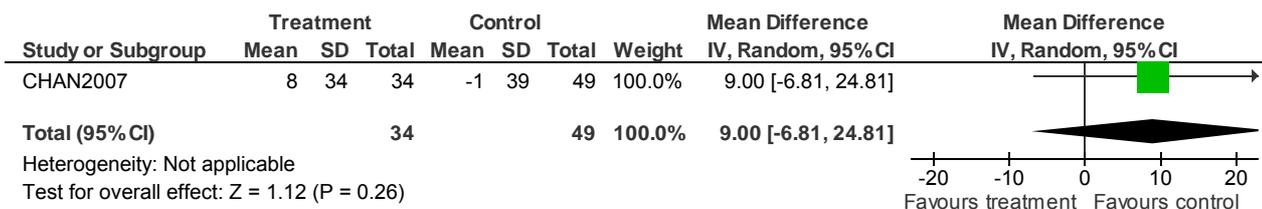


8.17 AE: 4. Cardiovascular SEs (short-term)

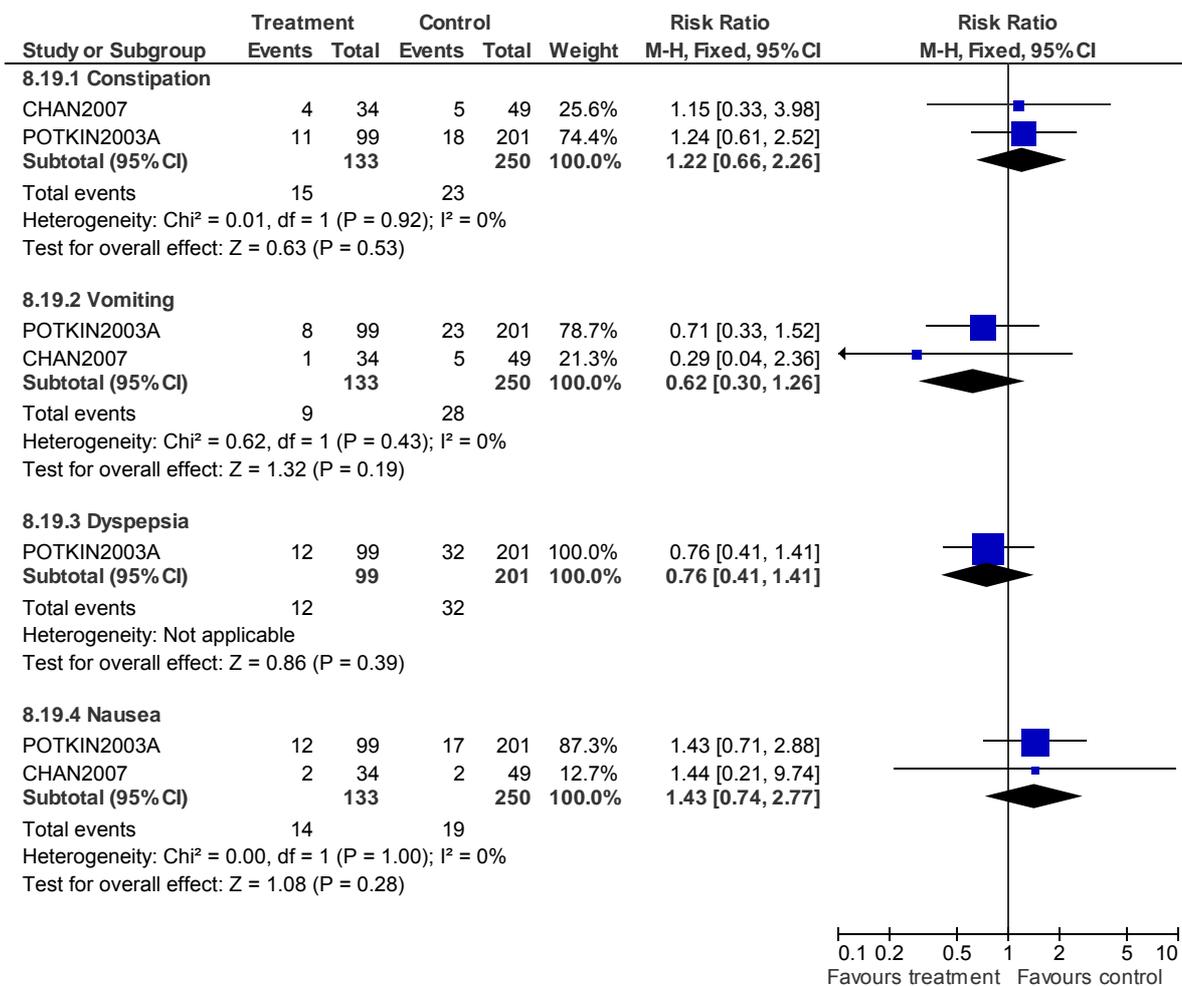


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.18 AE: 4. Cardiovascular SEs - QTc prolongation (Change in QTc interval ms) (short-term)

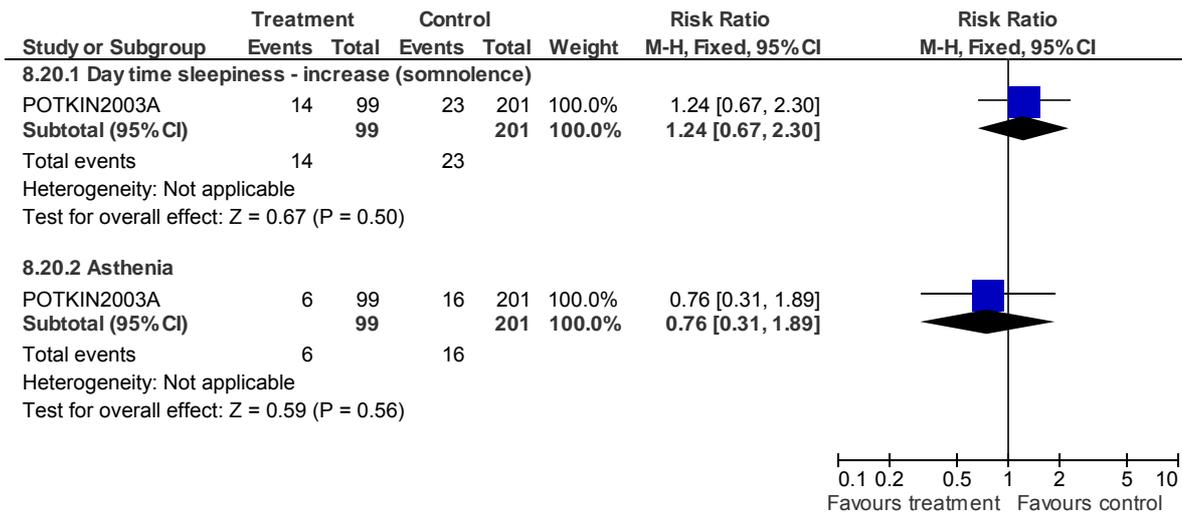


8.19 AE: 5. Gastrointestinal SEs (short-term)

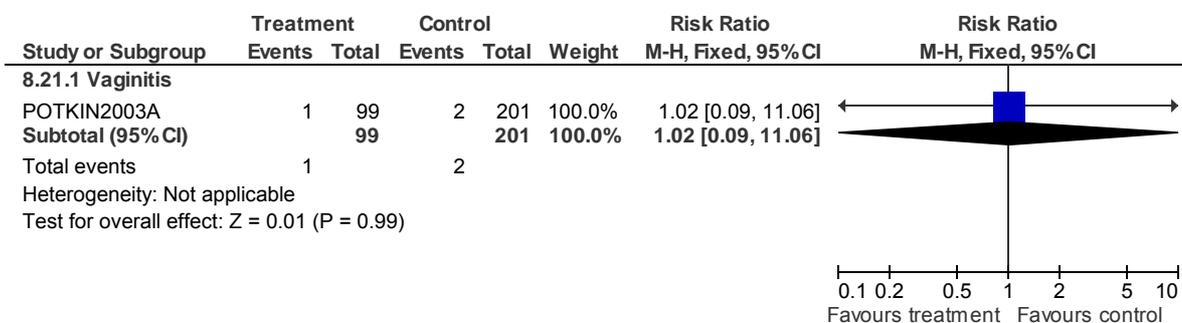


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

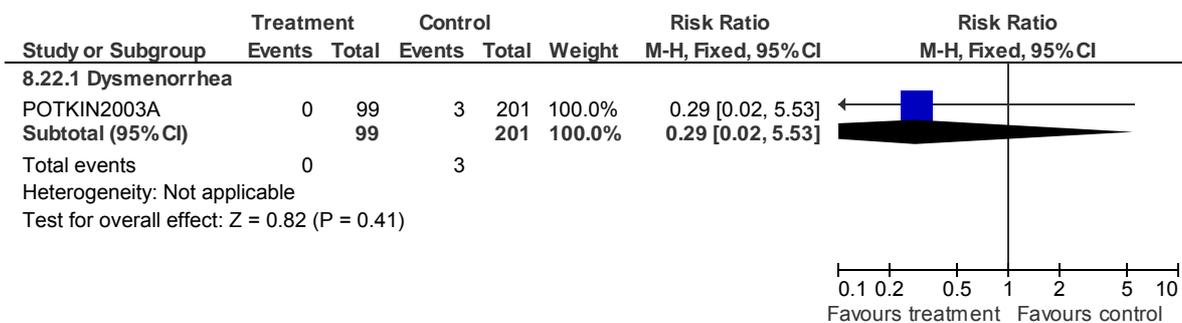
8.20 AE: 6. Sedation (short-term)



8.21 AE: 7. Sexual dysfunction (short-term)

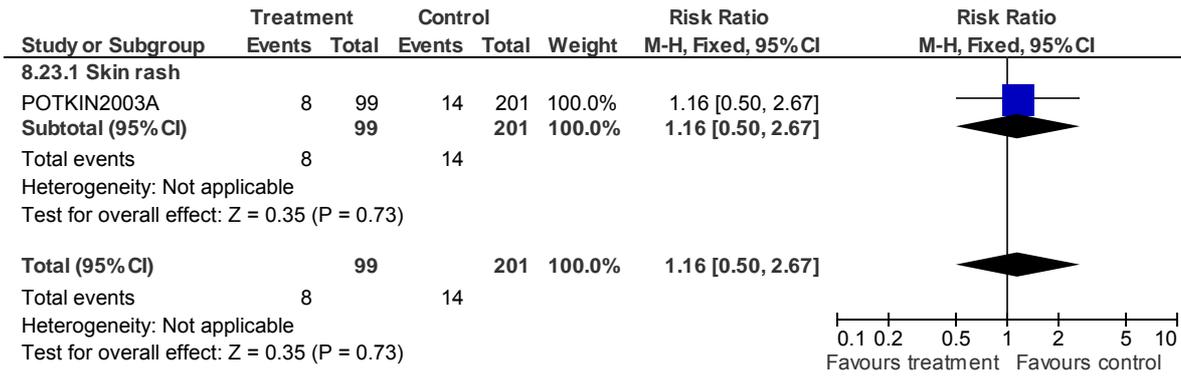


8.22 AE: 8. Menstrual problems (short-term)



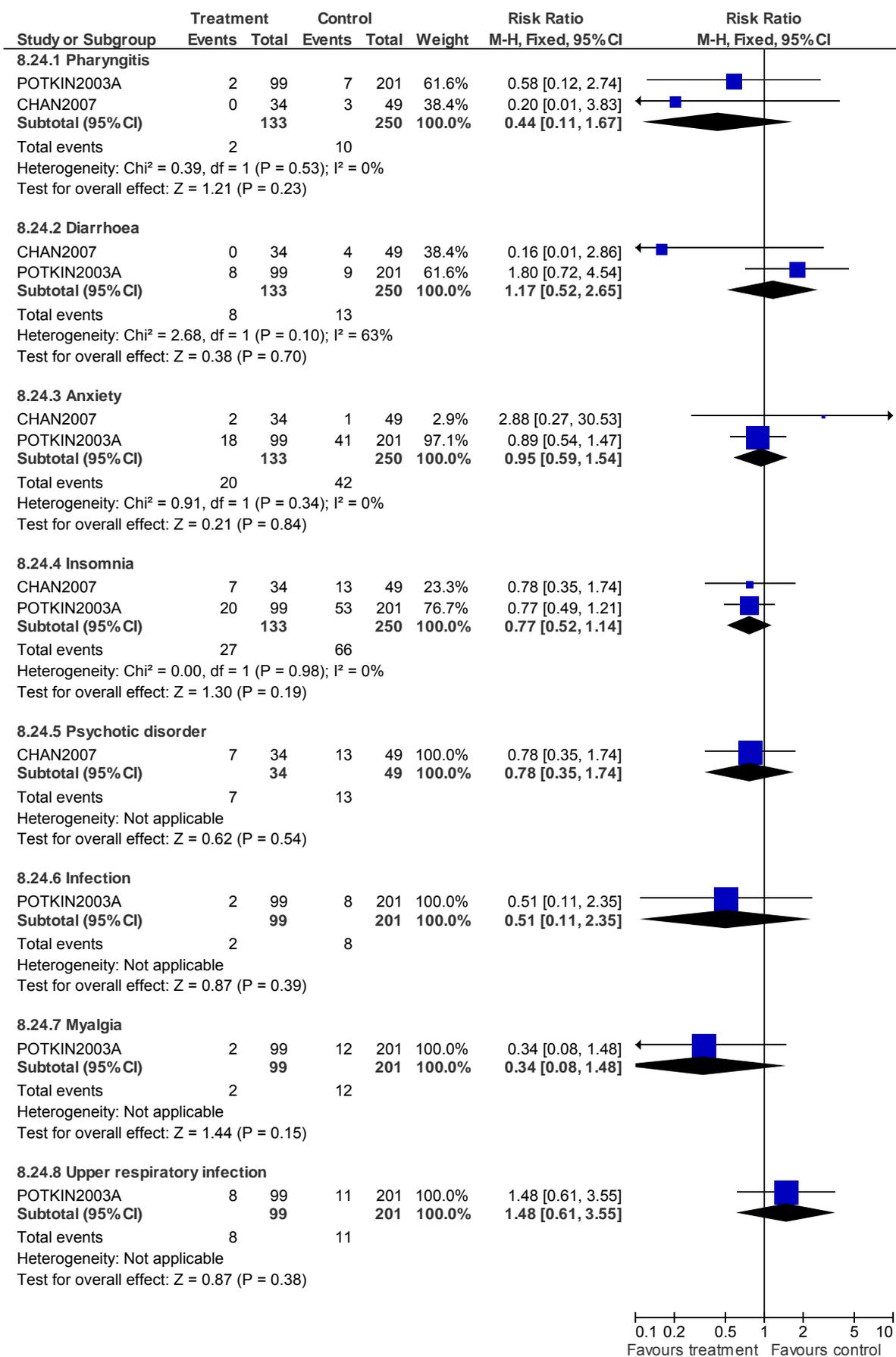
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.23 AE: 9. Dermatological system (short-term)



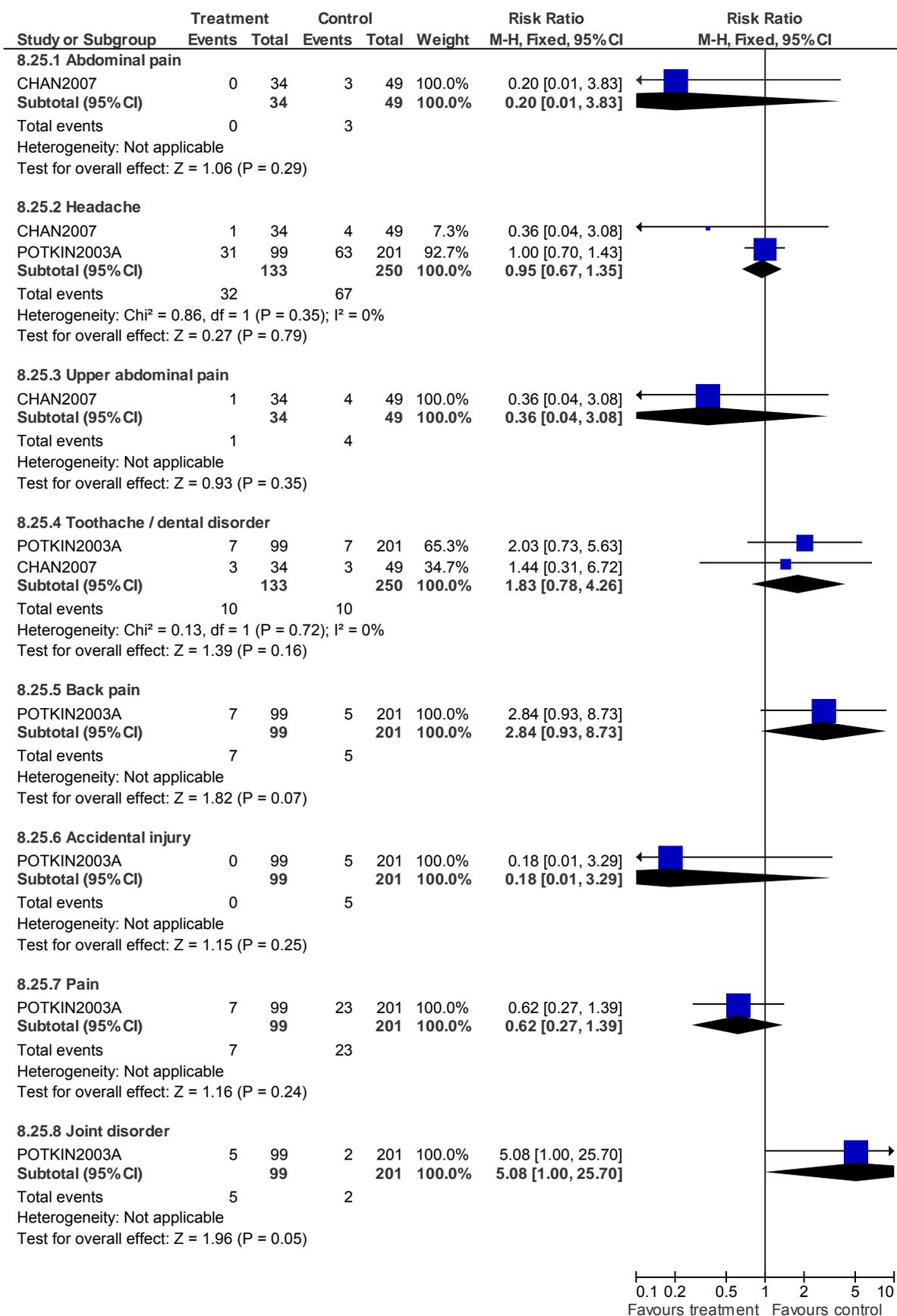
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.24 AE: 10. Other SEs (short-term)



Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

8.25 AE: 10. Other SEs - pain & injury (short-term)



9 Risperidone versus Quetiapine (phase: acute treatment) (critical outcomes)

Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

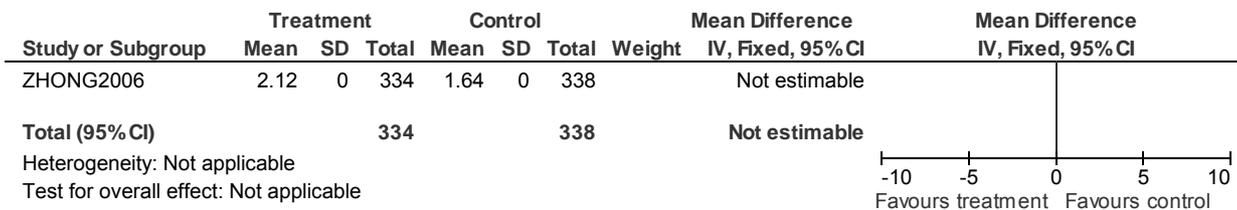
9.1 Leaving the study early: 1. Any reason (short-term)



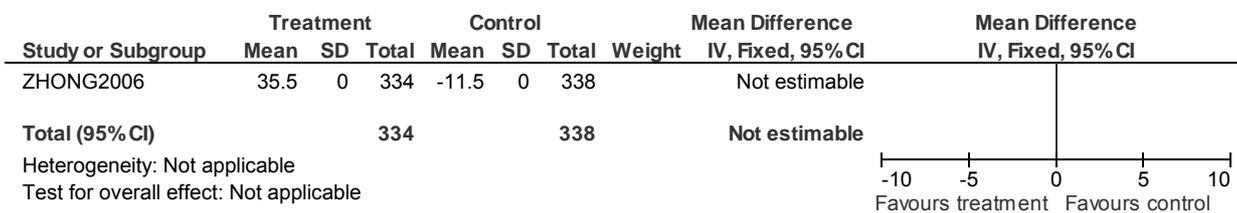
9.2 AE: 1. Metabolic SEs - Weight gain (>= 7% increase from baseline)



9.3 AE: 1. Metabolic SEs - Weight gain (short-term)



9.4 AE: 1. Metabolic SEs - Prolactin levels (change from baseline) (short-term)

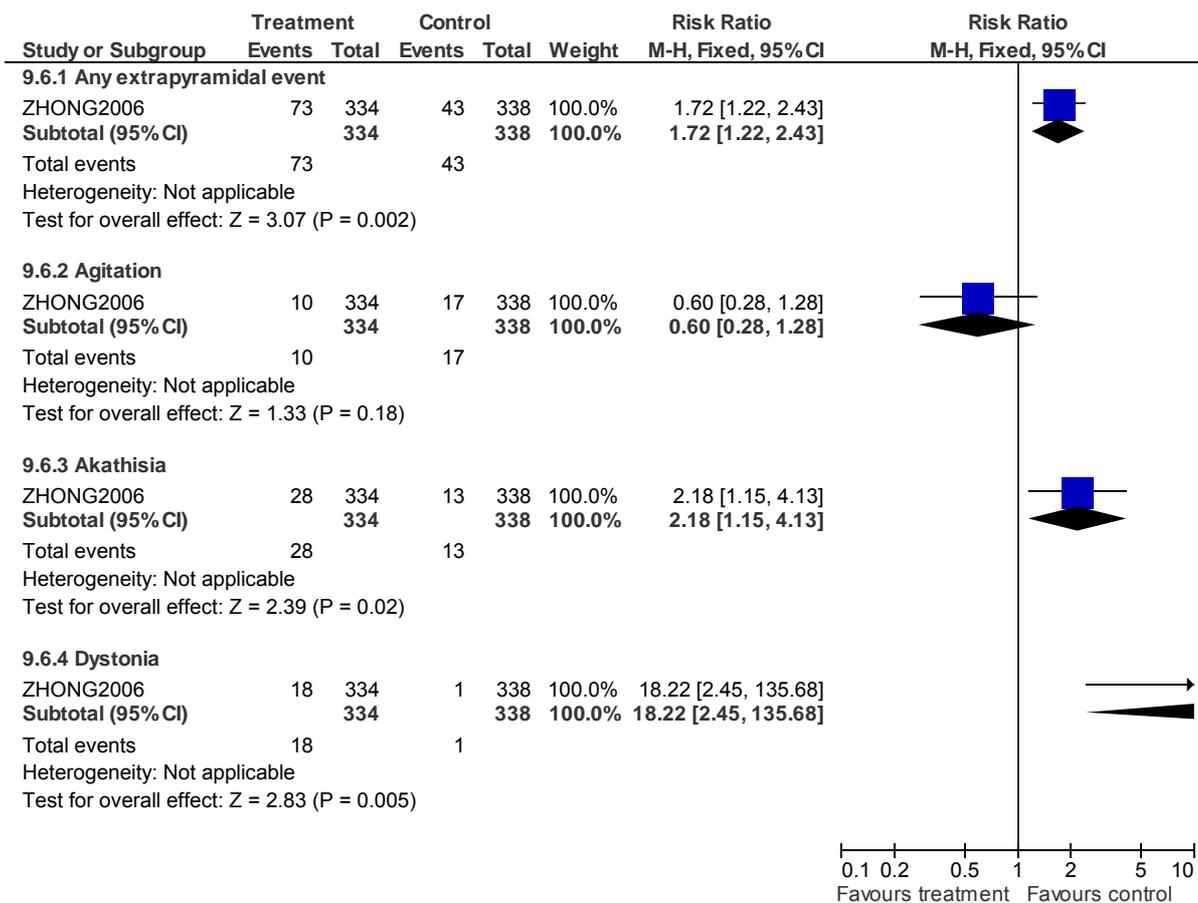


9.5 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)

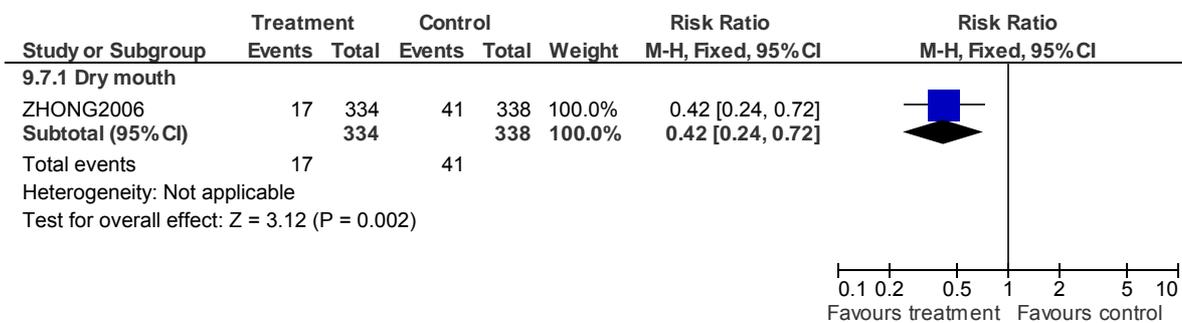


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

9.6 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

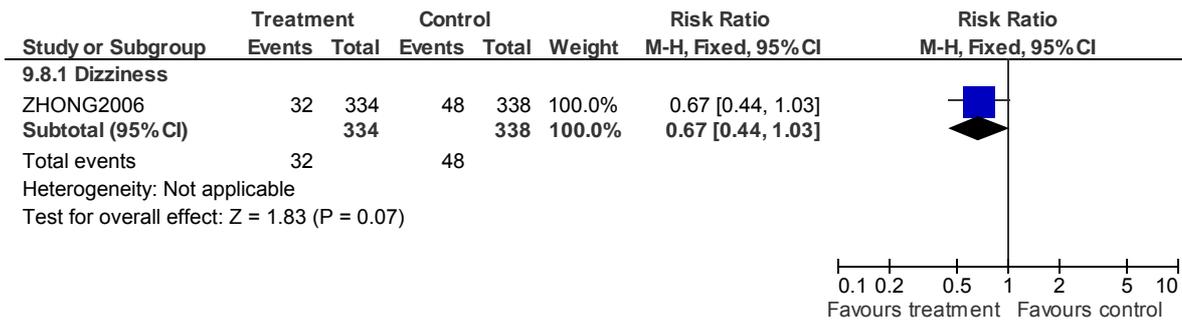


9.7 AE: 3. Autonomic SEs (short-term)

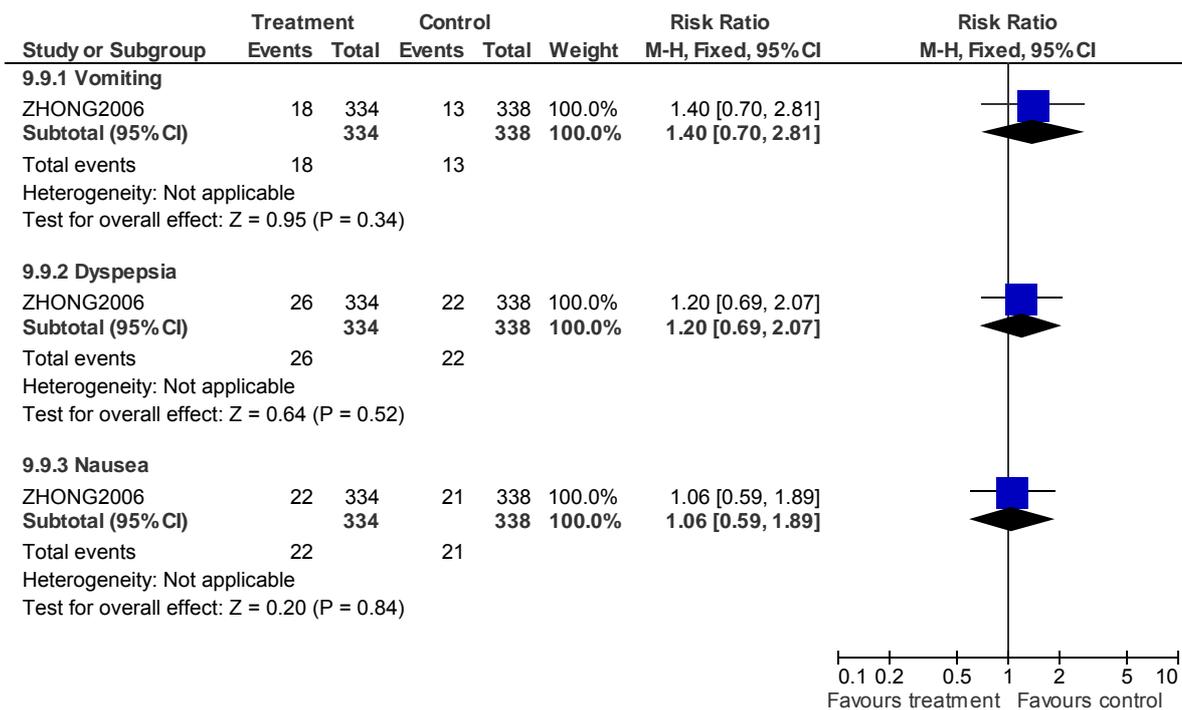


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

9.8 AE: 4. Cardiovascular SEs (short-term)

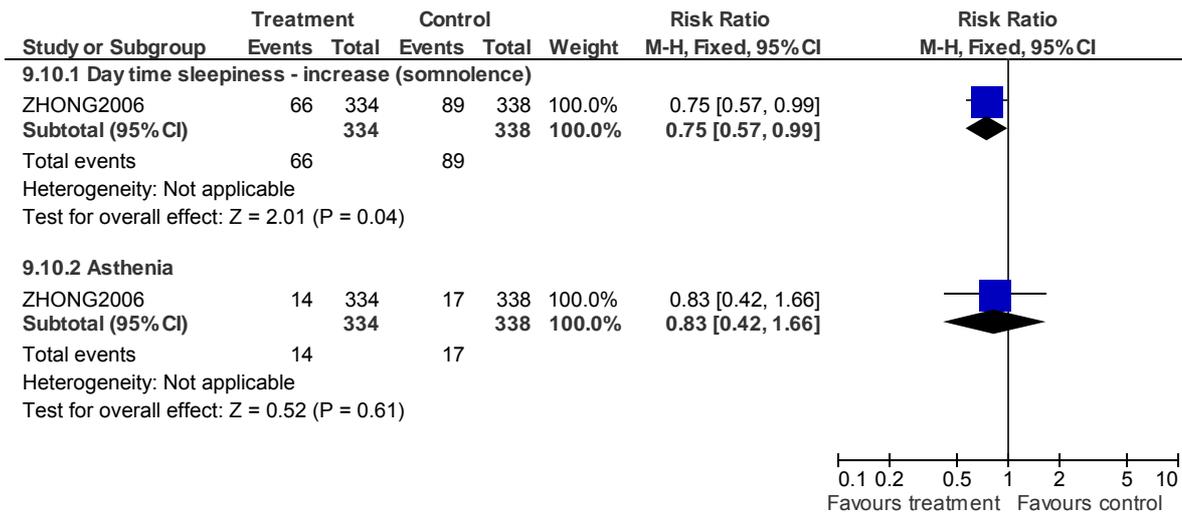


9.9 AE: 5. Gastrointestinal SEs (short-term)



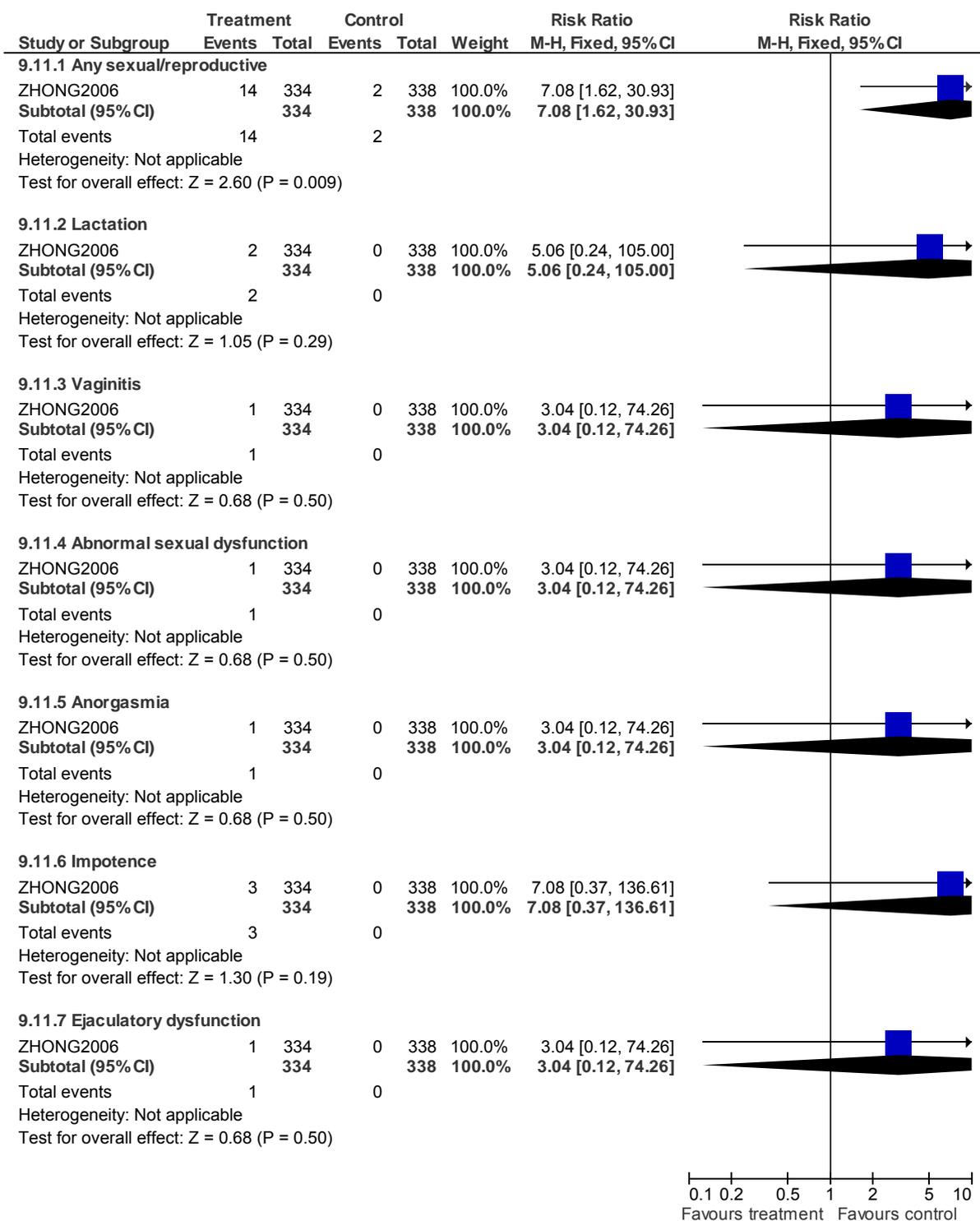
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

9.10 AE: 6. Sedation (short-term)



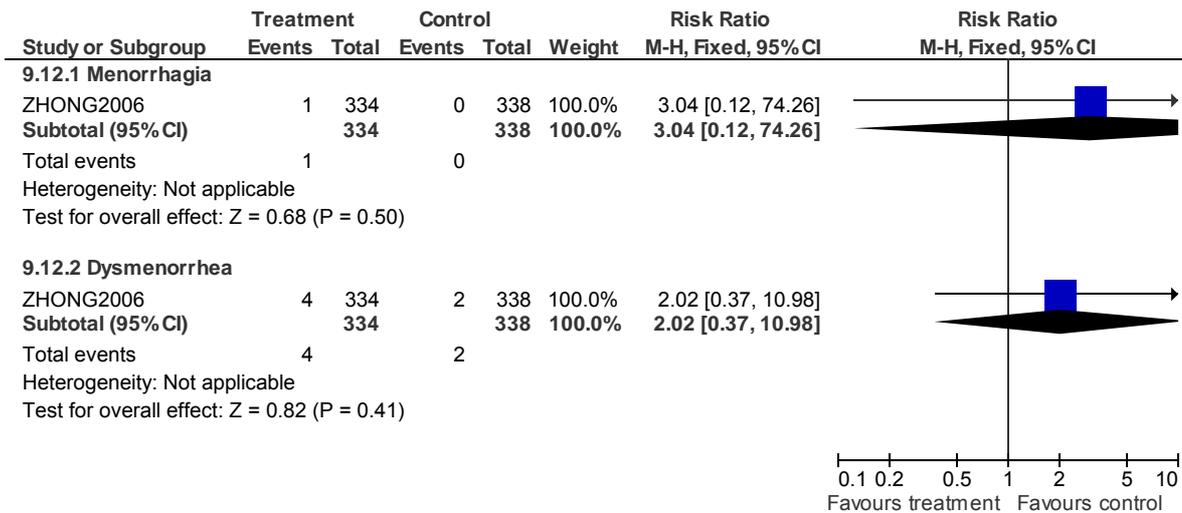
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

9.11 AE: 7. Sexual dysfunction (short-term)

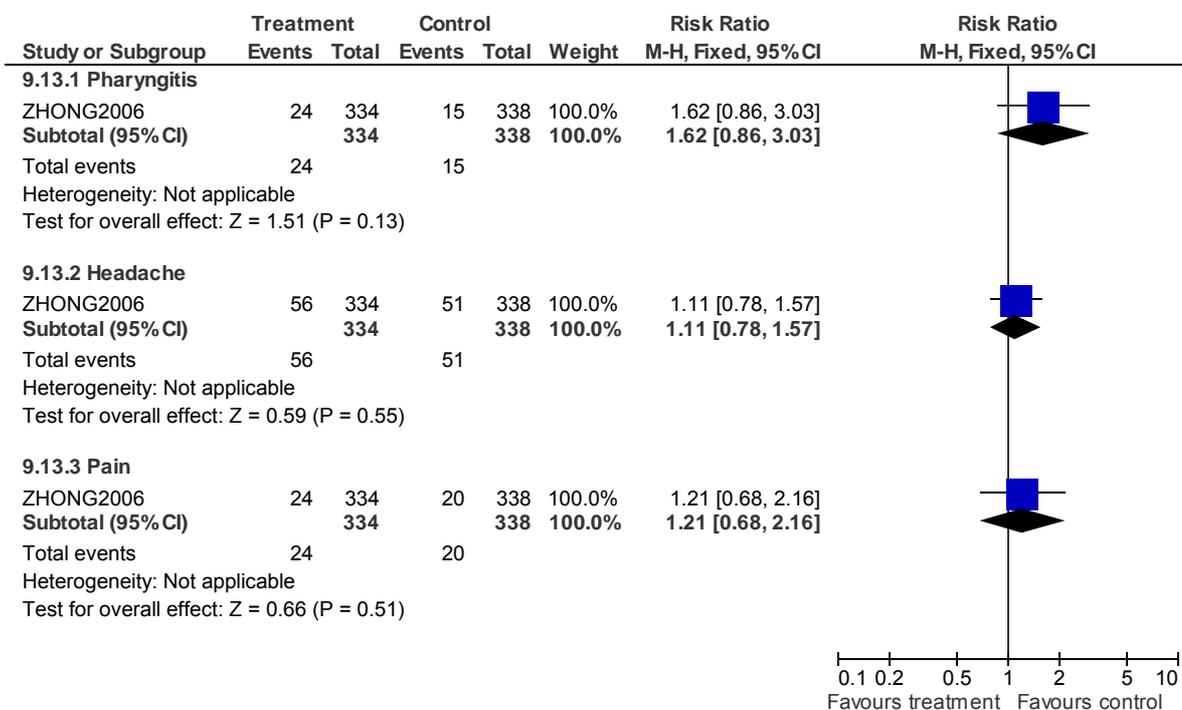


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

9.12 AE: 8. Menstrual problems (short-term)

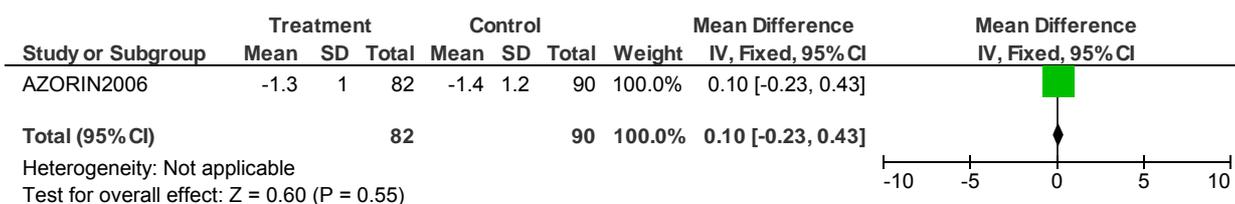


9.13 AE: 9. Other SEs (short-term)



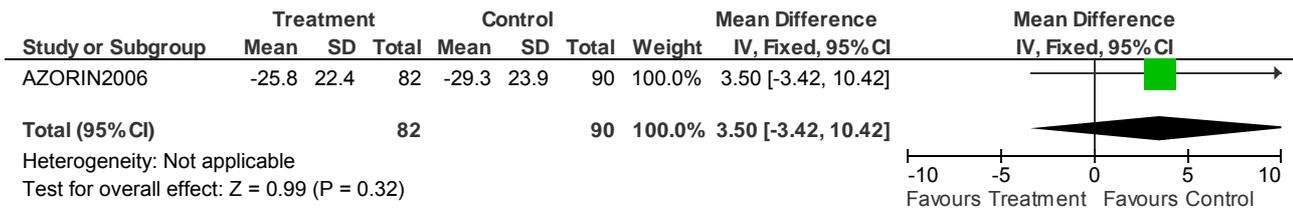
10 Risperidone versus Sertindole (phase: acute treatment) (critical outcomes)

10.1 Global state: 1. CGI-S (change from baseline) (medium-term)

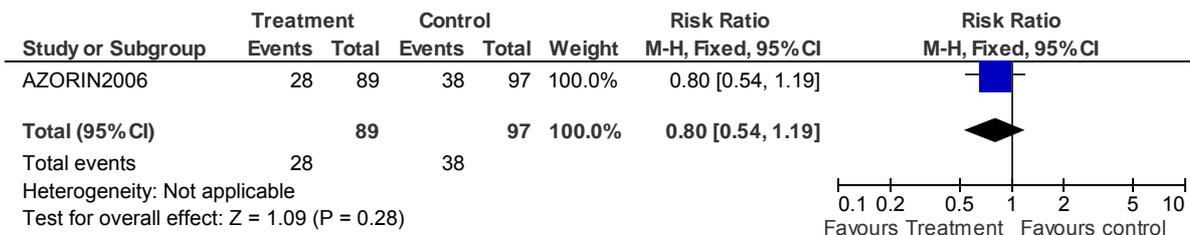


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

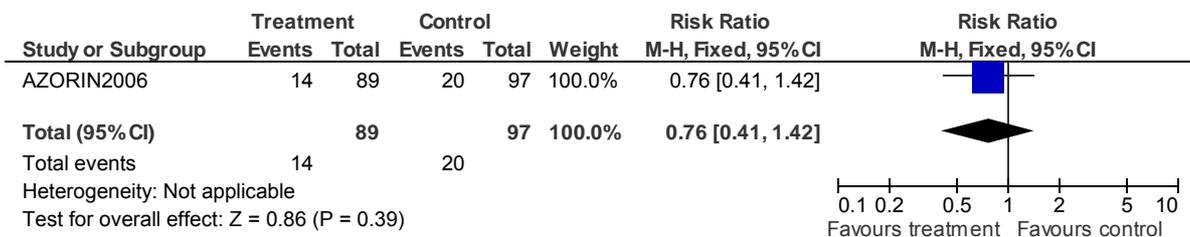
10.2 Mental state: 1. PANSS total (Change from baseline) (medium-term)



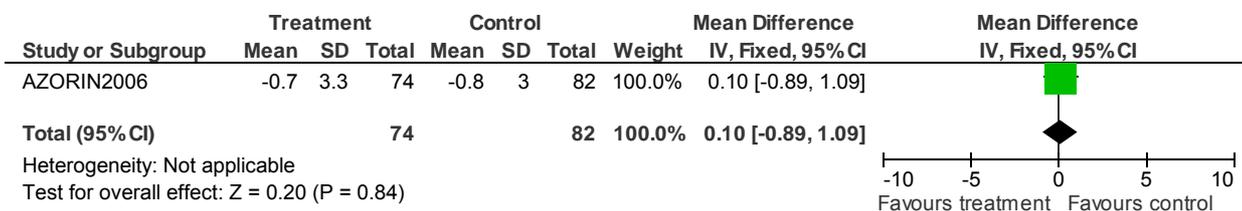
10.3 Leaving the study early: 1. Any reason (medium-term)



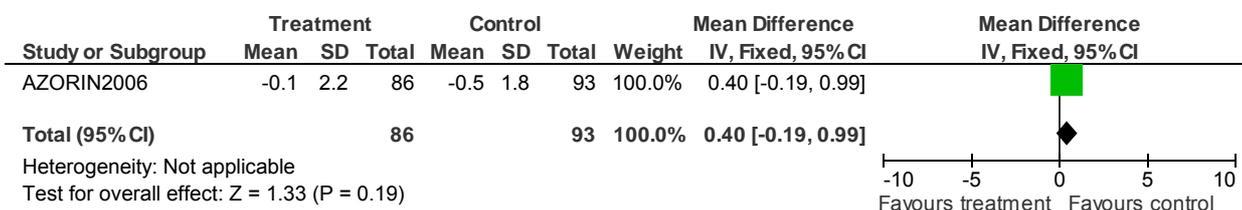
10.4 AE: 1. Metabolic SEs - Weight gain (medium-term)



10.5 AE: 2. Neurologic SEs - AIMS (change from baseline) (medium-term)

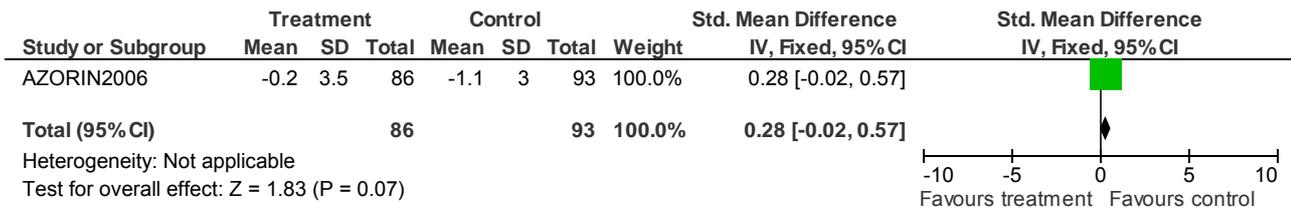


10.6 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; medium-term)

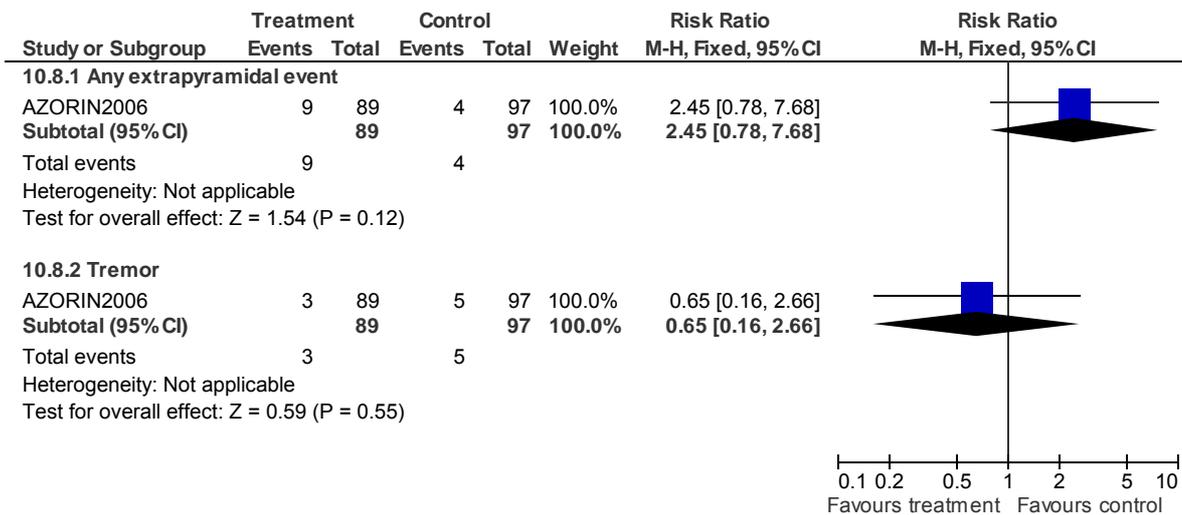


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

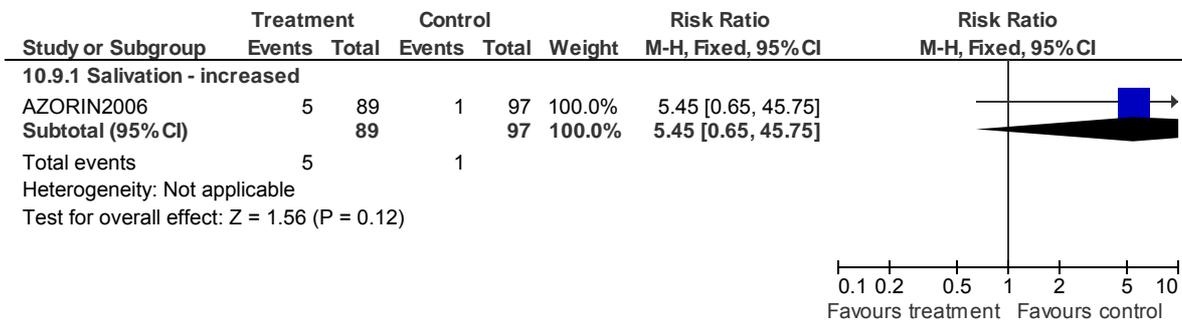
10.7 AE: 1. Neurologic SEs - Simpson-Angus Scale (SAS; change from baseline) (medium-term)



10.8 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

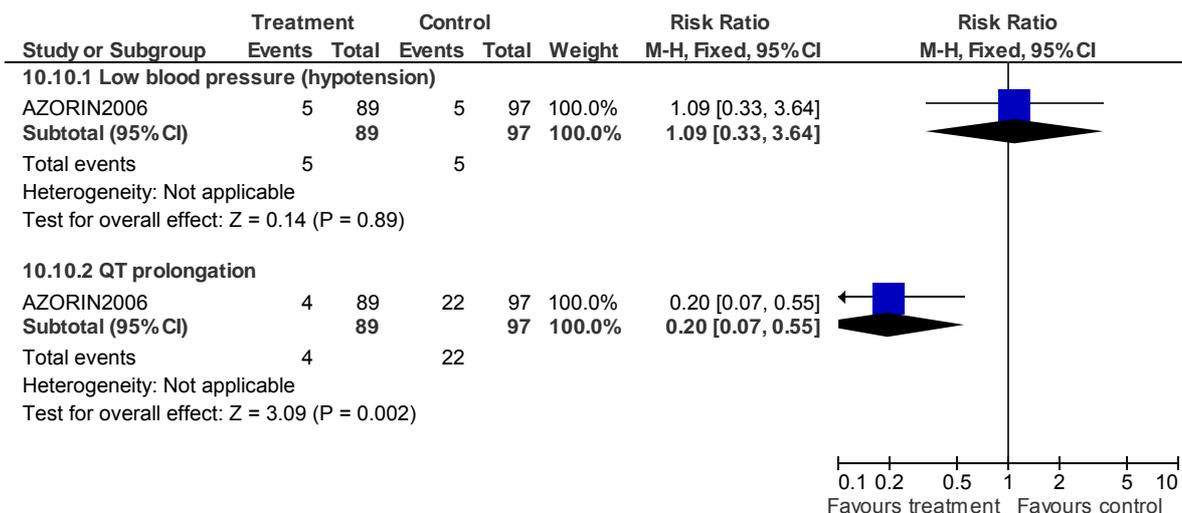


10.9 AE: 3. Autonomic SEs (medium-term)

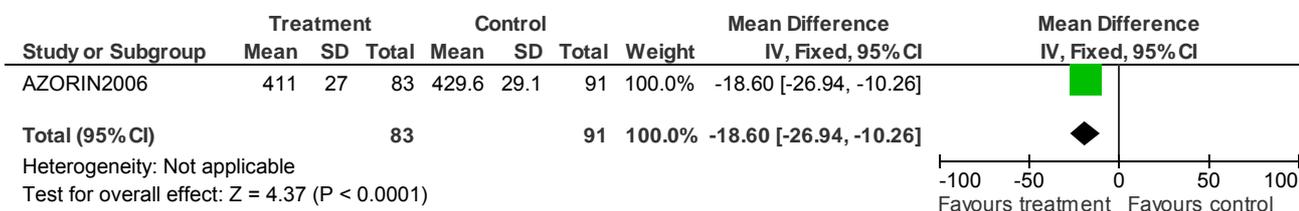


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

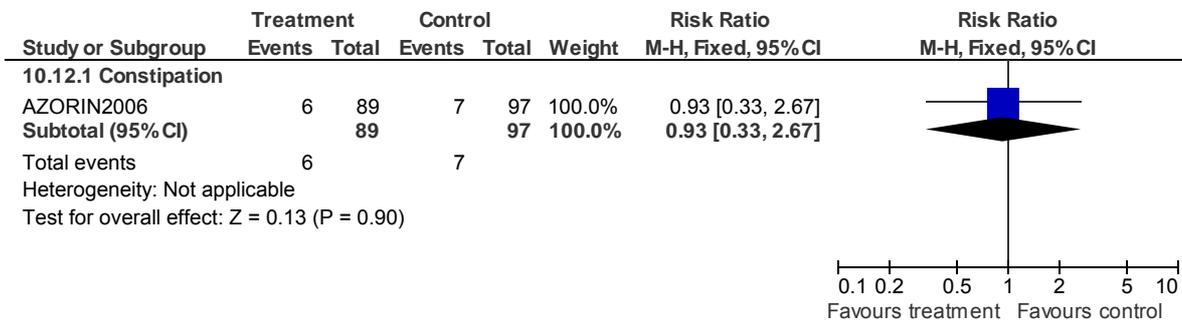
10.10 AE: 4. Cardiovascular SEs (medium-term)



10.11 AE: 4. Cardiovascular SEs - QTc (Endpoint) (medium-term)

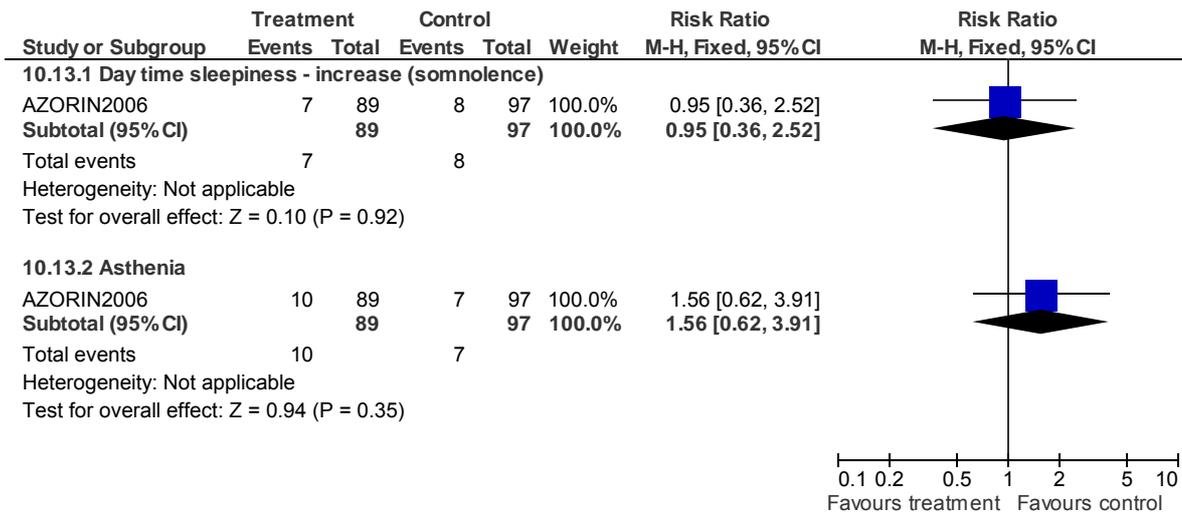


10.12 AE: 5. Gastrointestinal SEs (medium-term)

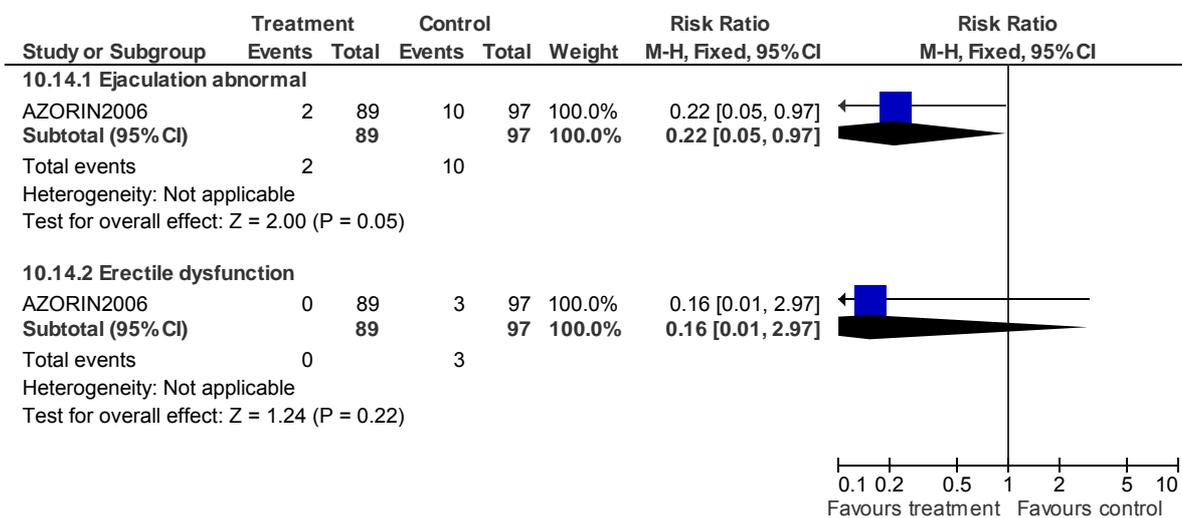


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

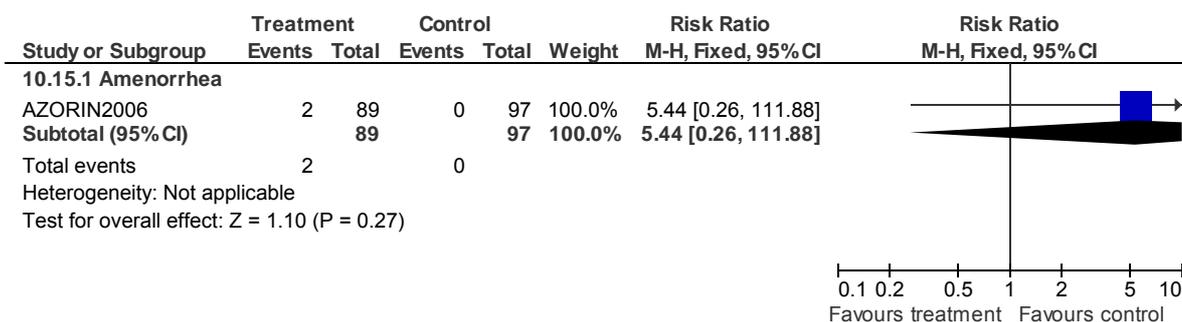
10.13 AE: 6. Sedation (medium-term)



10.14 AE: 7. Sexual dysfunction (medium-term)

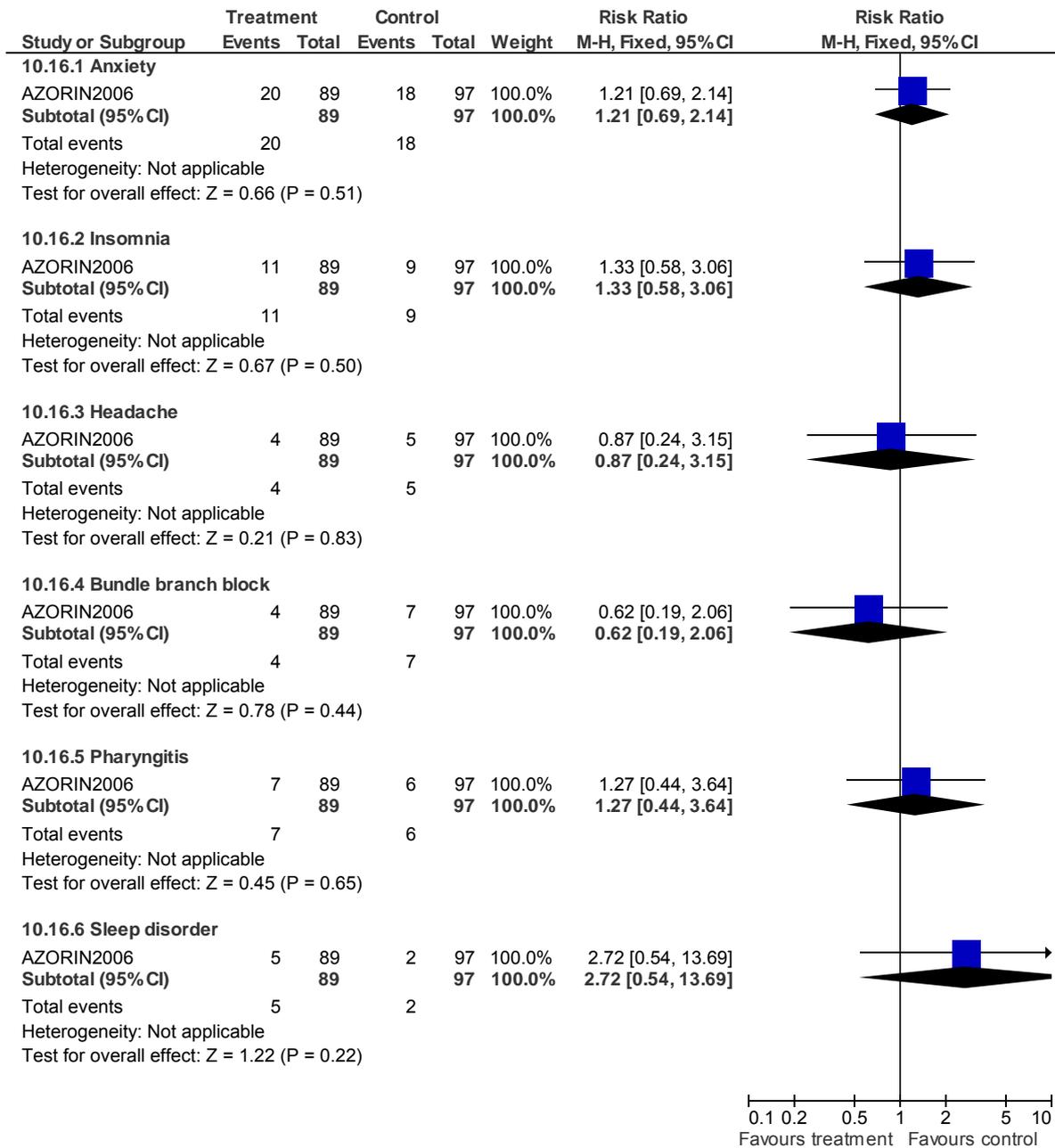


10.15 AE: 8. Menstrual problems (medium-term)



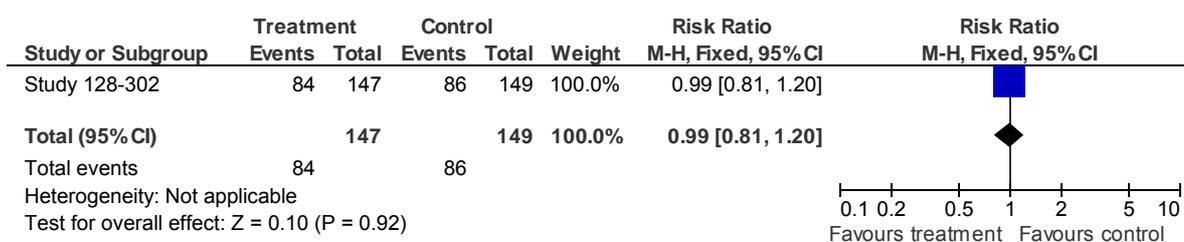
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

10.16 AE: 9. Other SEs (medium-term)



11 Risperidone versus Ziprasidone (phase: acute treatment) (critical outcomes)

11.1 Global state: 1. No clinically important response (CGI-I) (short-term)

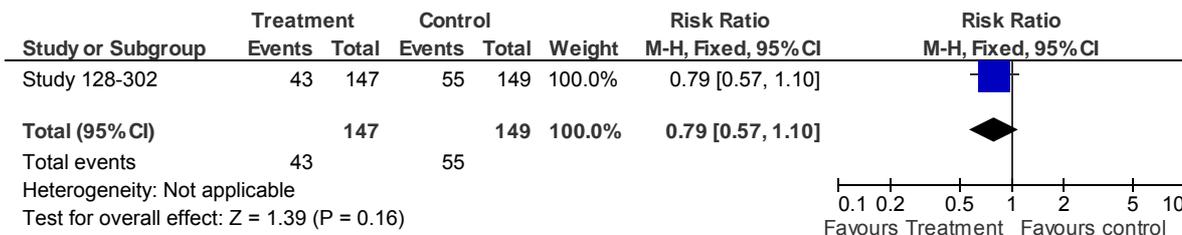


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.2 Mental state: 1. Non-response (<30% improvement in PANSS) (short-term)



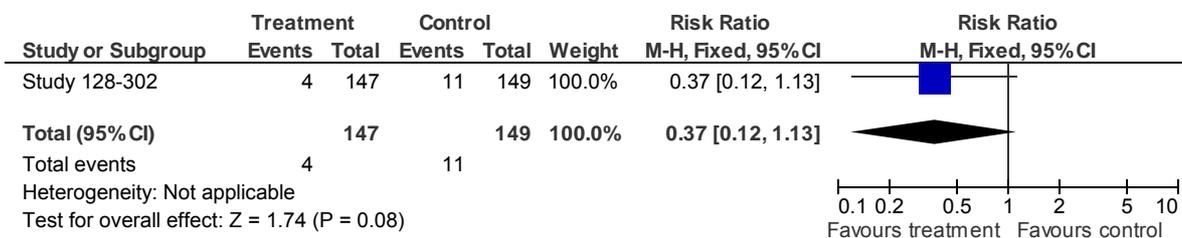
11.3 Leaving the study early: 1. Any reason (short-term)



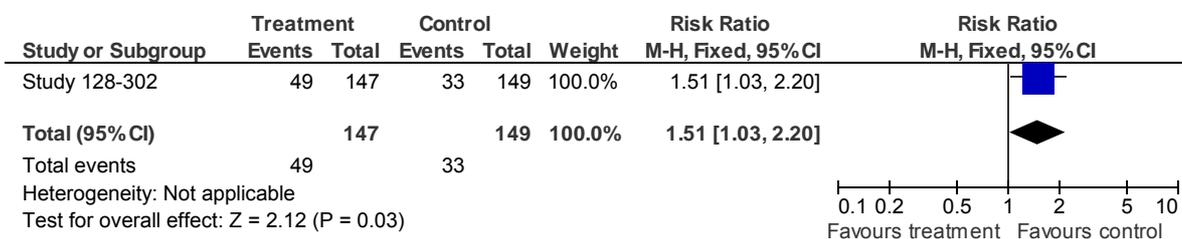
11.4 AE: 1. Metabolic SEs - Weight gain (short-term)



11.5 AE: 1. Metabolic SEs - Weight loss (short-term)

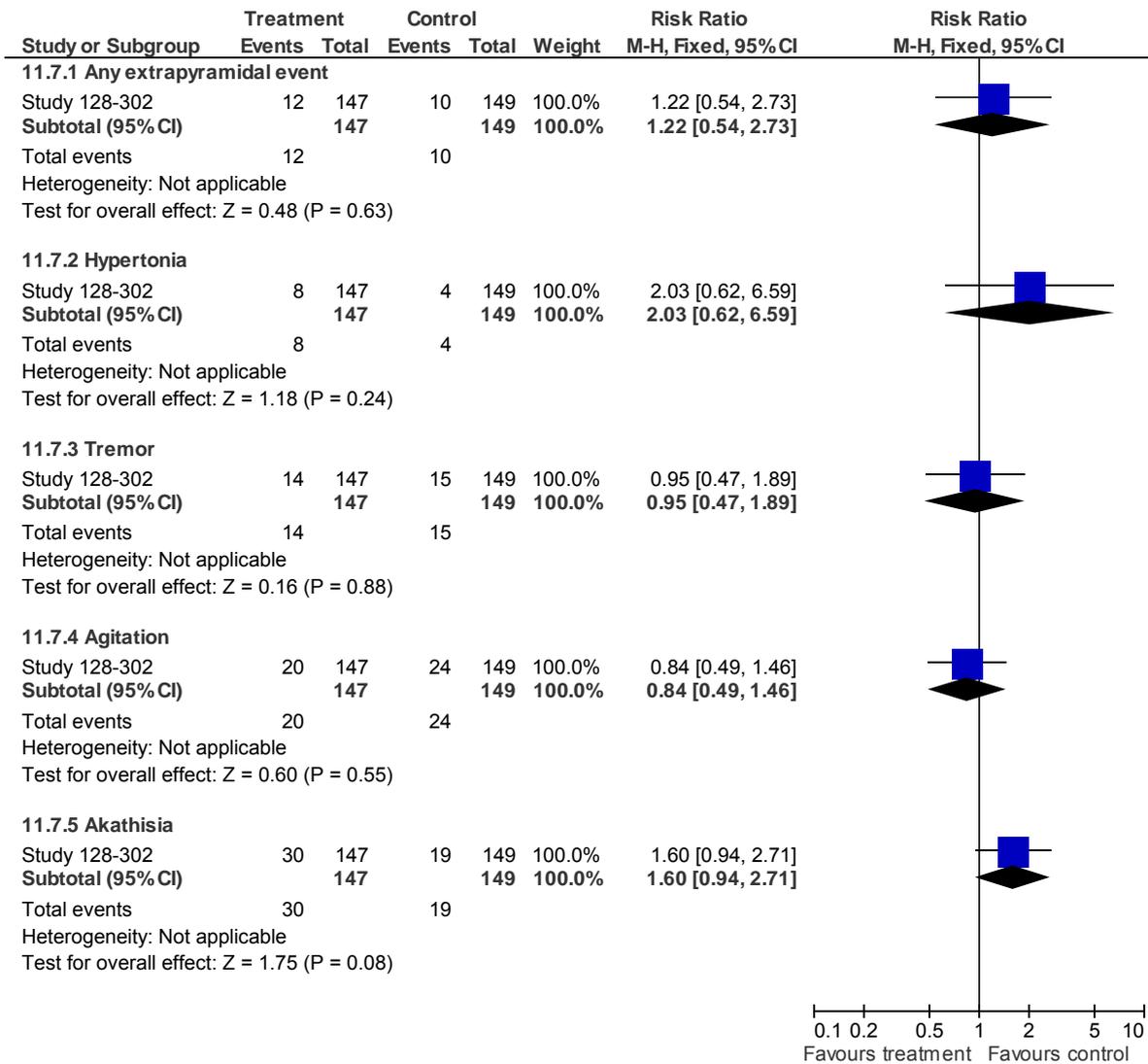


11.6 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (short-term)



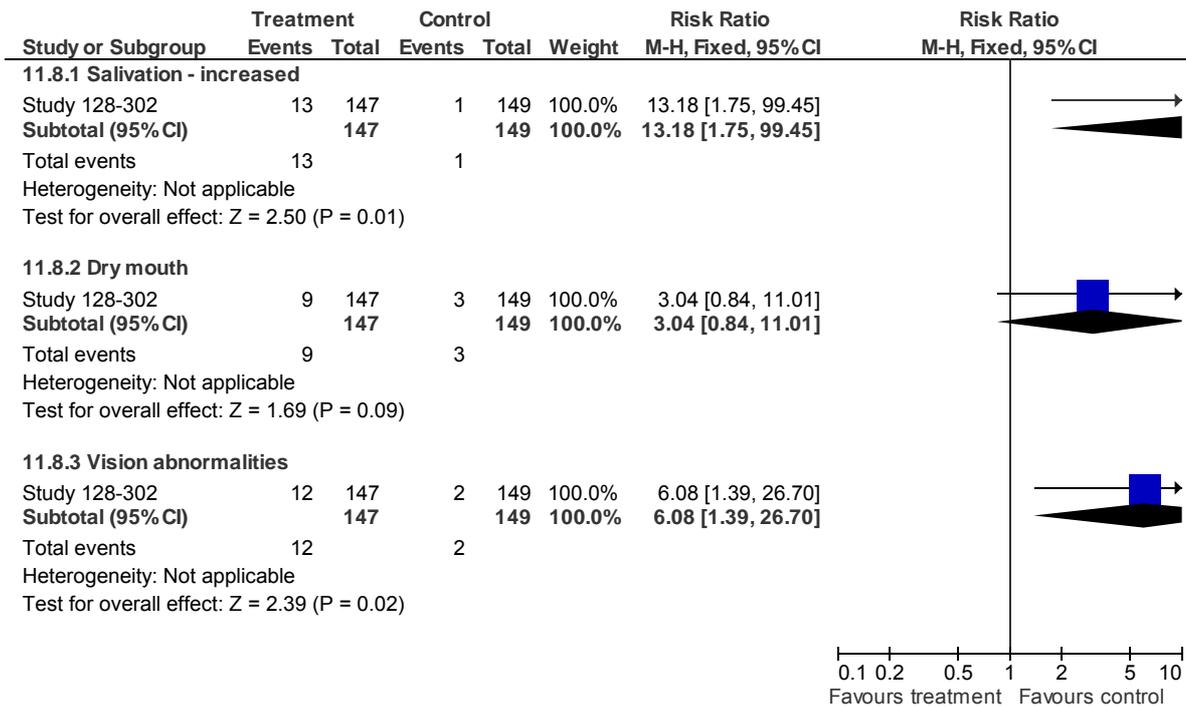
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.7 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

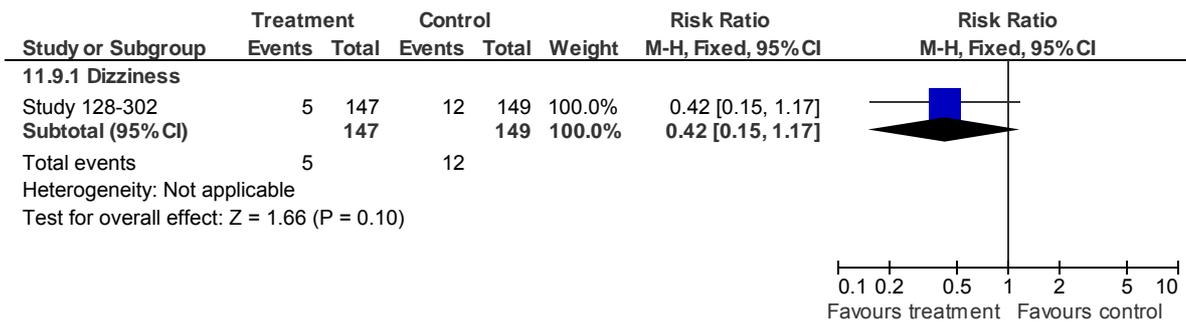


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.8 AE: 3. Autonomic SEs (short-term)

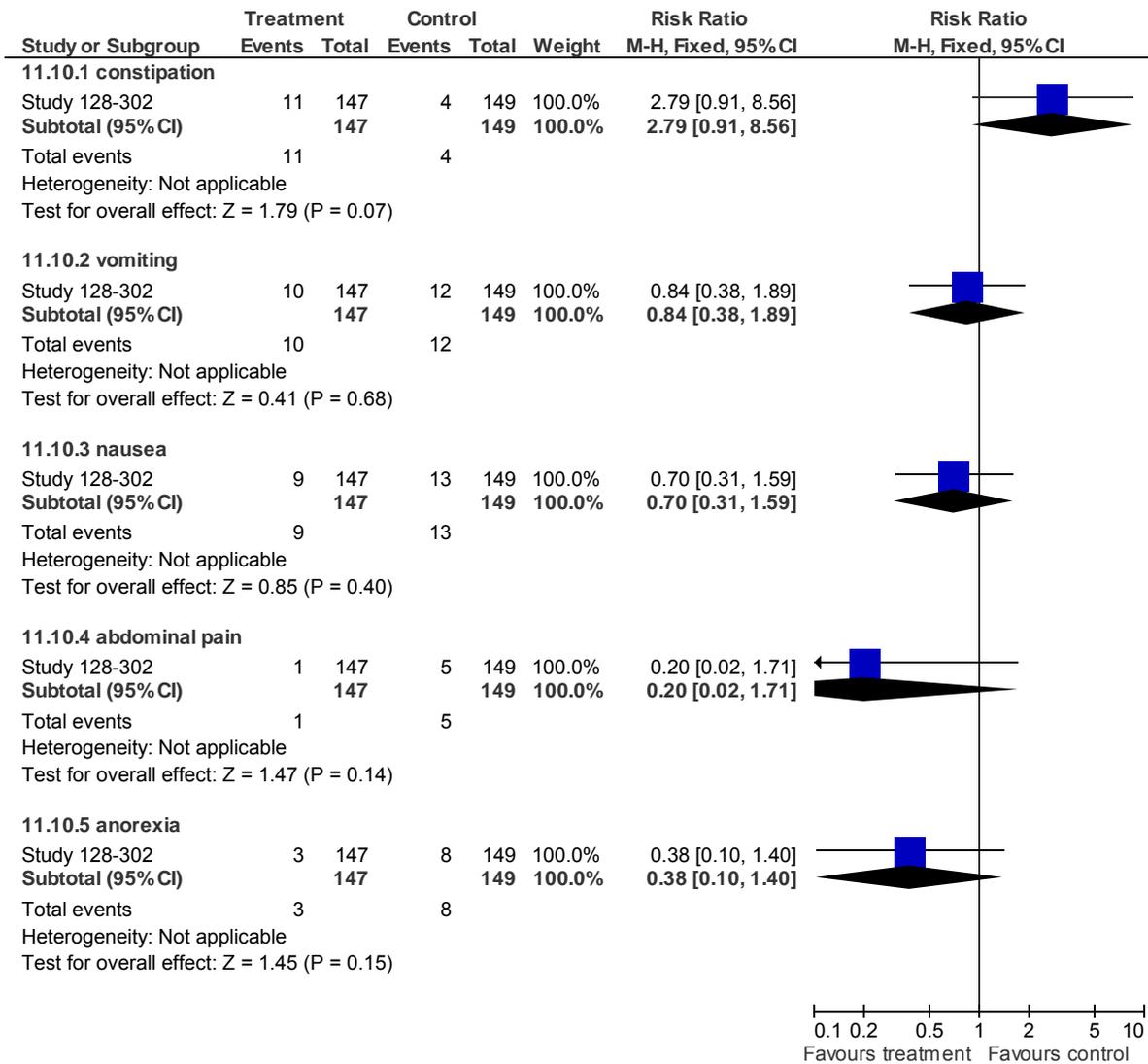


11.9 AE: 4. Cardiovascular SEs (short-term)



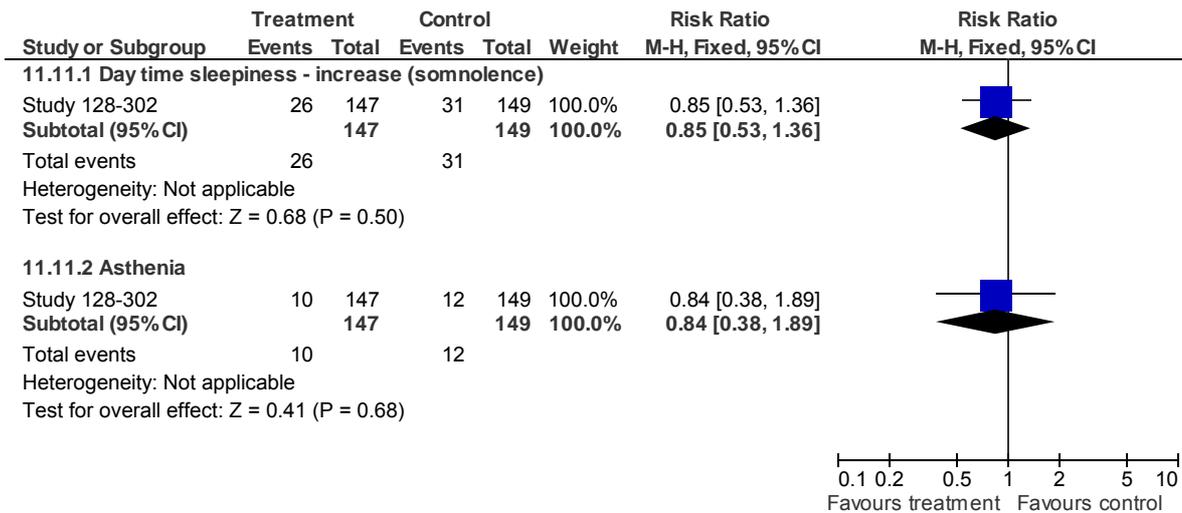
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.10 AE: 5. Gastrointestinal SEs (short-term)

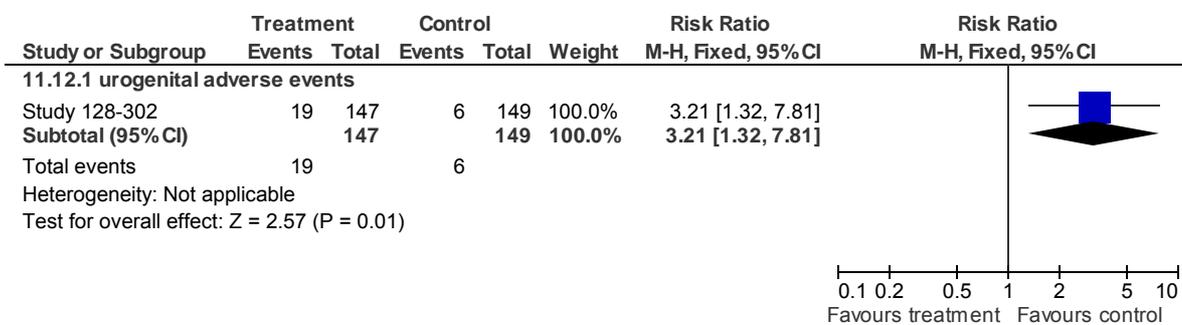


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.11 AE: 6. Sedation (short-term)

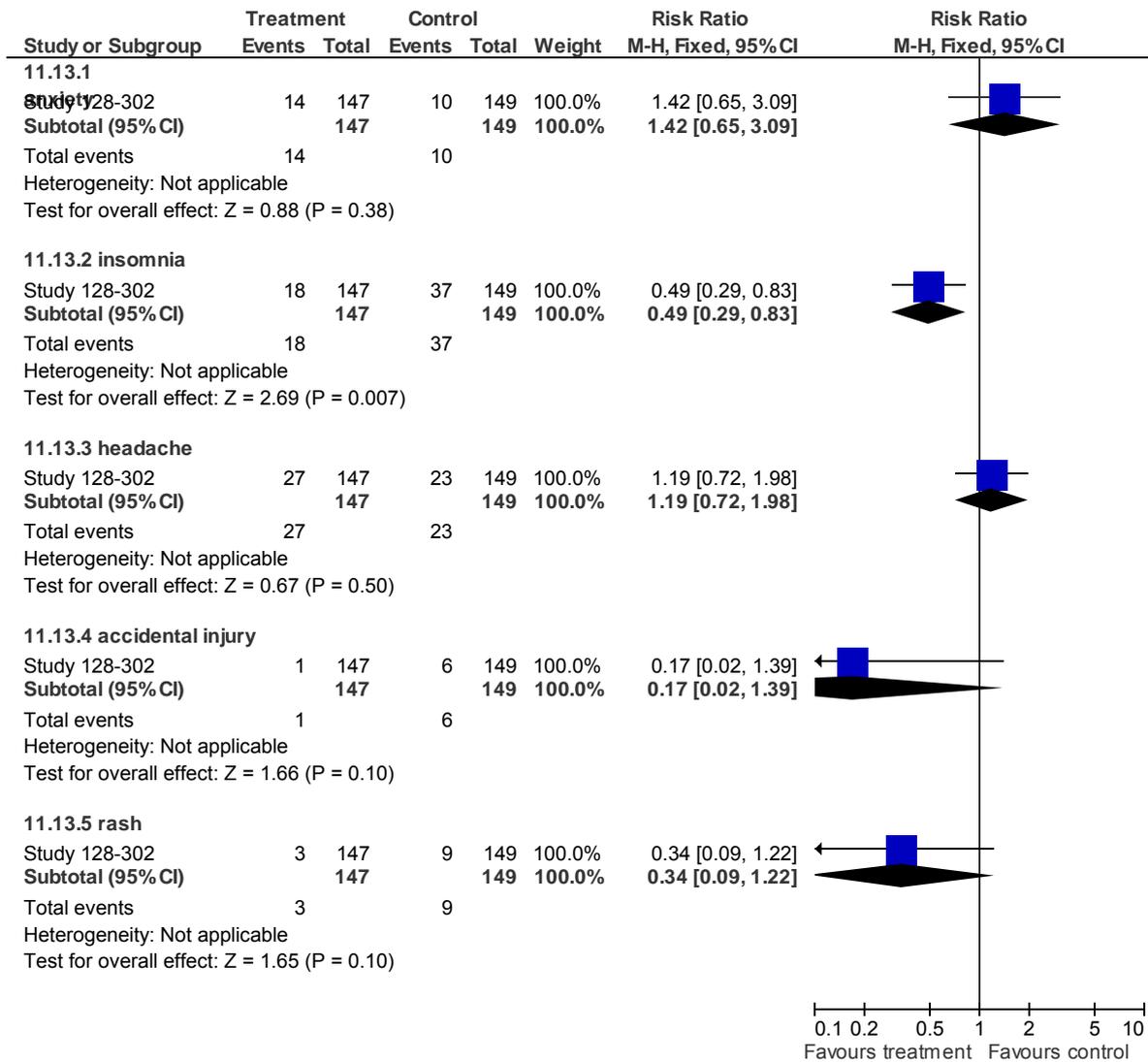


11.12 AE: 8. Menstrual problems (short-term)



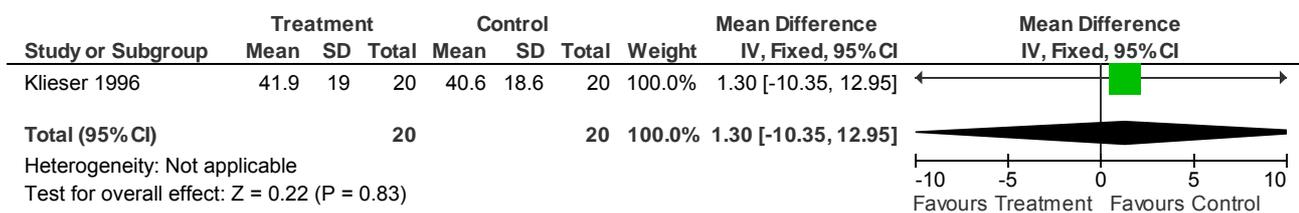
Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

11.13 AE: 9. Other SEs (short-term)



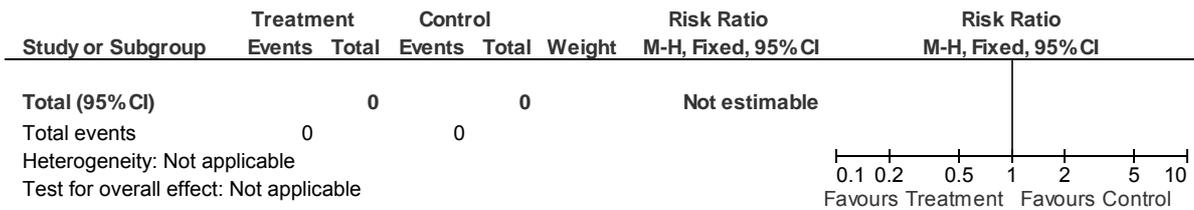
12 Risperidone versus Zotepine (phase: acute treatment) (critical outcomes)

12.1 Mental state: 1. BPRS endpoint score (high = poor)

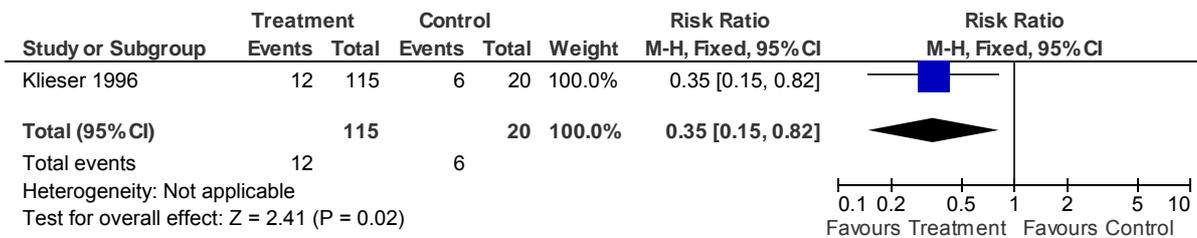


Pharmacological clinical evidence: Acute treatment (SGA versus SGA)

12.2 Leaving the study early: 1. Any reason



12.3 AE: 1. Neurologic SEs - needing additional anticholinergic medication (short-term)



12.4 AE: 1. Neurologic SEs - parkinsonism (Simpson-Angus Scale endpoint, high = poor)

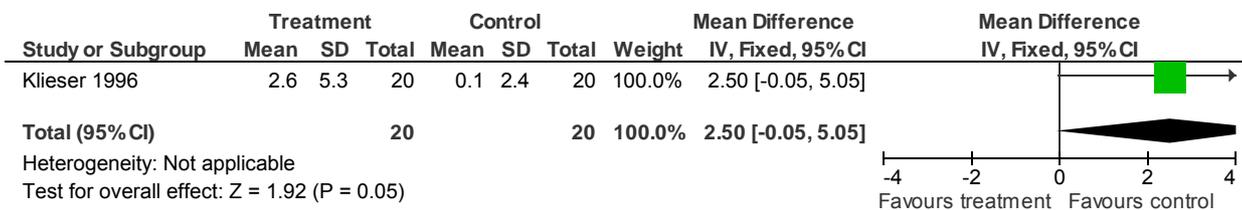


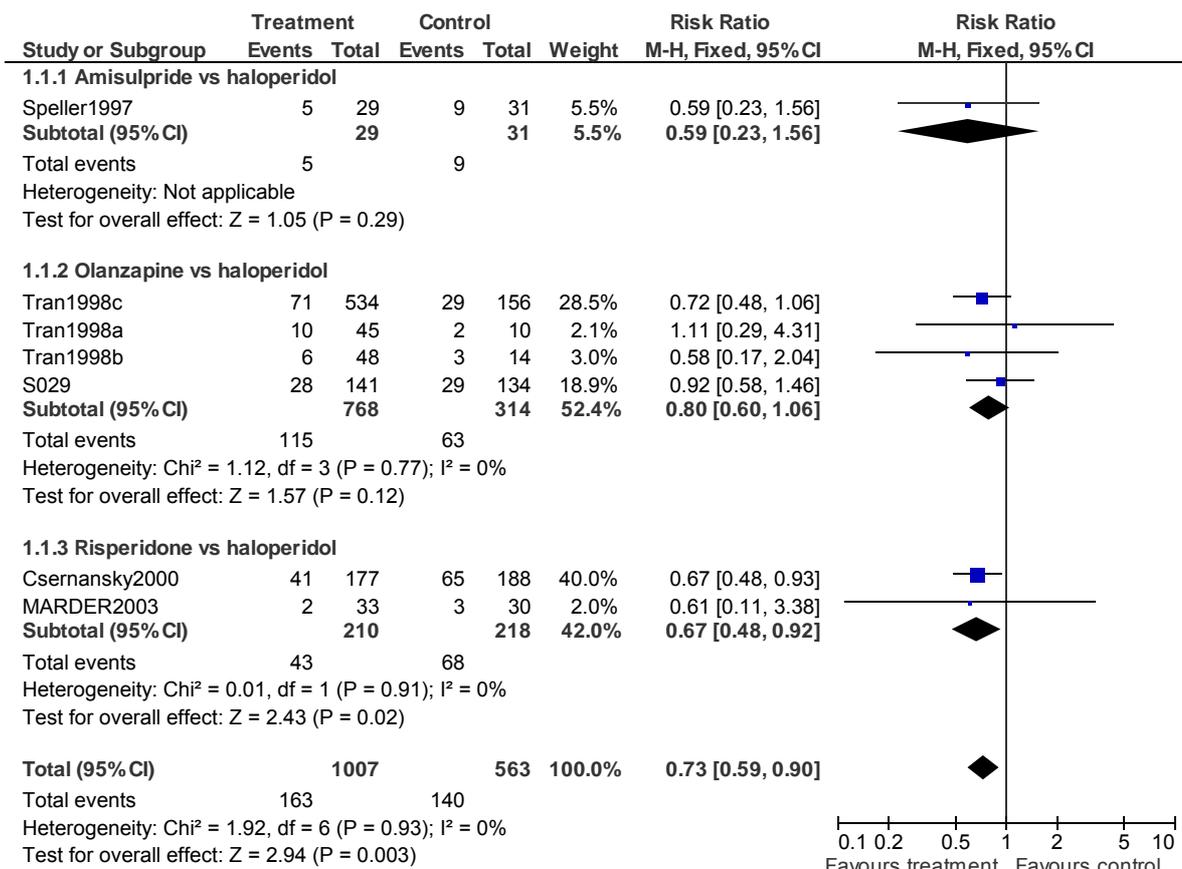
Table 4: Studies included in the relapse prevention review

| Treatment | versus Comparator | | | | |
|-----------|--|---|------------------------------|----------------------------|------------------------------|
| | Placebo | HAL | OLZ | RIS | ZIP |
| AMI | LOO1997 [26weeks, N=141] | Speller 1997 [52weeks, N=60] | | | |
| ARI | PIGOTT2003 [26weeks, N=310] | | | | |
| OLZ | BEASLEY2000 [42weeks, N=326] DELLVA1997 (study 1) [46weeks, N=58] DELLVA1997 (study 2) [46weeks, N=62] | STUDY-S029 [52weeks, N=275] Tran 1998a [52weeks, N=55] Tran 1998b [52weeks, N=62] Tran 1998c [22-84weeks, N=690] | | Tran 1997 [28weeks, N=339] | SIMPSON2005 [28weeks, N=126] |
| PAL | KRAMER2007 [up to 46weeks, N=207] | | | | |
| RIS | | Csernansky 2000 [52weeks, N=365] MARDER2003 [104weeks, N=63] | Tran 1997 [28weeks, N=339] | | |
| ZIP | ARATO2002 [52weeks, N=277] | | SIMPSON2005 [28weeks, N=126] | | |
| ZOT | COOPER2000 [26weeks, N=119] | | | | |

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

1 SGA versus Haloperidol - raw relapse rates

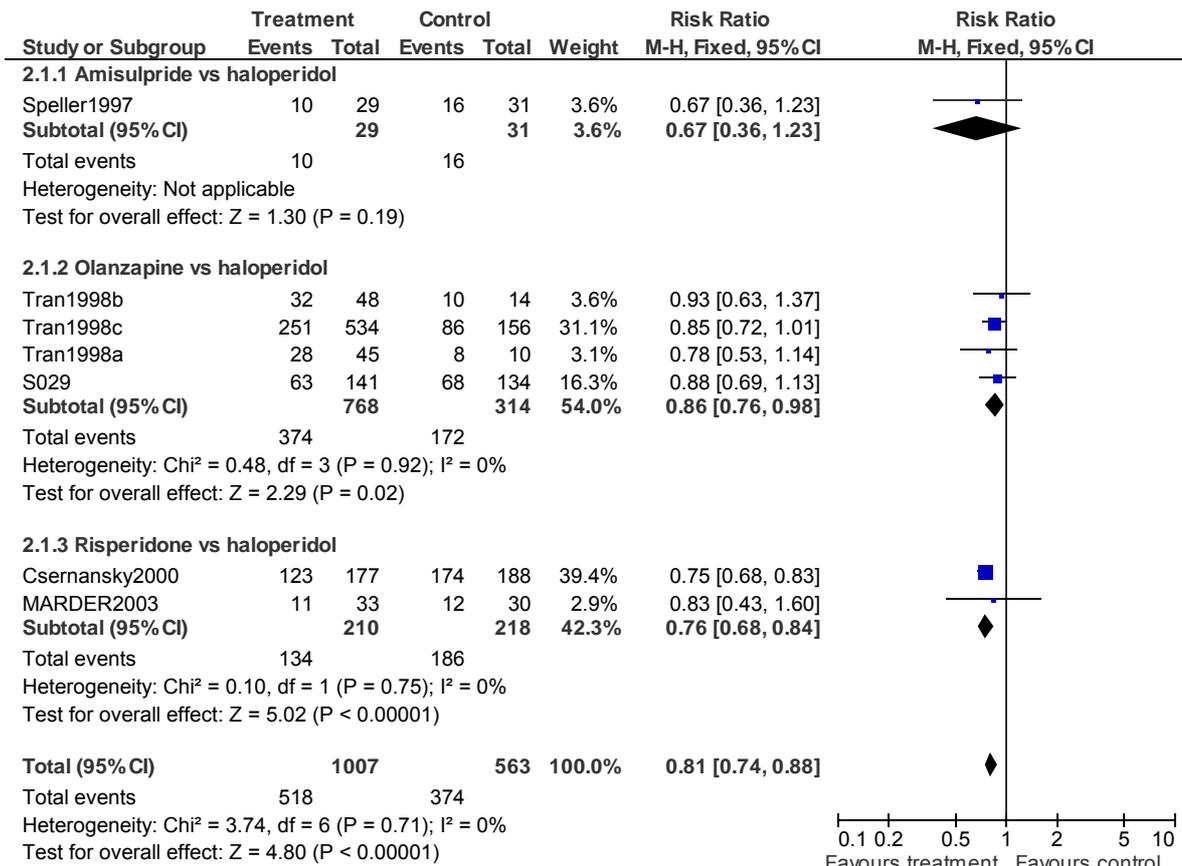
1.1 Relapse rates



2 SGA versus Haloperidol - overall treatment failure

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

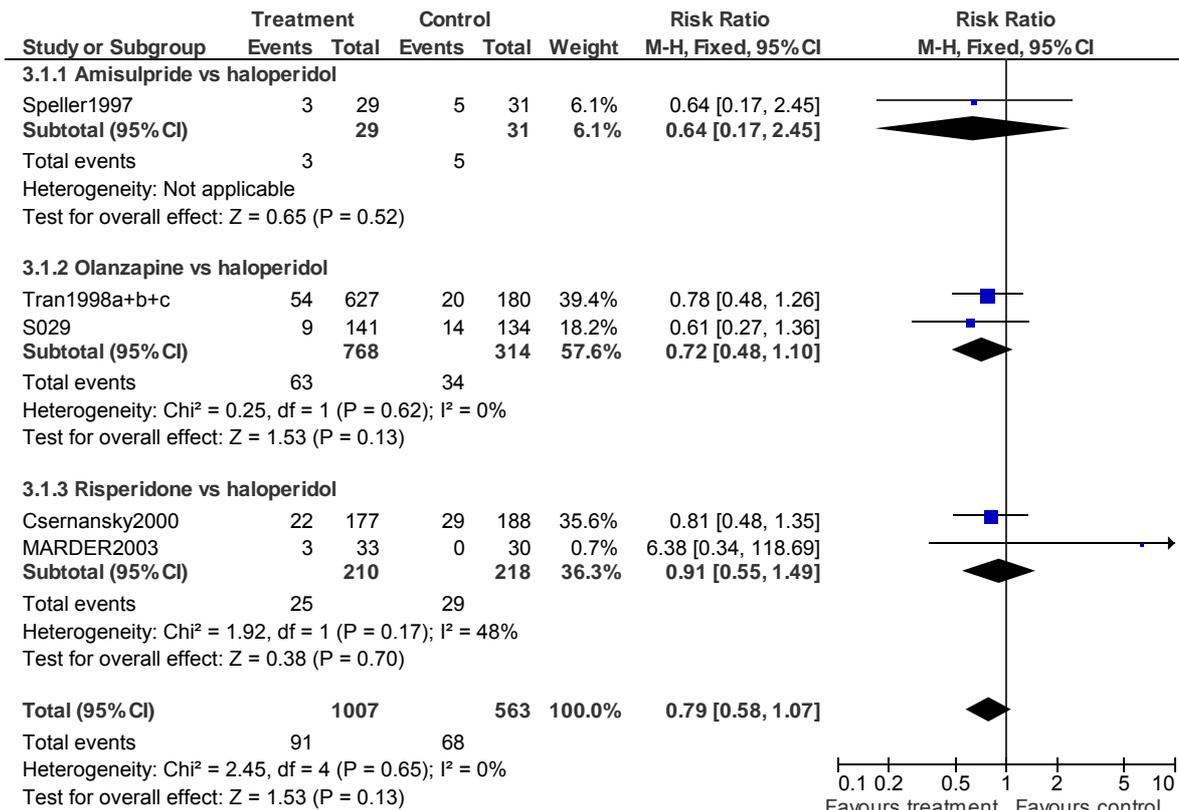
2.1 Relapse or leaving early for any other reason



3 SGA versus Haloperidol - leaving the study early due to adverse events

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

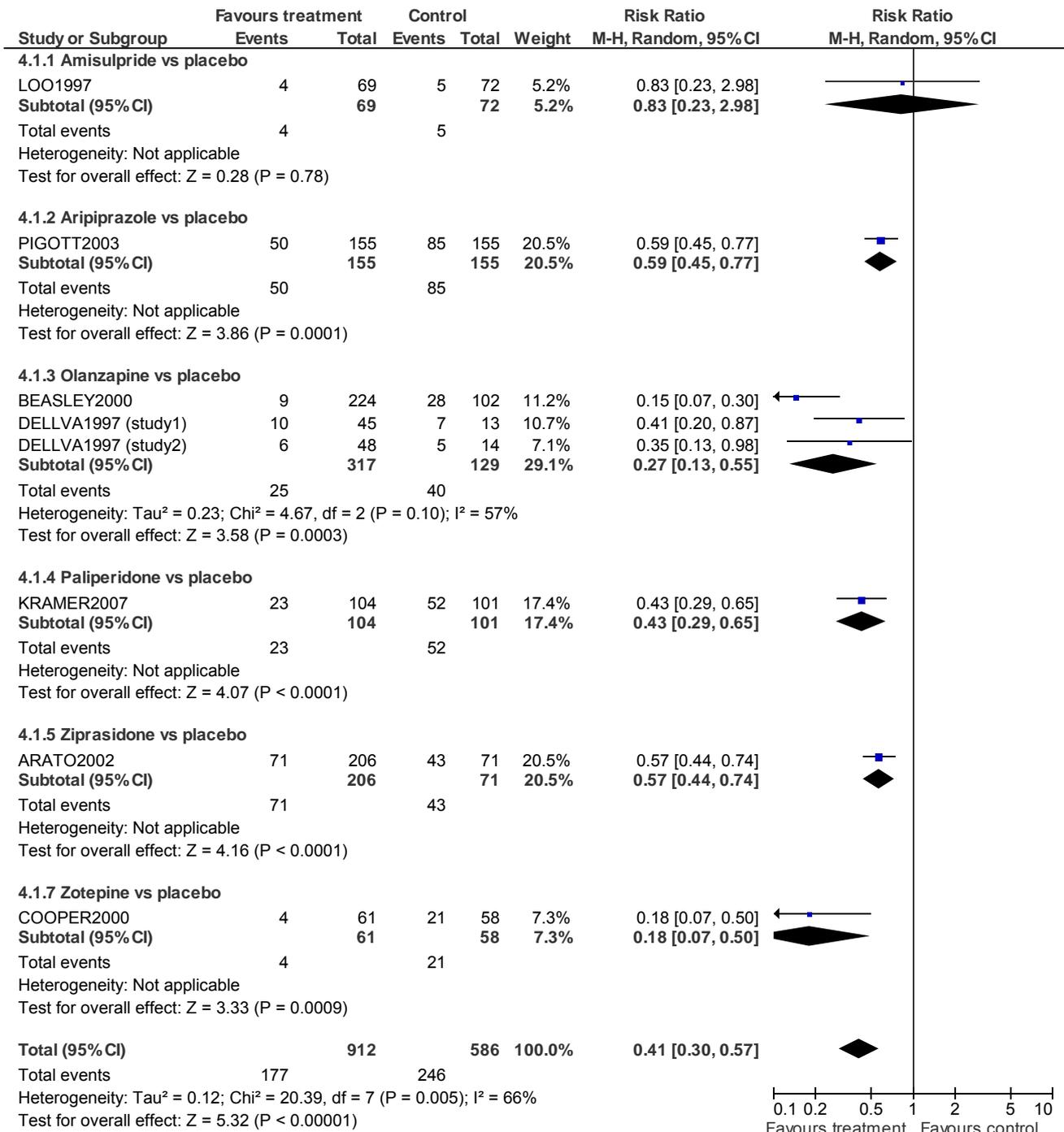
3.1 Leaving the study early due to adverse events



4 SGA versus Placebo - raw relapse rates

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

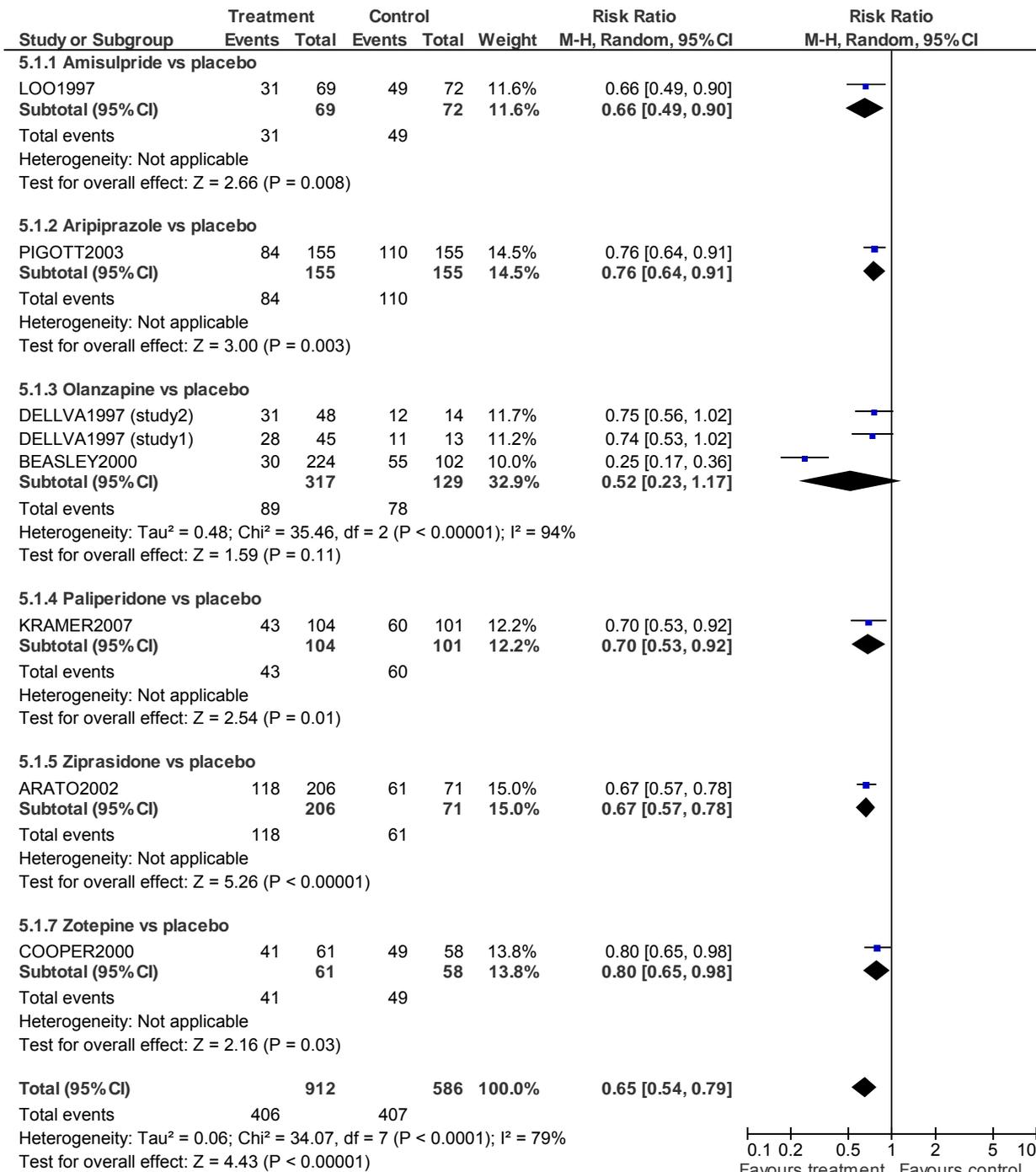
4.1 Relapse rates



5 SGA versus Placebo - overall treatment failure

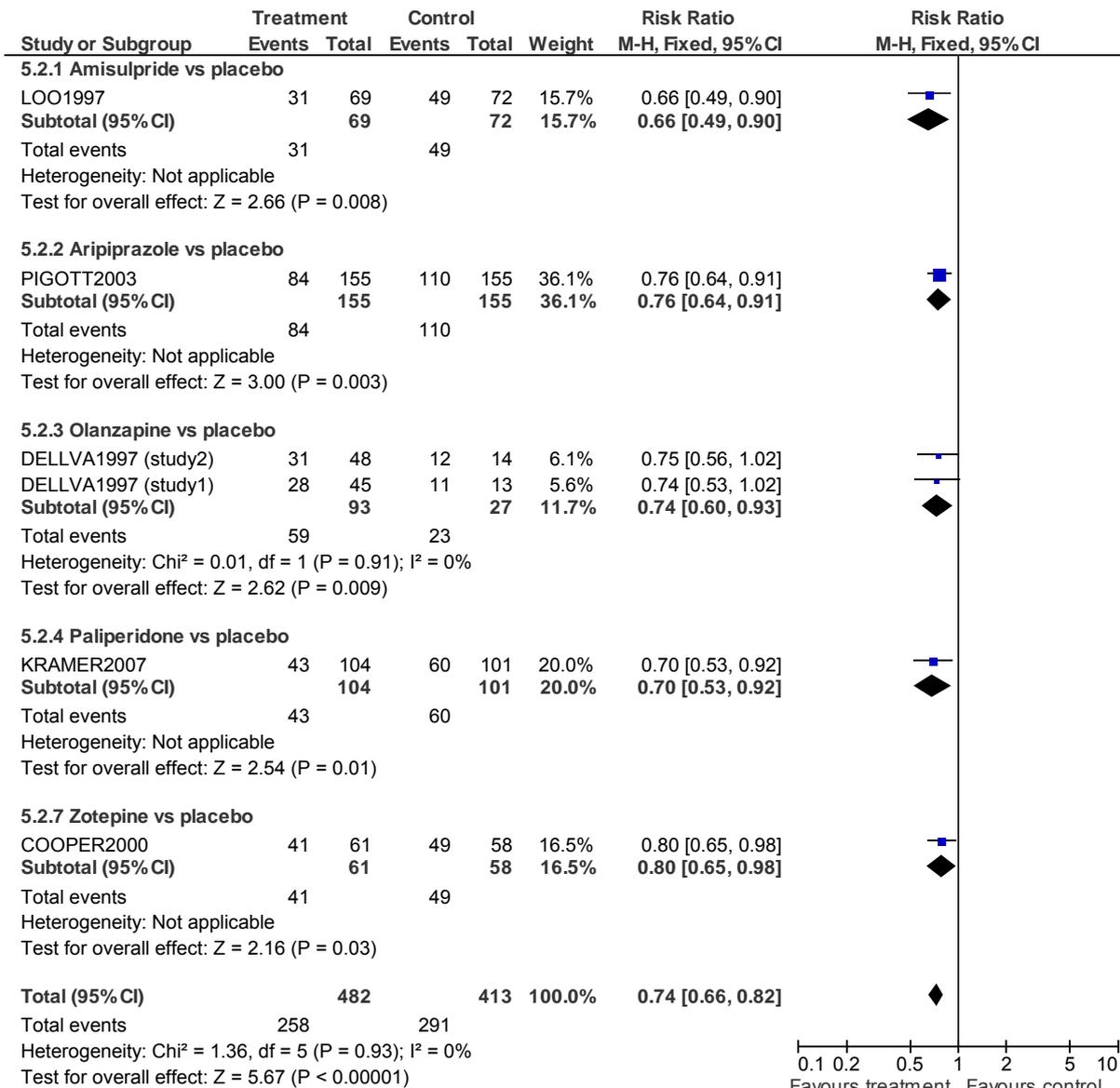
Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

5.1 Relapse or leaving early for any other reason



Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

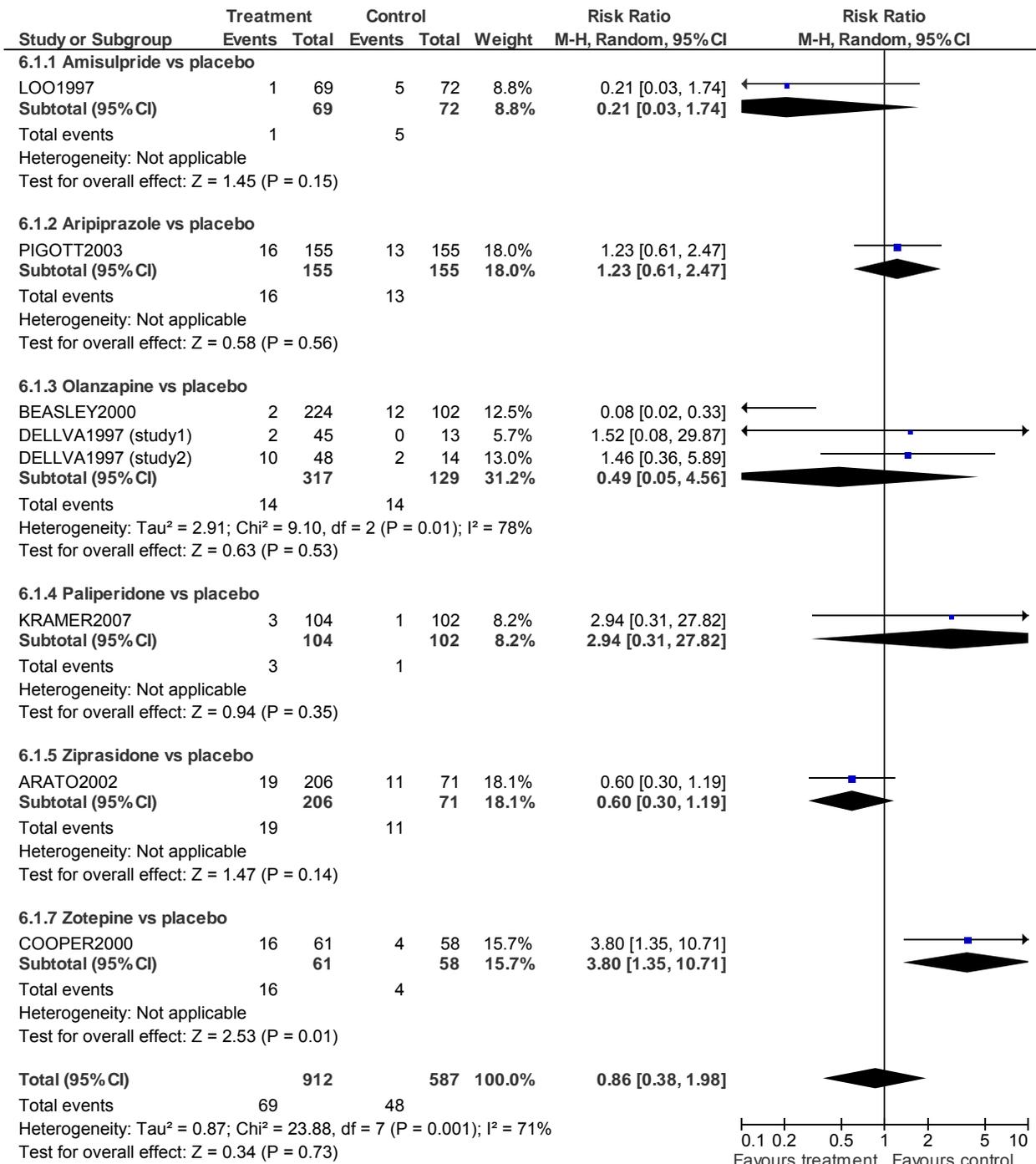
5.2 Relapse or leaving early for any other reason (sensitivity analysis: excl. Beasley2000)



6 SGA versus Placebo - leaving the study early due to adverse events

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

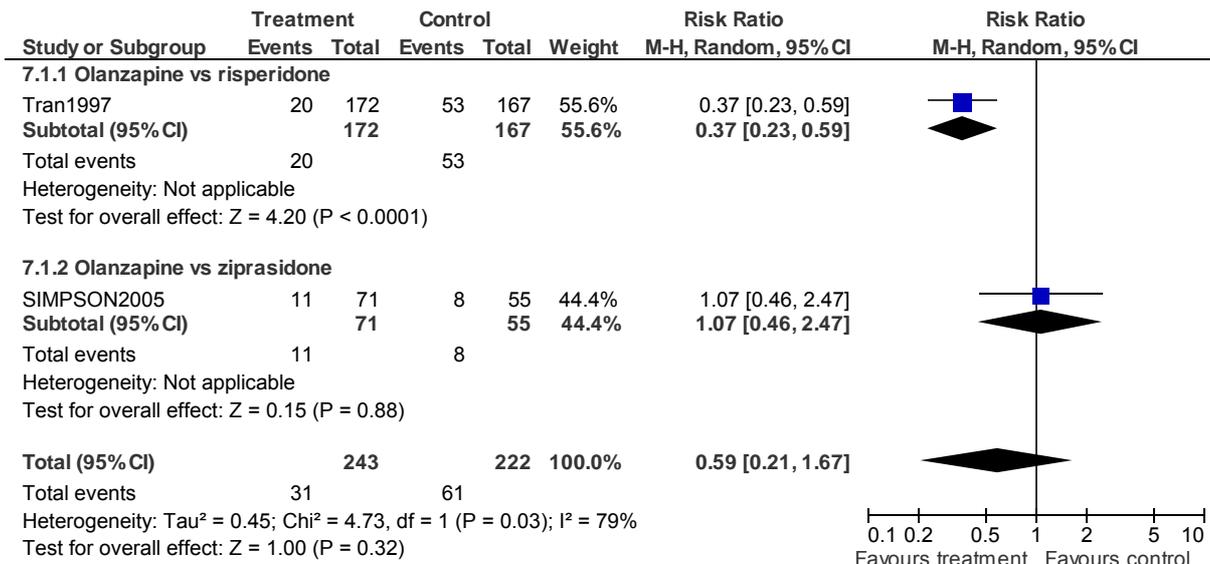
6.1 Number leaving early



7 SGA versus SGA - raw relapse rates

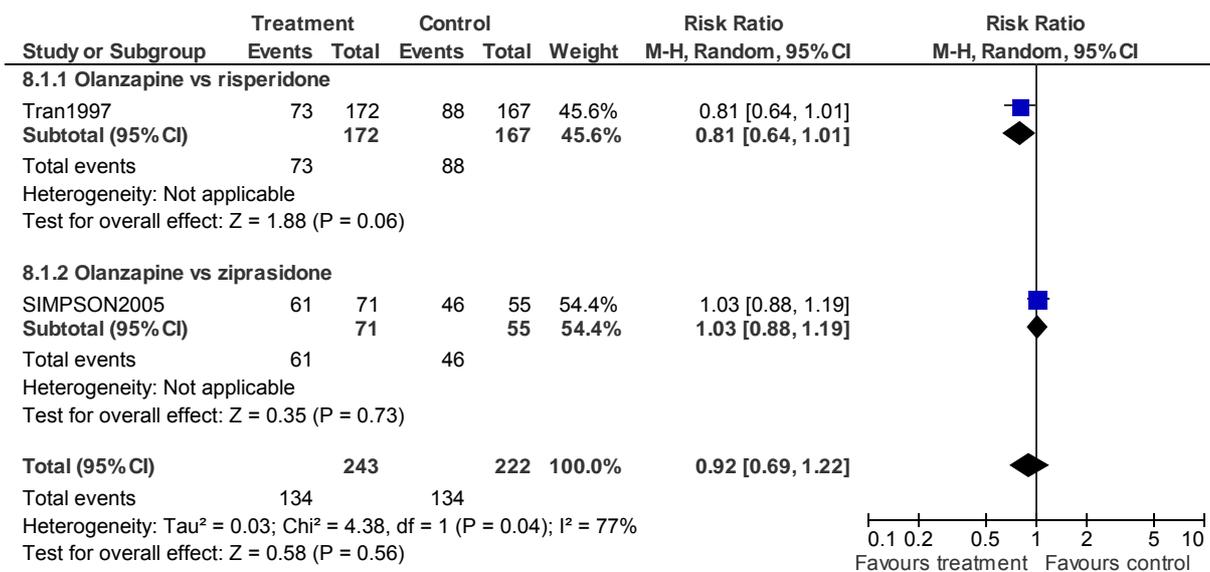
Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

7.1 Relapse rates



8 SGA versus SGA - overall treatment failure

8.1 Relapse or leaving early for any other reason



9 SGA versus SGA - leaving the study early due to adverse events

Pharmacological clinical evidence: Relapse prevention with antipsychotic drugs

9.1 Leaving the study early due to adverse events

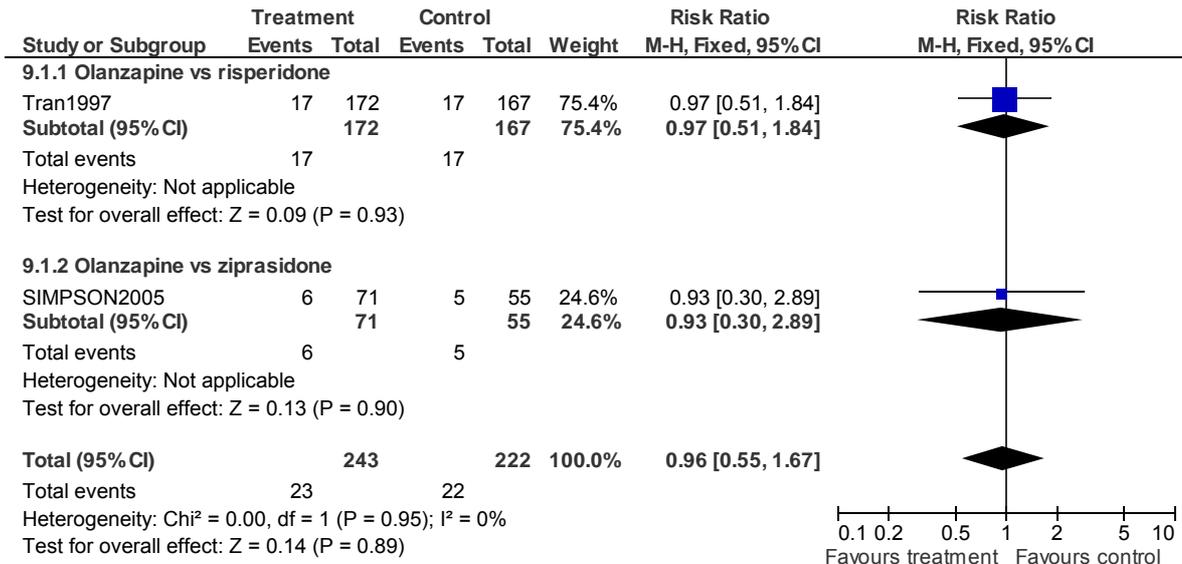


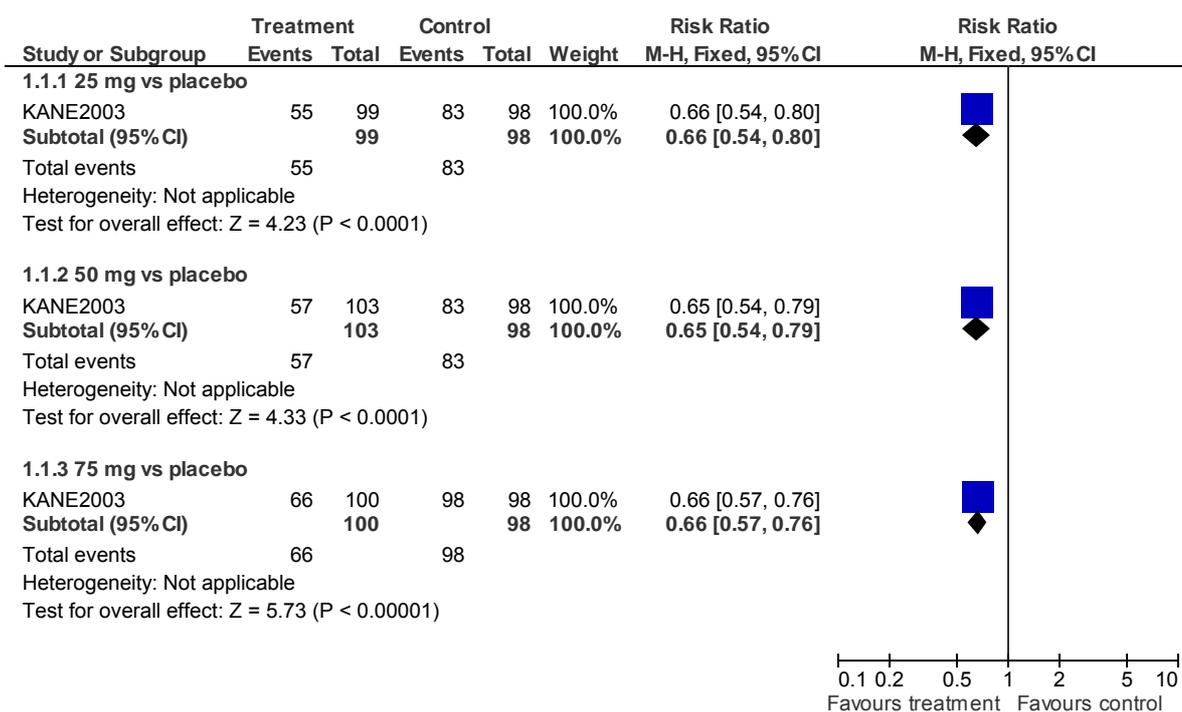
Table 5: Studies included in the review of long-acting injectable risperidone

| Treatment | versus Comparator | |
|-----------------------------------|---------------------------|---------------------------|
| | Placebo | Oral RIS |
| Long-acting risperidone injection | KANE2003 [12weeks, N=400] | CHUE2005 [12weeks, N=642] |

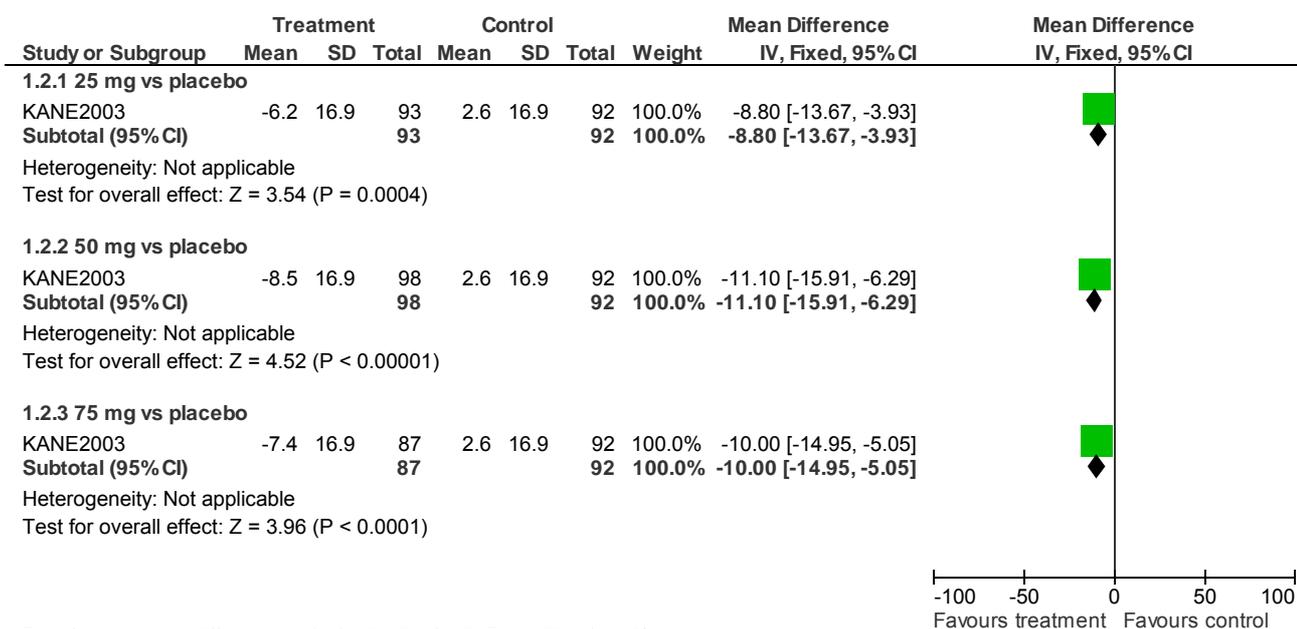
Pharmacological clinical evidence: Long-acting injectable risperidone

1 Long-acting risperidone versus placebo

1.1 Global state: 1. No important clinical response (<20% improvement on PANSS total) (medium-term)

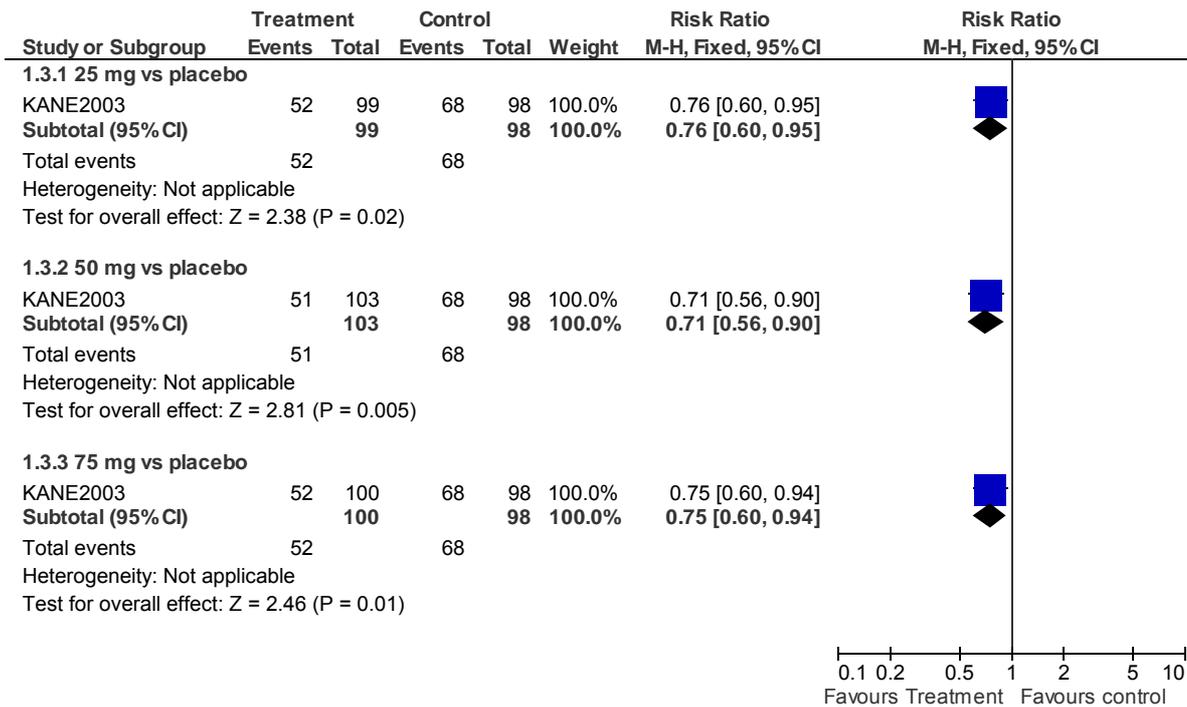


1.2 Mental state: 1. PANSS total (change from baseline) (medium-term)

Test for subgroup differences: Chi² = 0.43, df = 2 (P = 0.80), I² = 0%

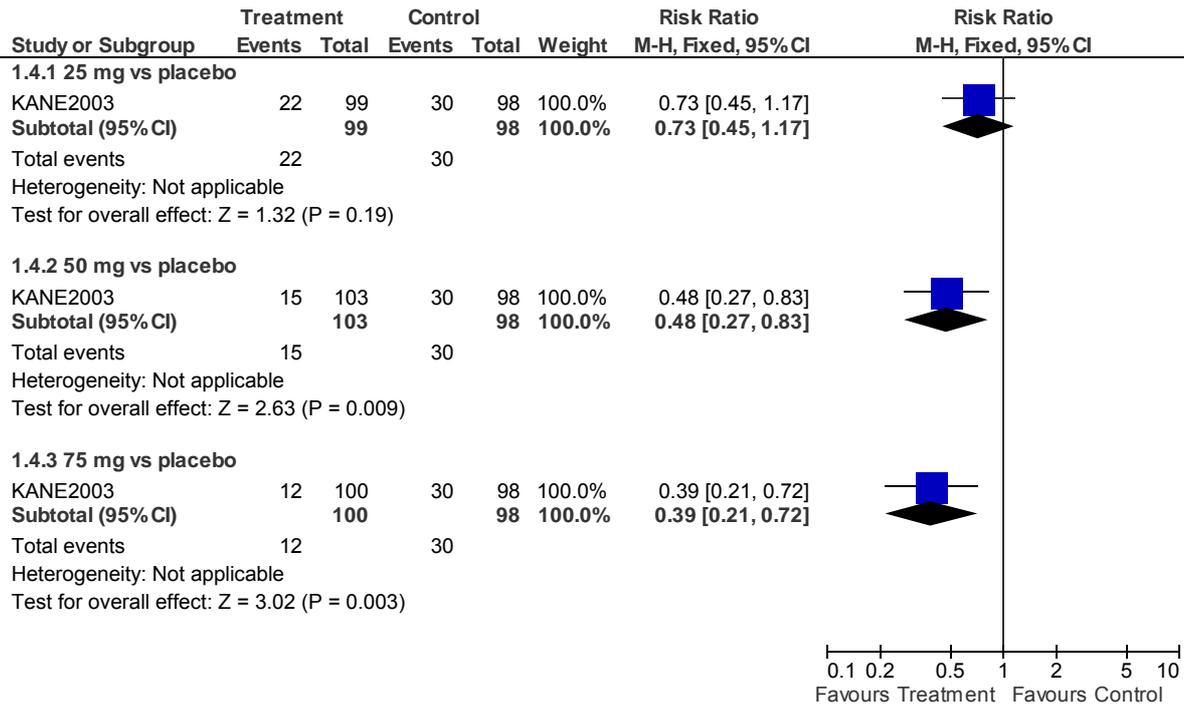
Pharmacological clinical evidence: Long-acting injectable risperidone

1.3 Leaving the study early: 1. Any reason (medium-term)



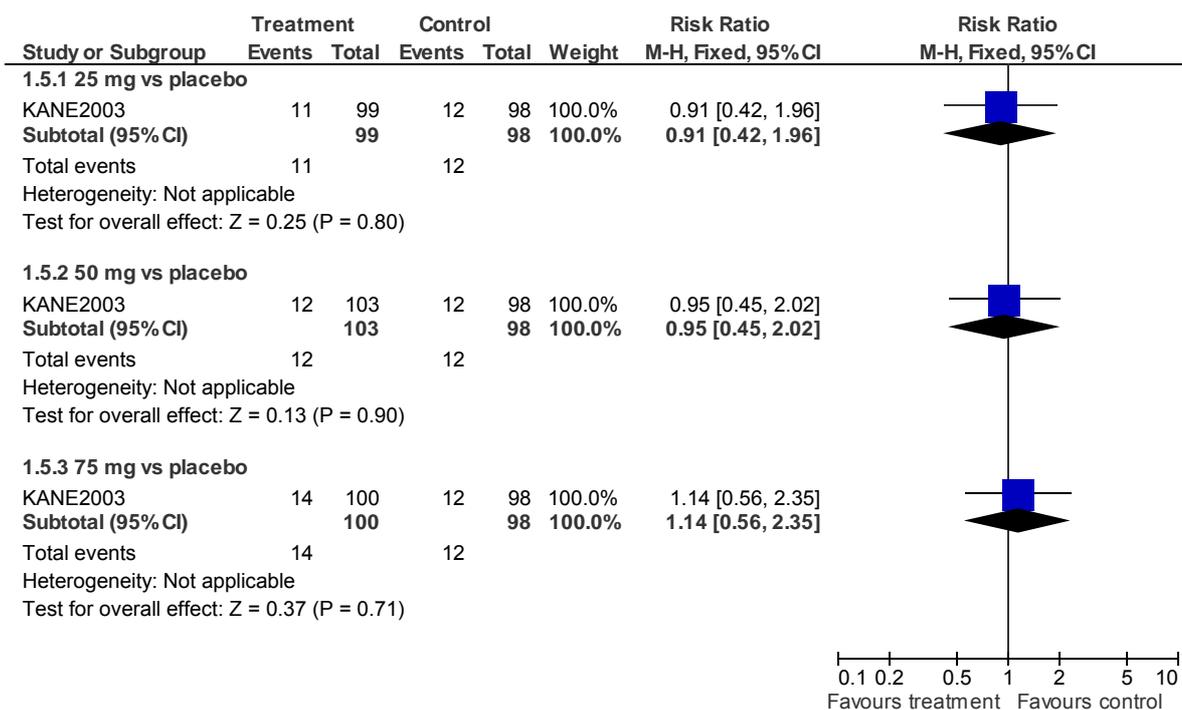
Pharmacological clinical evidence: Long-acting injectable risperidone

1.4 Leaving the study early: 2. Due to lack of efficacy (medium-term)



Pharmacological clinical evidence: Long-acting injectable risperidone

1.5 Leaving the study early: 3: Adverse event (medium-term)



1.6 AE: 1. Metabolic SEs - weight gain at endpoint (medium-term)

1.6.1 25 mg vs placebo

| Study ID | LAI risperidone | Placebo |
|----------|-----------------|---------|
| KANE2003 | 0.5 kg | -1.4 kg |

1.6.2 50 mg vs placebo

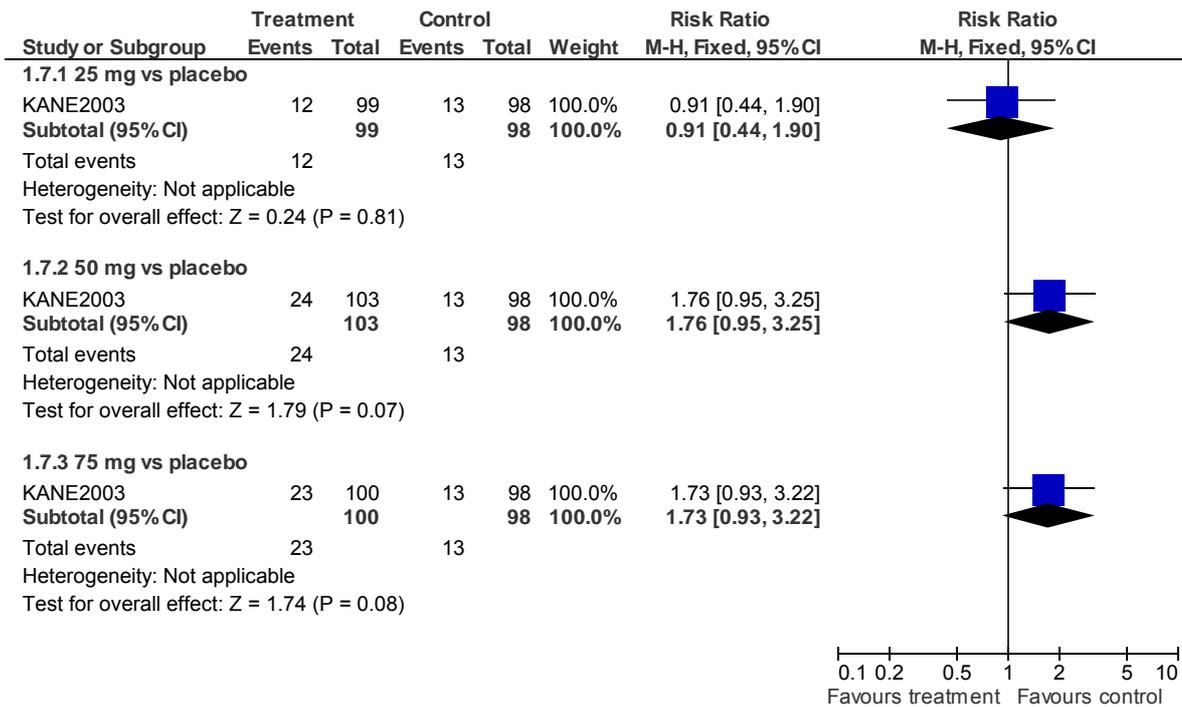
| Study ID | LAI risperidone | Placebo |
|----------|-----------------|---------|
| KANE2003 | 1.2 kg | -1.4 kg |

1.6.3 75 mg vs placebo

| Study ID | LAI risperidone | Placebo |
|----------|-----------------|---------|
| KANE2003 | 1.9 kg | -1.4 kg |

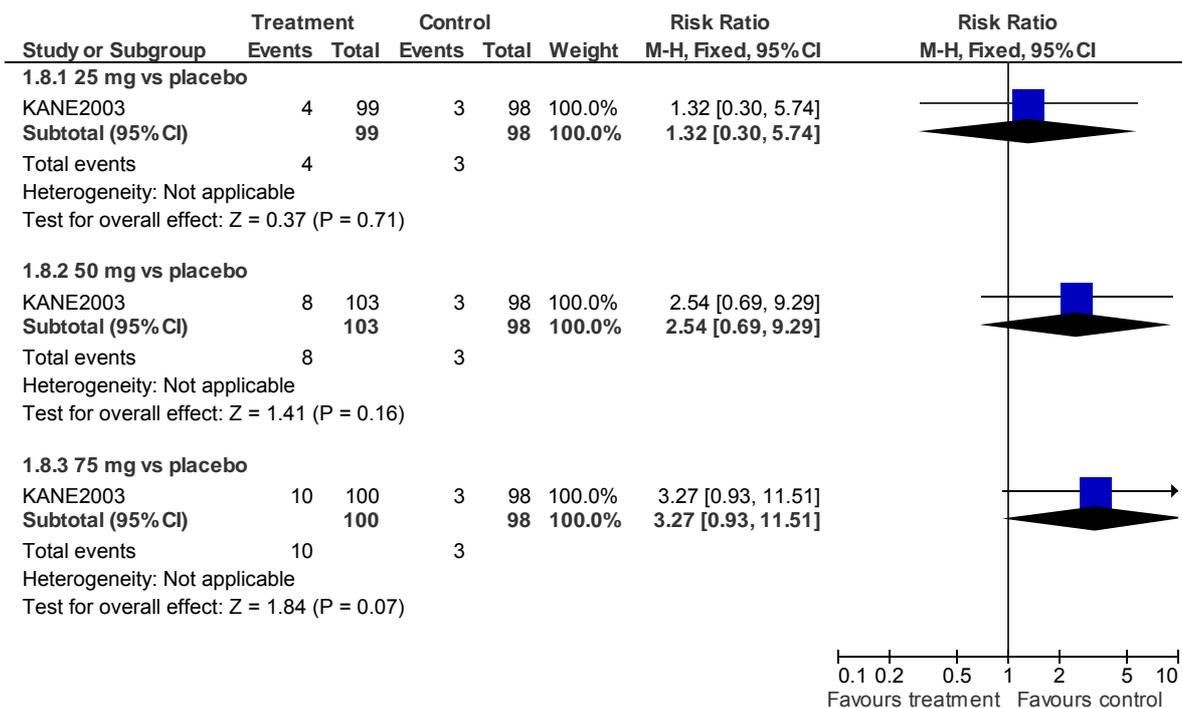
Pharmacological clinical evidence: Long-acting injectable risperidone

1.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)

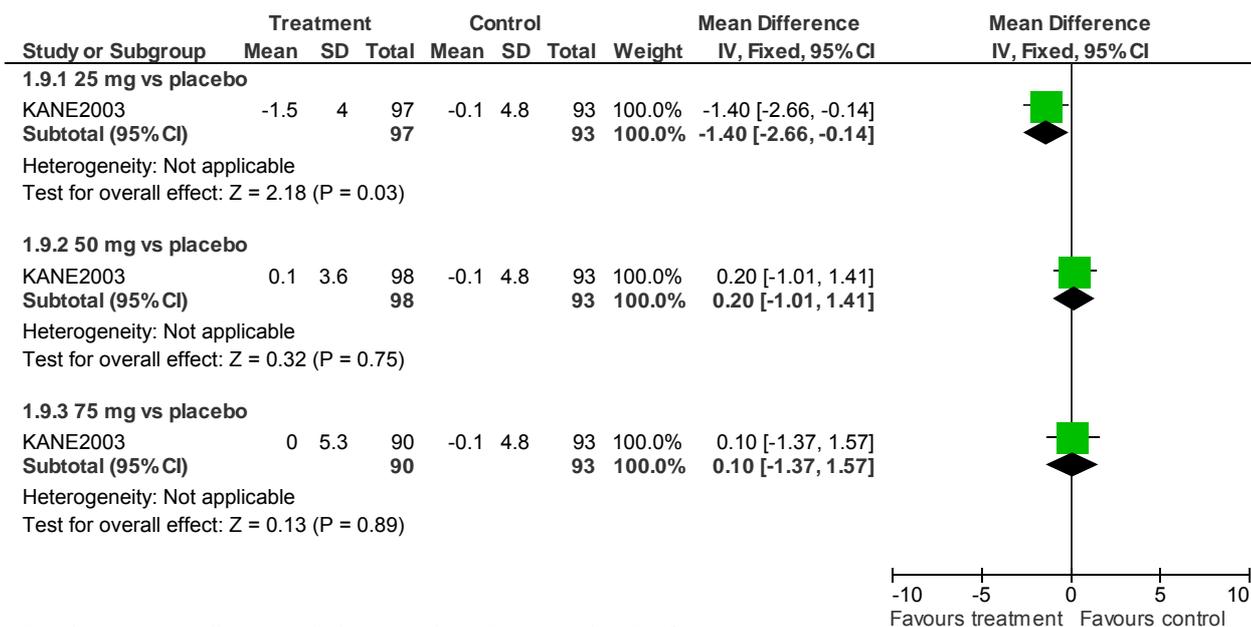


Pharmacological clinical evidence: Long-acting injectable risperidone

1.8 AE: 2. Neurologic SEs - Extrapyrimal disorder (medium-term)

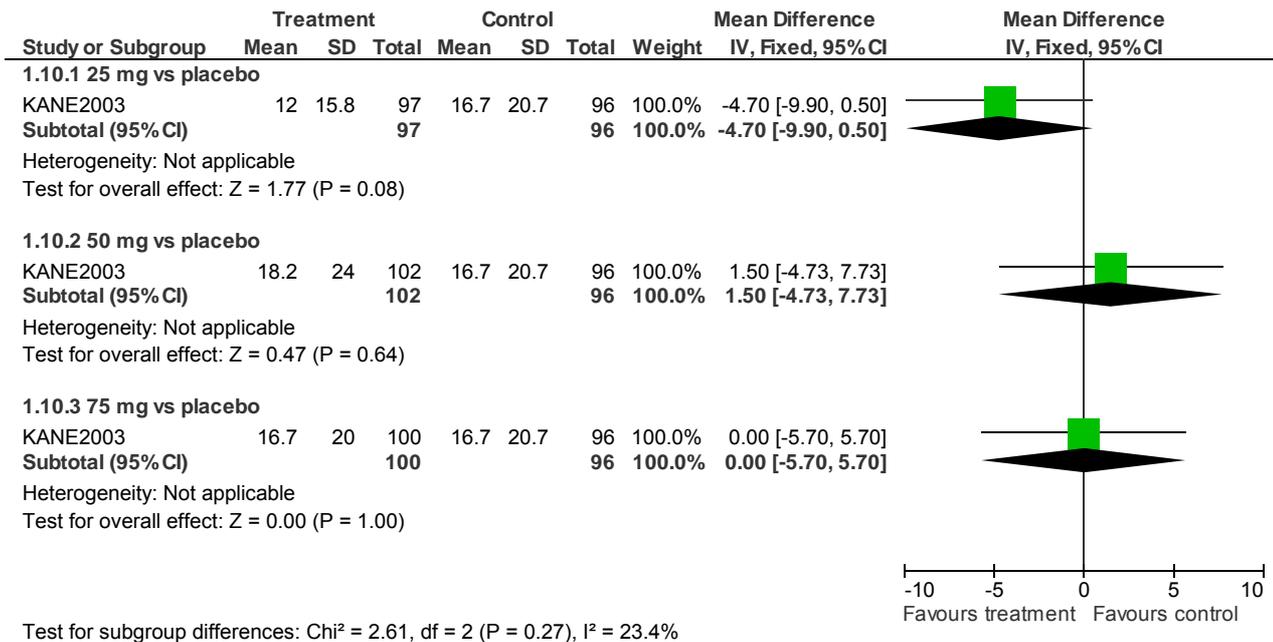


1.9 AE: 2. Neurologic SEs - ESRS total (medium-term)

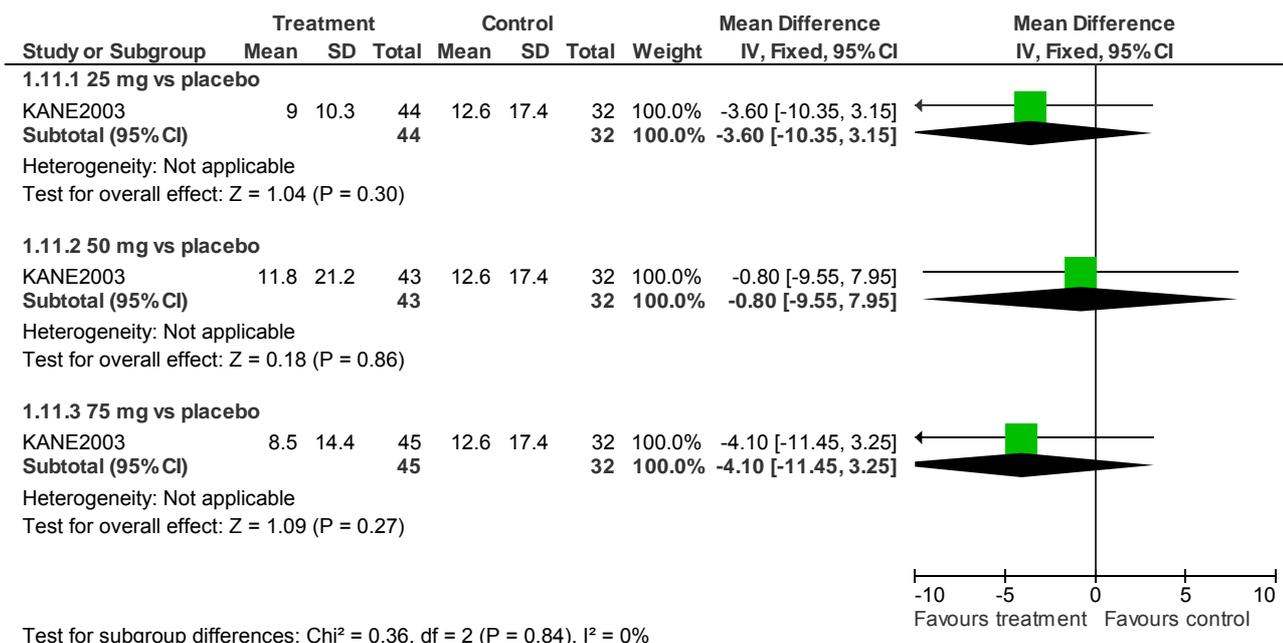
Test for subgroup differences: Chi² = 3.82, df = 2 (P = 0.15), I² = 47.6%

Pharmacological clinical evidence: Long-acting injectable risperidone

1.10 AE: 3. Pain at injection site (patient rating) (first injection)



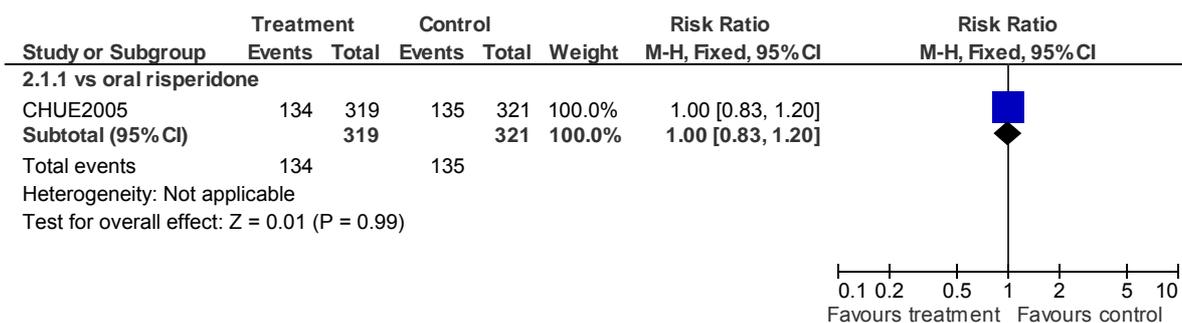
1.11 AE: 3. Pain at injection site (patient rating) (sixth injection)



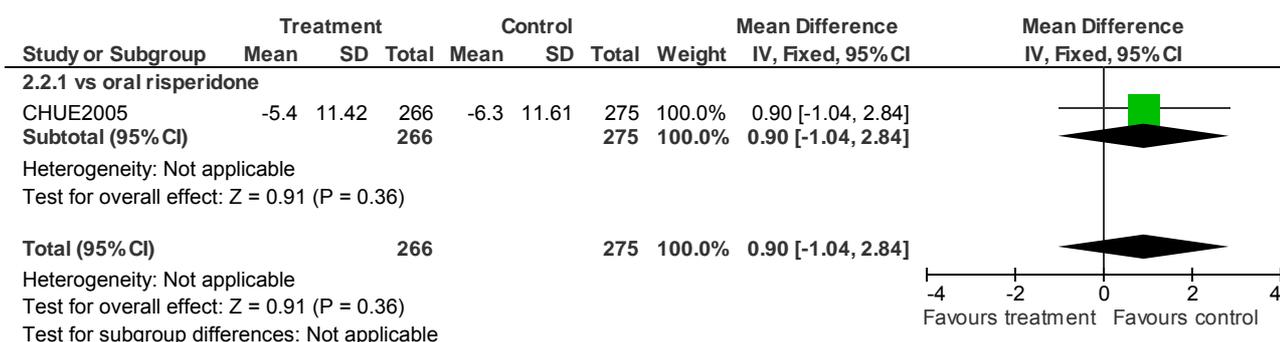
2 Long-acting risperidone versus oral risperidone

Pharmacological clinical evidence: Long-acting injectable risperidone

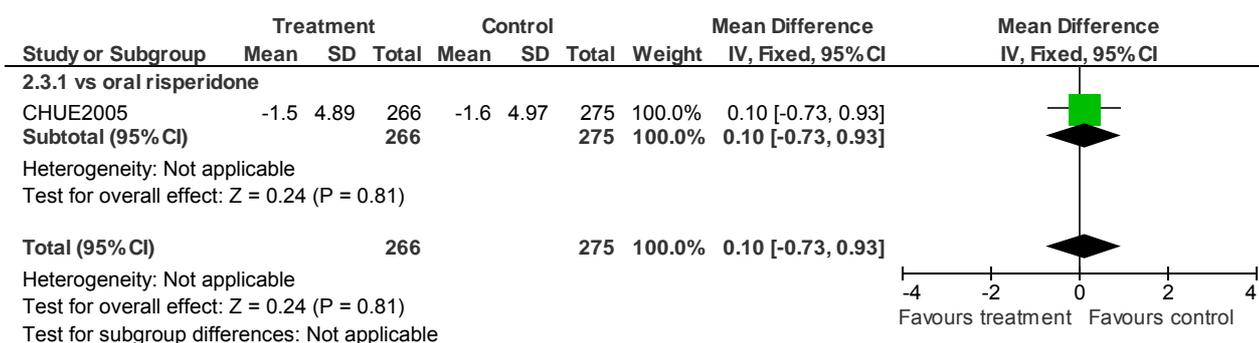
2.1 Global state: 1. No important clinical response (moderate or severe on CGI at endpoint) (medium-term)



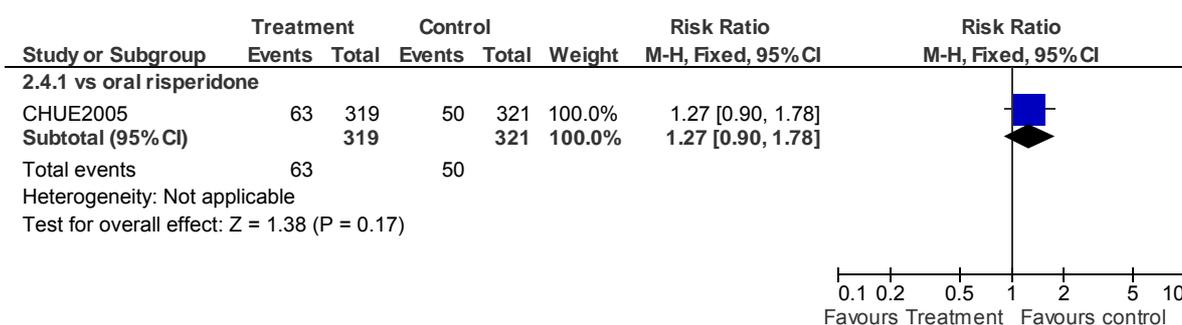
2.2 Mental state: 1. PANSS total (change from baseline)



2.3 Mental state: 1. PANSS negative symptoms (change from baseline)

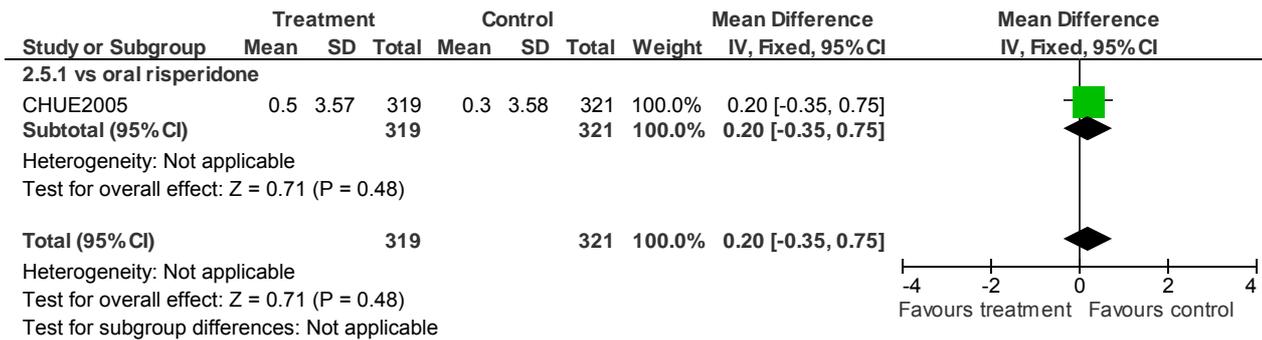


2.4 Leaving the study early: 1. Any reason (medium-term)

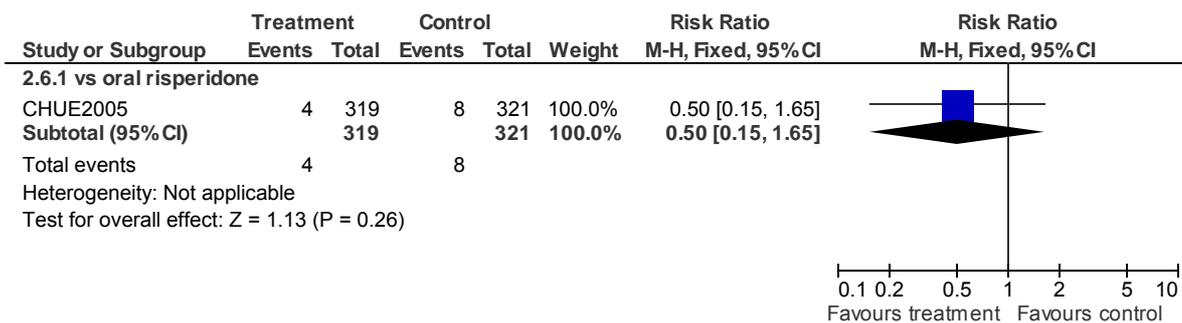


Pharmacological clinical evidence: Long-acting injectable risperidone

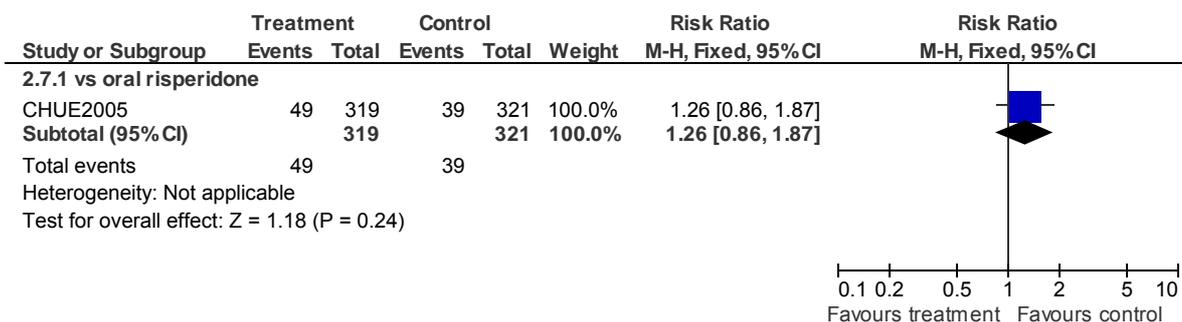
2.5 AE: 1. Metabolic SEs - Weight gain (change from baseline)



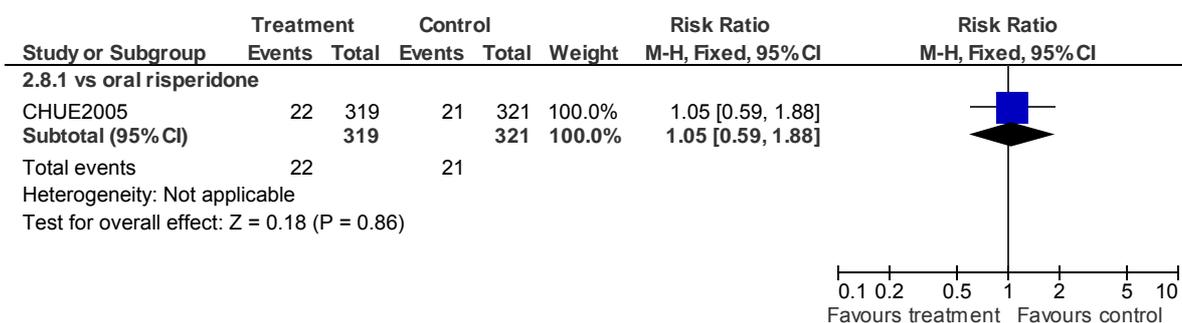
2.6 AE: 1. Metabolic SEs - Potentially attributable to prolactin elevation (medium-term)



2.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)

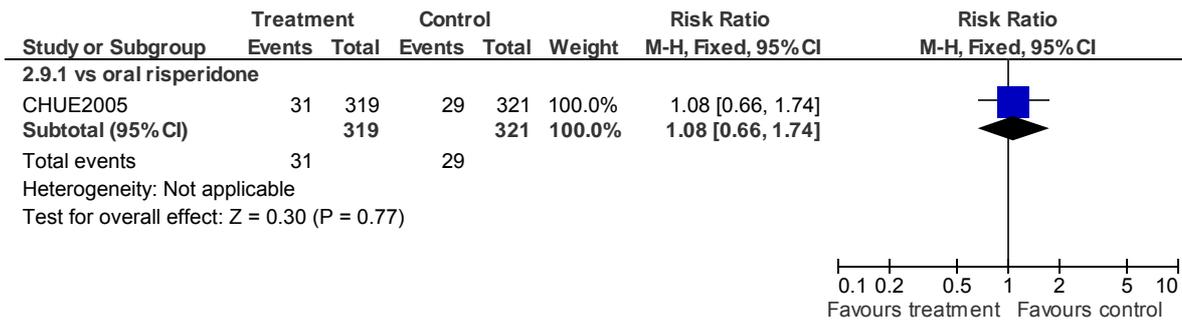


2.8 AE: 2. Neurologic SEs - Movement disorder-related AEs (medium-term)

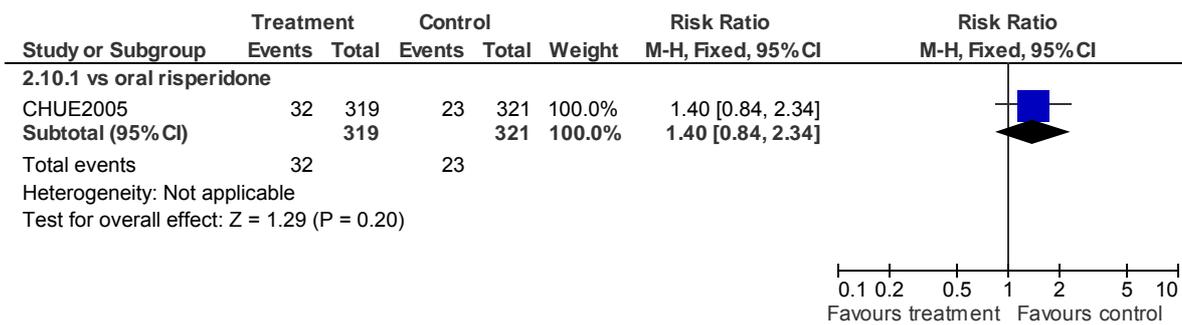


Pharmacological clinical evidence: Long-acting injectable risperidone

2.9 AE: 3. Other SEs - Insomnia (medium-term)



2.10 AE: 3. Other SEs - Anxiety (medium-term)



2.11 AE: 3. Other SEs - Headache (medium-term)

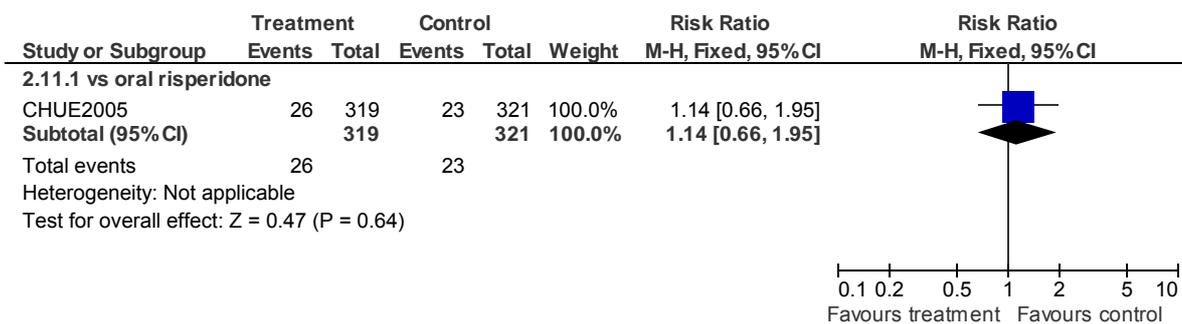


Table 6: Studies included in the review of antipsychotic medication for people whose illness has not responded adequately to treatment

| Treatment | versus Comparator | | | | | | | | | |
|------------|---|---|-------------|--|---|---------------------------------|-----|---|---------------------------------------|---|
| | CHL | CLZ | FLUPHE N | HAL | OLZ | PER | QUE | RIS | ZIP | ZOT |
| ARI | | | | | | KANE2007B [6weeks, N=300] | | | | |
| CLZ | Claghorn 1987 [4- 8weeks, N=151] Hong 1997 [12weeks, N=40] Kane 1988 [6weeks, N=268] | | | Buchanan1998 [10weeks, N=75] Klieser 1989 [6weeks, N=32] Rosenheck 1997 [52weeks, N=423] VOLAVKA200 2 [14weeks, N=77] | Beuzen 1998 [18weeks, N=180] Bitter 1999 [18weeks, N=150] Oliemeulen 2000 [8weeks, N=36] VOLAVKA2002 [14weeks, N=79] MELTZER2008 [26weeks, N=40] | | | Anand 1998 [12weeks, N=273] Bondolfi 1998 [8weeks, N=86] Breier 1999 [6weeks, N=29] Chowdhury 1999 [16weeks, N=60] VOLAVKA200 2 [14weeks, N=81] | | Meyer- Lindberg 1996 [6weeks, N=50] |
| OLZ | Conley 1998a [8weeks, N=84] | Beuzen 1998 [18weeks, N=180] Bitter 1999 [18weeks, N=150] Oliemeulen 2000 [8weeks, N=36] VOLAVKA2 | | Altamura 1999 [14weeks, N=28] Breier 2000 [6weeks, N=526] BUCHANAN2 005 [16weeks, N=63] | | | | VOLAVKA200 2 [14weeks, N=80] | KINON20 06A [24weeks, N=394] | |

Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

| | | | | | | | | | | |
|------------|--|--|--------------------------------------|--|-----------------------------------|--|---------------------------------------|----------------------------------|--|--|
| | | 002 [14weeks, N=79] MELTZER20 08 [26weeks, N=40] | | | | | | | | |
| QUE | | | CONLEY 2005 [12weeks, N=25] | Emsley 1999 [8weeks, N=288] | | | | CONLEY2005 [12weeks, N=25] | | |
| RIS | | Anand 1998 [12weeks, N=273] Bondolfi 1998 [8weeks, N=86] Breier 1999 [6weeks, N=29] Chowdhury 1999 [16weeks, N=60] VOLAVKA2 002 [14weeks, N=81] | CONLEY 2005 [12weeks, N=26] | Heck 2000 [6weeks, N=77] Kern 1998/1999 [8weeks, N=64] SEE1999 [5weeks, N=20] | VOLAVKA2002 [14weeks, N=80] | | CONLE Y2005 [12week s, N=25] | | | |
| ZIP | | | | | KINON2006A [24weeks, N=394] | | | | | |

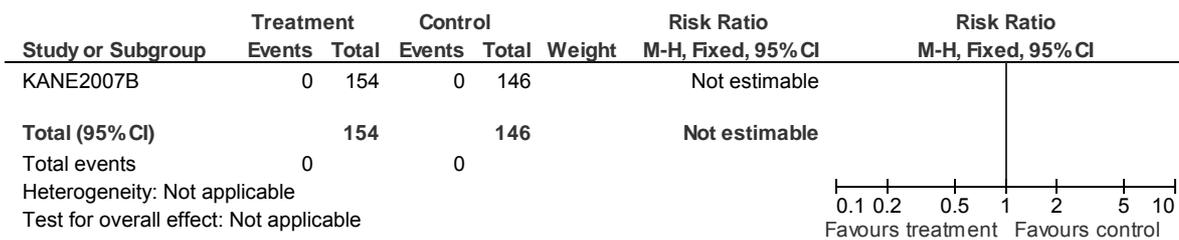
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

| | | | | | | | | | |
|-----|---|--|--|--|--|--|--|--|--|
| ZOT | Meyer-Lindberg 1996 [6weeks, N=50] | | | | | | | | |
|-----|---|--|--|--|--|--|--|--|--|

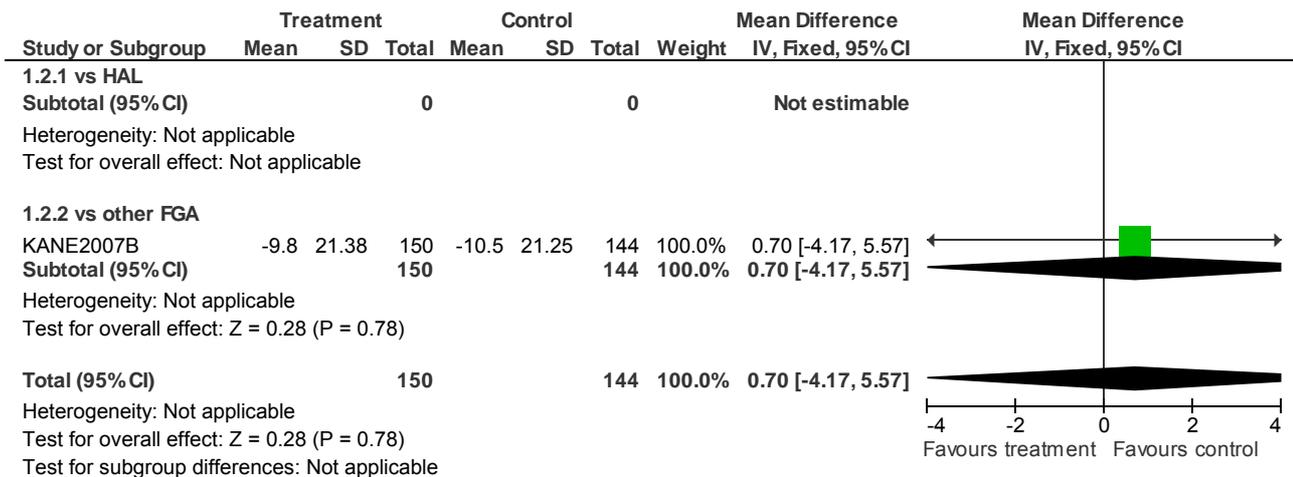
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

1 Aripiprazole vs. FGA (in people whose illness has not responded adequately to treatment)

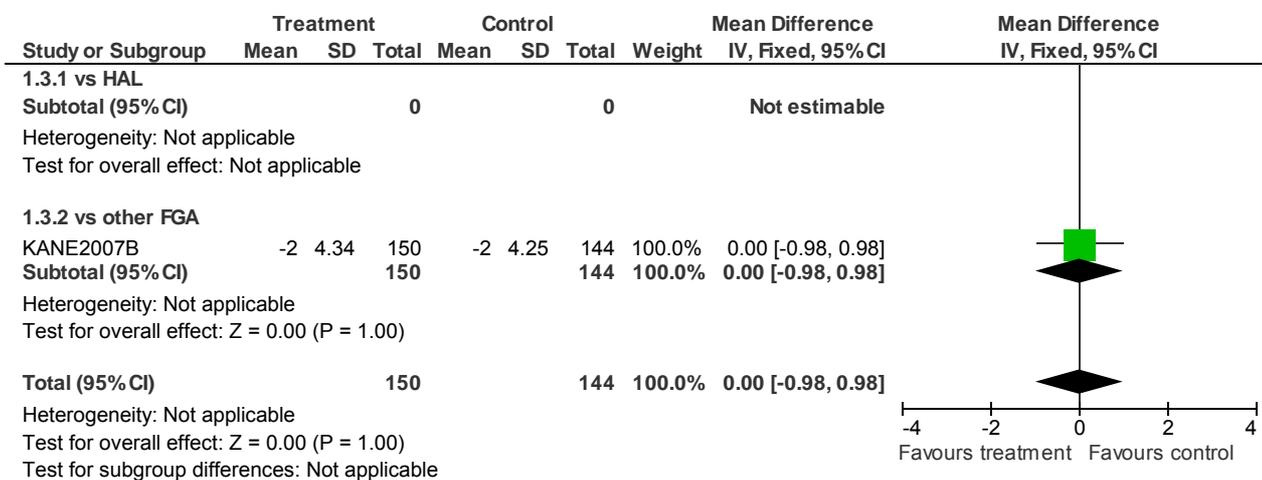
1.1 Mortality (short-term)



1.2 Mental state: 1. PANSS total (change from baseline) (short-term)

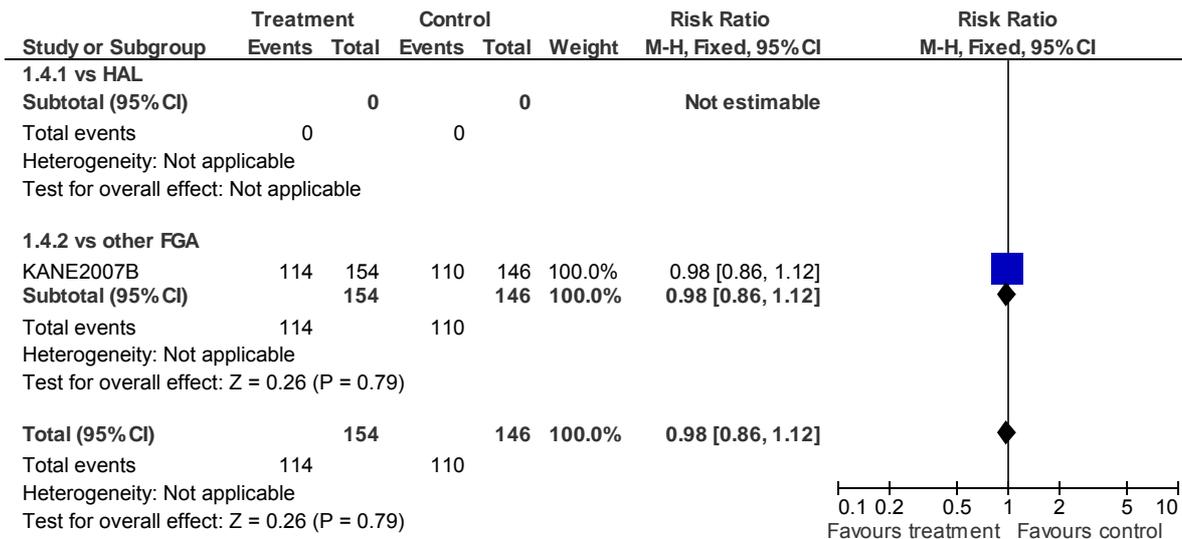


1.3 Mental state: 1. BPRS total (change from baseline) (short-term)

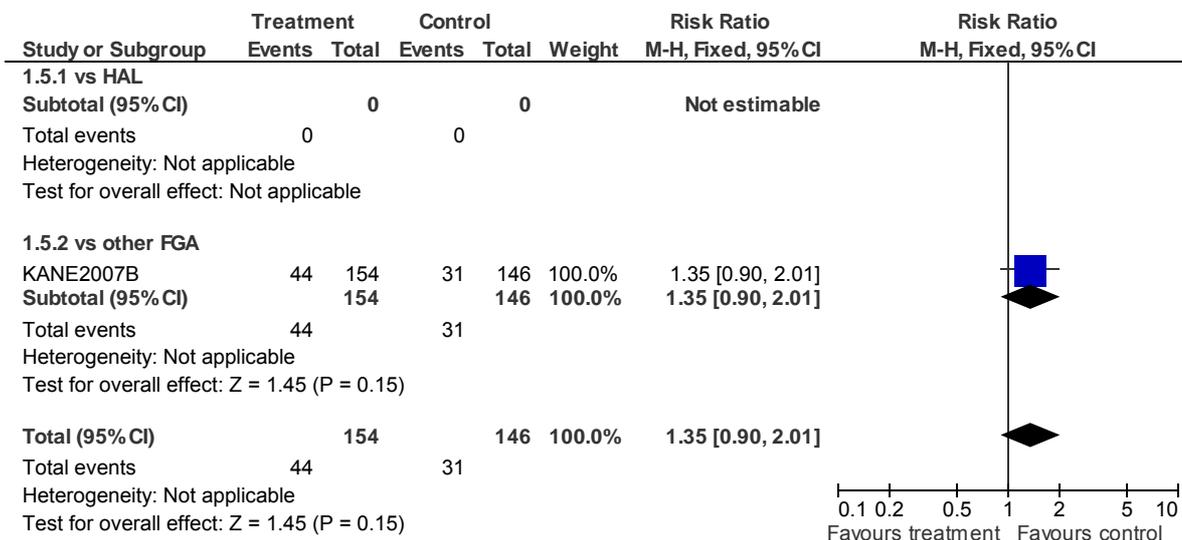


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

1.4 Mental state: 2. Non-response (<30% improvement on PANSS or CGI-I >2) (short-term)

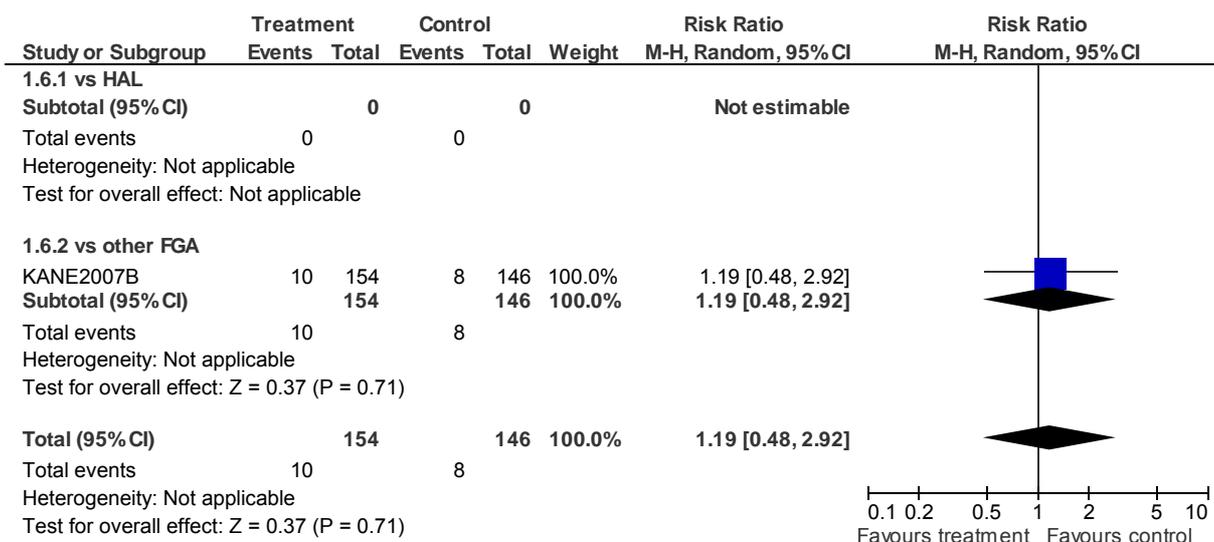


1.5 Leaving the study early: 1. Any reason (short-term)

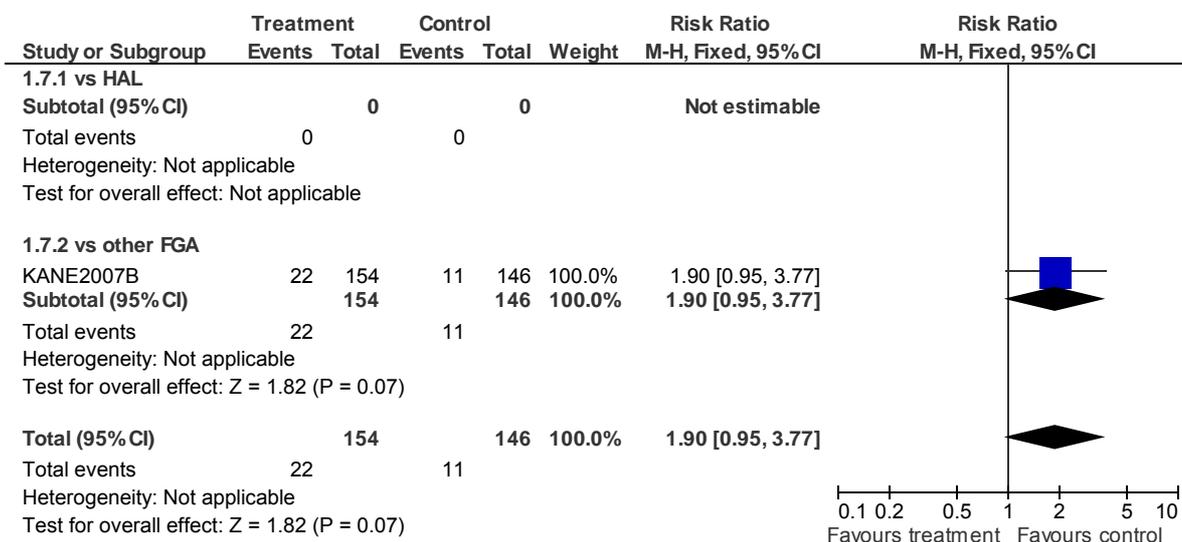


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

1.6 Leaving the study early: 2. Due to lack of efficacy (short-term)

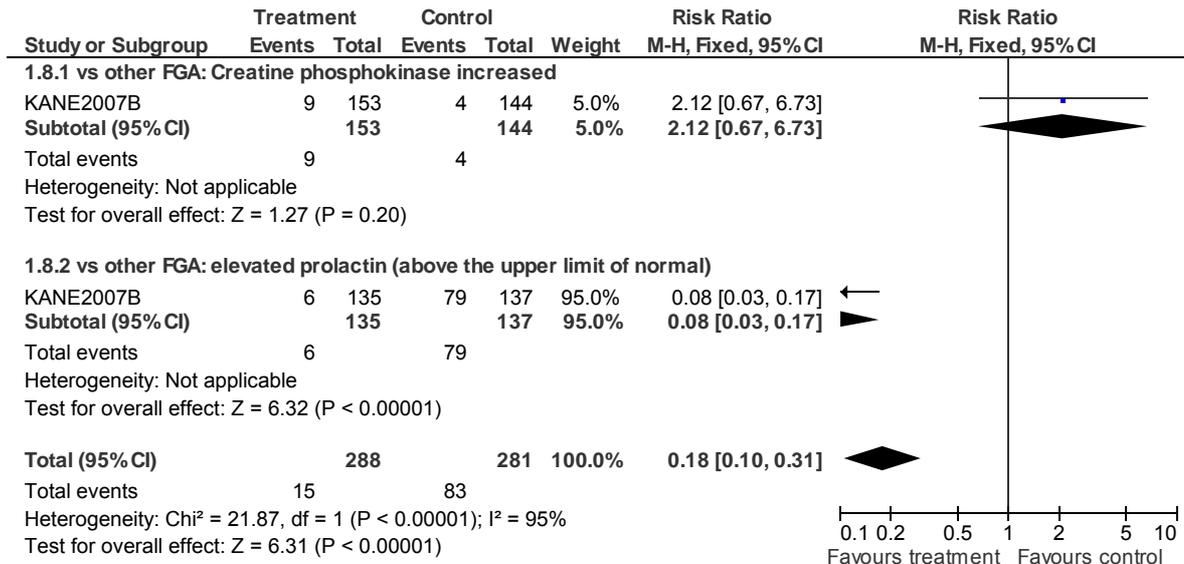


1.7 Leaving the study early: 3: Adverse event (short-term)

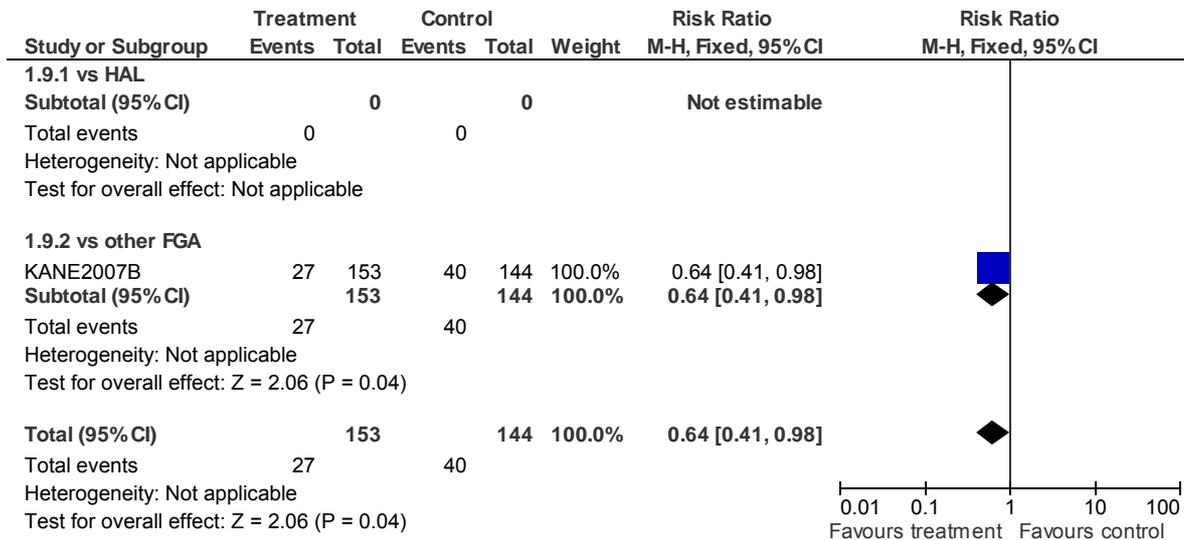


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

1.8 AE: 1. Metabolic SEs (treatment-emergent) (short-term)

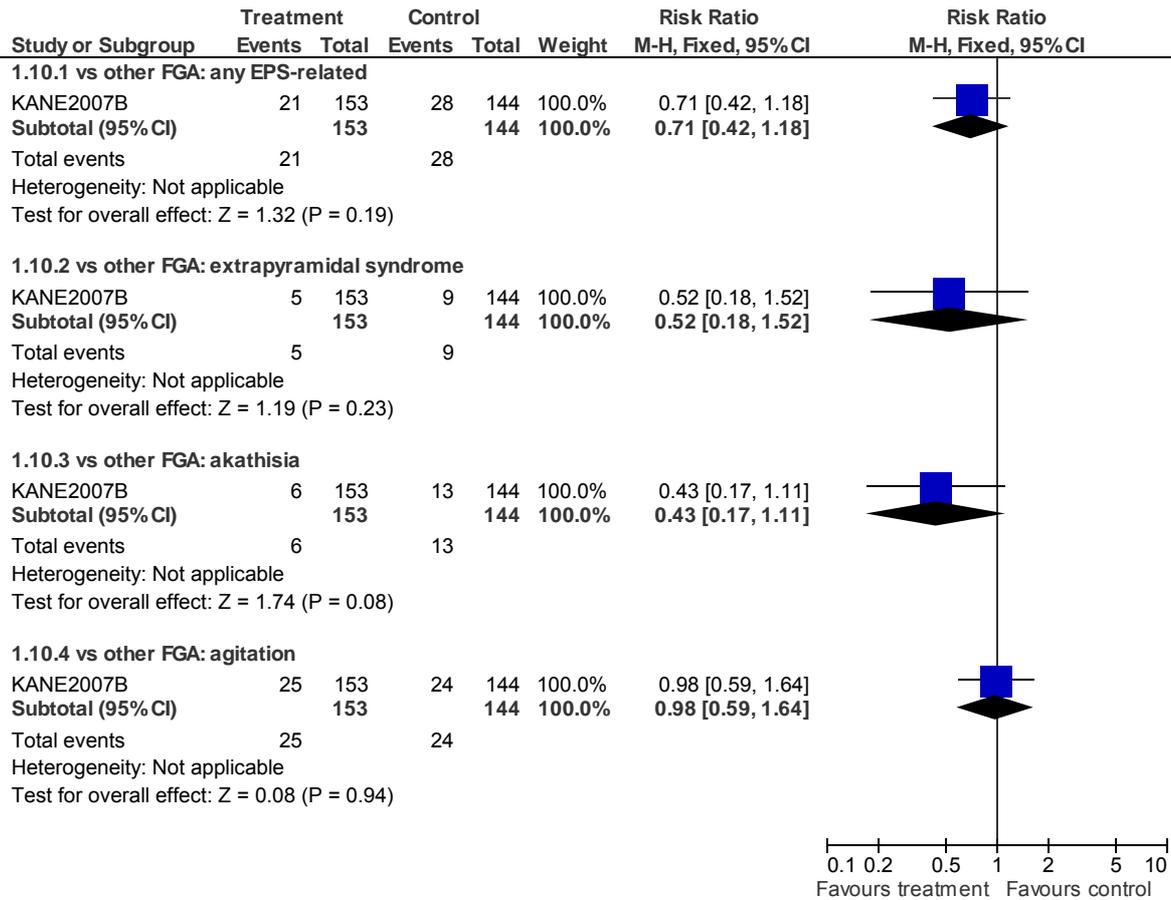


1.9 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

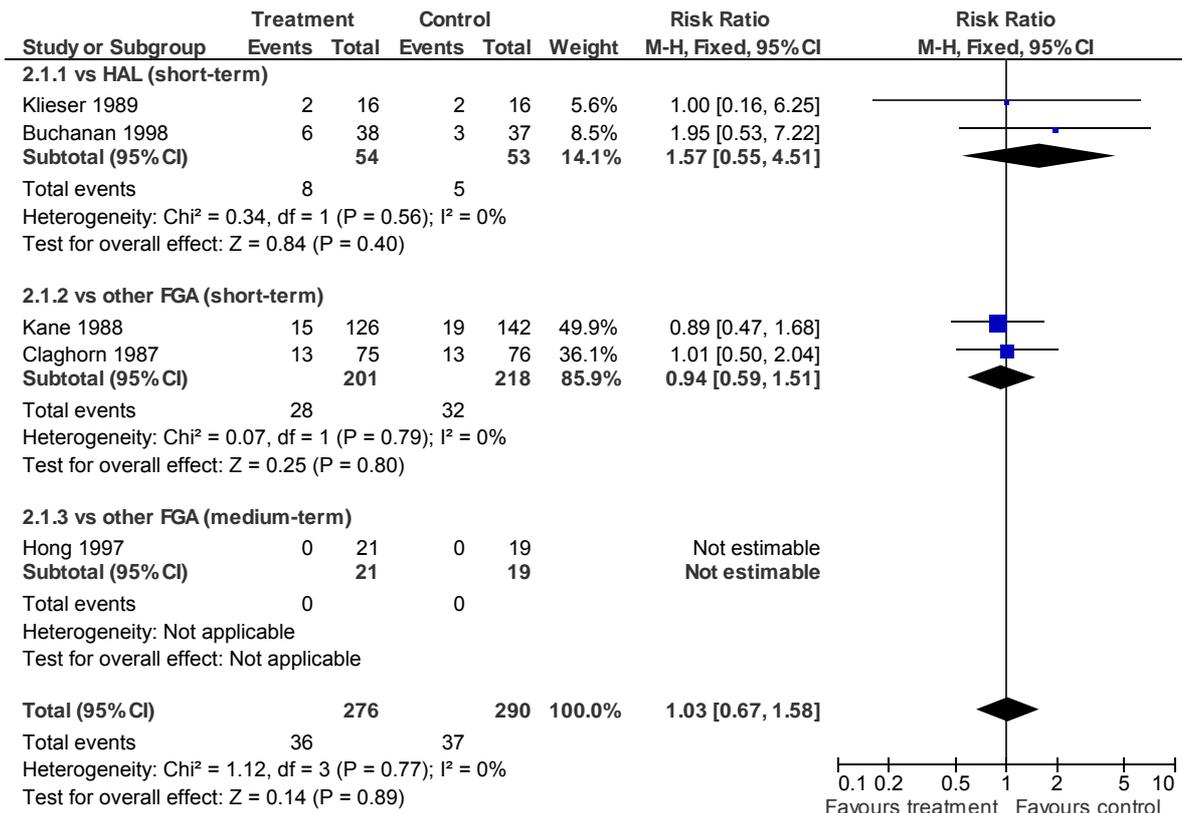
1.10 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



2 Clozapine vs. FGA (in people whose illness has not responded adequately to treatment)

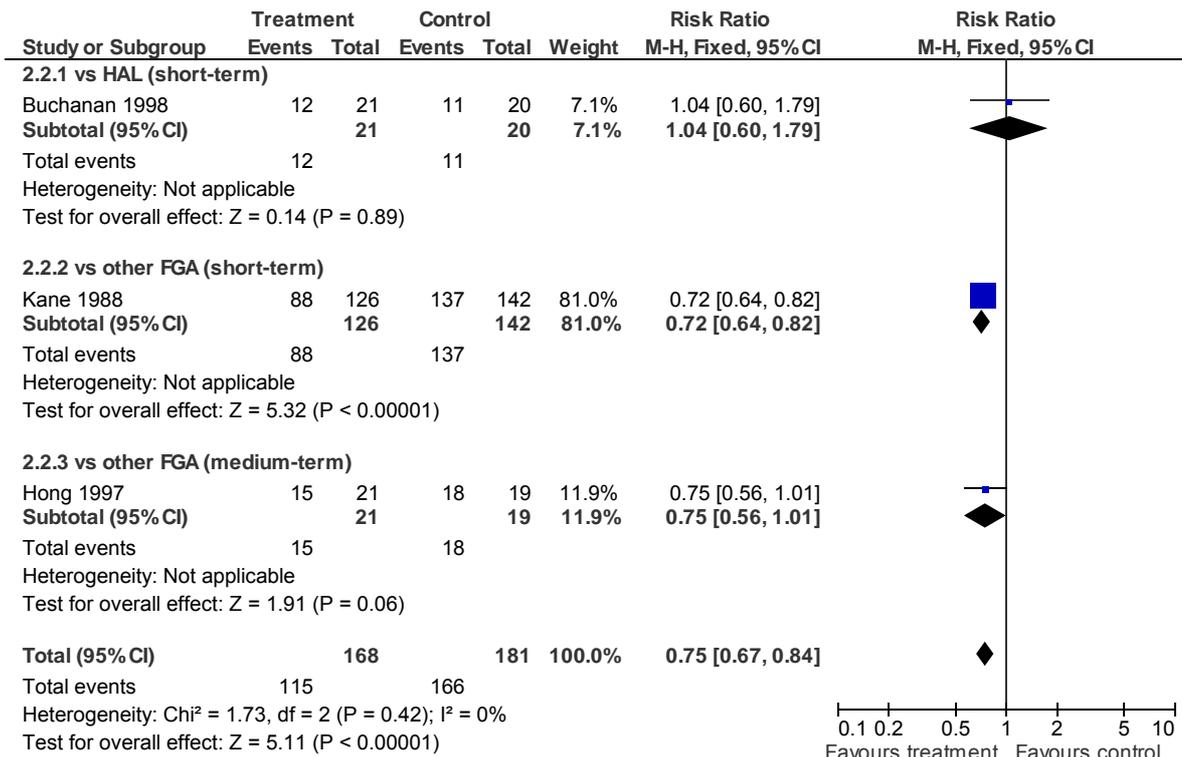
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.1 Global state: 1. Relapse (short-to-medium-term)

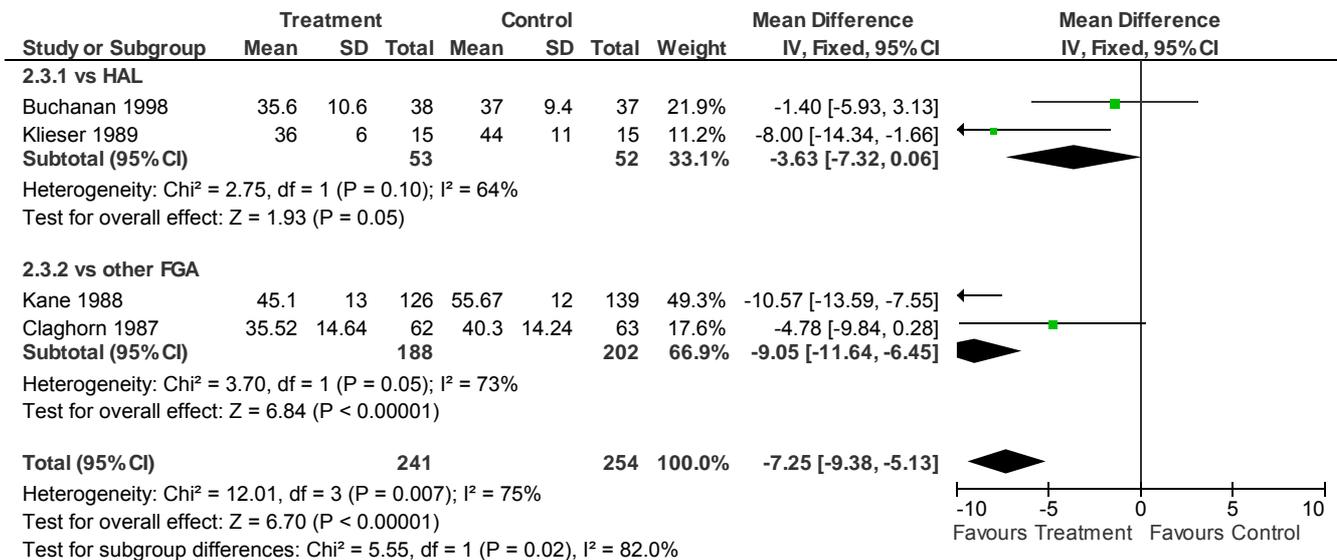


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.2 Global state: 2. Not improved (CGI) (short-to-medium-term)

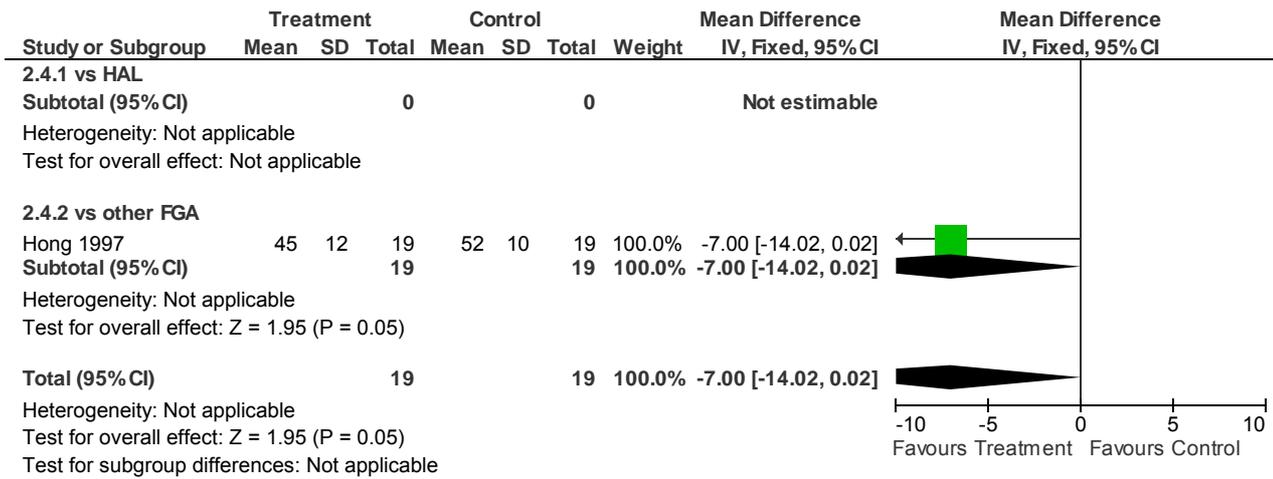


2.3 Mental state: 1. BPRS total (endpoint, high=poor) (short-term)

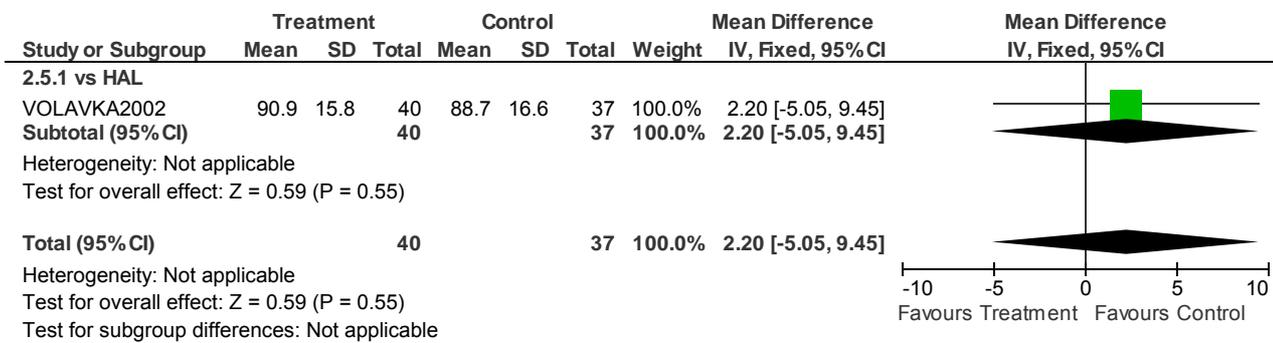


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.4 Mental state: 1. BPRS total (endpoint, high=poor) (medium-term)

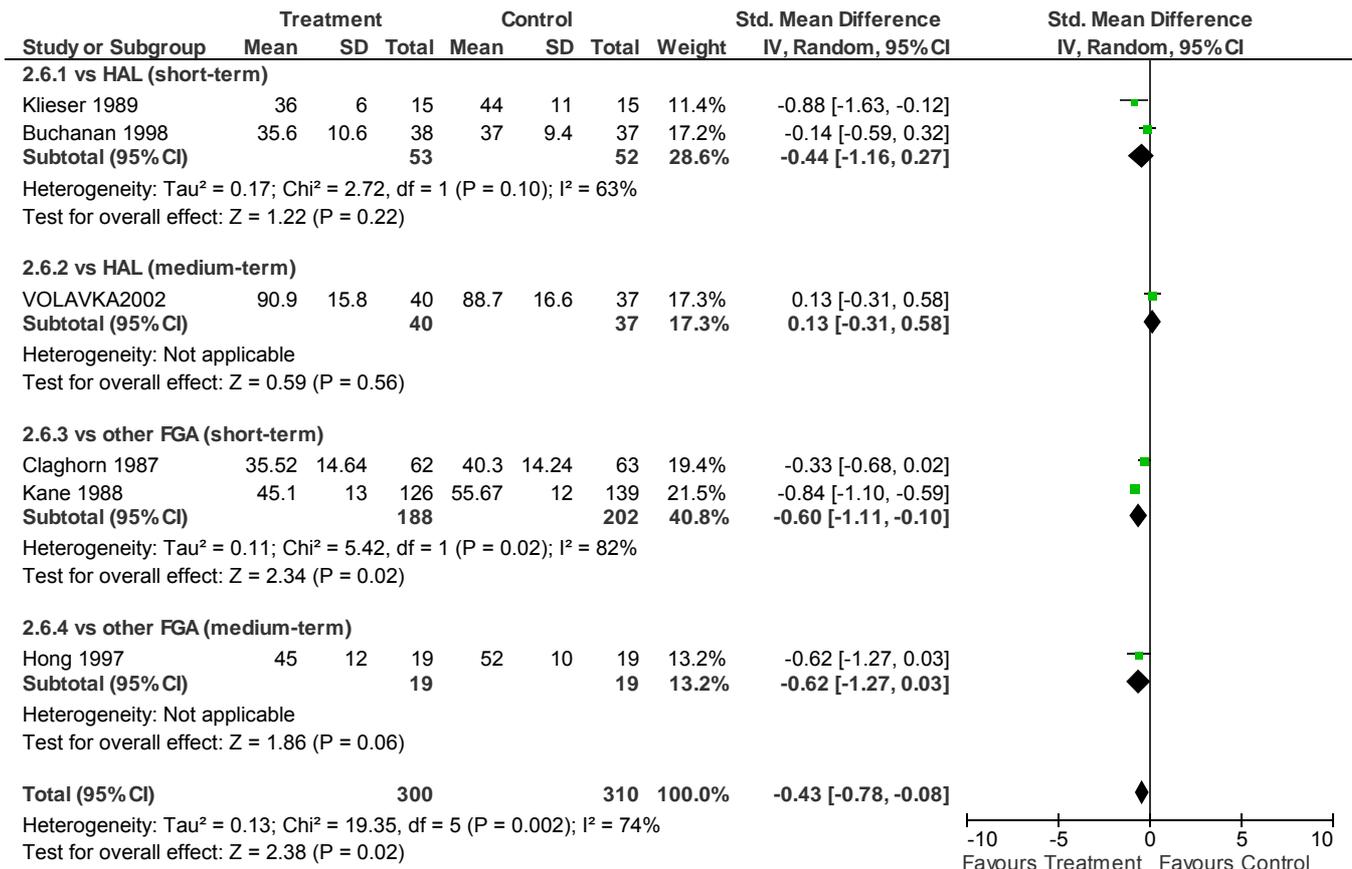


2.5 Mental state: 1. PANSS total (endpoint, high=poor) (medium-term)

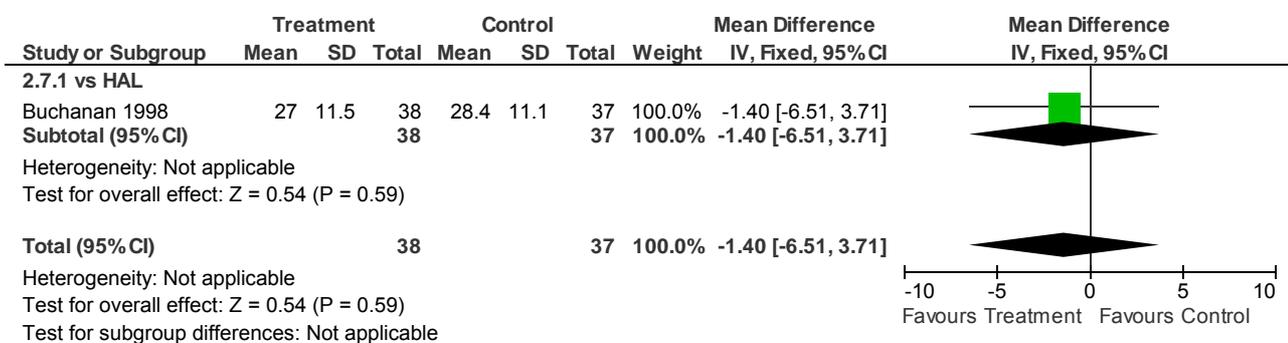


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.6 Mental state: 1. BPRS/PANSS total (endpoint, high=poor) (short-to-medium-term)

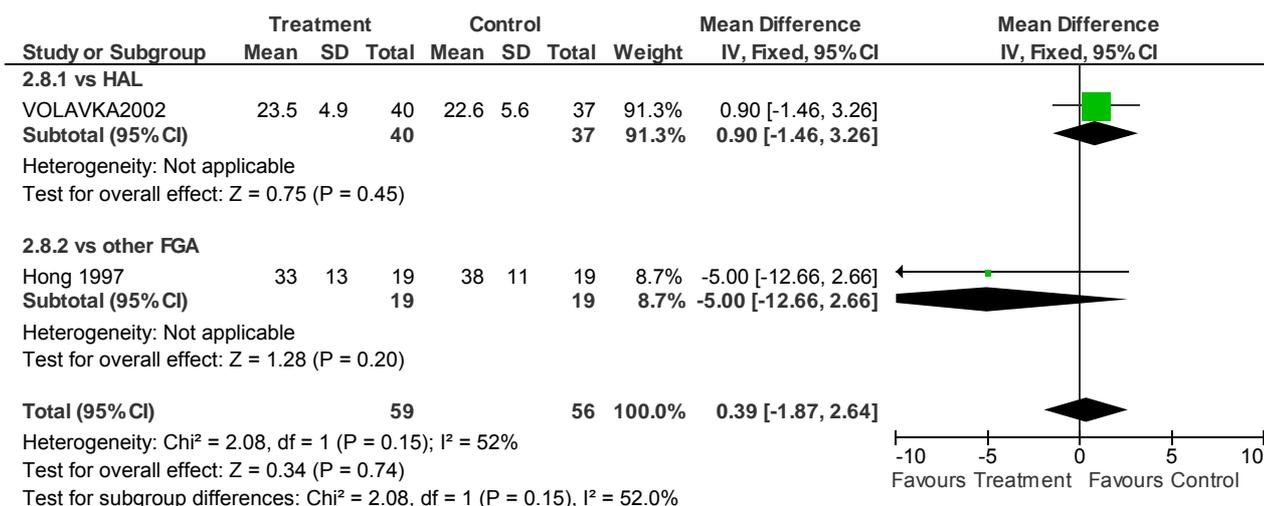


2.7 Mental state: 2. Negative symptoms (endpoint, high=poor) (short-term)

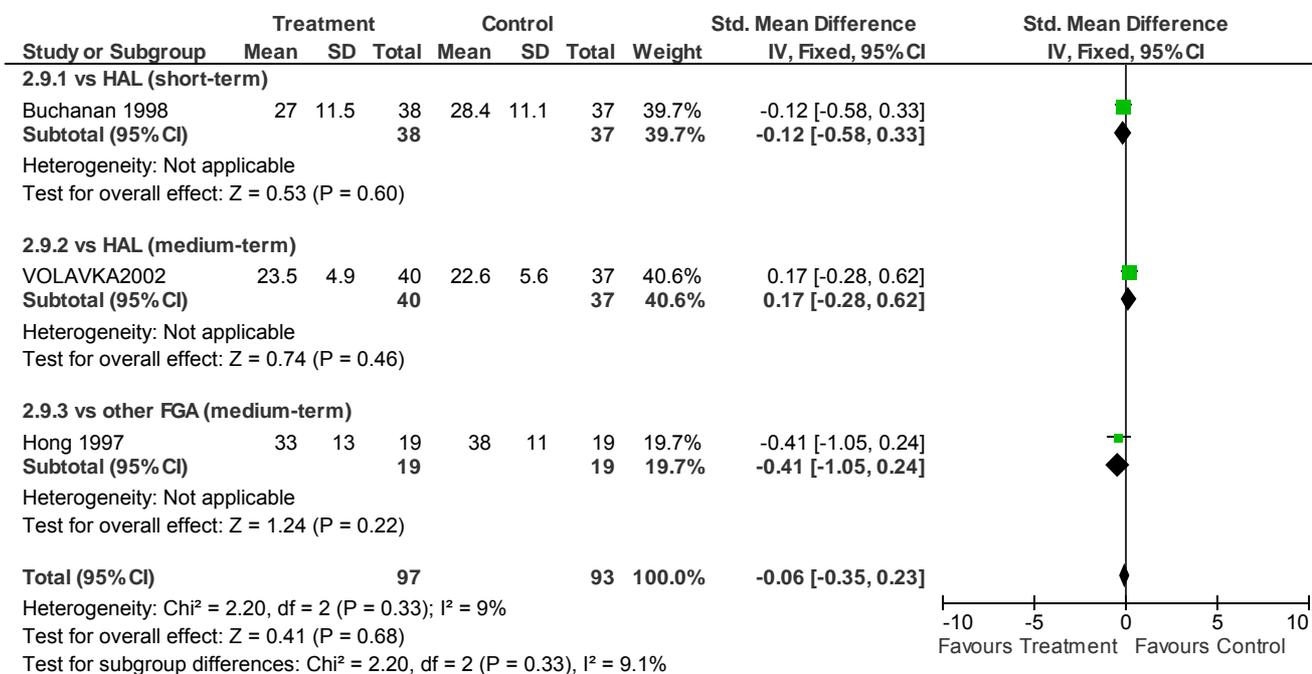


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.8 Mental state: 2. PANSS negative score (endpoint, high=poor) (medium-term)

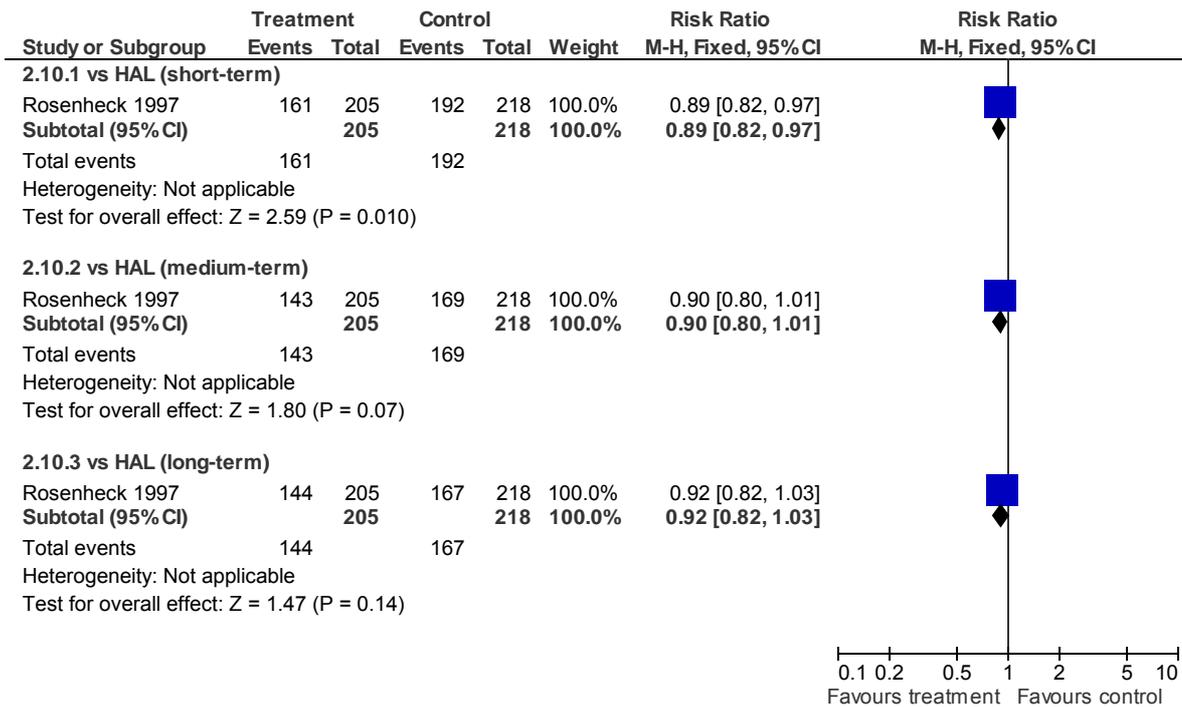


2.9 Mental state: 2. Negative symptoms (endpoint, high=poor) (short-to-medium-term)



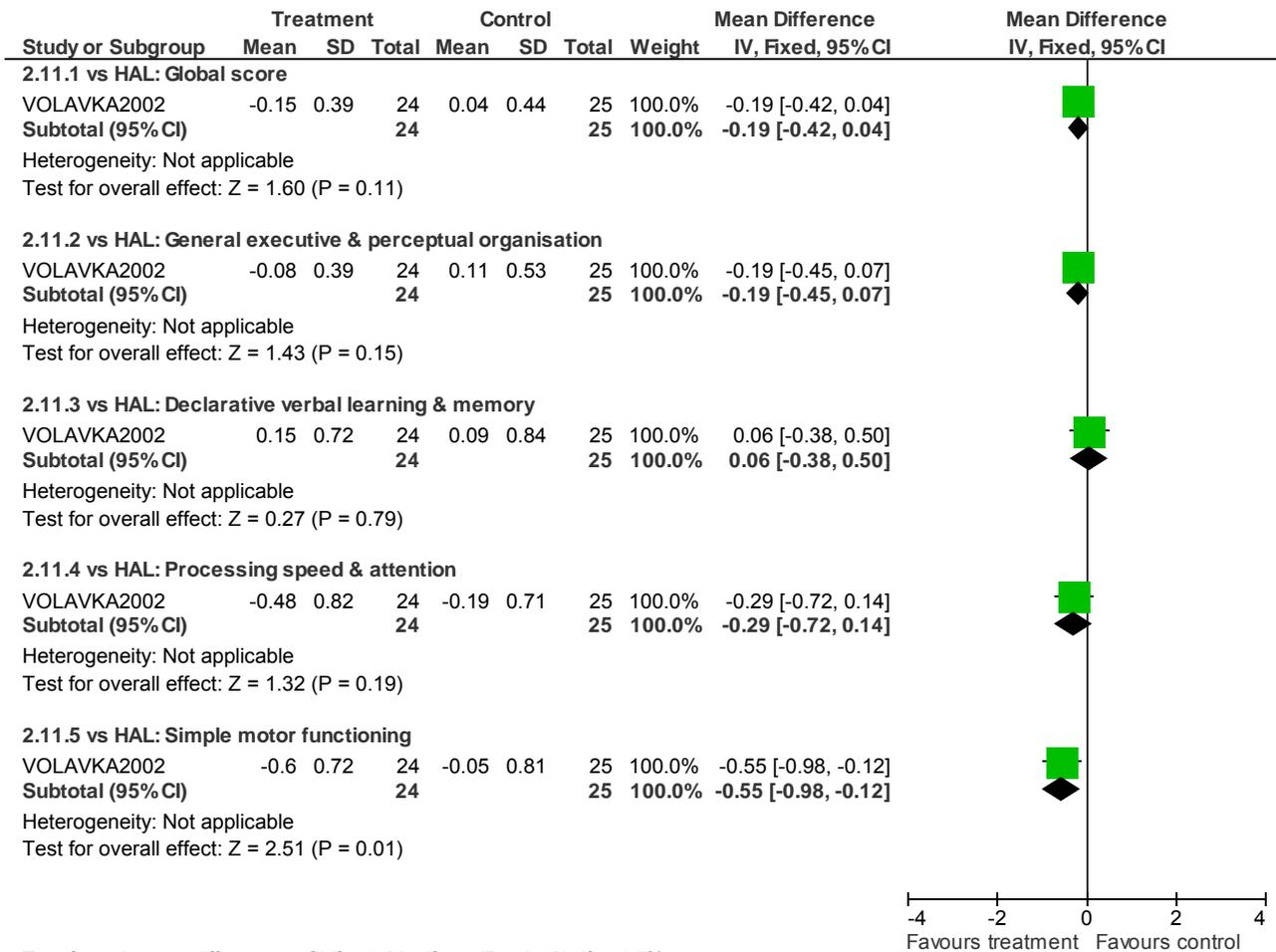
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.10 Mental state: 3. Non-response (20% or less improvement on PANSS) (short-term)



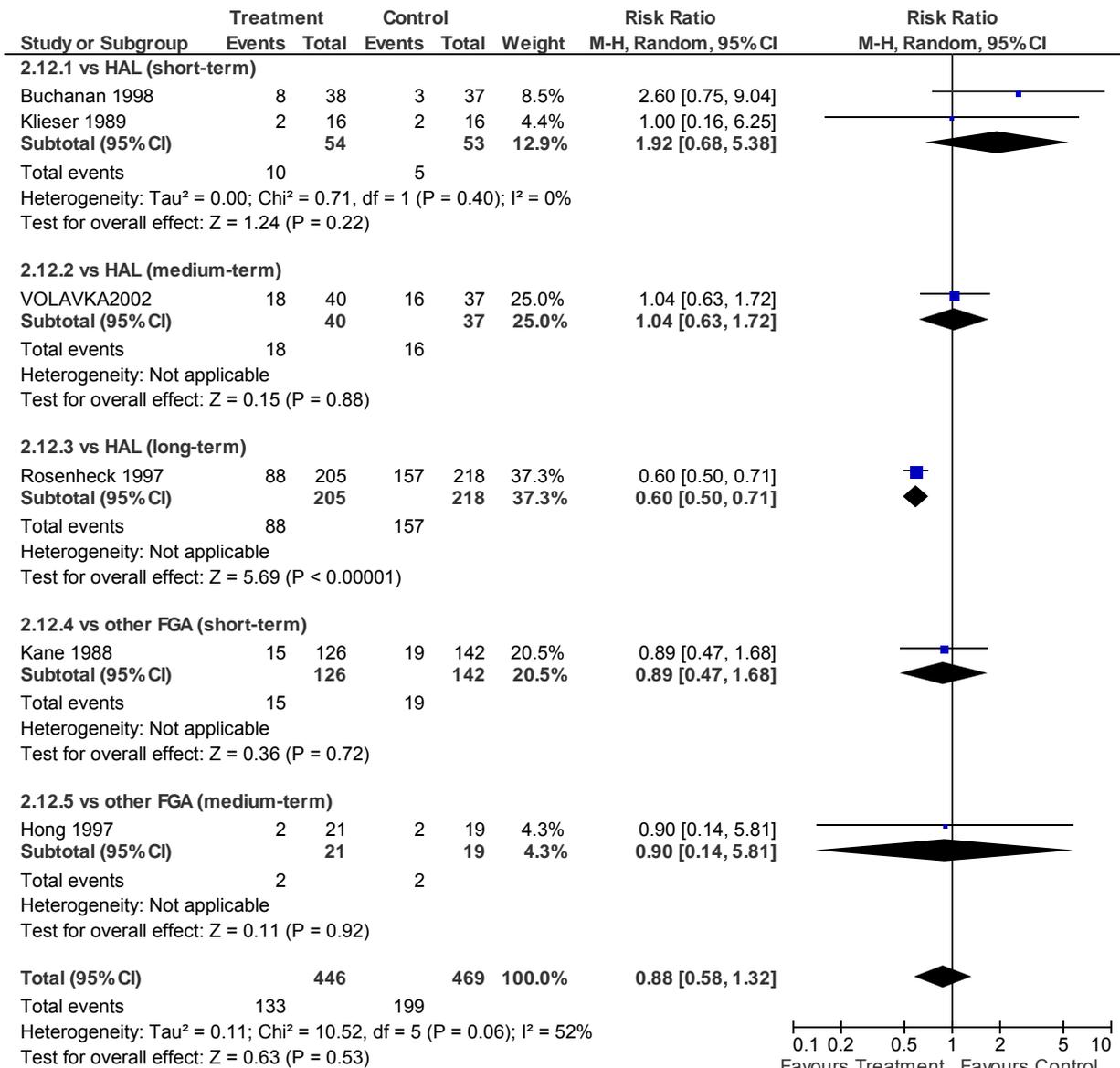
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.11 Cognitive functioning: 1. Global & domain scores (Z score change) (medium-term) (sign changed)

Test for subgroup differences: Chi² = 4.06, df = 4 (P = 0.40), I² = 1.5%

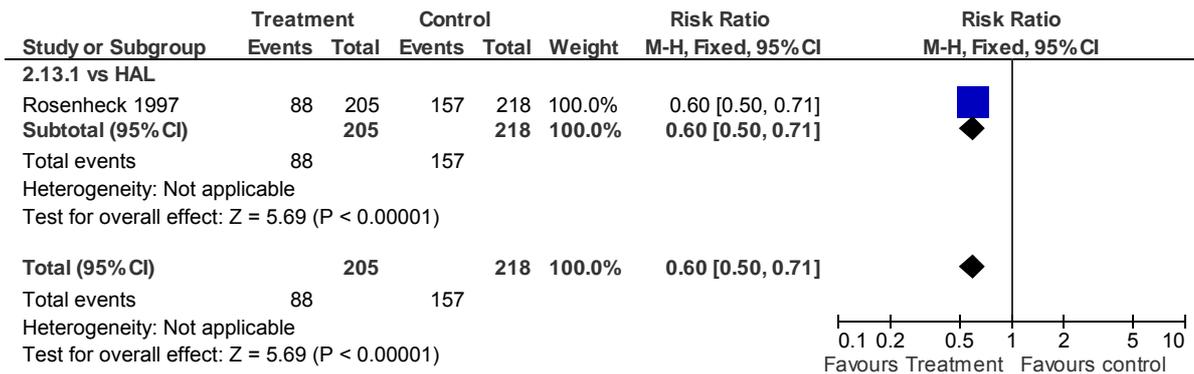
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.12 Leaving the study early: 1. Any reason (short-to-medium-term)

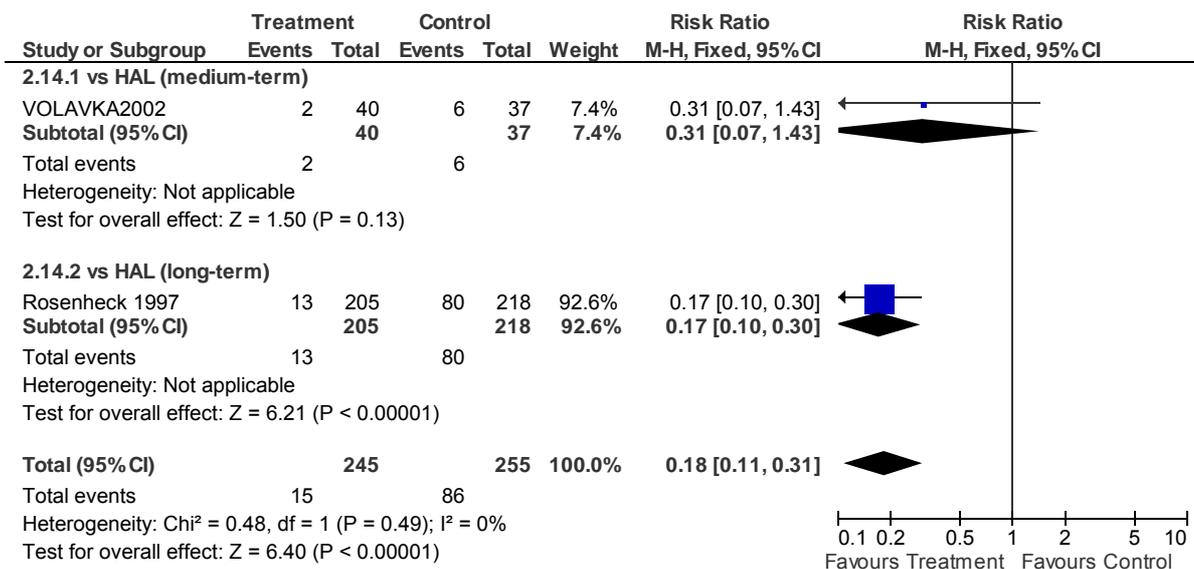


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.13 Leaving the study early: 1. Any reason (long-term)

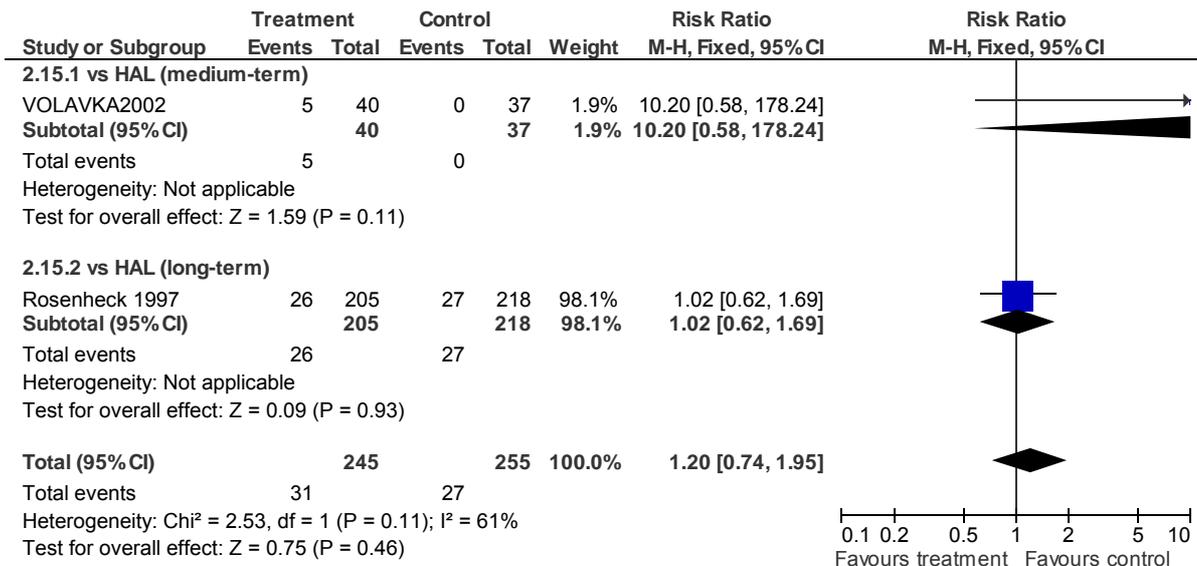


2.14 Leaving the study early: 2. Due to lack of efficacy (medium-to-long-term)

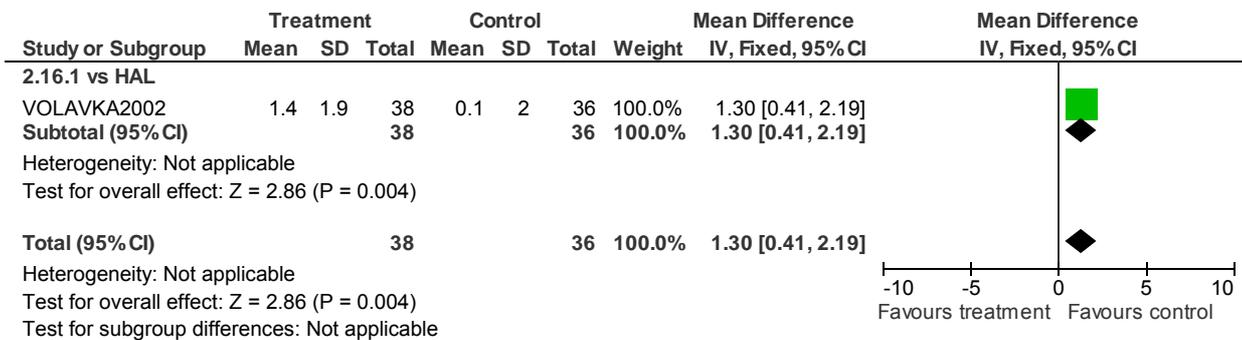


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.15 Leaving the study early: 3: Adverse event (medium-to-long-term)

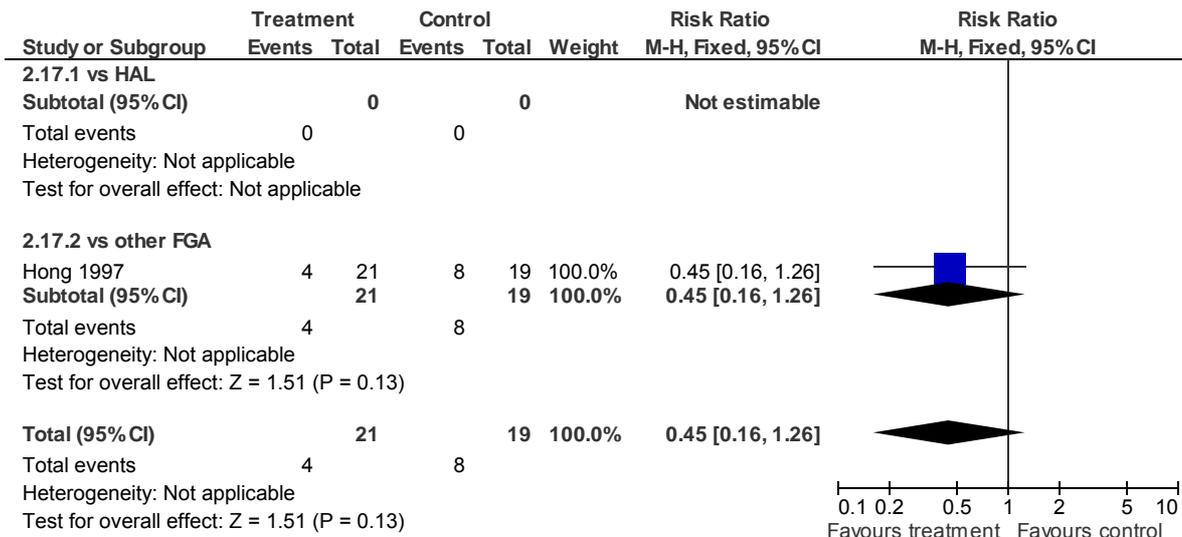


2.16 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)

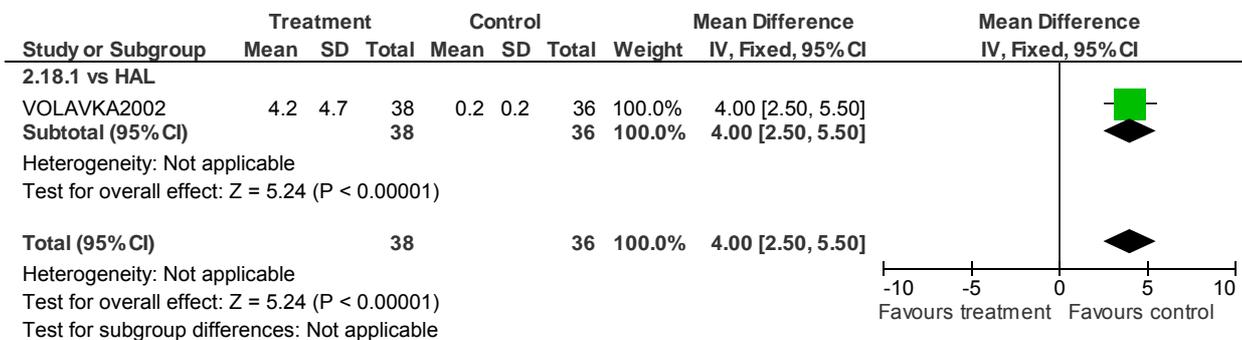


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

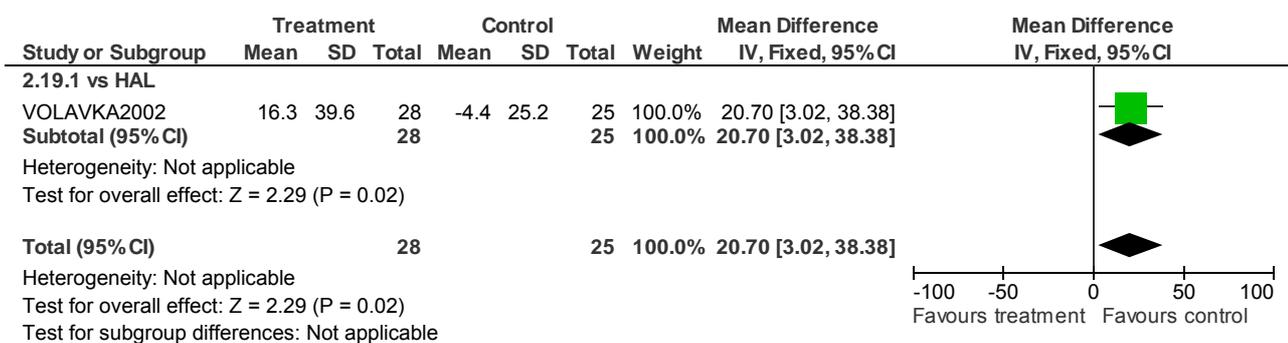
2.17 AE: 1. Metabolic SEs - Weight gain (medium-term)



2.18 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

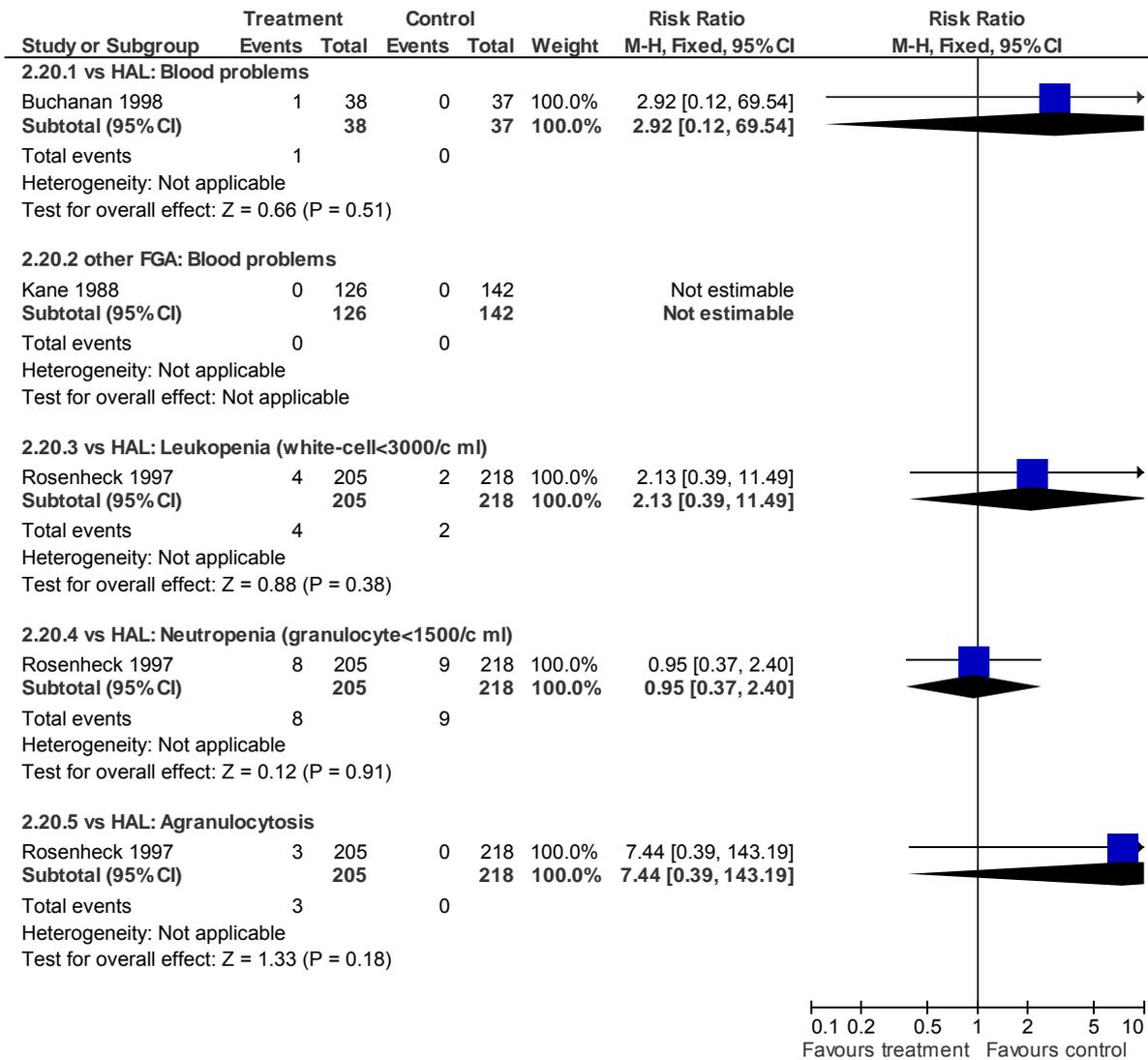


2.19 AE: 1. Metabolic SEs - Cholesterol mg/dL (change from baseline) (medium-term)



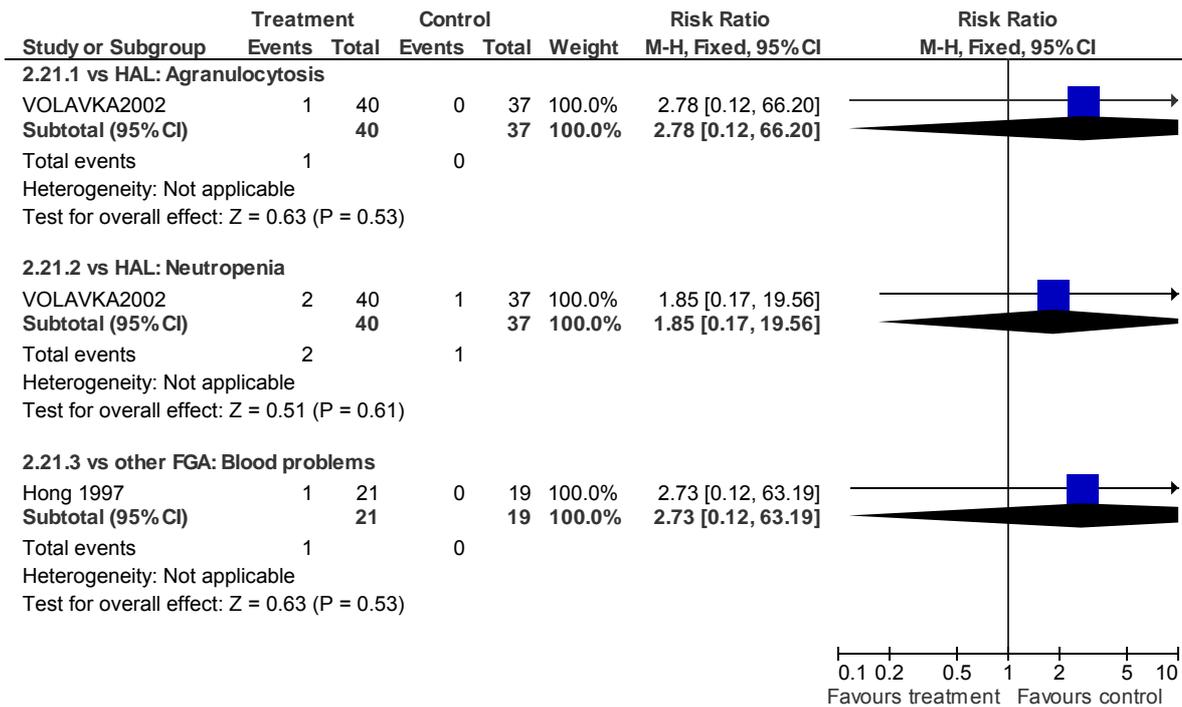
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.20 AE: 1. Metabolic SEs (treatment-emergent) (short-term)

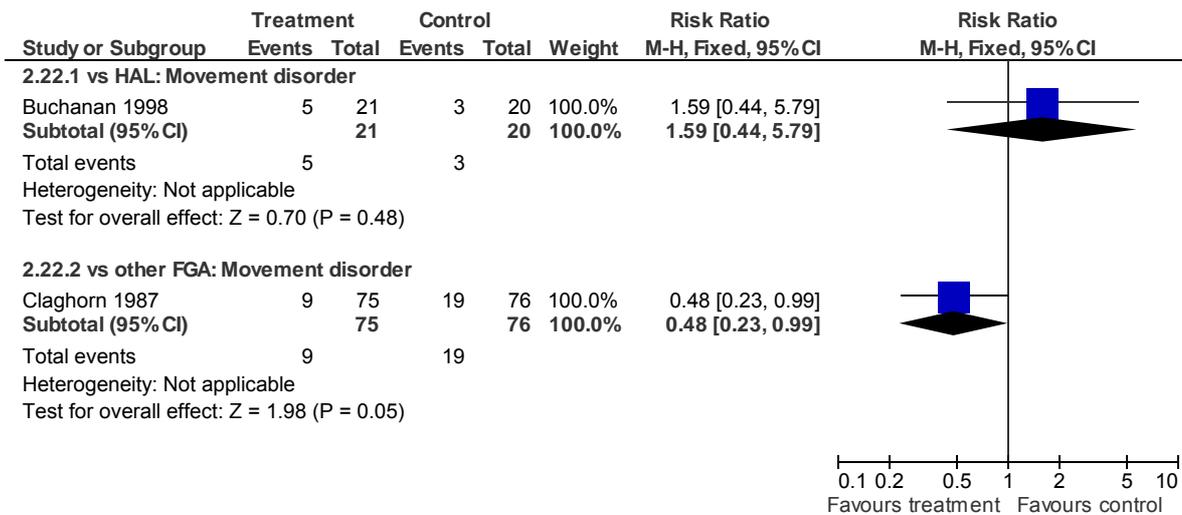


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.21 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)

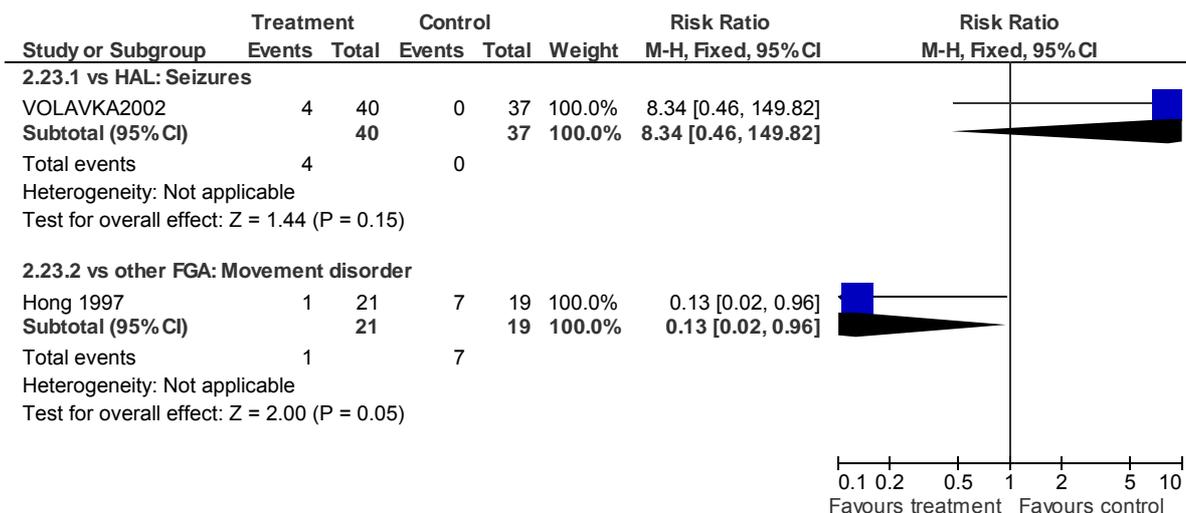


2.22 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

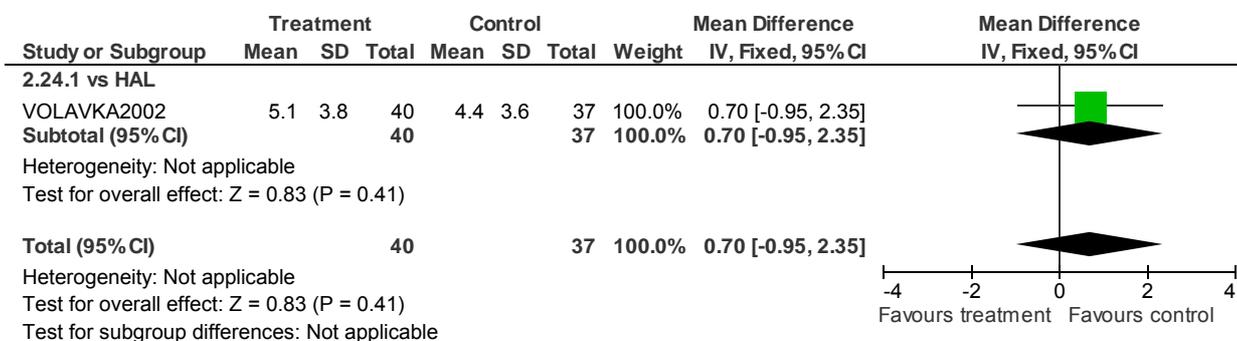


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.23 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

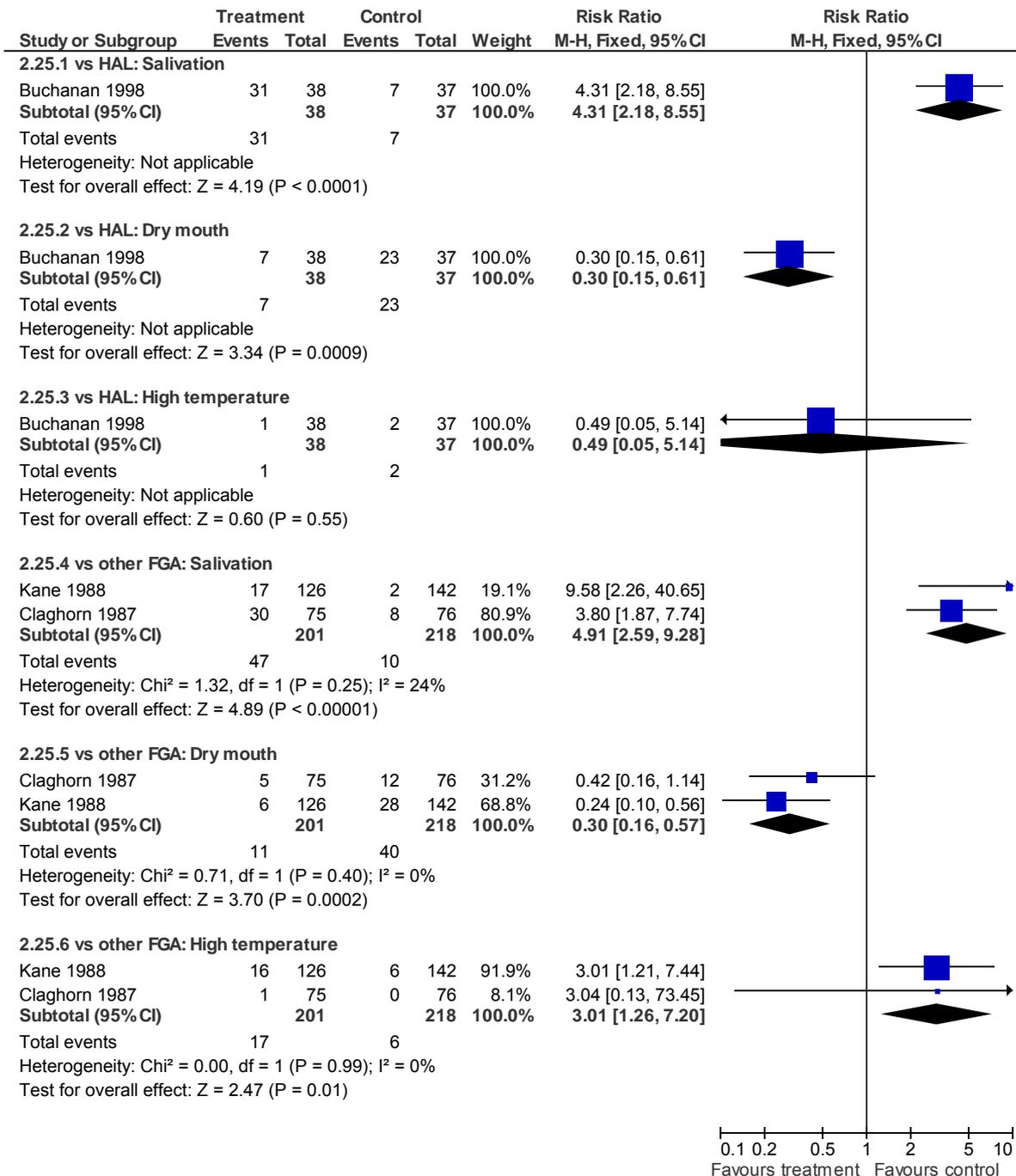


2.24 AE: 2. Neurologic SEs - Extrapyramidal Symptom Rating Scale (endpt mean) (medium-term)



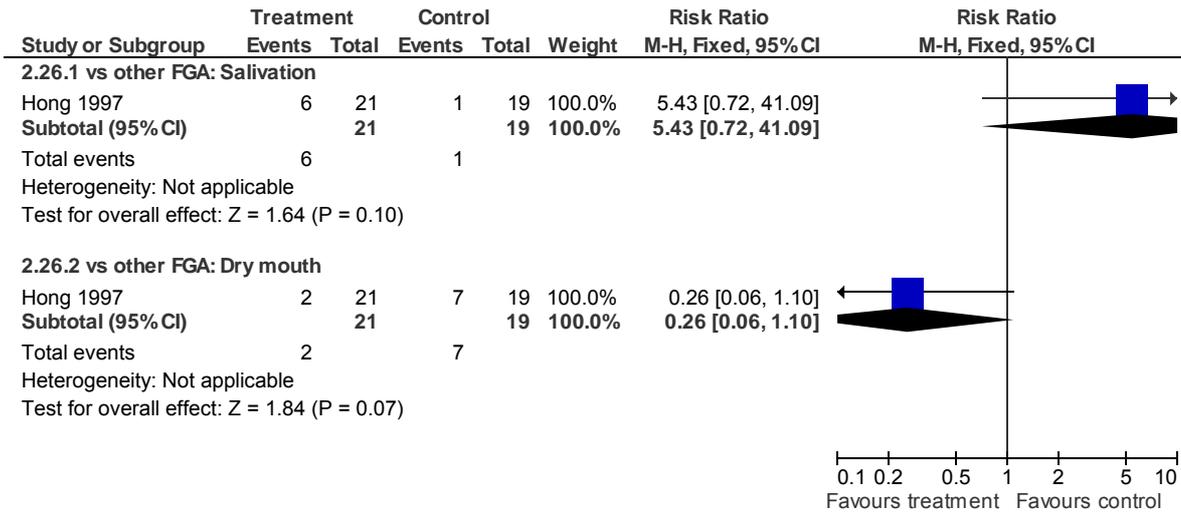
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.25 AE: 3. Autonomic SEs (short-term)

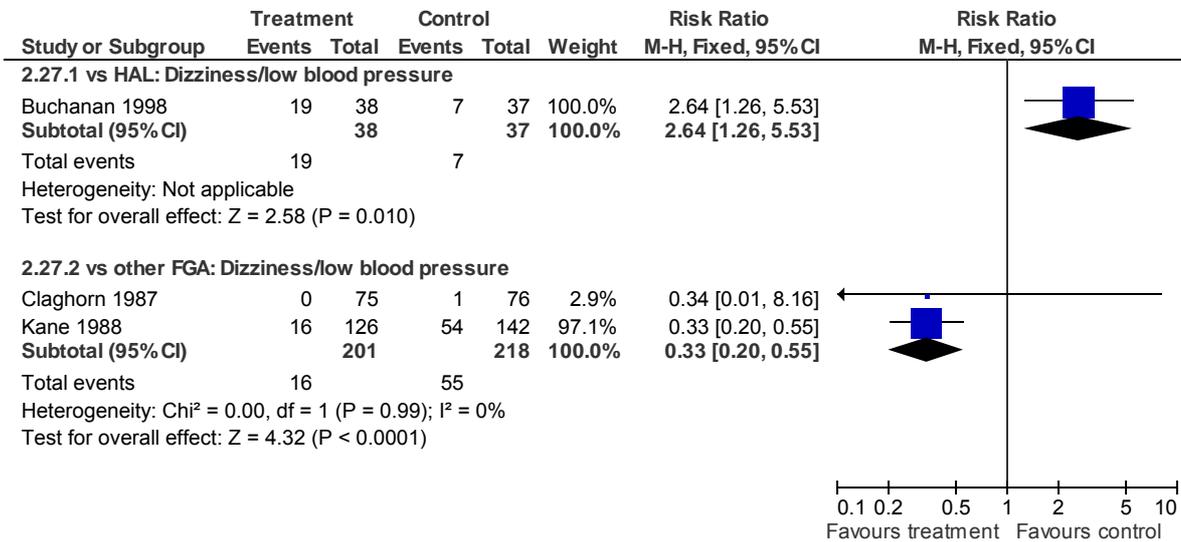


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.26 AE: 3. Autonomic SEs (medium-term)

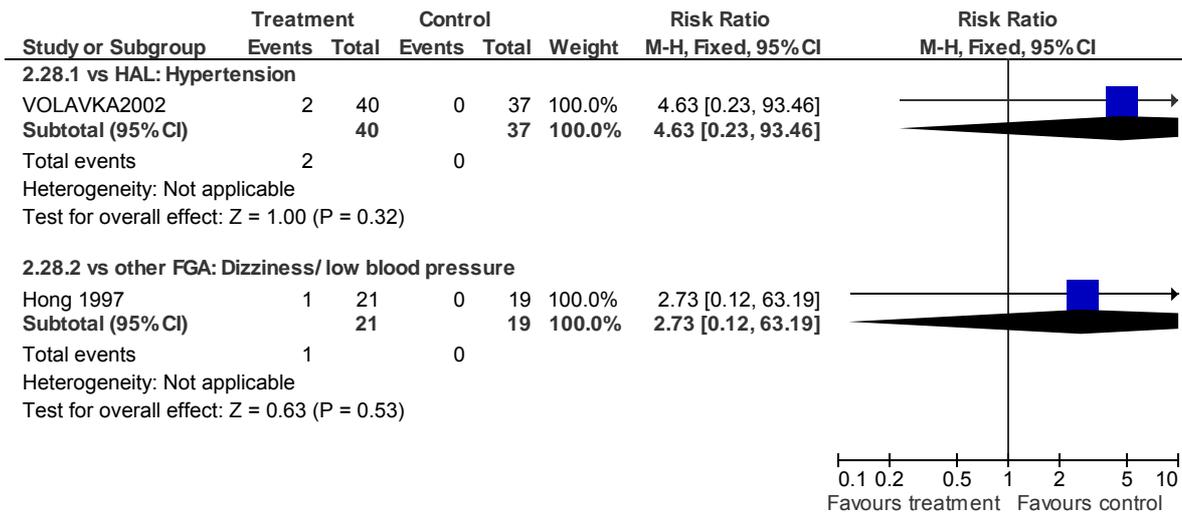


2.27 AE: 4. Cardiovascular SEs (short-term)

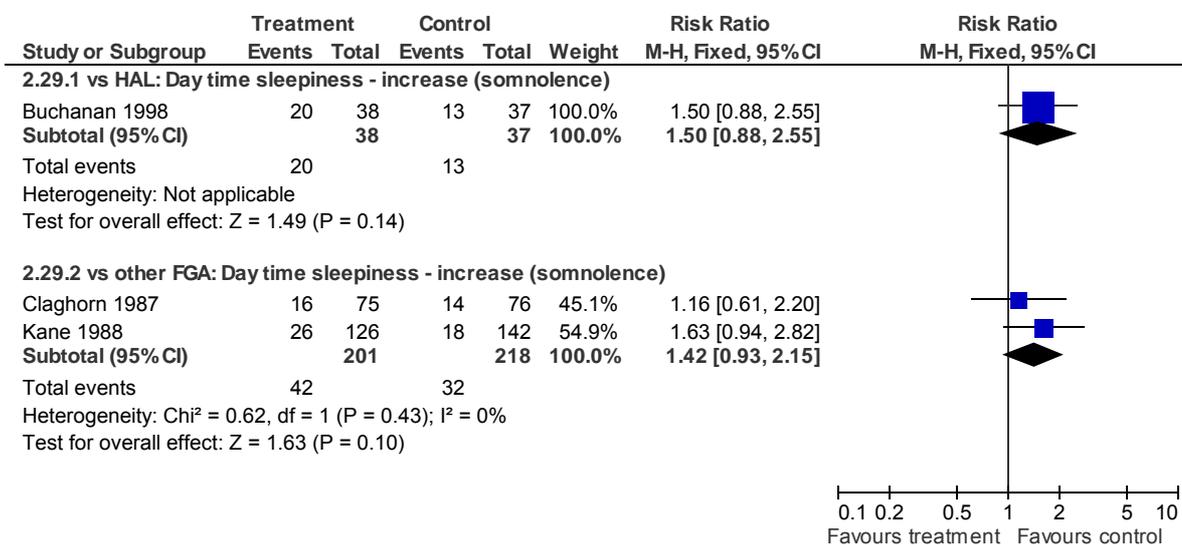


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

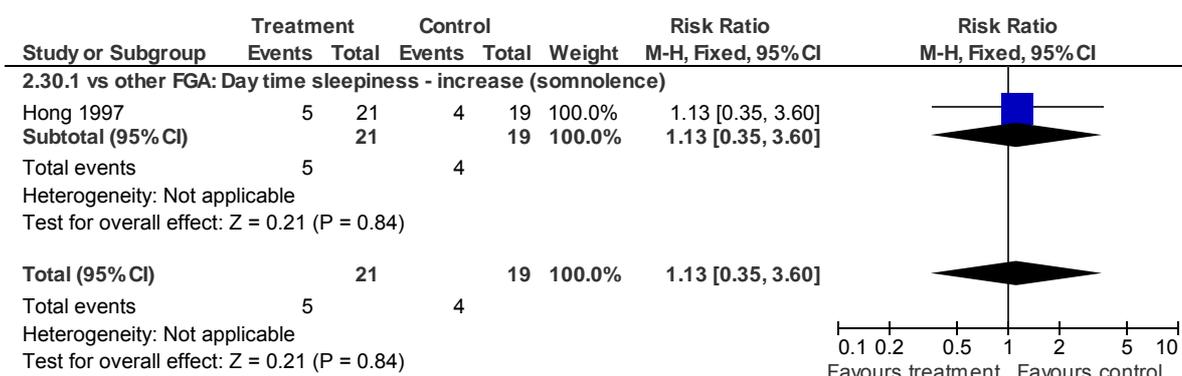
2.28 AE: 4. Cardiovascular SEs (medium-term)



2.29 AE: 6. Sedation (short-term)

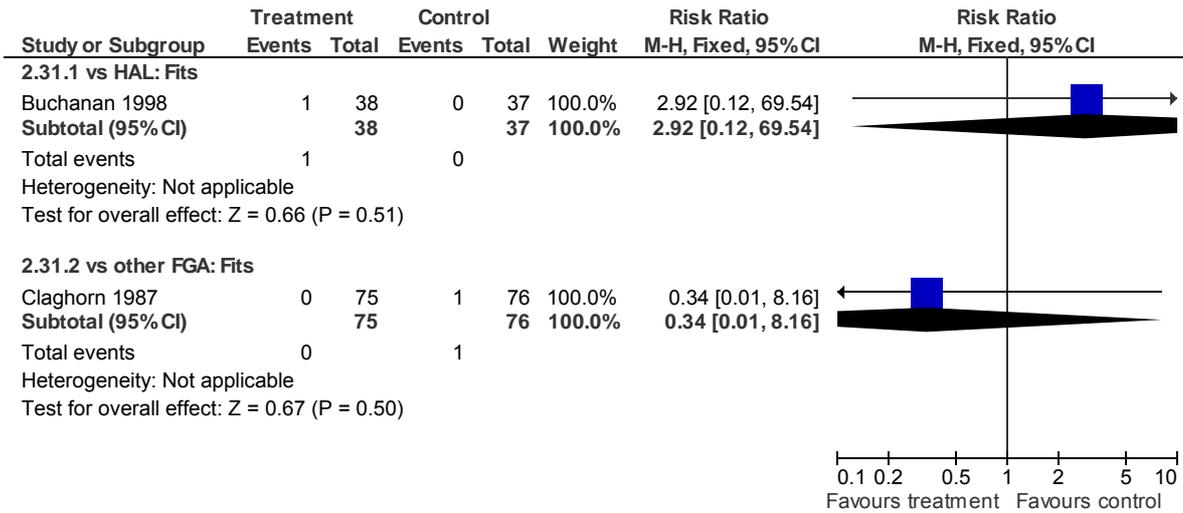


2.30 AE: 6. Sedation (medium-term)

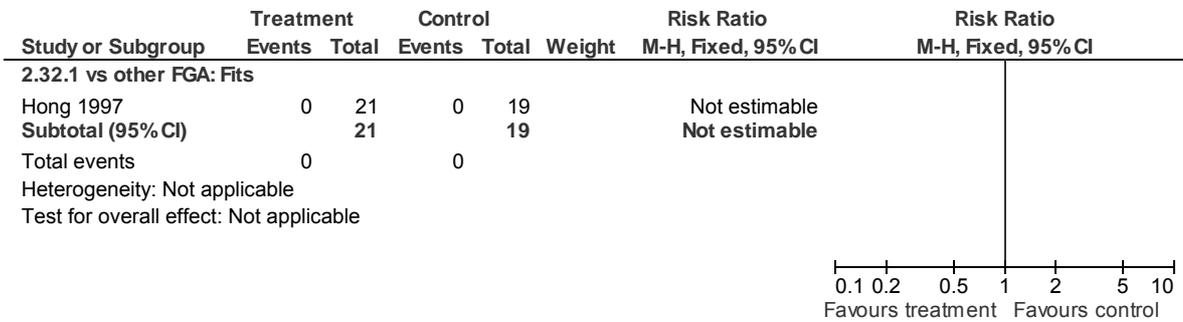


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

2.31 AE: 10. Other SEs (short-term)

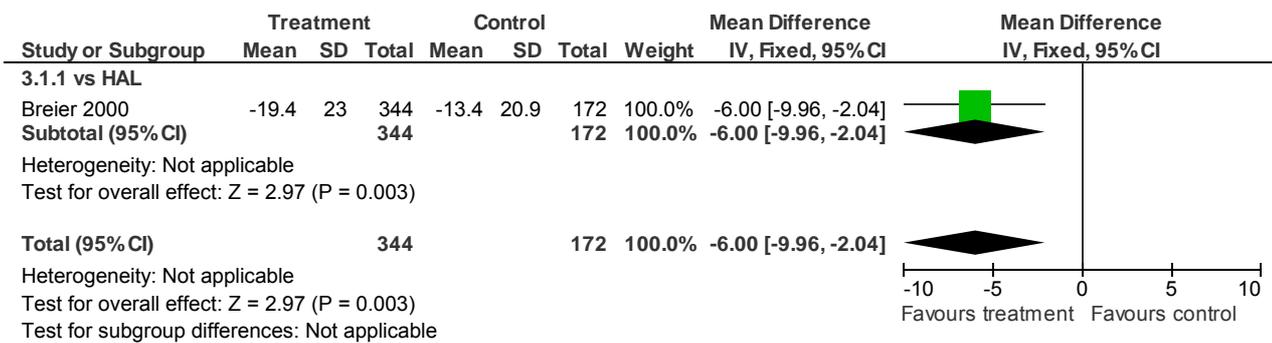


2.32 AE: 10. Other SEs (medium-term)



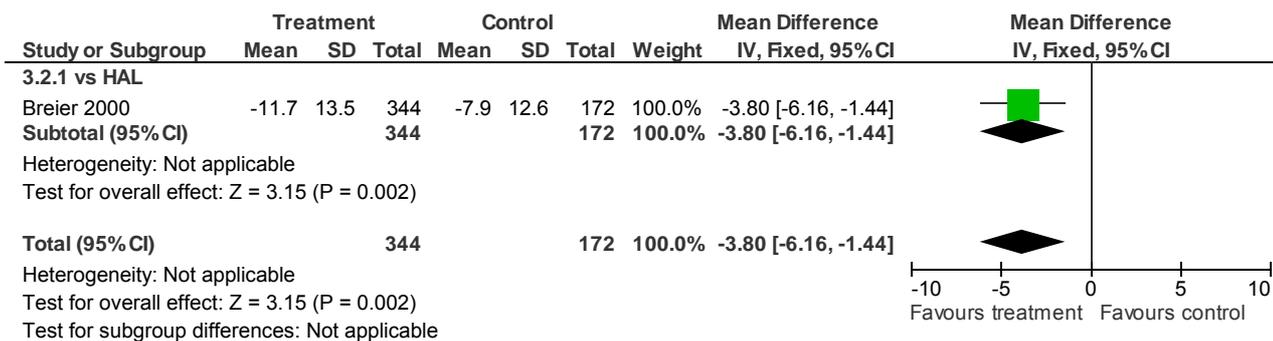
3 Olanzapine vs. FGA (in people whose illness has not responded adequately to treatment)

3.1 Mental state: 1. PANSS total (change from baseline) (short-term)

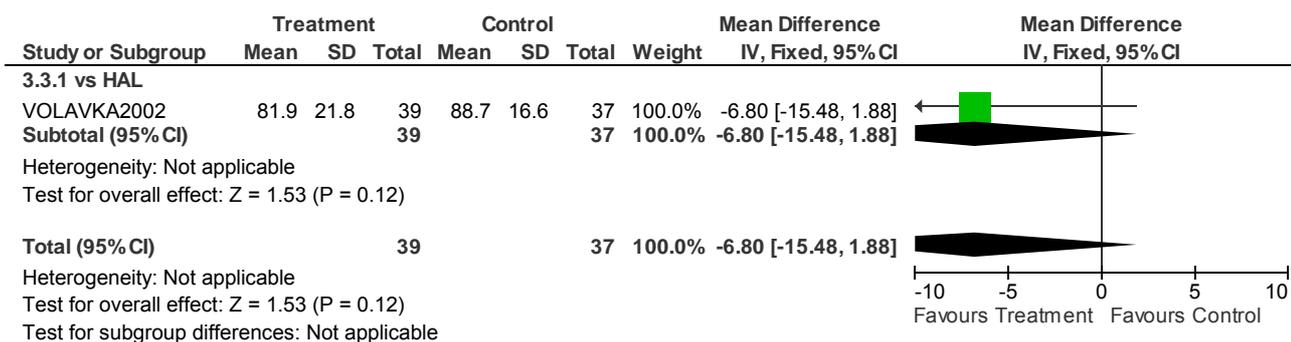


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

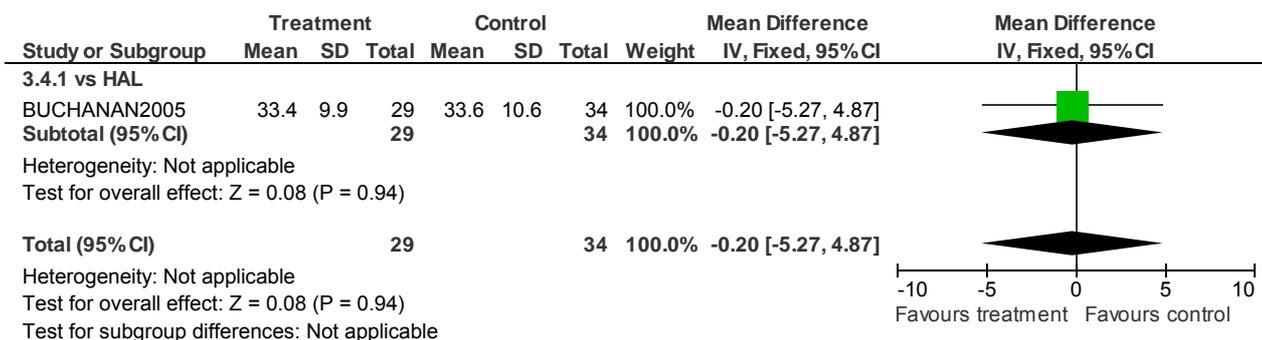
3.2 Mental state: 1. BPRS total (change from baseline) (short-term)



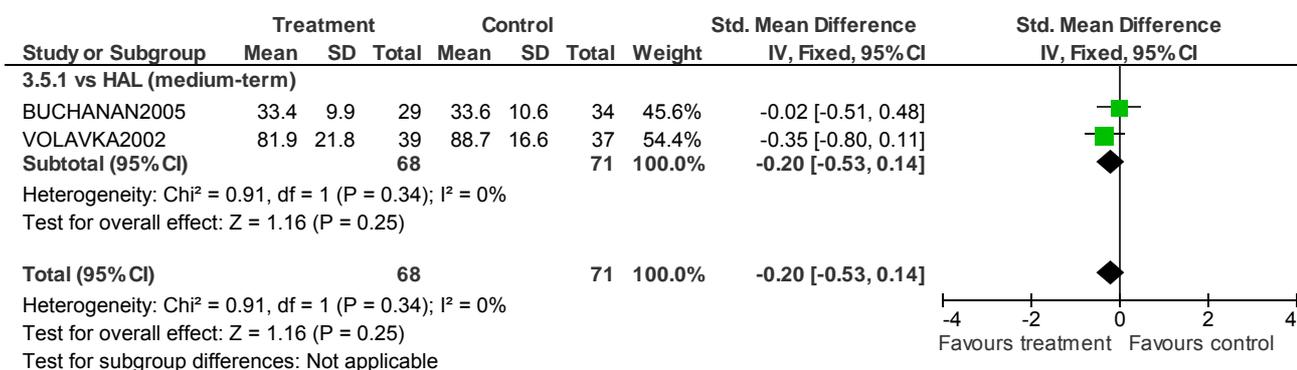
3.3 Mental state: 1. PANSS total (endpoint, high=poor) (medium-term)



3.4 Mental state: 1. BPRS total (endpoint, high=poor) (medium-term)

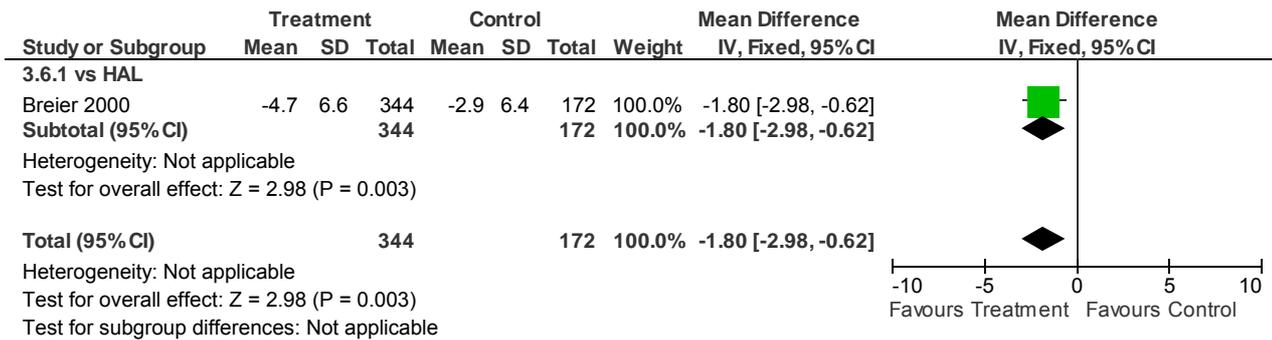


3.5 Mental state: 1. BPRS/PANSS total (endpoint) (medium-term)

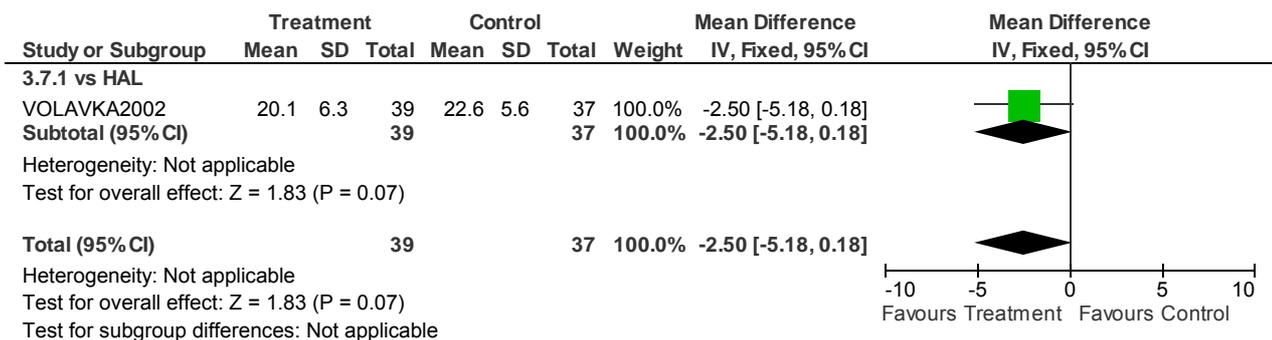


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

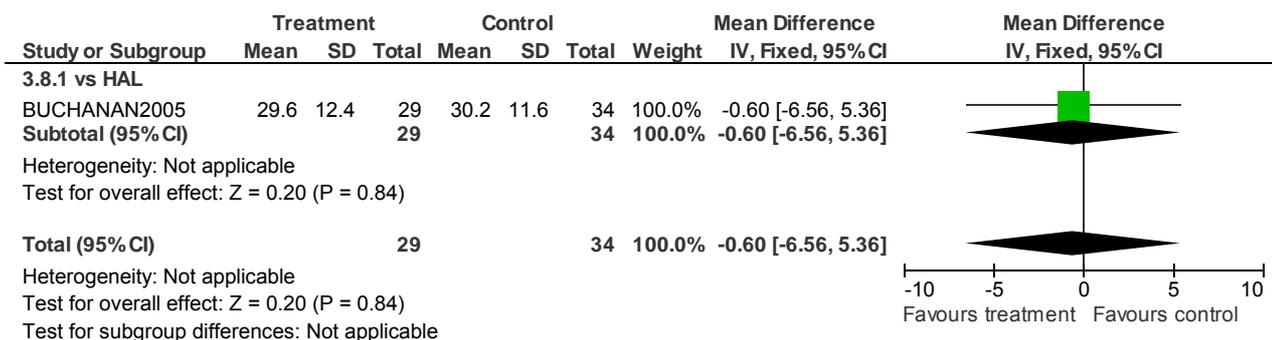
3.6 Mental state: 2. PANSS negative score (change from baseline) (short-term)



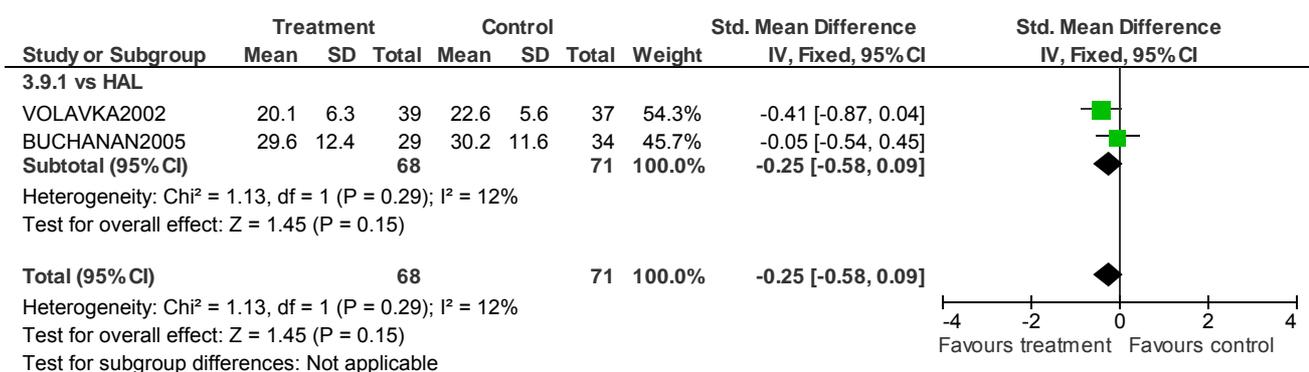
3.7 Mental state: 2. PANSS negative score (endpoint, high=poor) (medium-term)



3.8 Mental state: 2. SANS score (endpoint, high=poor) (medium-term)

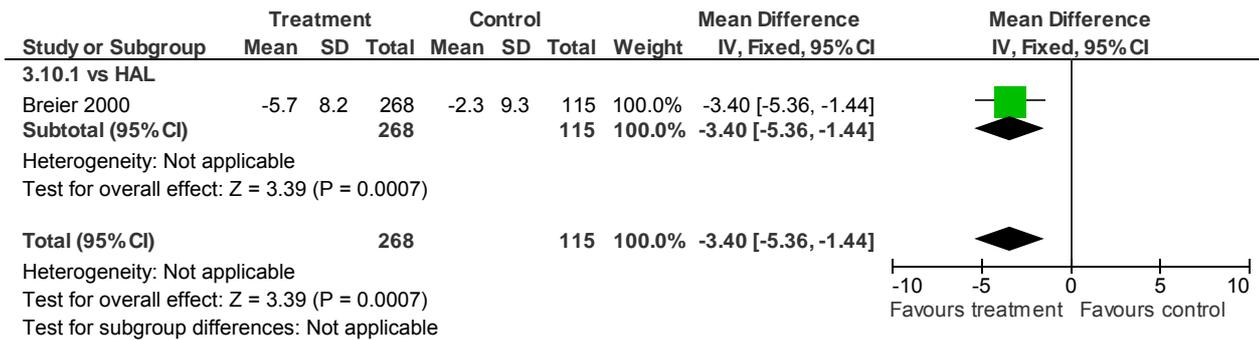


3.9 Mental state: 2. PANSS negative score/SANS (endpoint, high=poor) (medium-term)

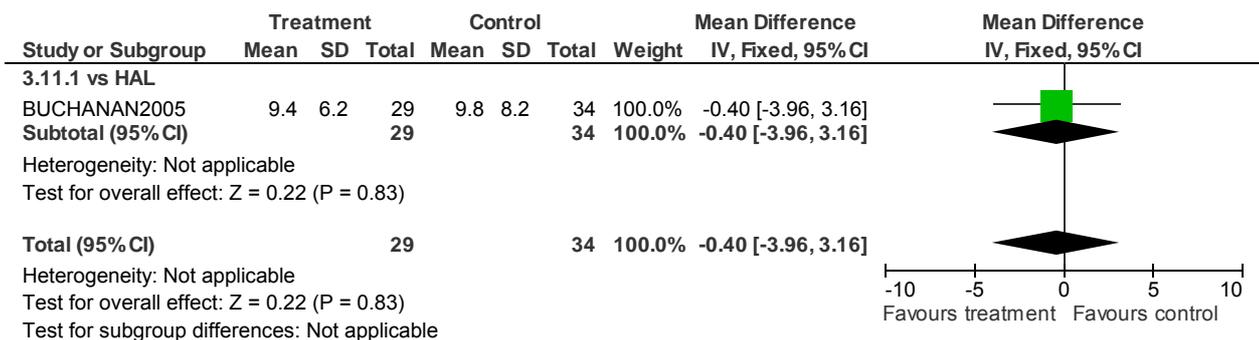


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

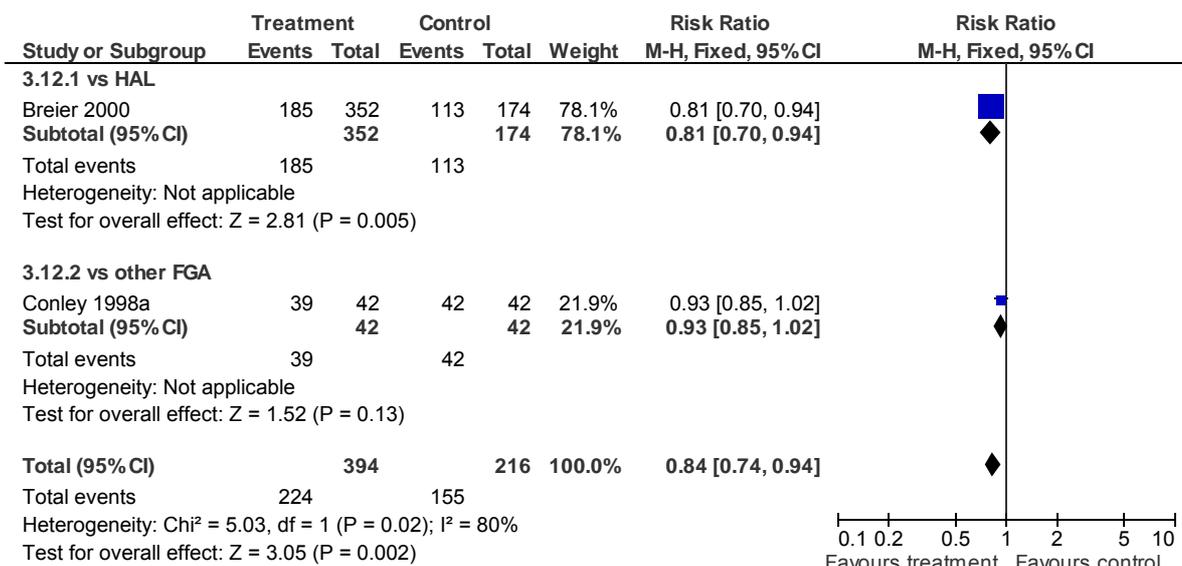
3.10 Mental state: 3. Depression (MADRS) (change from baseline) (short-term)



3.11 Mental state: 3. Depression (HDRS) (endpoint, high=poor) (medium-term)

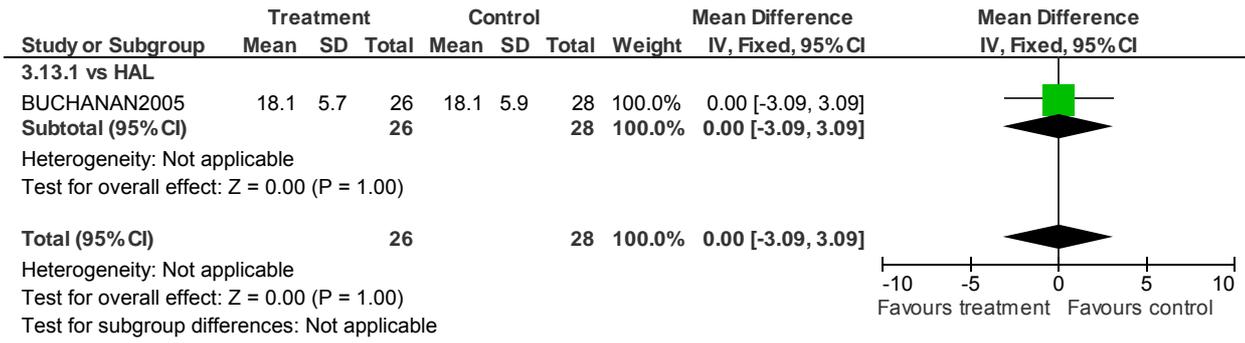


3.12 Mental state: 4. Non-response (<20% improvement on any scale) (short-term)



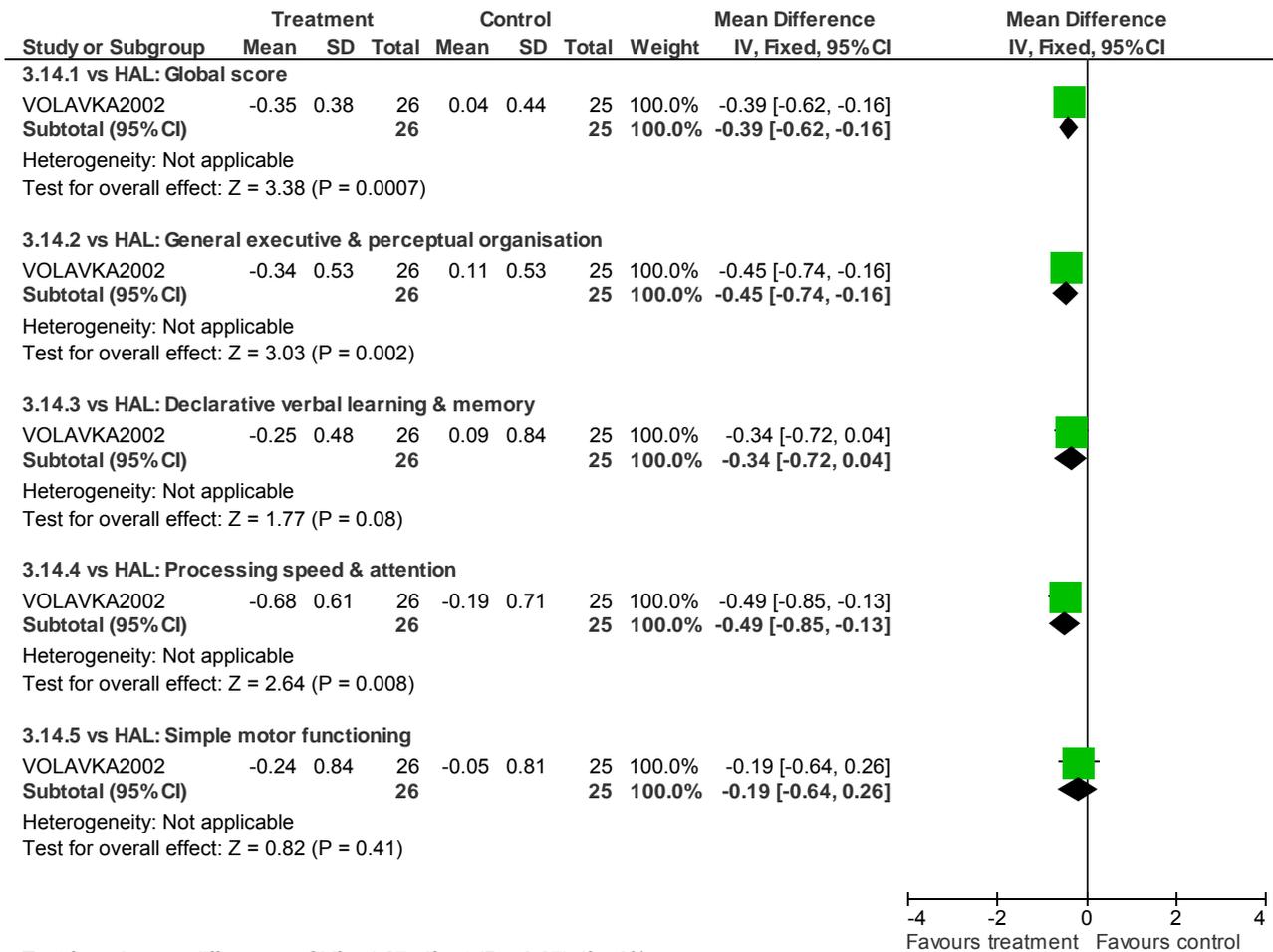
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.13 Social functioning: 1. Level of Functioning Scale (endpoint) (medium-term)



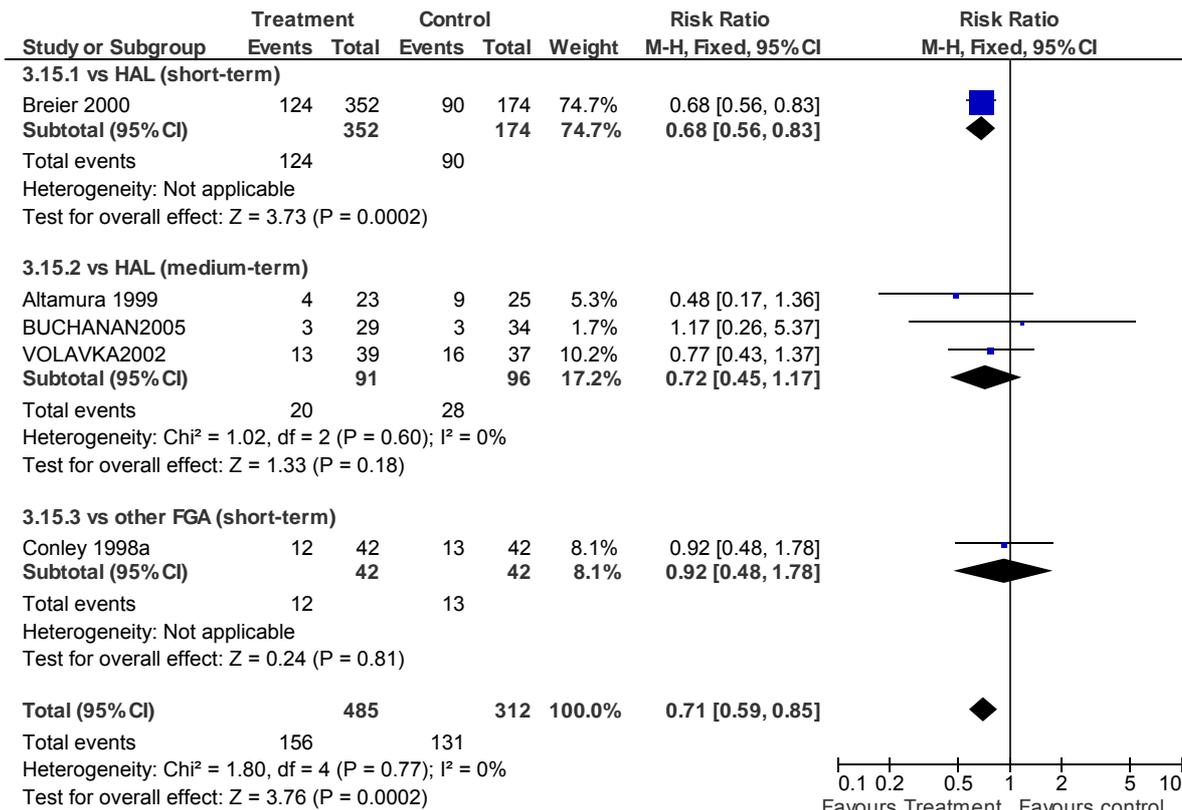
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.14 Cognitive functioning: 1. Global & domain scores (Z score change) (medium-term) (sign changed)



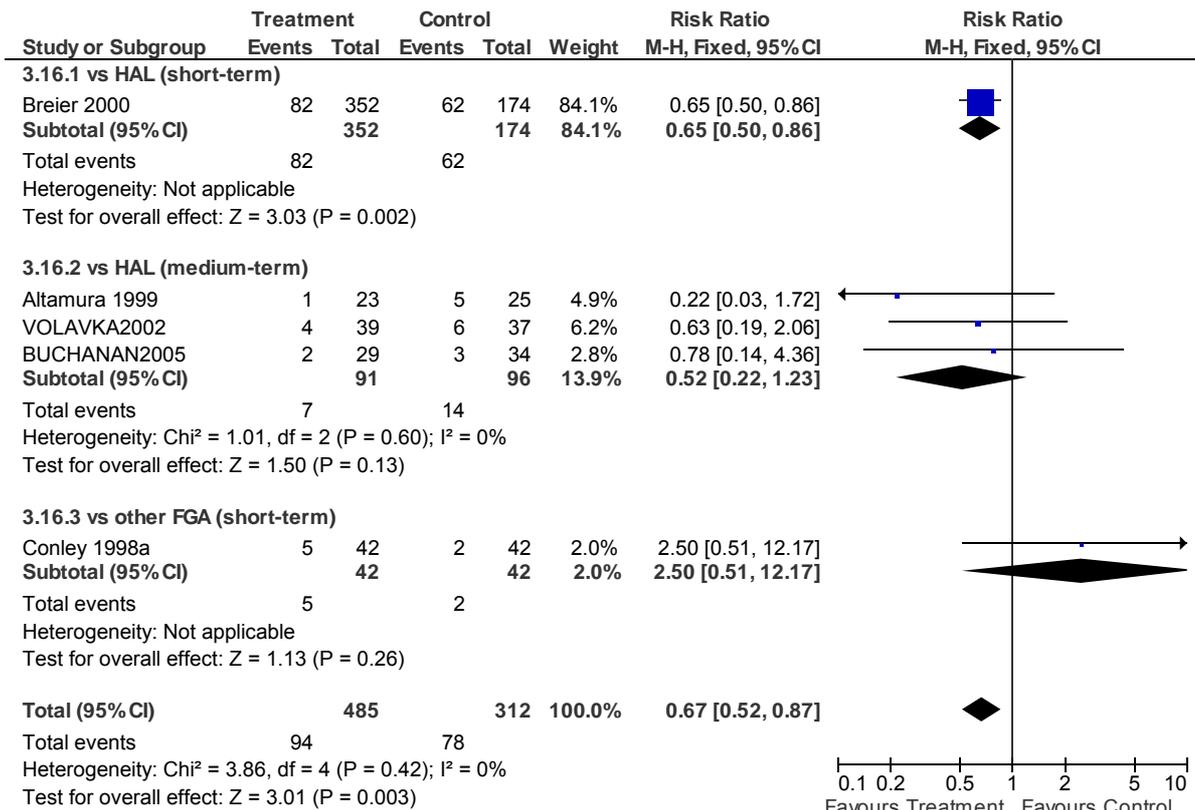
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.15 Leaving the study early: 1. Any reason (short-to-medium-term)

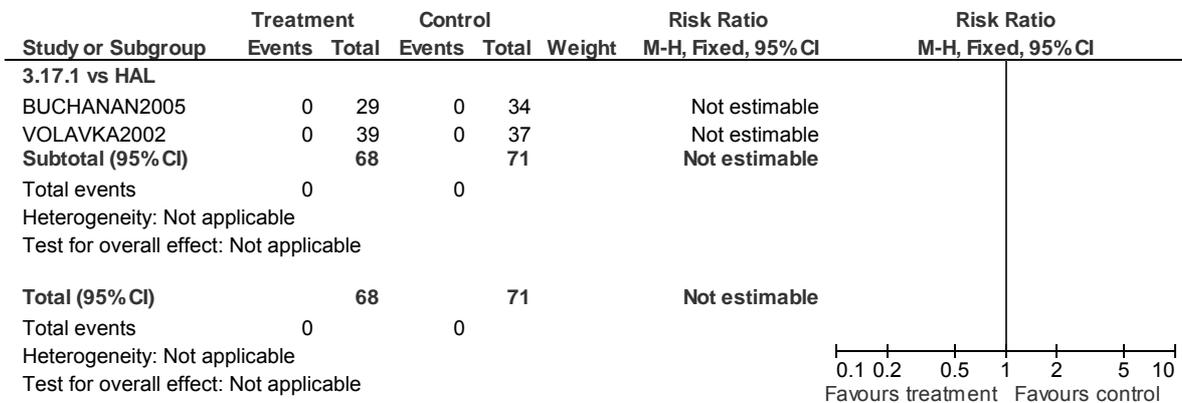


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.16 Leaving the study early: 2. Due to lack of efficacy (short-to-medium-term)

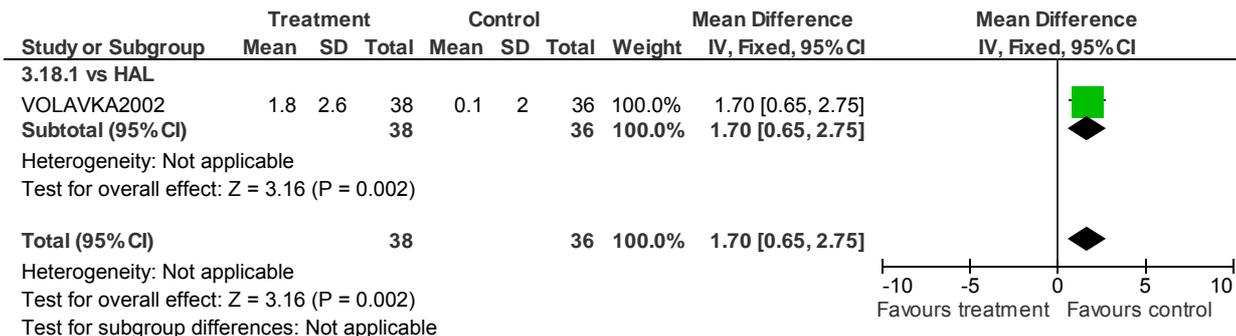


3.17 Leaving the study early: 3: Adverse event (medium-term)

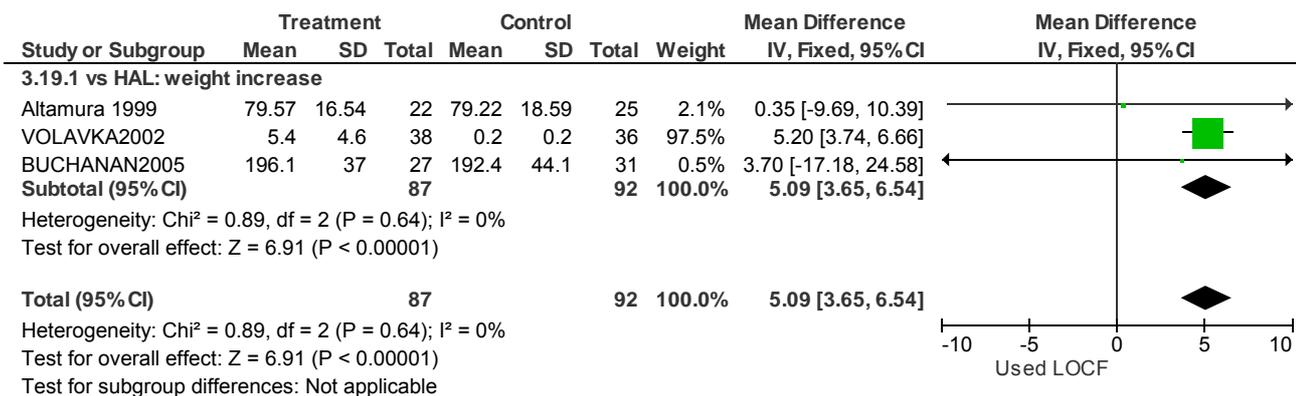


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

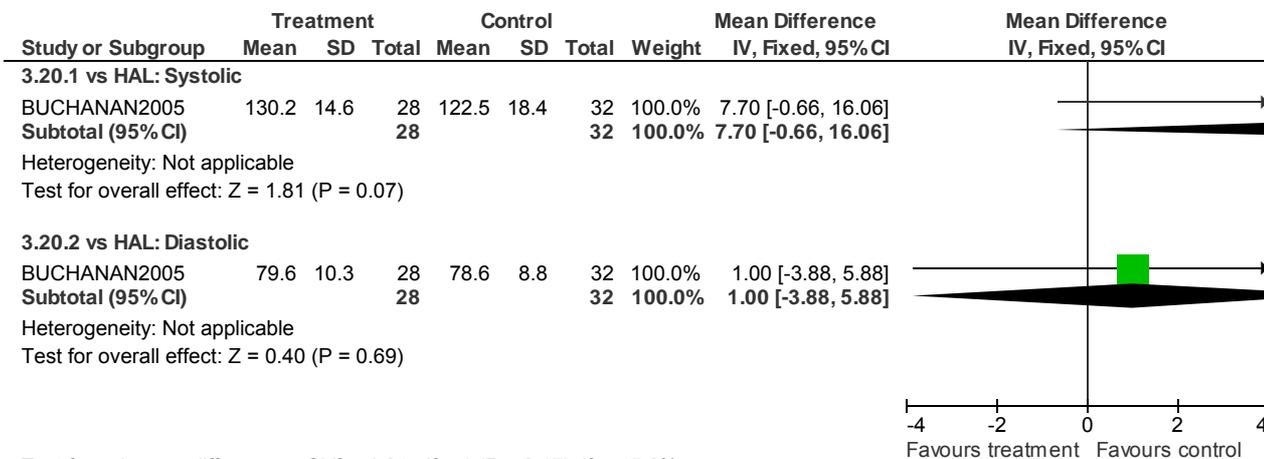
3.18 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)



3.19 AE: 1. Metabolic SEs - weight (kg) (medium-term)

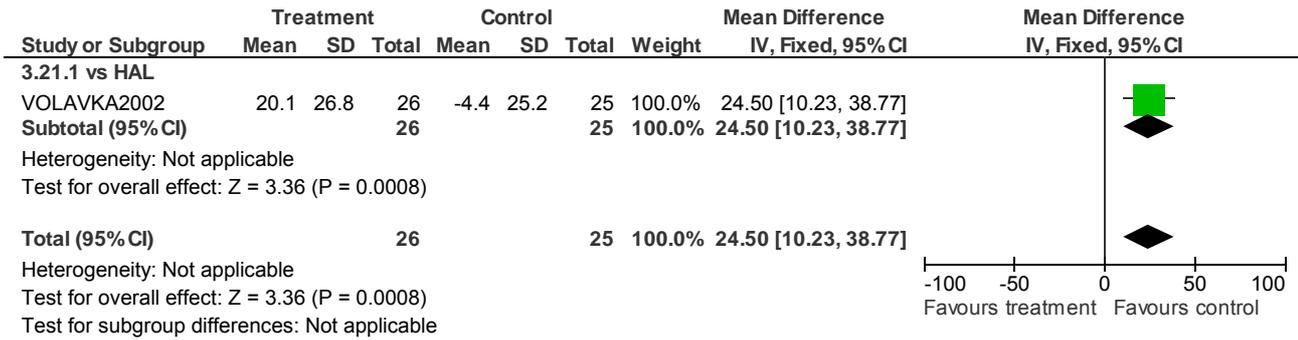


3.20 AE: 1. Metabolic SEs - blood pressure (medium-term)

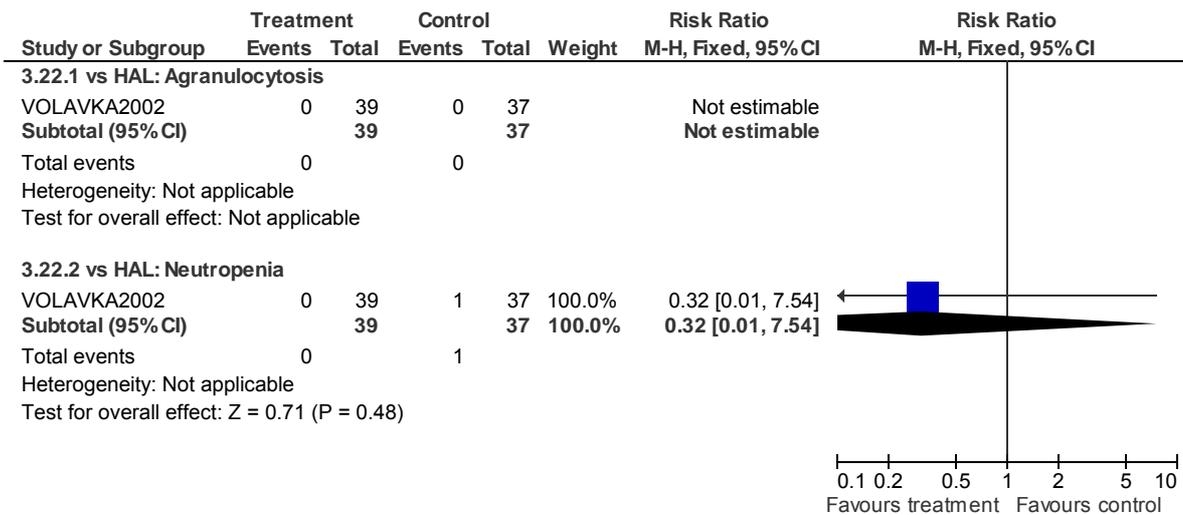


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.21 AE: 1. Metabolic SEs - Cholestrol mg/dL (change from baseline) (medium-term)

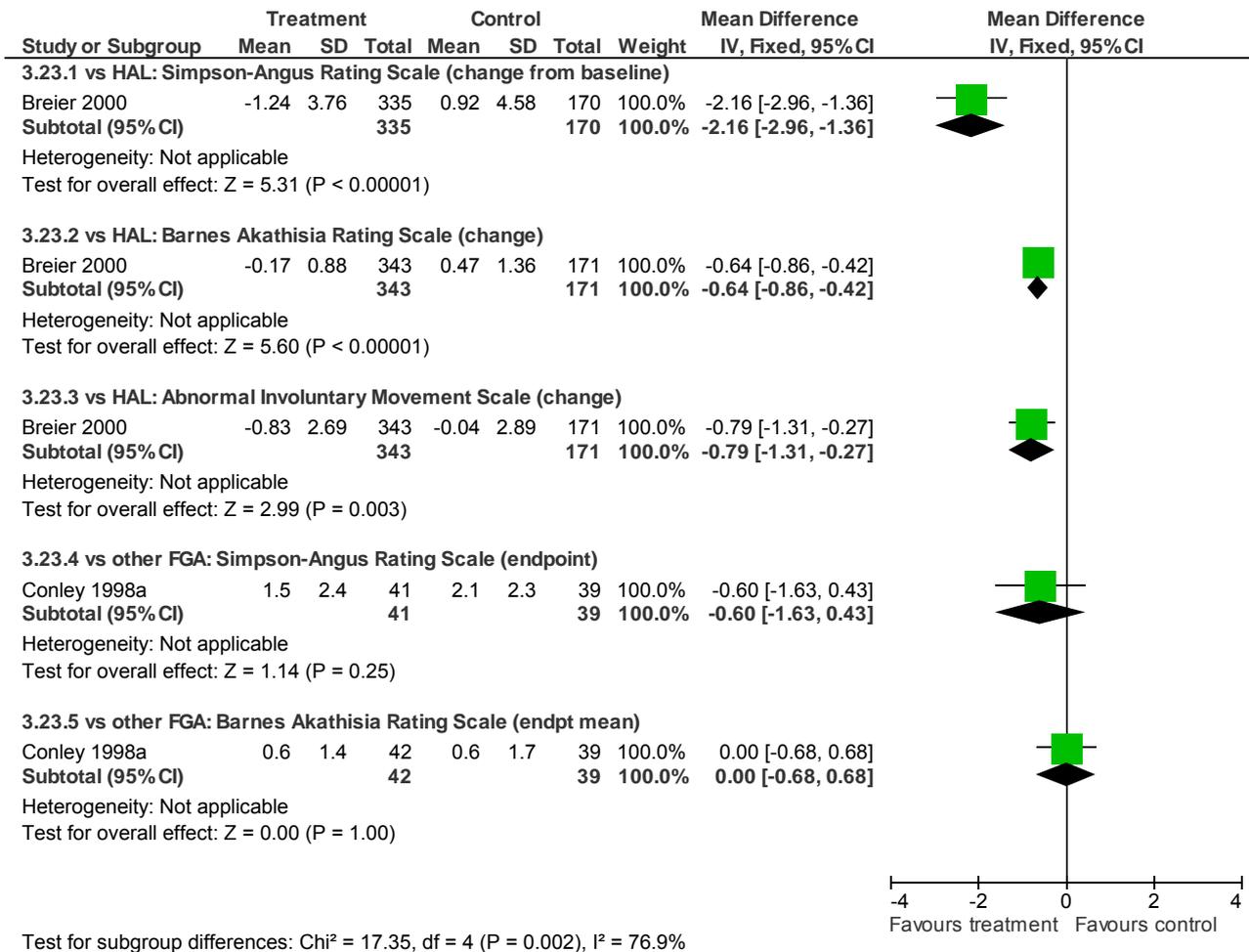


3.22 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)



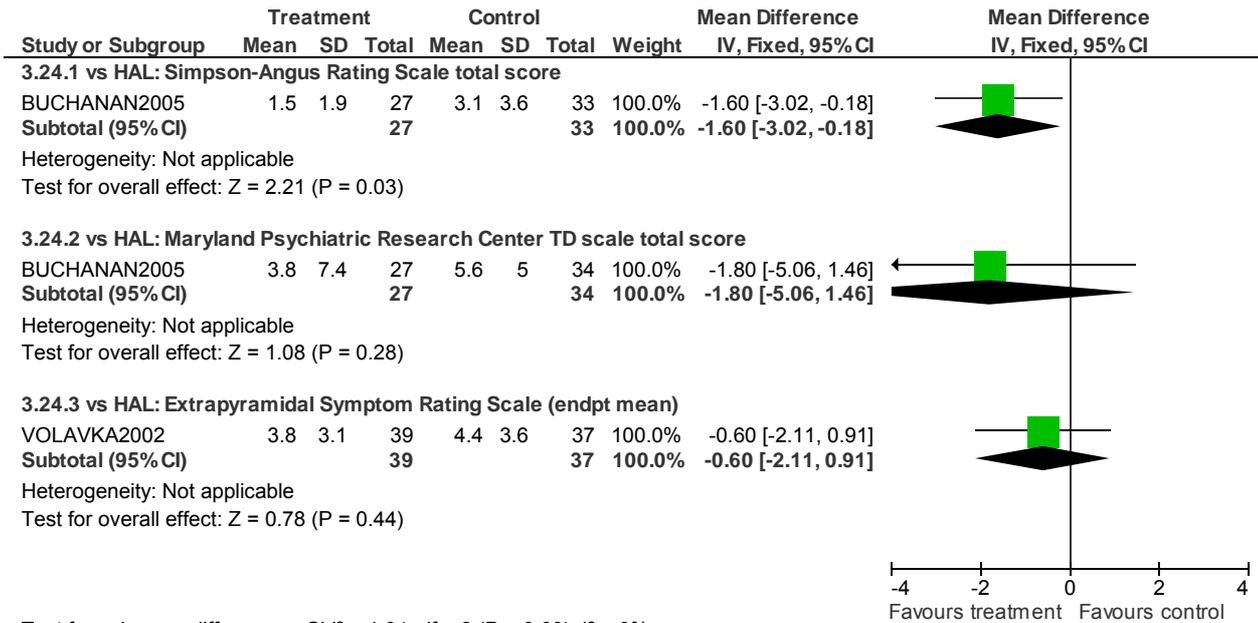
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.23 AE: 2 Neurologic SEs (treatment-emergent) (short-term)



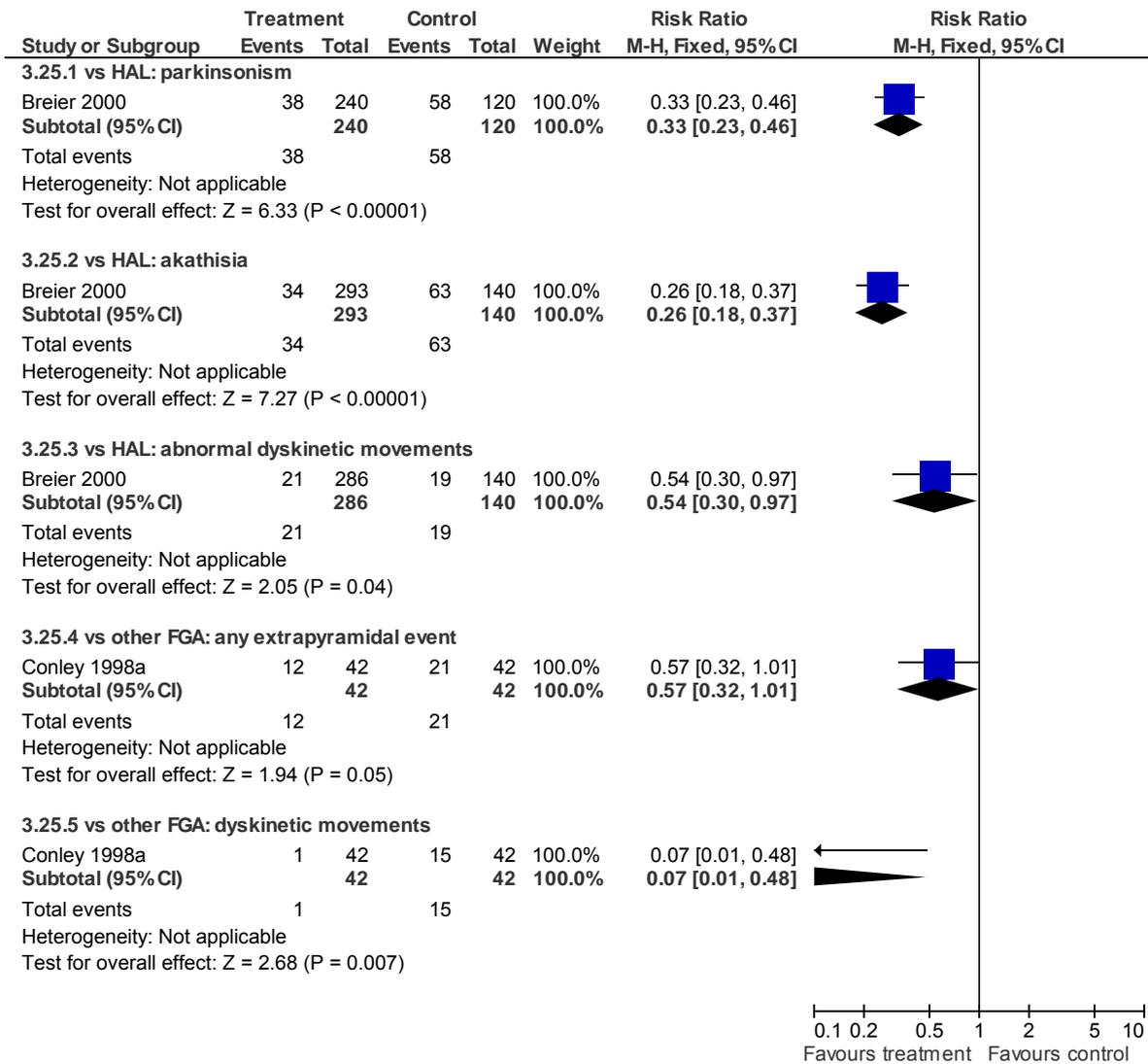
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.24 AE: 2 Neurologic SEs (treatment-emergent) (medium-term)



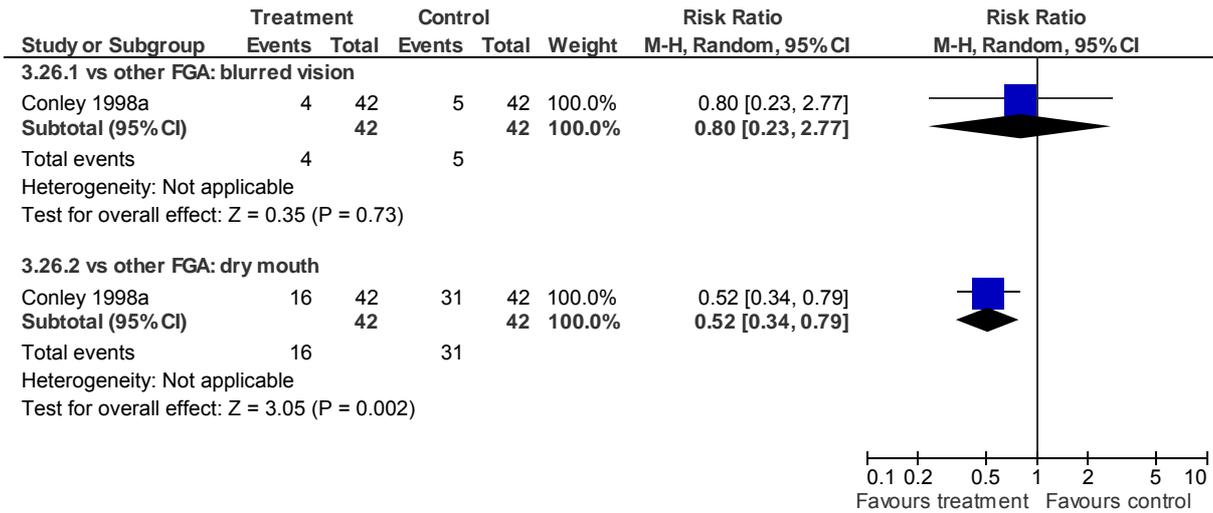
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.25 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



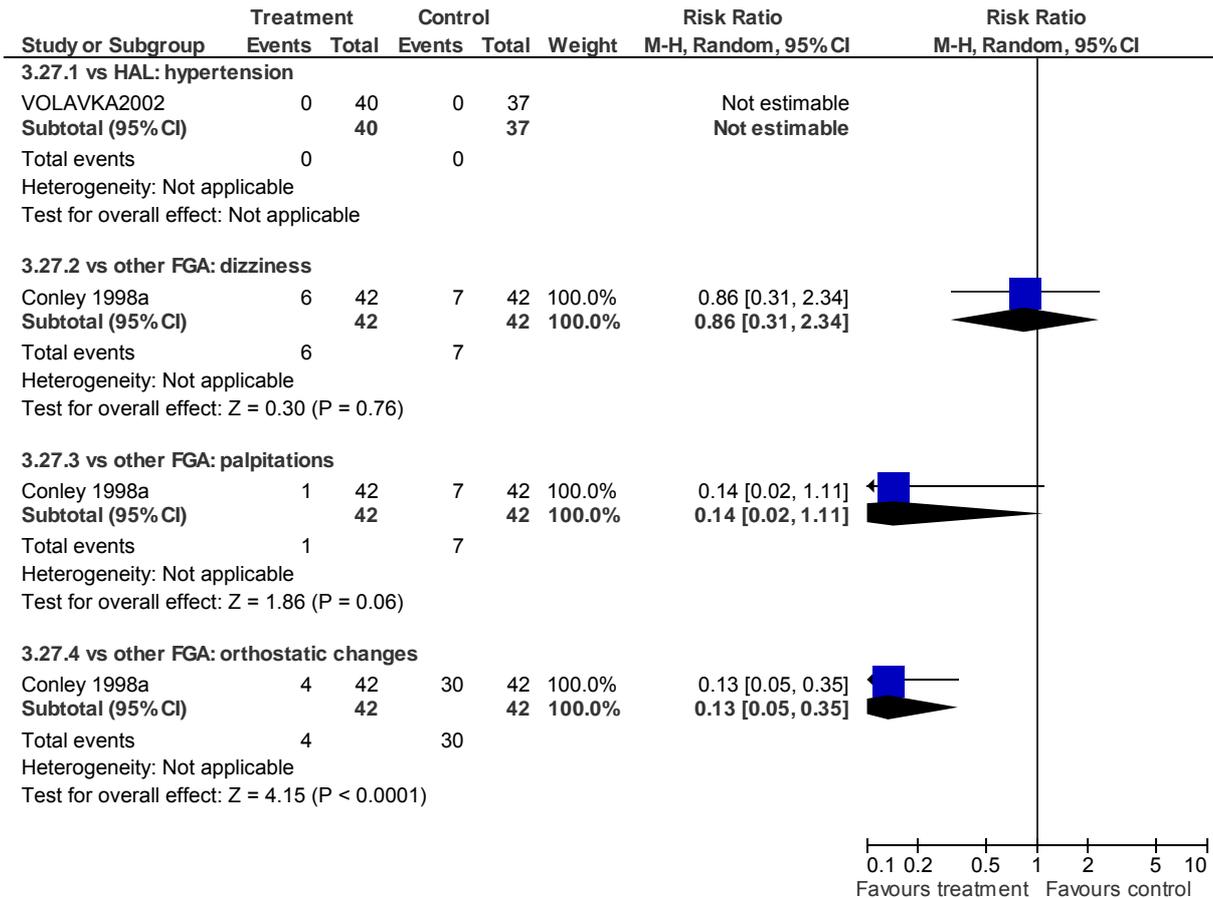
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.26 AE: 3. Autonomic SEs (short-term)

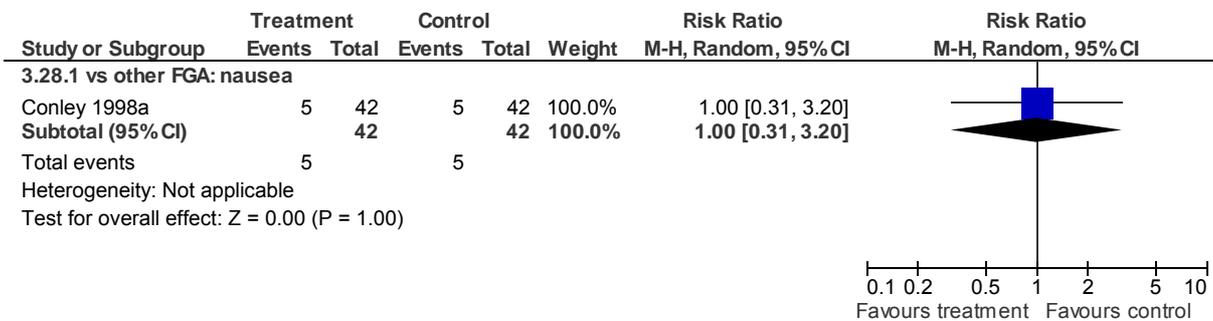


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.27 AE: 4. Cardiovascular SEs (short-term)

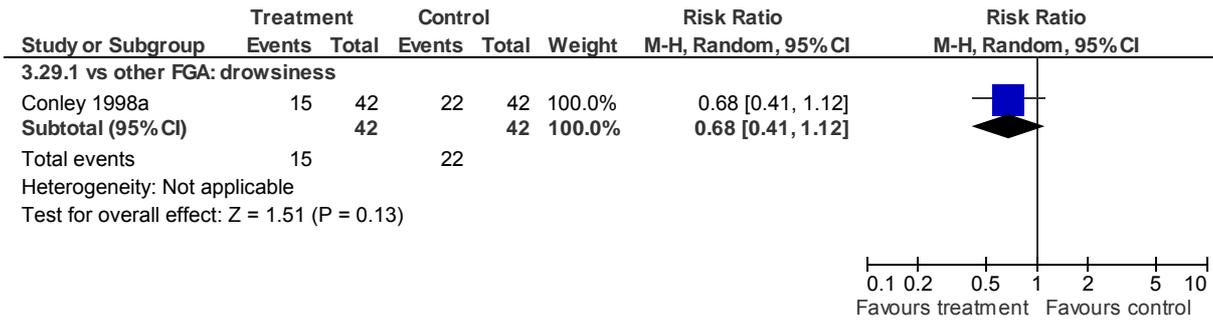


3.28 AE: 5. Gastrointestinal SEs (short-term)

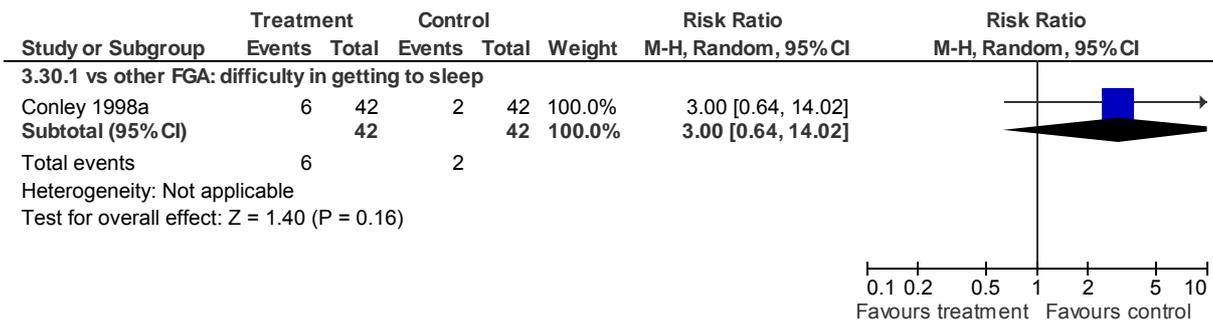


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

3.29 AE: 6. Sedation (short-term)

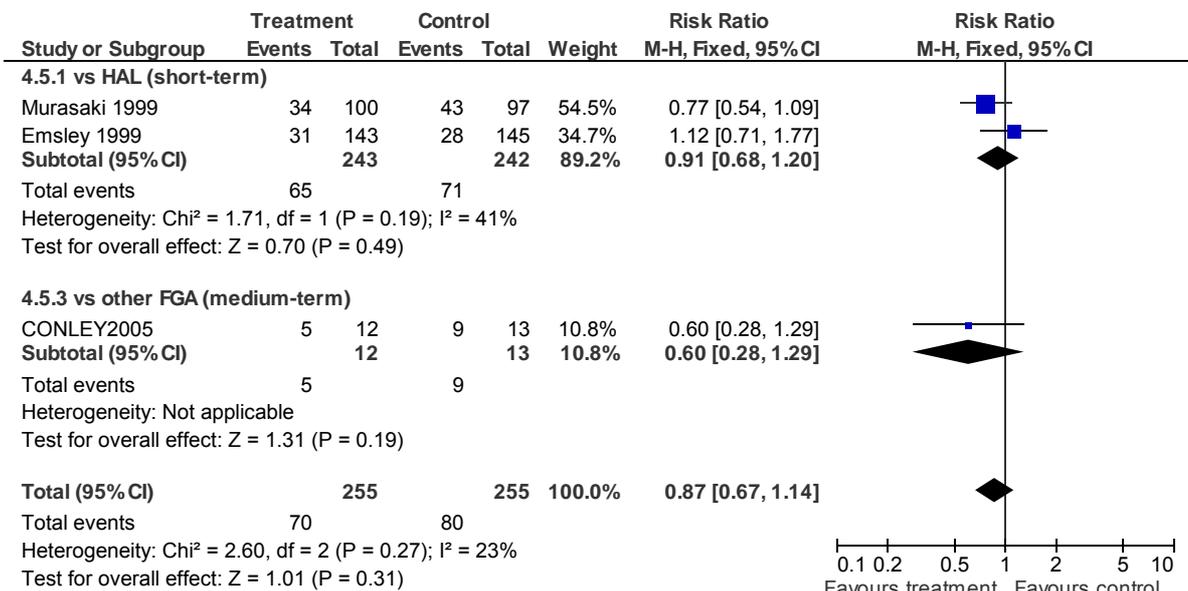


3.30 AE: 7. Other SEs (short-term)



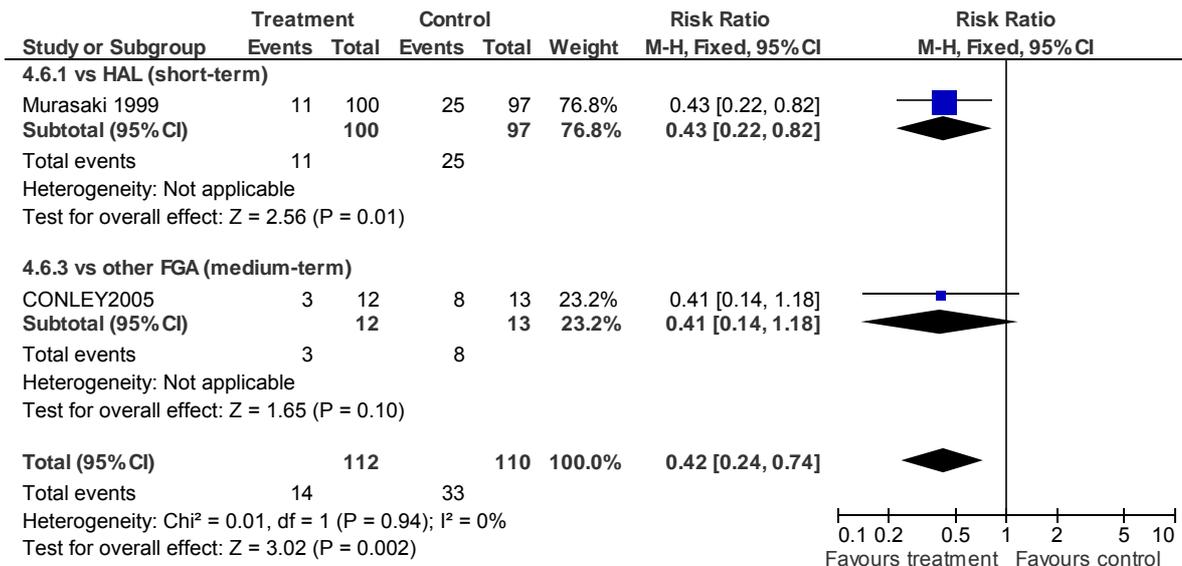
4 Quetiapine vs. FGA (in people whose illness has not responded adequately to treatment)

4.5 Leaving the study early: 1. Any reason (short-to-medium-term)

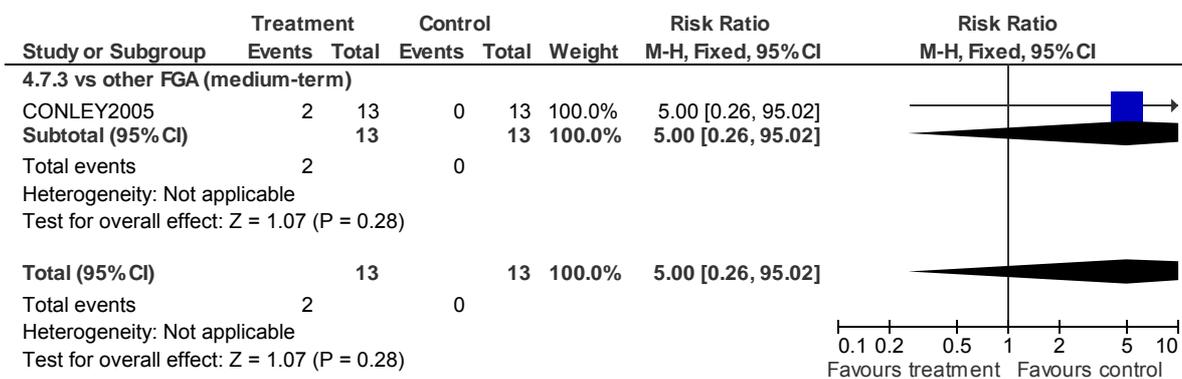


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

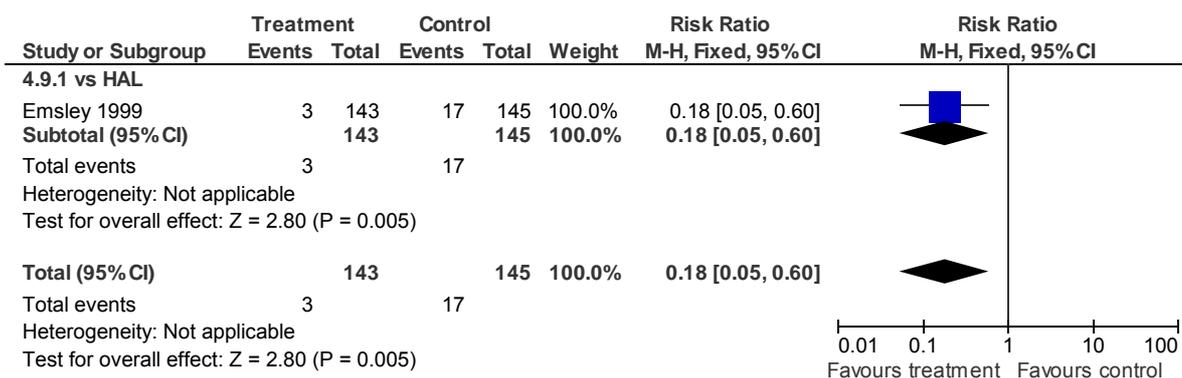
4.6 Leaving the study early: 2. Due to lack of efficacy (short-to-medium-term)



4.7 Leaving the study early: 3: Adverse event (short-to-medium-term)



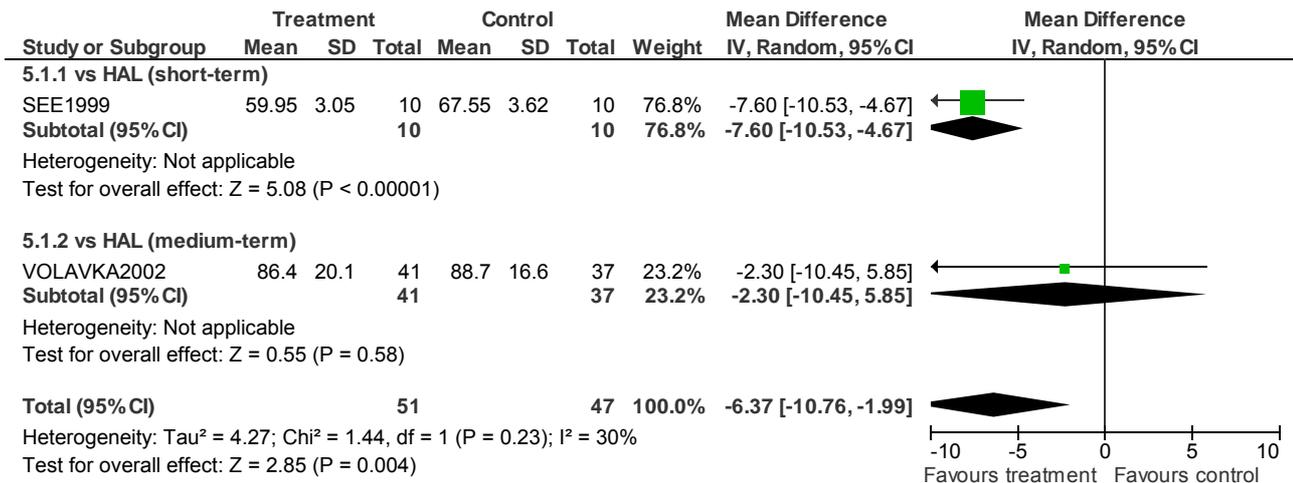
4.9 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



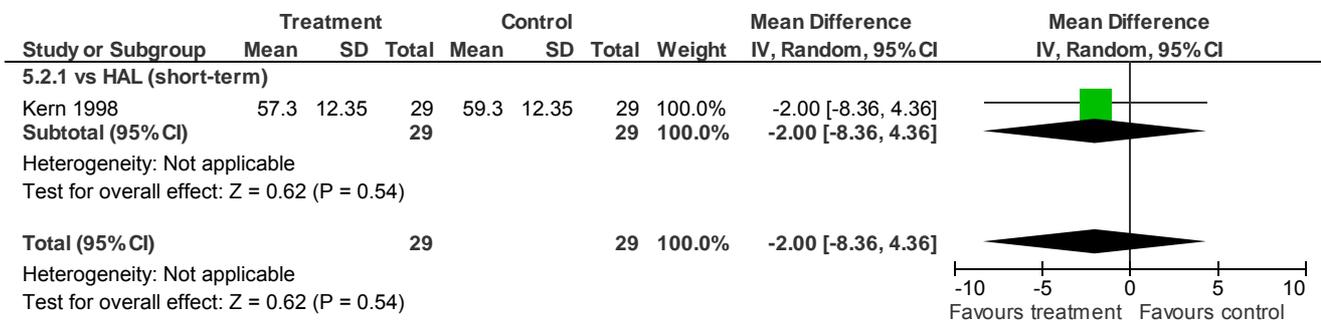
5 Risperidone vs. FGA (in people whose illness has not responded adequately to treatment)

Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

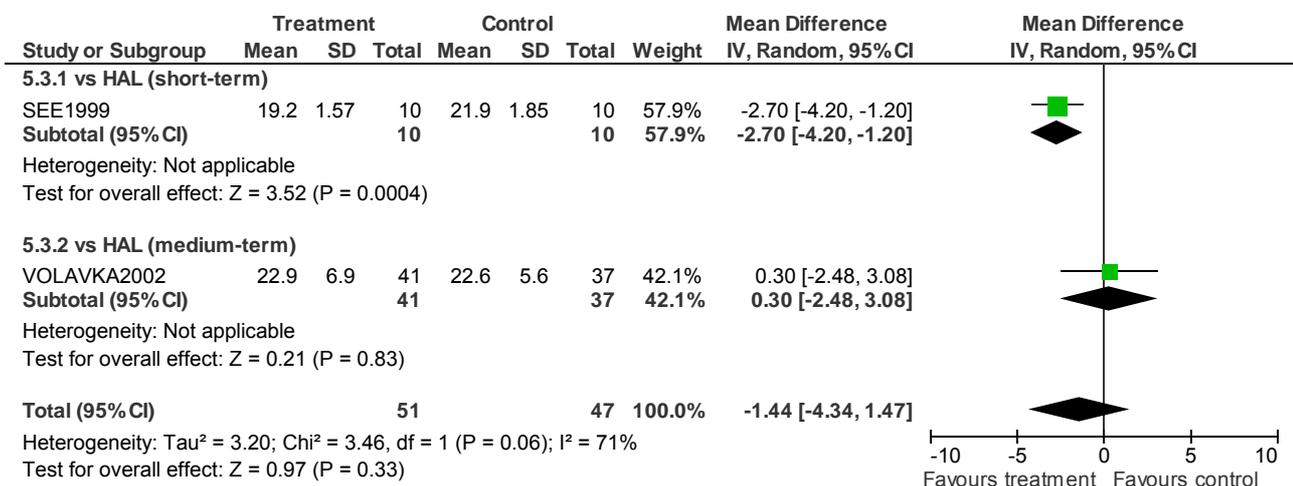
5.1 Mental state: 1. PANSS total (short-to-medium-term)



5.2 Mental state: 1. BPRS total (short-term)

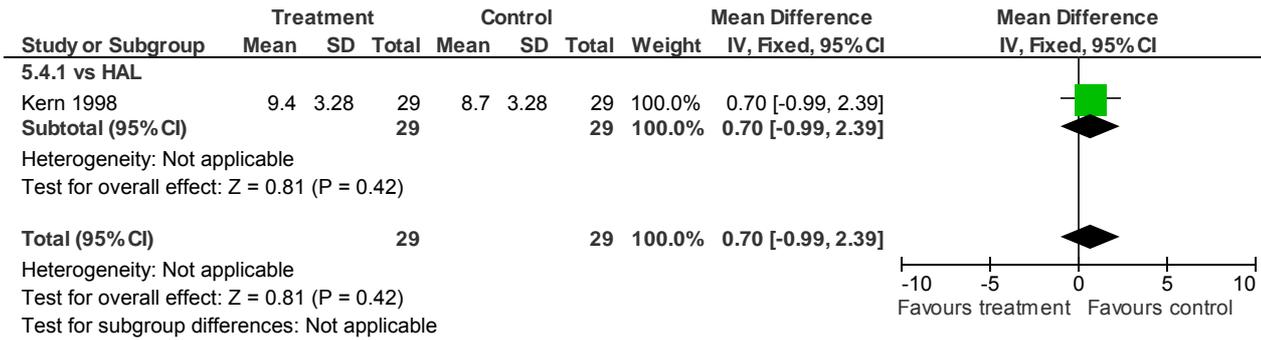


5.3 Mental state: 2. PANSS negative symptoms (short-to-medium-term)

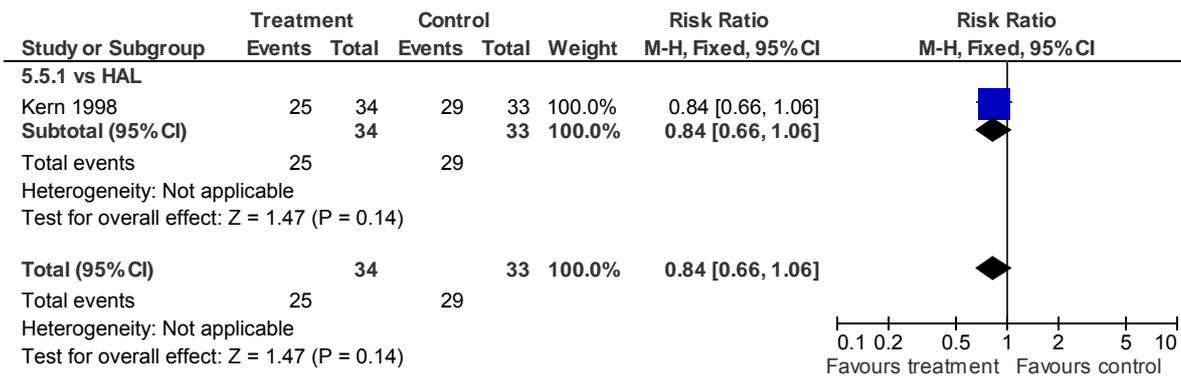


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

5.4 Mental state: 2. BPRS negative symptoms (short-term)

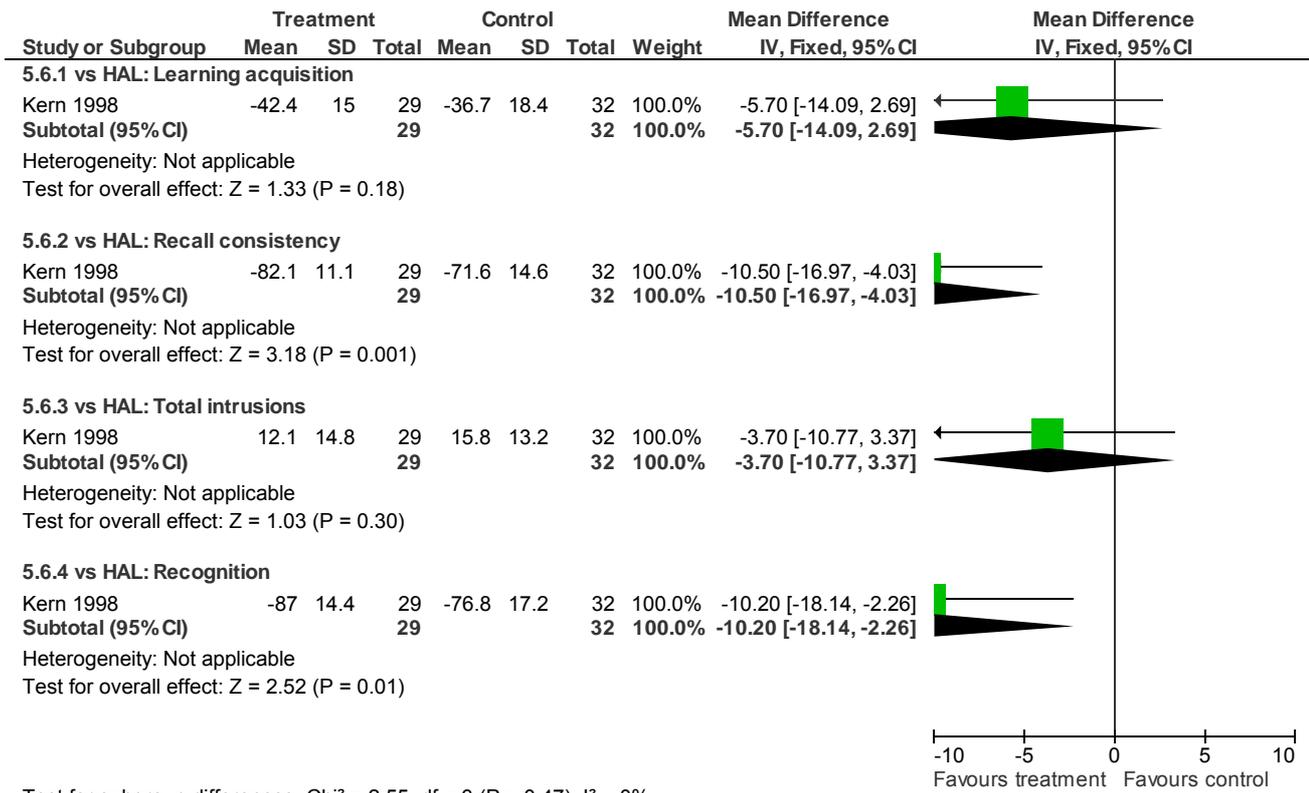


5.5 Mental state: 4. Non-response (<20% improvement in BPRS & CGI 3 or more & BPRS > 35) (short-term)



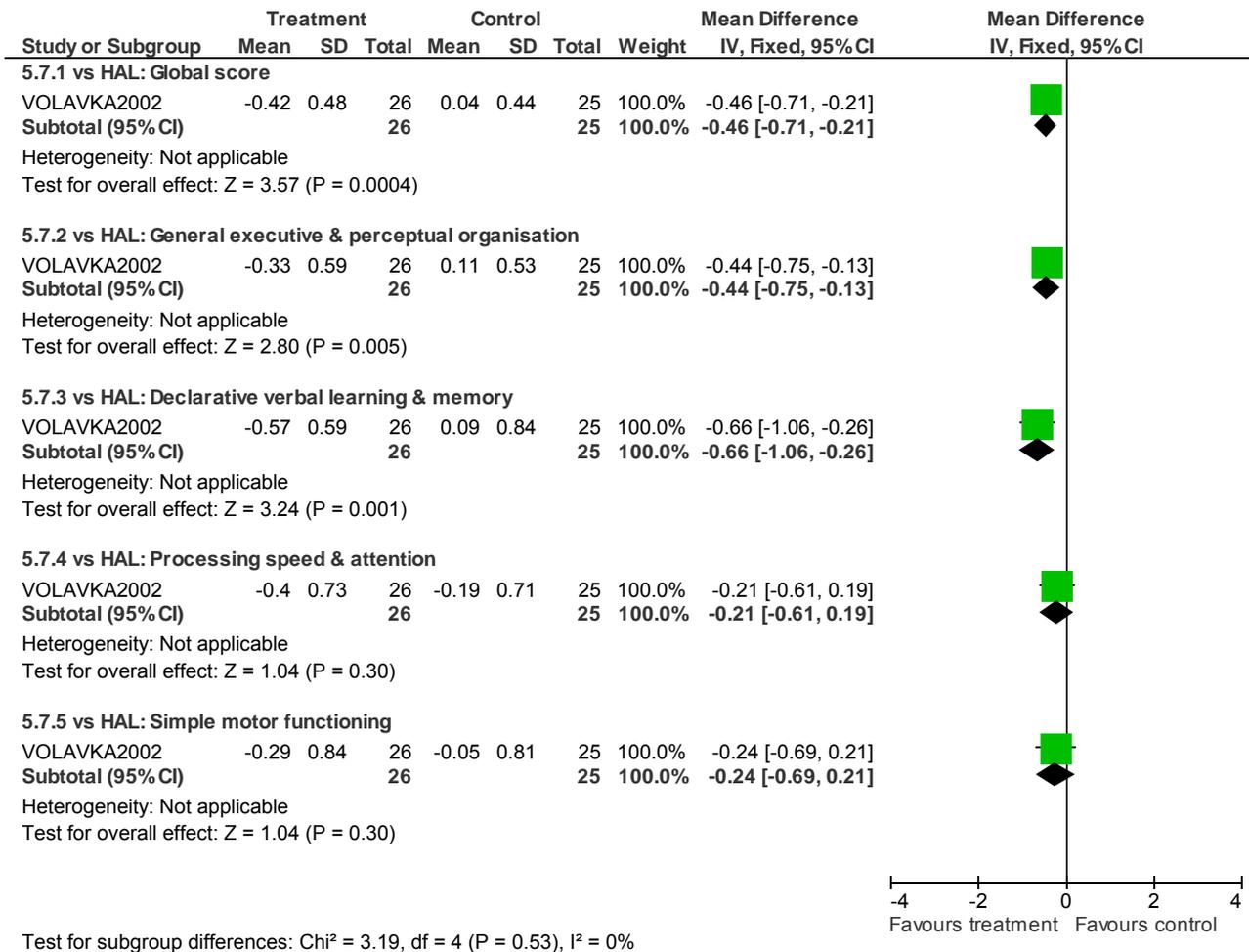
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

5.6 Cognitive functioning: 1. CVLT (short-term)



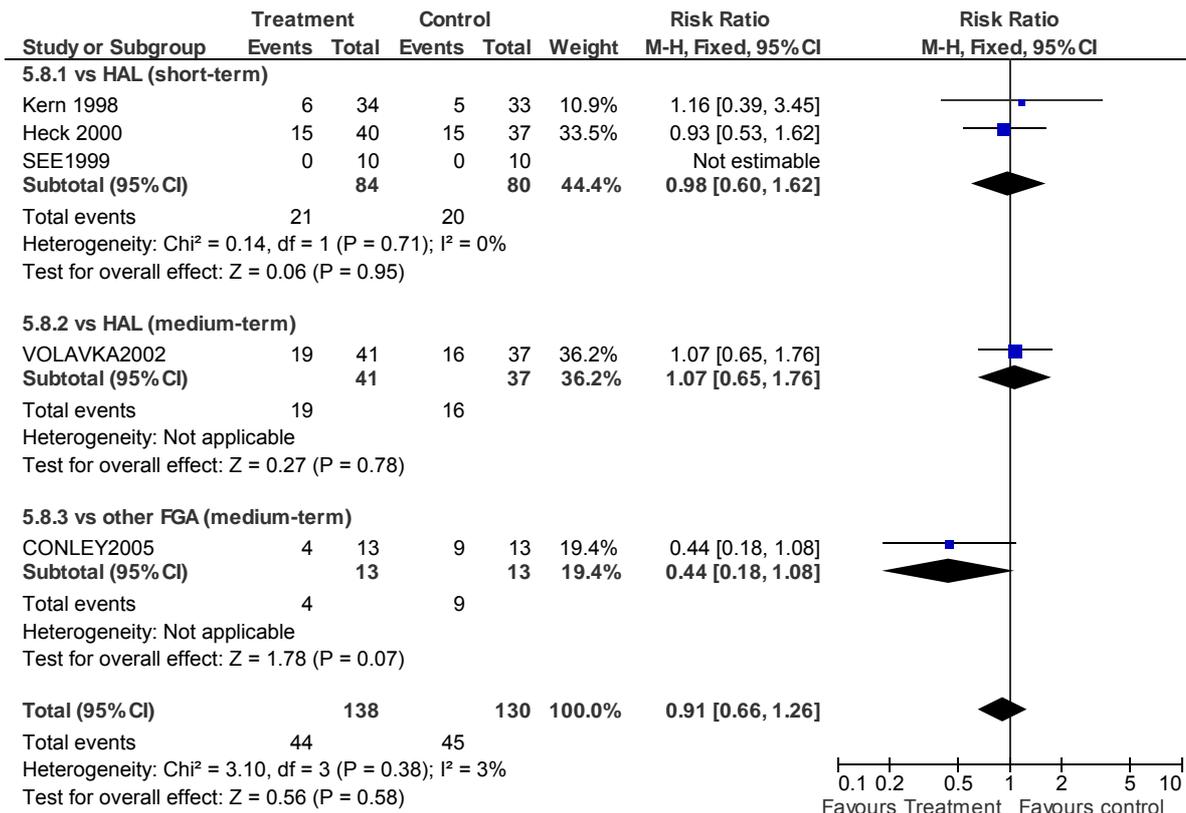
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

5.7 Cognitive functioning: 1. Global & domain scores (Z score change) (medium-term) (sign changed)



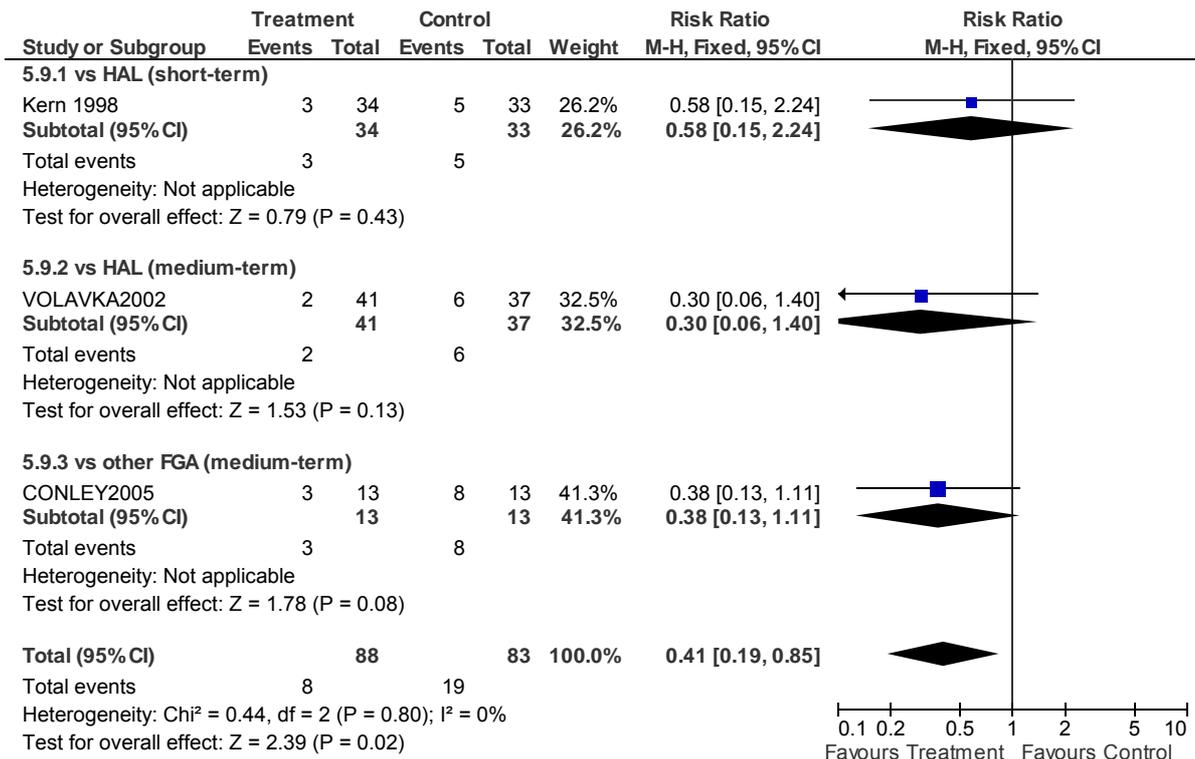
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

5.8 Leaving the study early: 1. Any reason (short-to-medium-term)



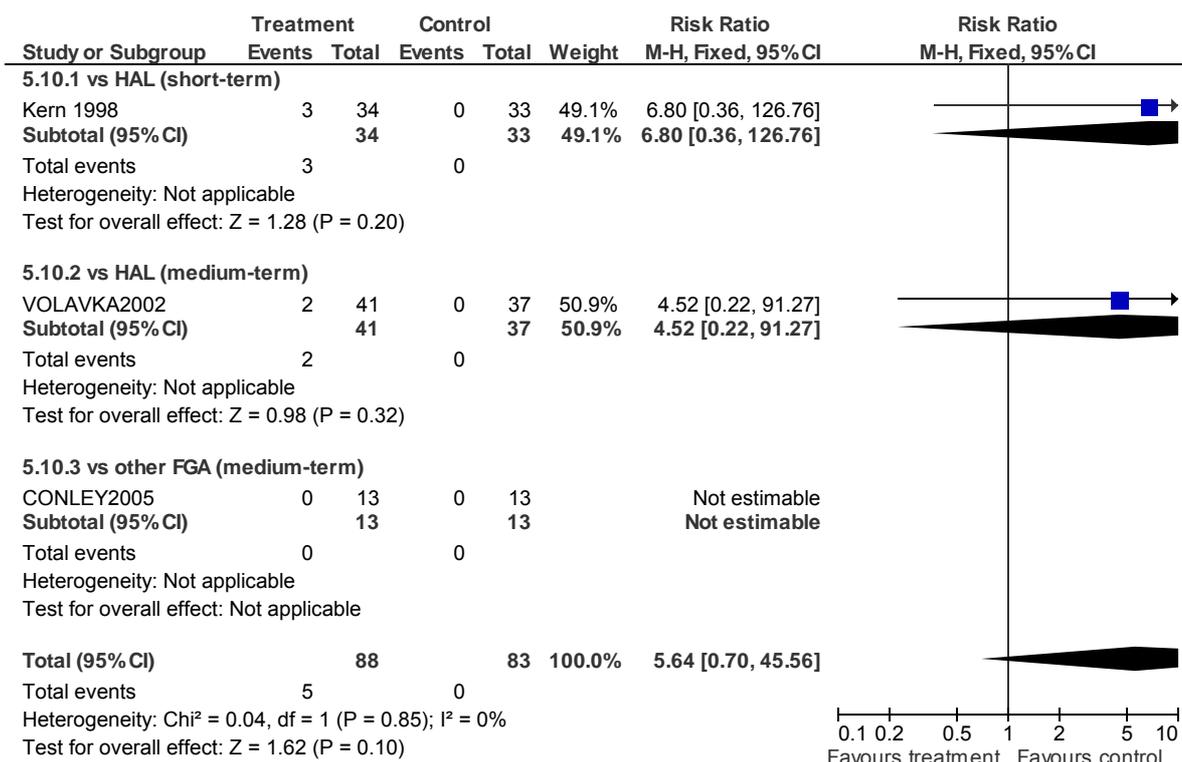
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

5.9 Leaving the study early: 2. Due to lack of efficacy (short-to-medium-term)

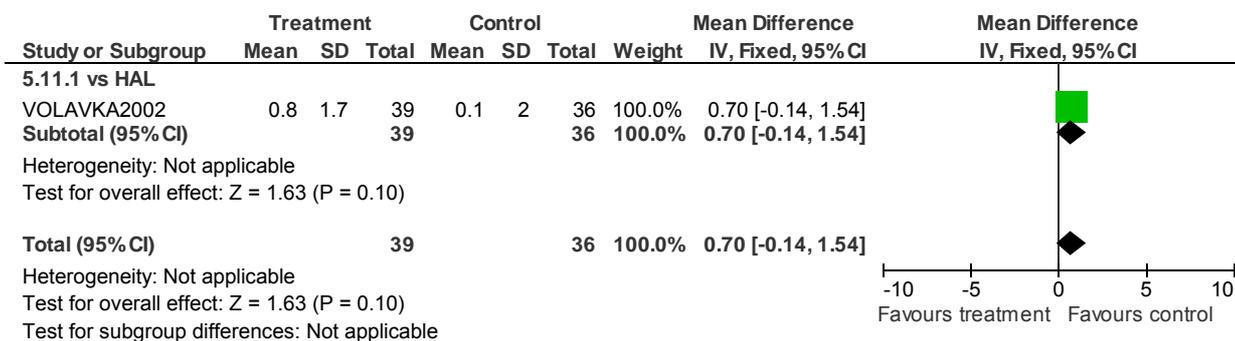


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

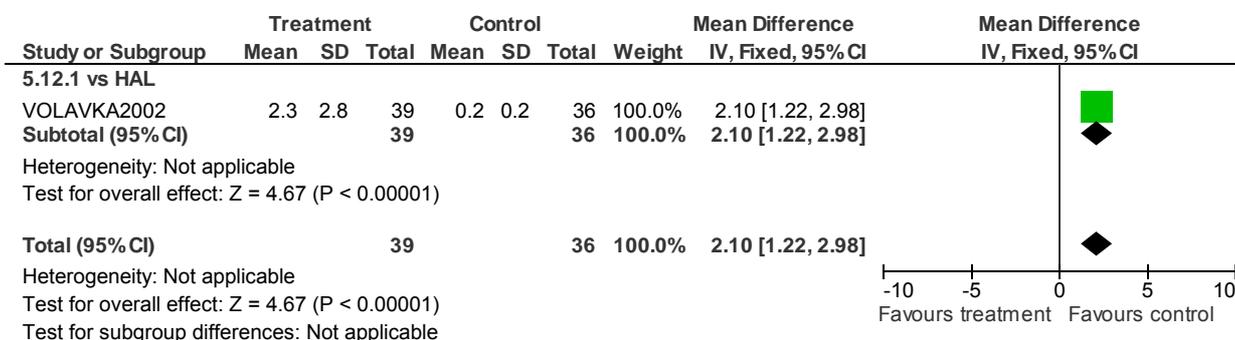
5.10 Leaving the study early: 3: Adverse event (short-to-medium-term)



5.11 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)

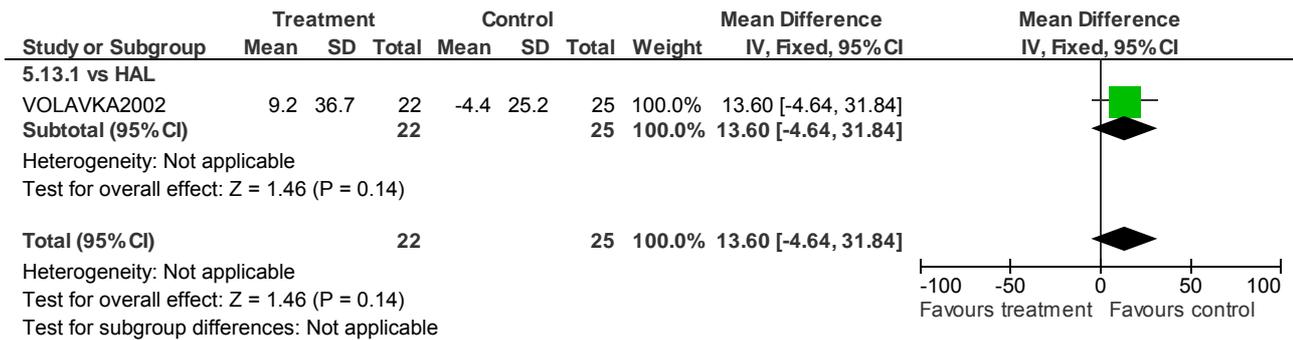


5.12 AE: 1. Metabolic SEs - weight change from baseline (kg) (medium-term)

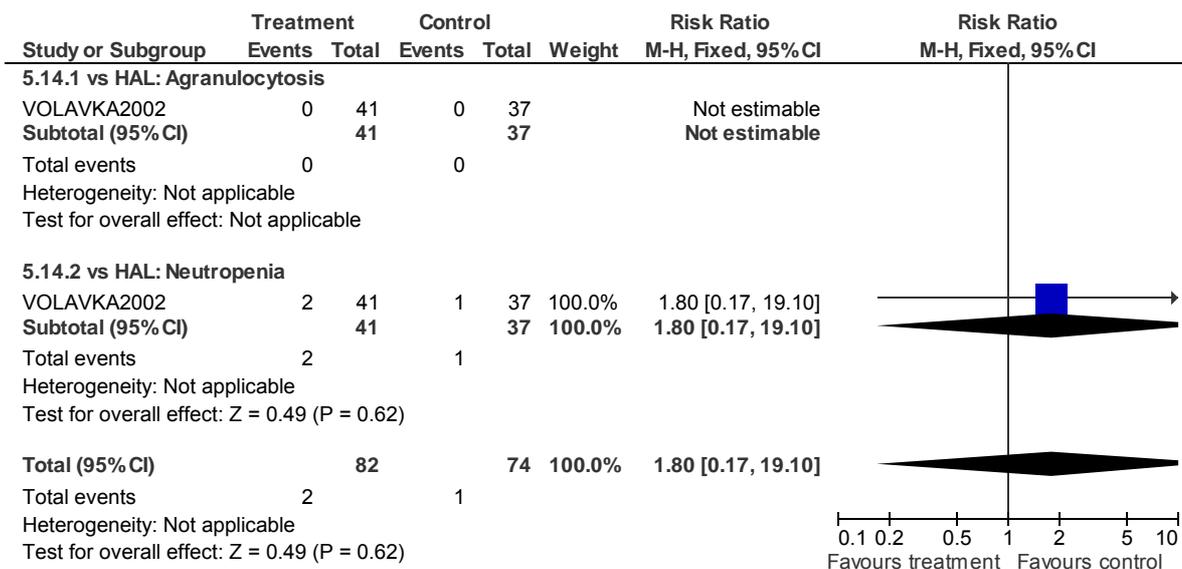


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

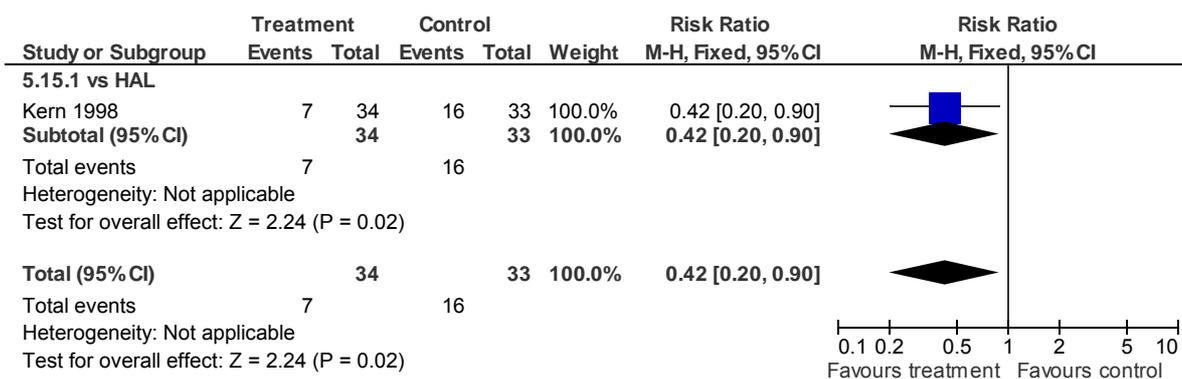
5.13 AE: 1. Metabolic SEs - Cholesterol mg/dL (change from baseline) (medium-term)



5.14 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)

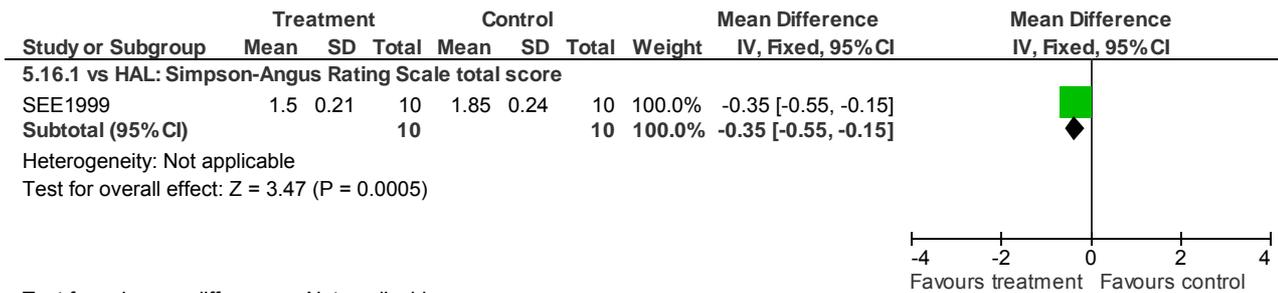


5.15 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

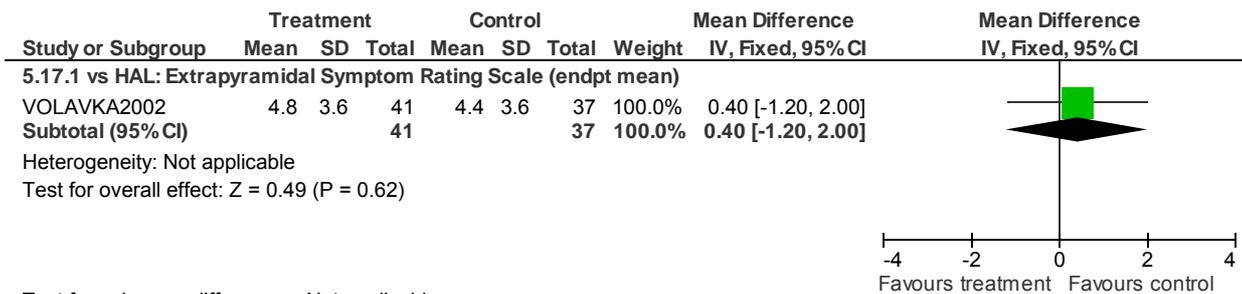


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

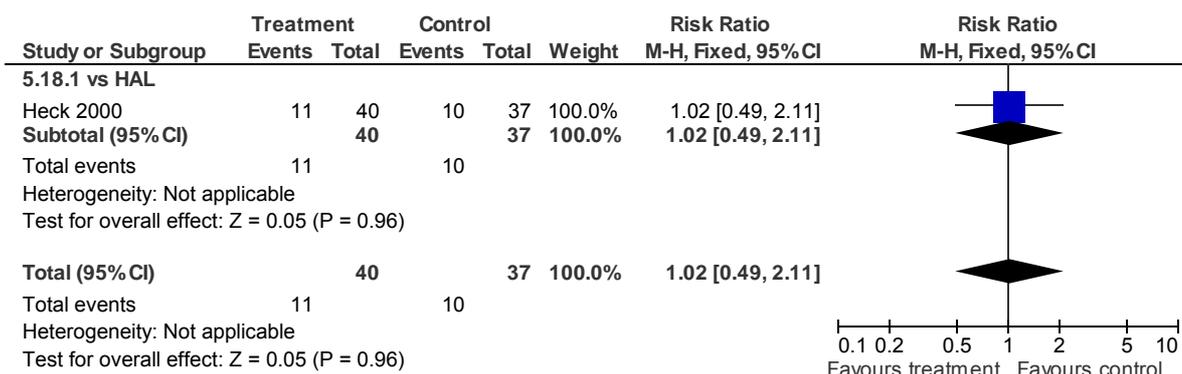
5.16 AE: 2. Neurologic SEs - Any rating scale (treatment-emergent) (short-term)



5.17 AE: 2. Neurologic SEs - Any rating scale (treatment-emergent) (medium-term)

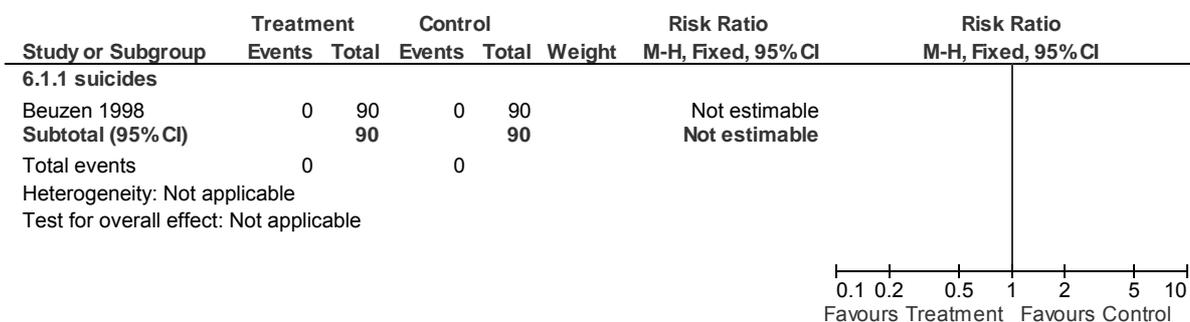


5.18 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



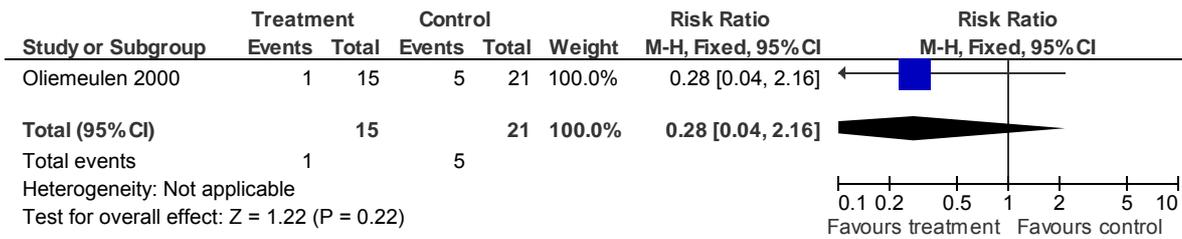
6 Clozapine vs. Olanzapine (in people whose illness has not responded adequately to treatment)

6.1 Mortality (medium-term)

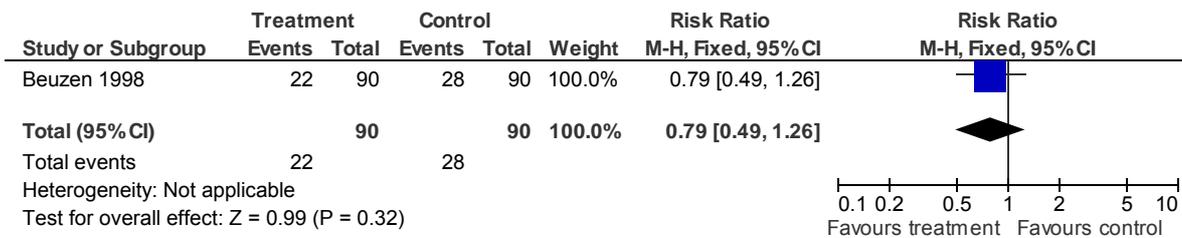


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

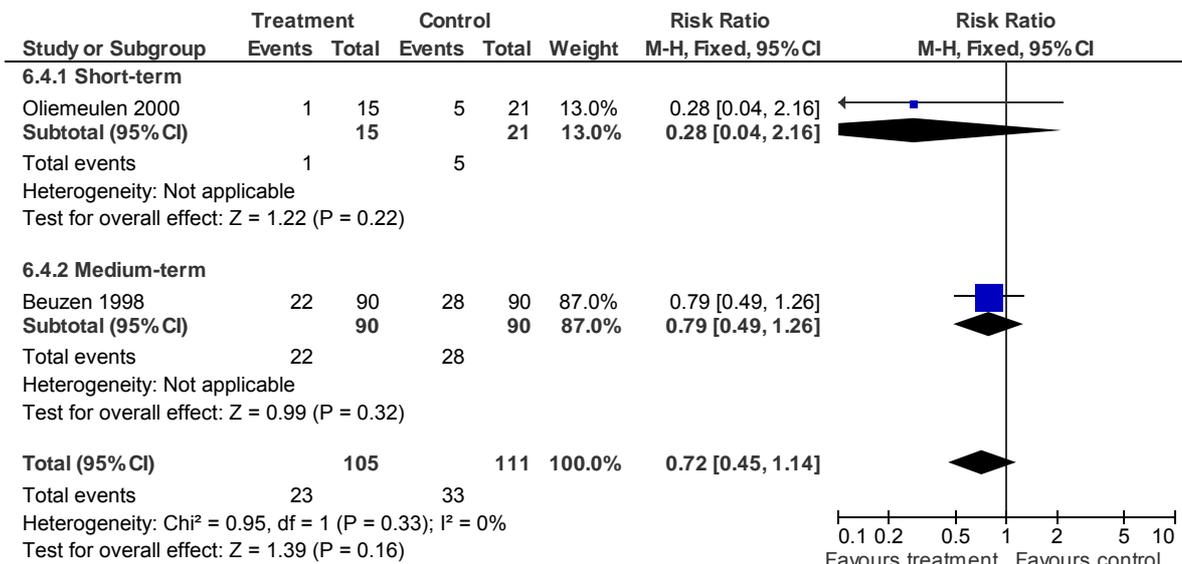
6.2 Global state: 1. Relapse (short-term)



6.3 Global state: 1. Relapse (medium-term)

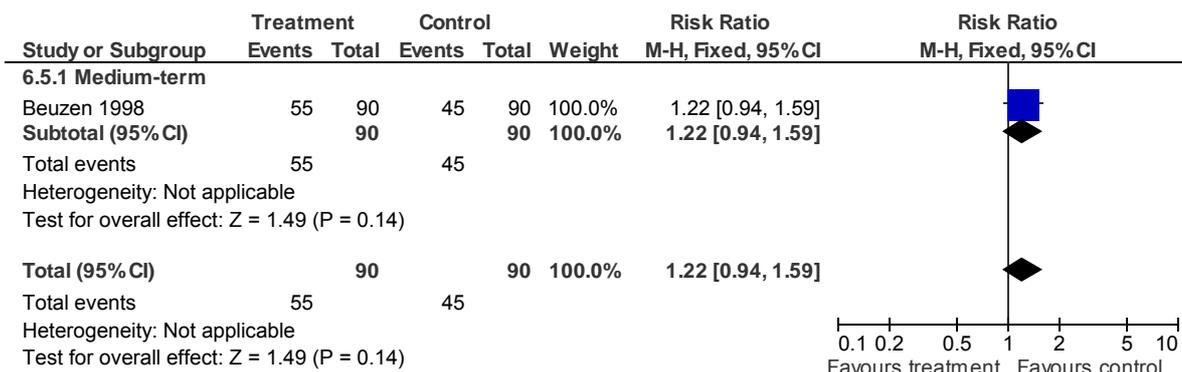


6.4 Global state: 1. Relapse (short-to-medium-term)

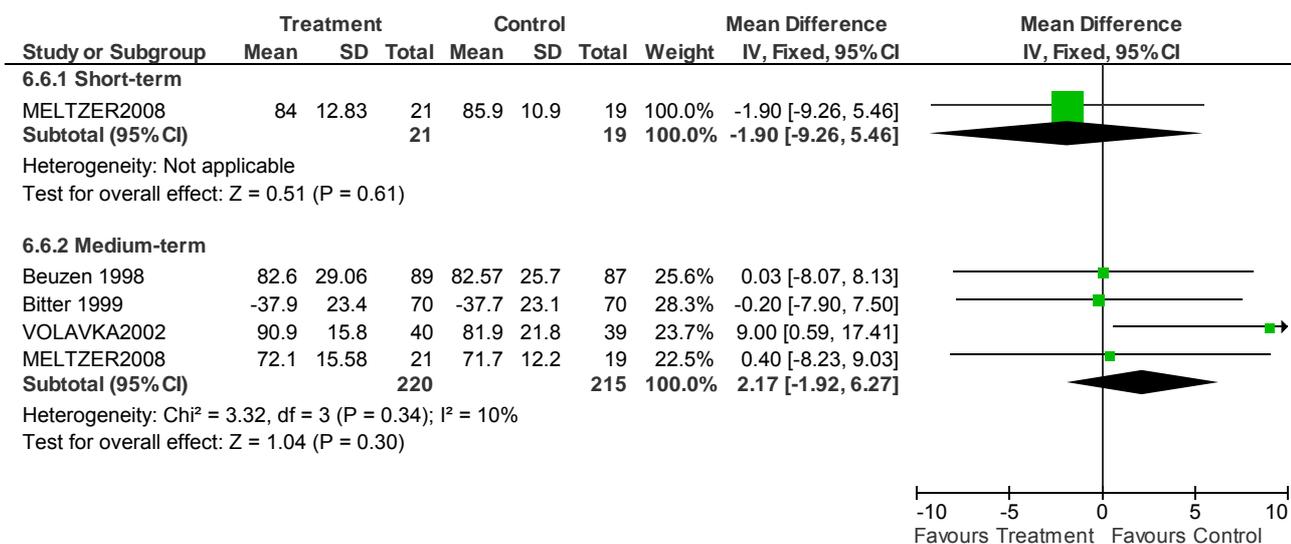


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.5 Global state: 2. Non-response (CGI) (medium-term)



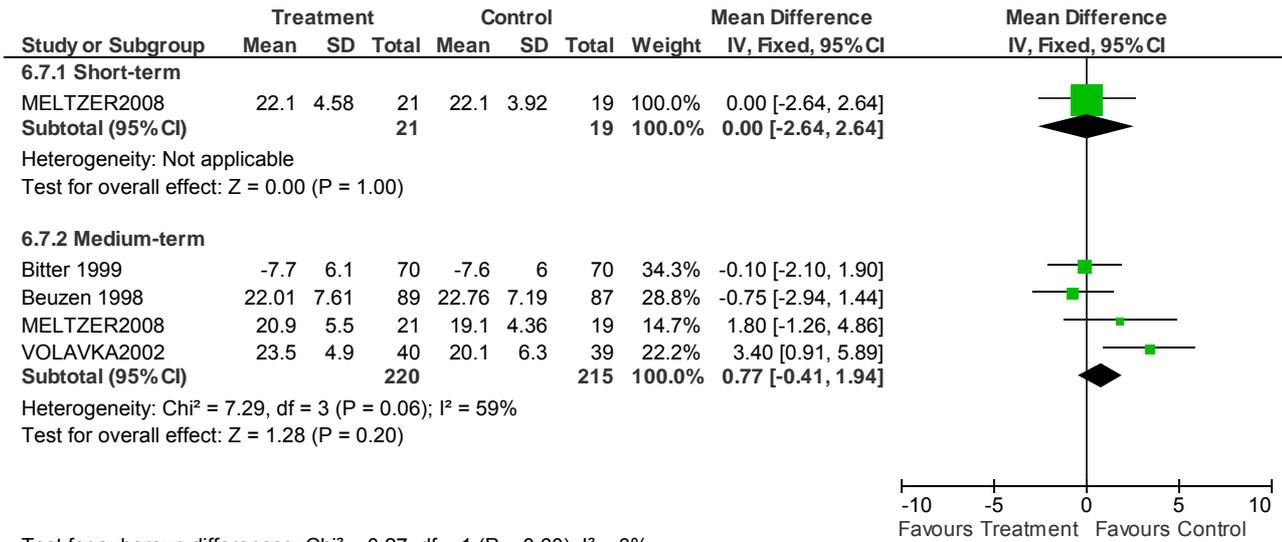
6.6 Mental state: 1. PANSS total (endpoint/change) (short-to-medium-term)



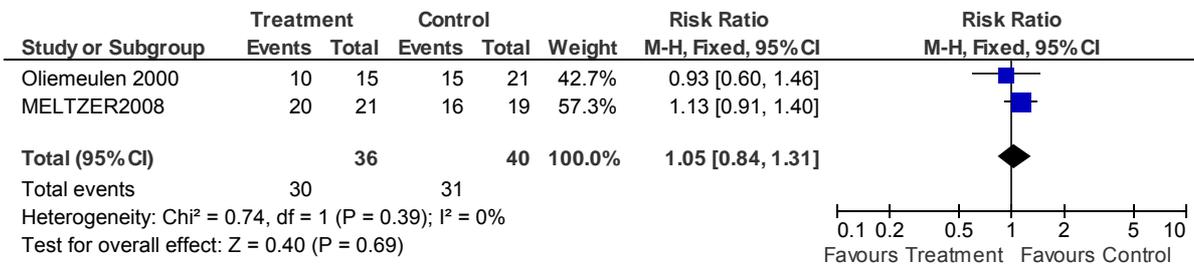
Test for subgroup differences: Chi² = 0.90, df = 1 (P = 0.34), I² = 0%

Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

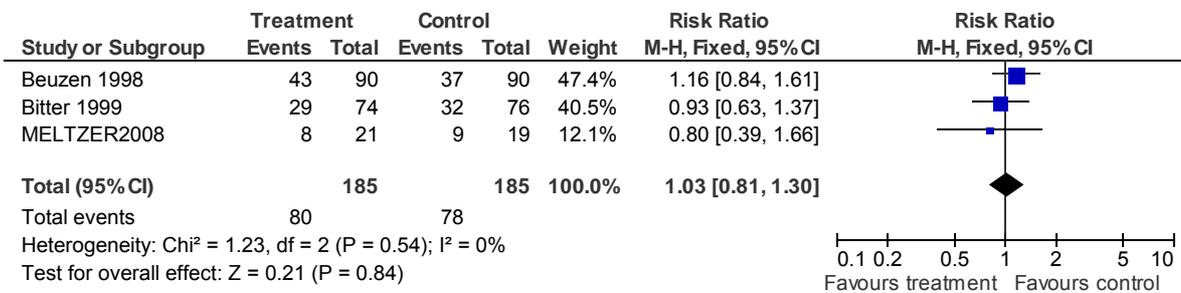
6.7 Mental state: 2. PANSS negative score (endpoint/change) (short-to-medium-term)



6.8 Mental state: 3. Non-response (< 20% change on BPRS/PANSS) (short-term)

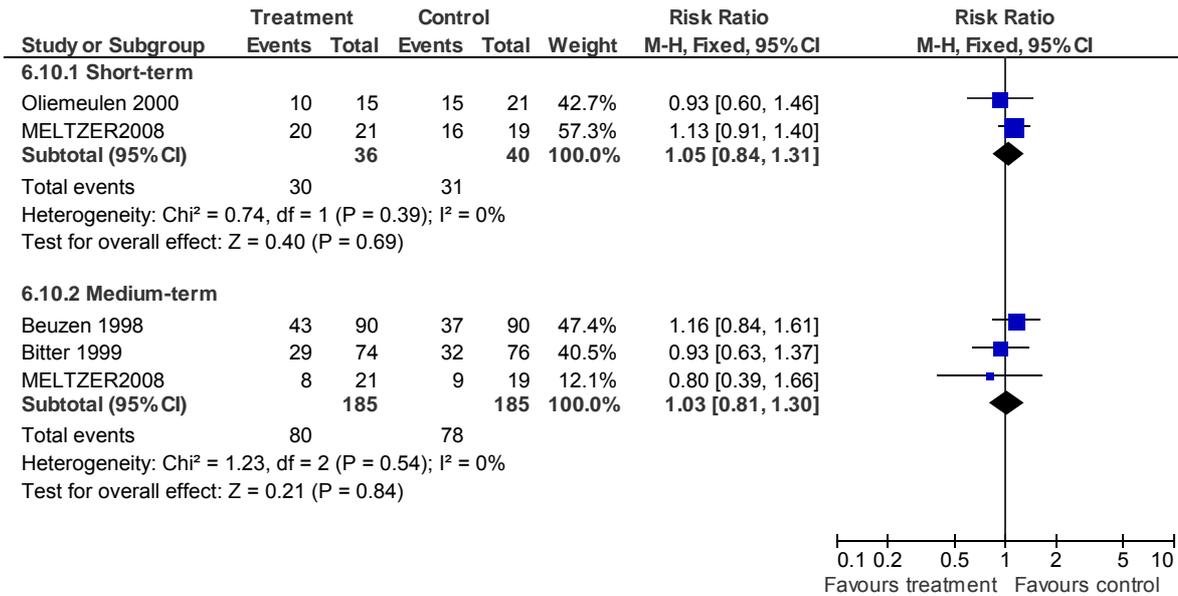


6.9 Mental state: 3. Non-response (<20-30% improvement in PANSS) (medium-term)

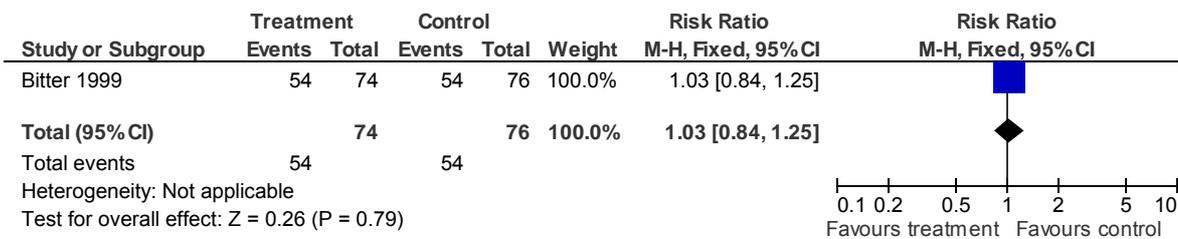


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.10 Mental state: 3. Non-response (<20-30% improvement in PANSS) (short-to-medium-term)

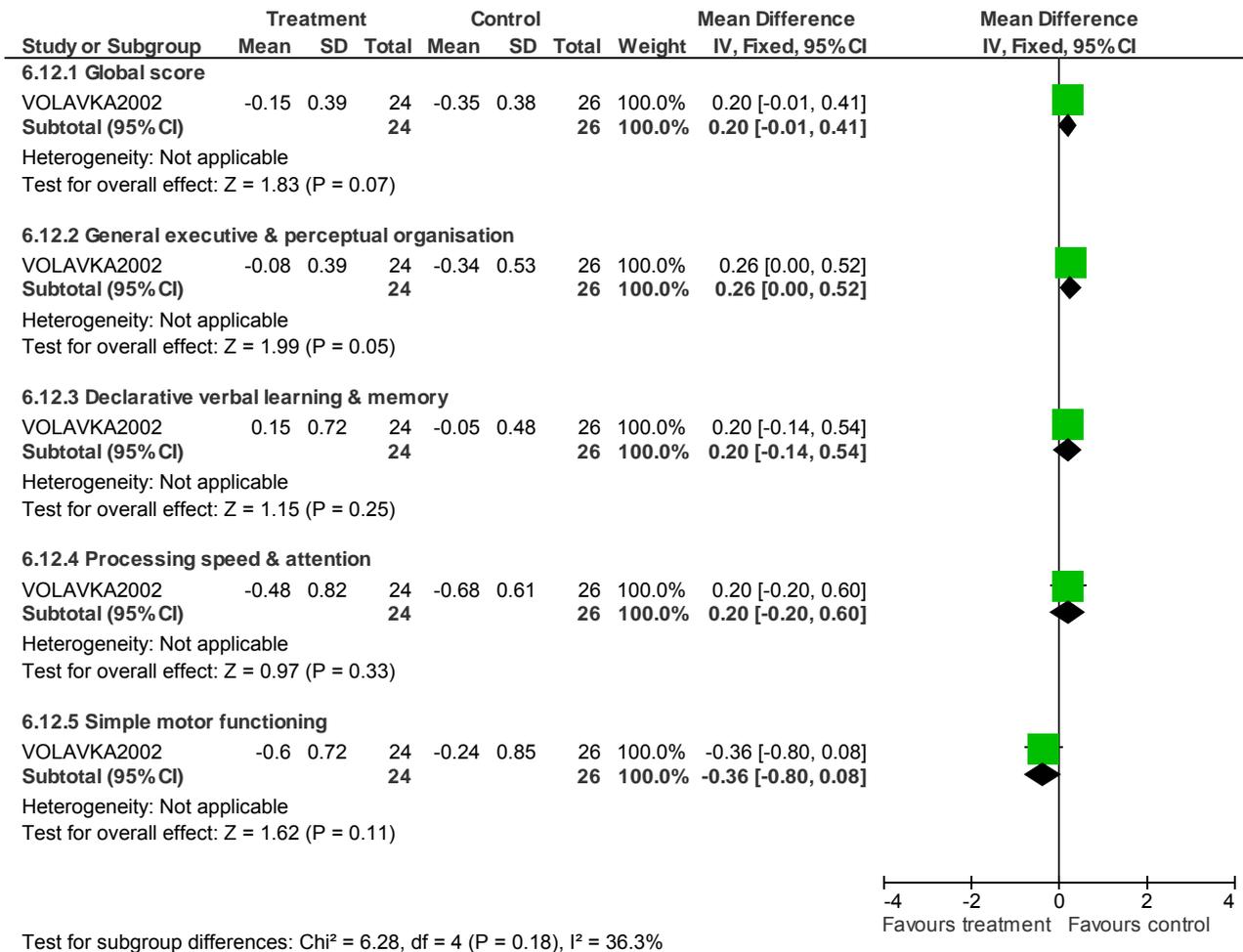


6.11 Mental state: 3. Non-response (<50% improvement in PANSS) (medium-term)

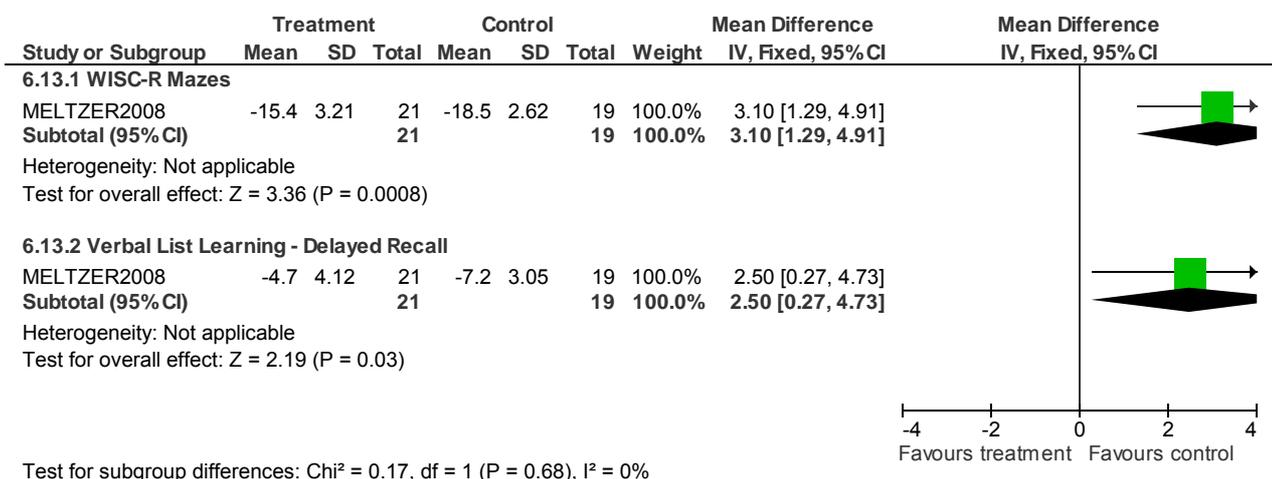


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.12 Cognitive functioning: 1. Global & domain scores (Z score change) (medium-term) (sign changed)

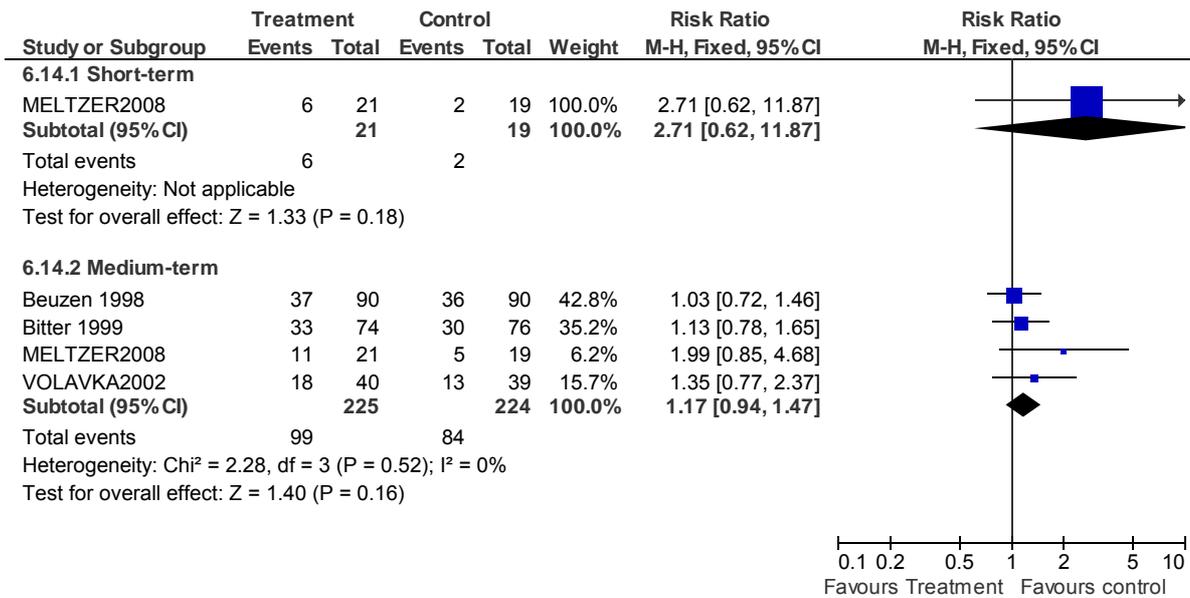


6.13 Cognitive functioning: 1. Cognitive measures with sig. differences (endpoint; signs converted) (medium-term)

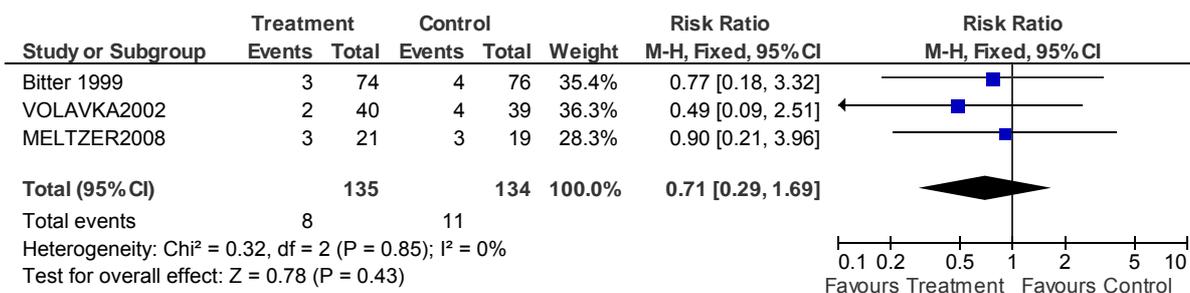


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

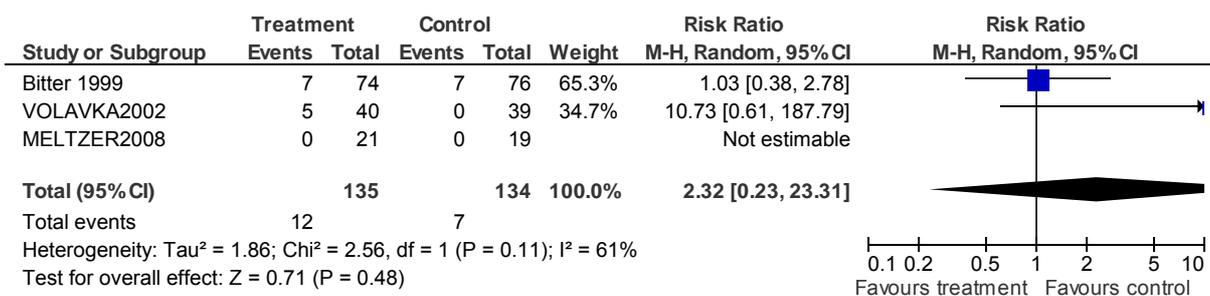
6.14 Leaving the study early: 1. Any reason (short-to-medium-term)



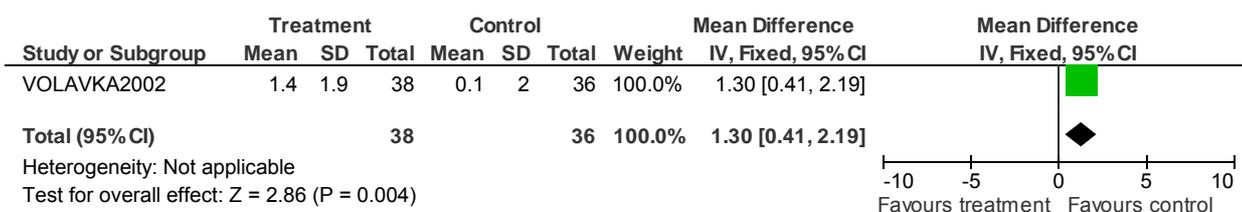
6.15 Leaving the study early: 2. Due to lack of efficacy (medium-term)



6.16 Leaving the study early: 3: Adverse event (medium-term)

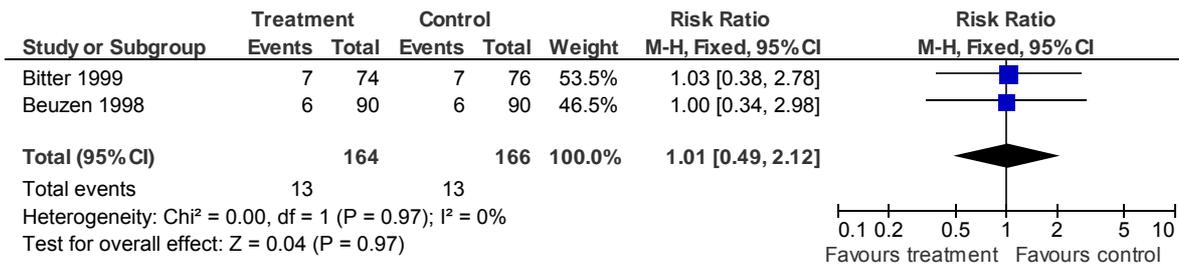


6.17 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)

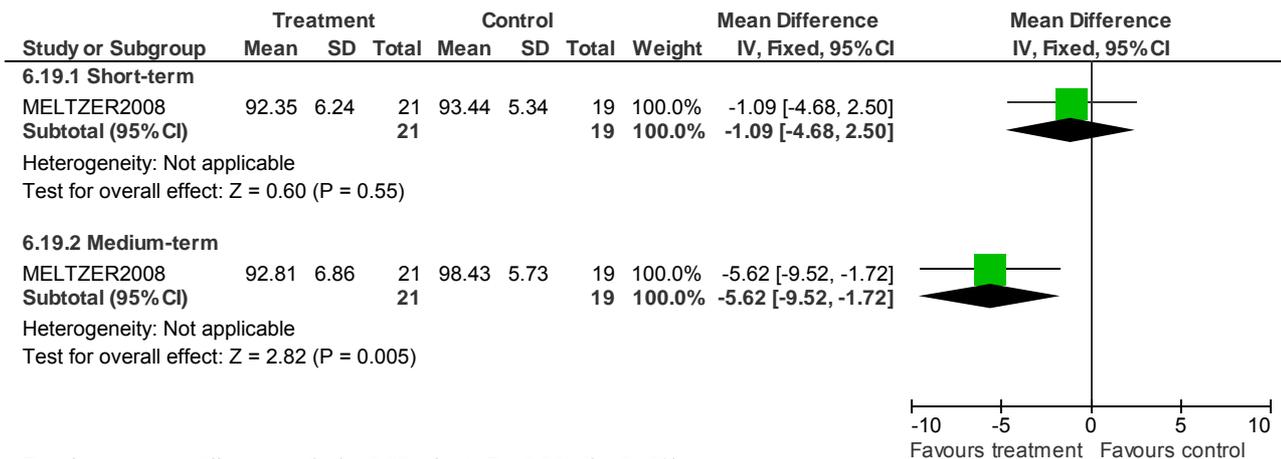


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.18 AE: 1. Metabolic SEs - No. with weight gain (medium-term)

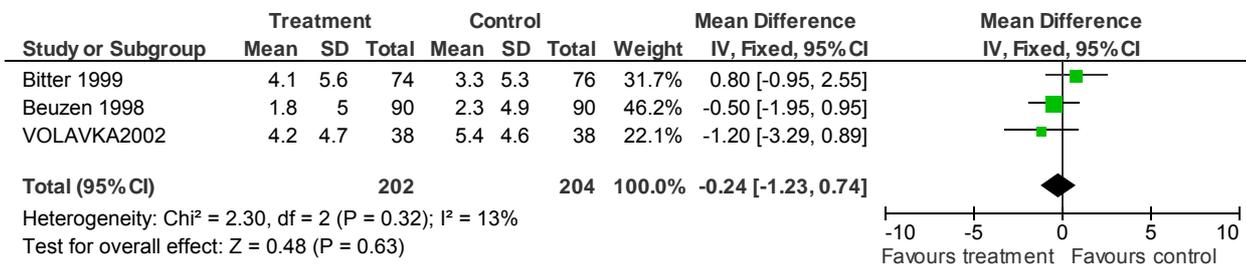


6.19 AE: 1. Metabolic SEs - Weight at endpoint (kg) (medium-term)

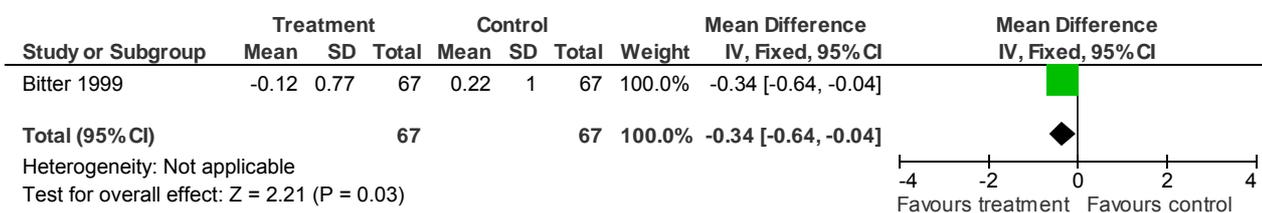


Test for subgroup differences: Chi² = 2.80, df = 1 (P = 0.09), I² = 64.3%

6.20 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

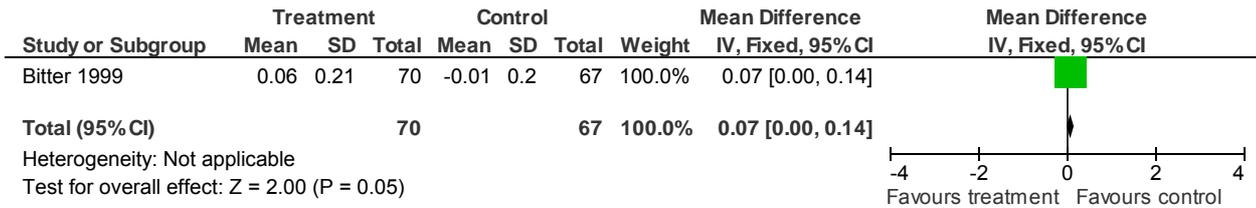


6.21 AE: 1. Metabolic SEs - Urinary pH (change from baseline) (medium-term)

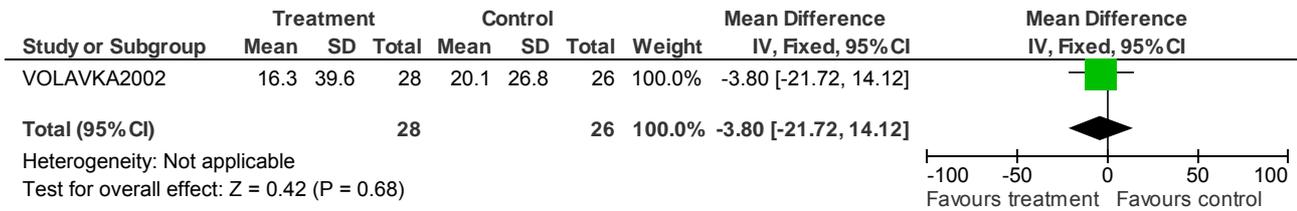


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.22 AE: 1. Metabolic SEs - Phosphate (change from baseline) (medium-term)

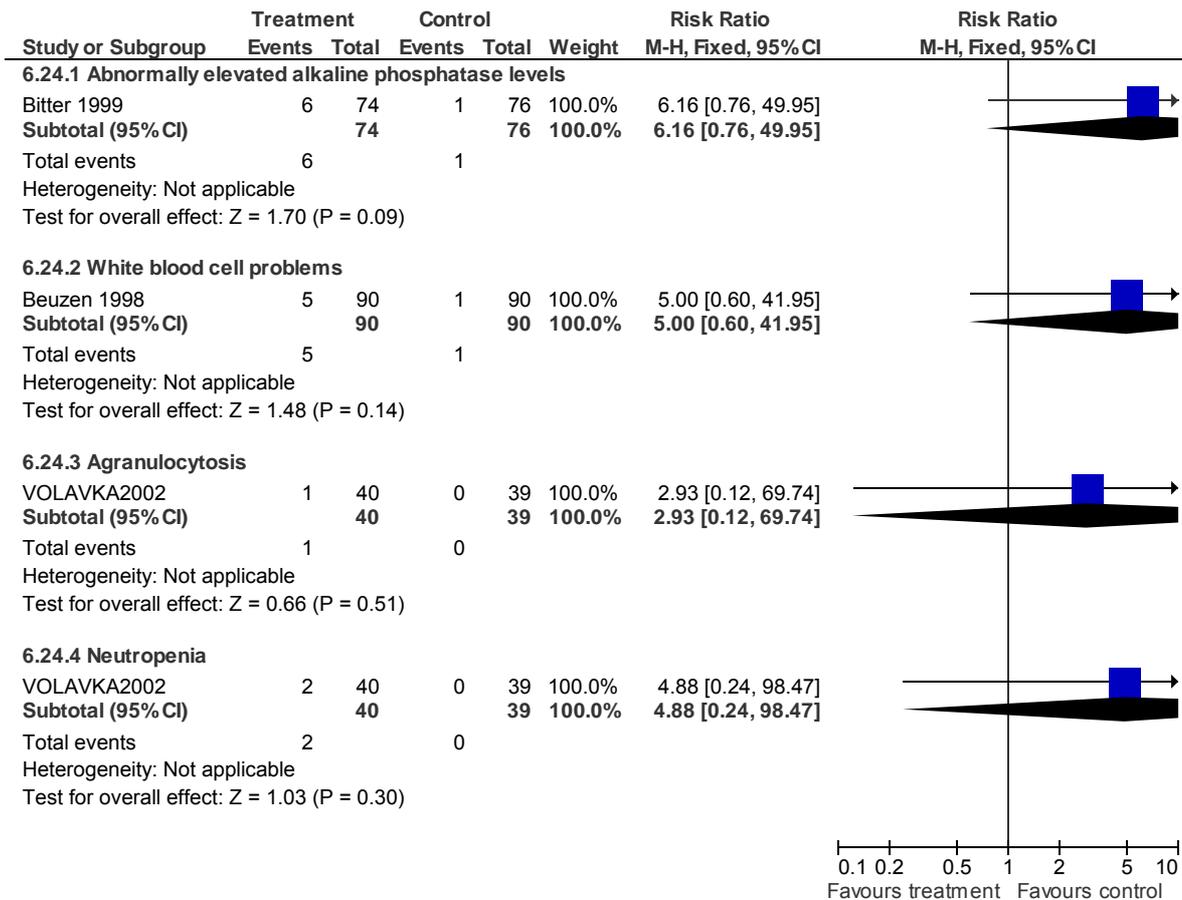


6.23 AE: 1. Metabolic SEs - Cholesterol mg/dL (change from baseline) (medium-term)

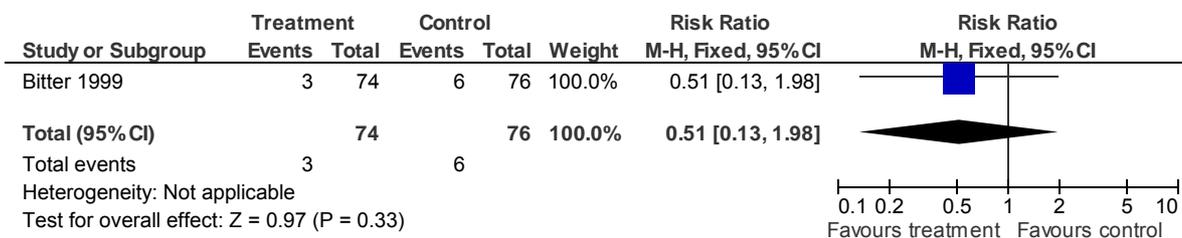


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.24 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)

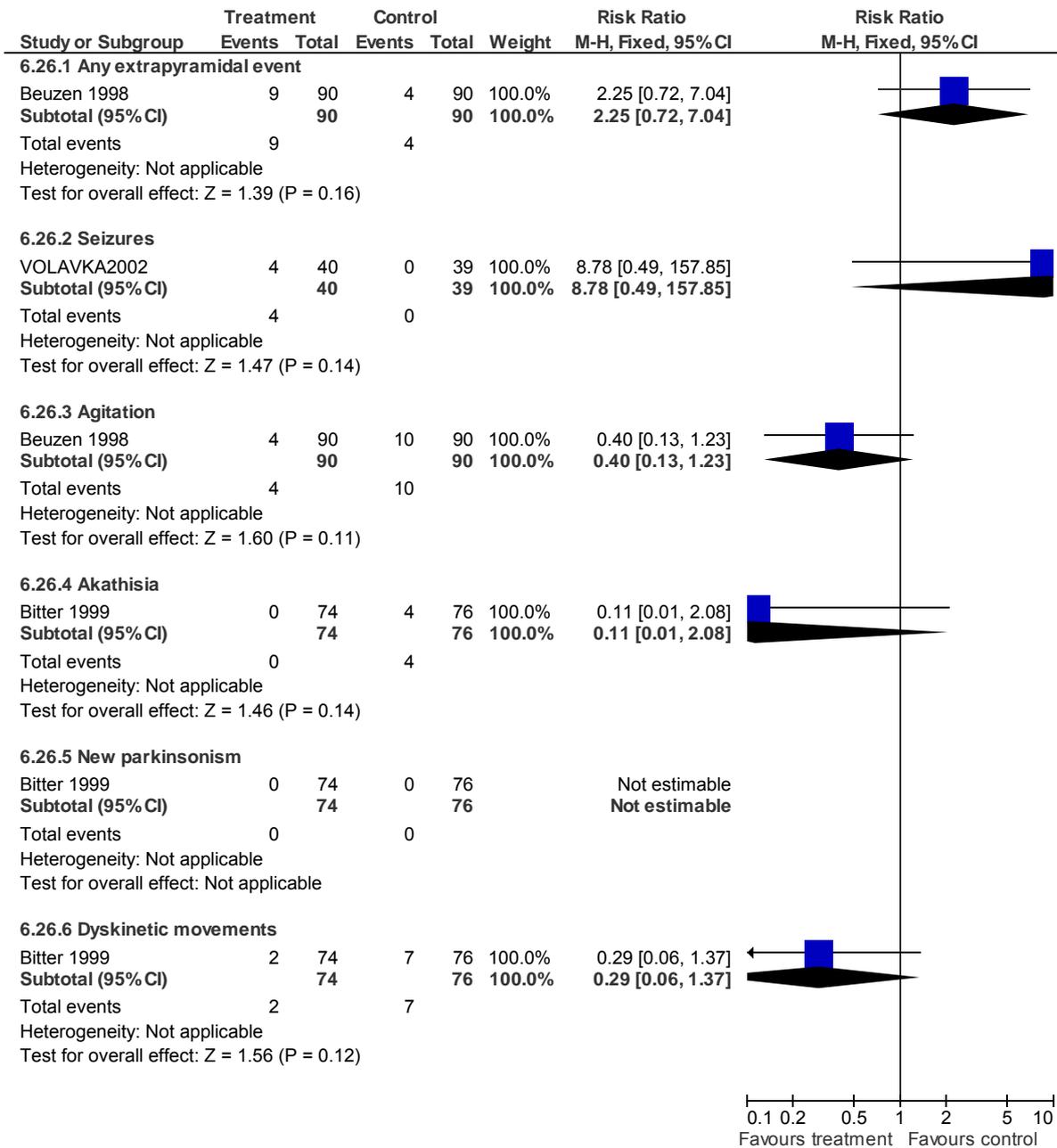


6.25 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)

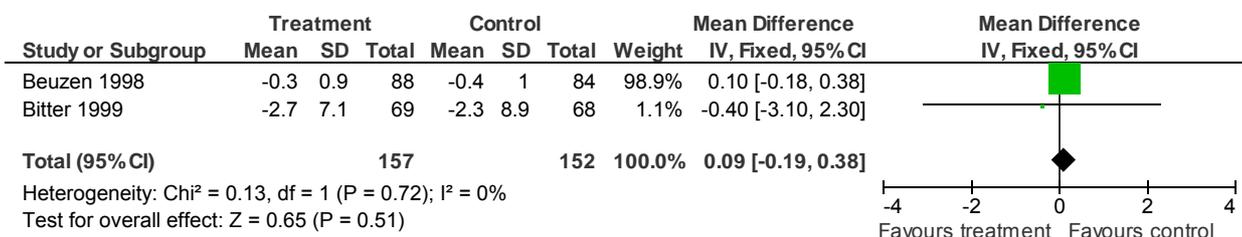


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.26 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

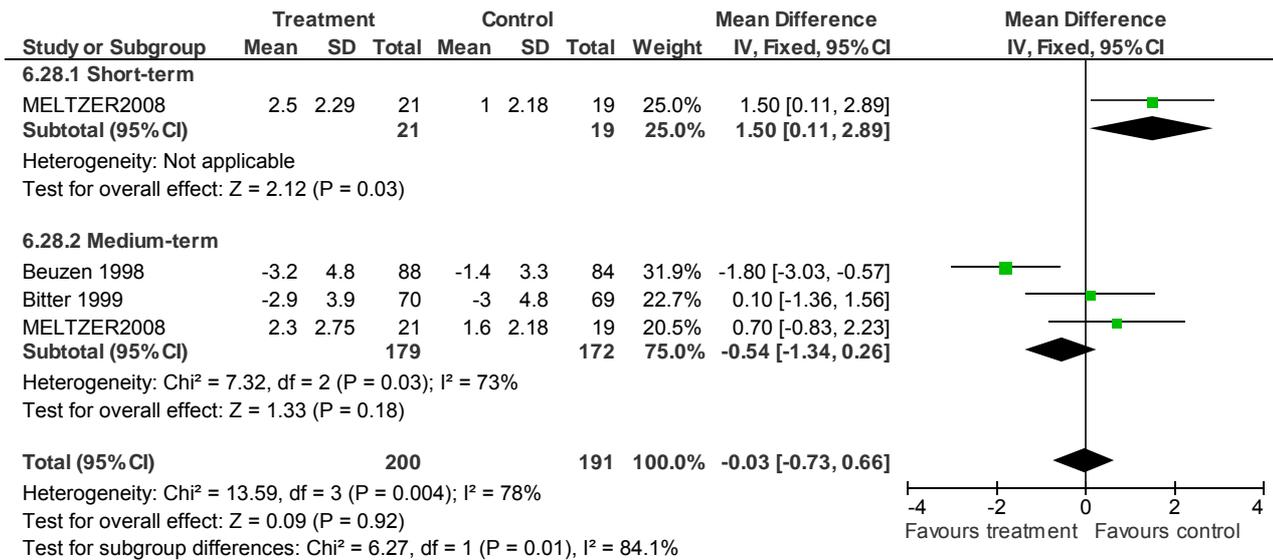


6.27 AE: 2. Neurologic SEs - Hillside or Barnes Akathisia Scale (change) (medium-term)

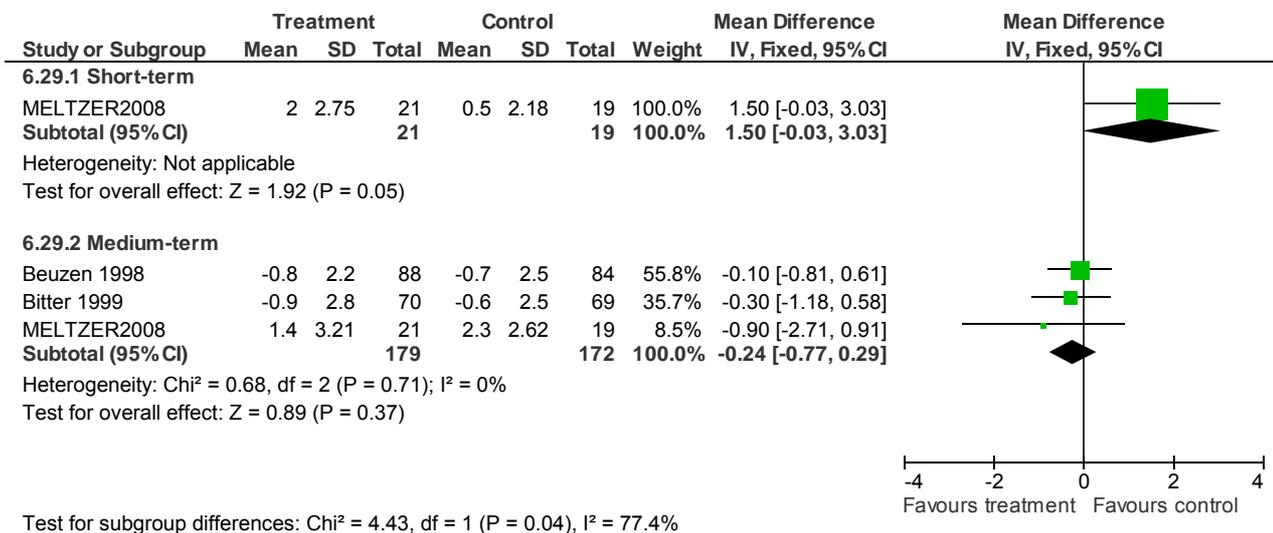


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

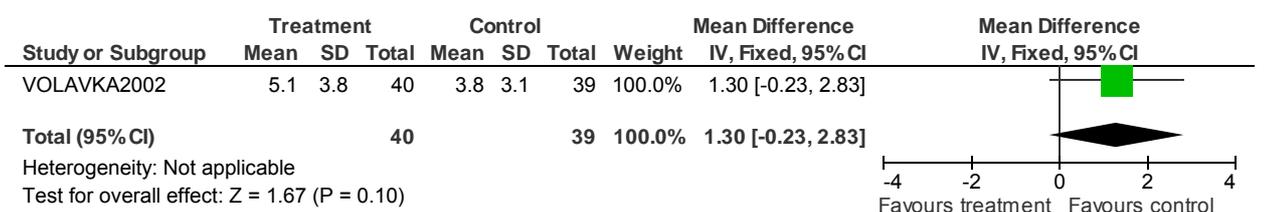
6.28 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; change/endpoint) (medium-term)



6.29 AE: 2. Neurologic SEs - Abnormal Involuntary Movement Scale (AIMS; change/endpoint) (medium-term)

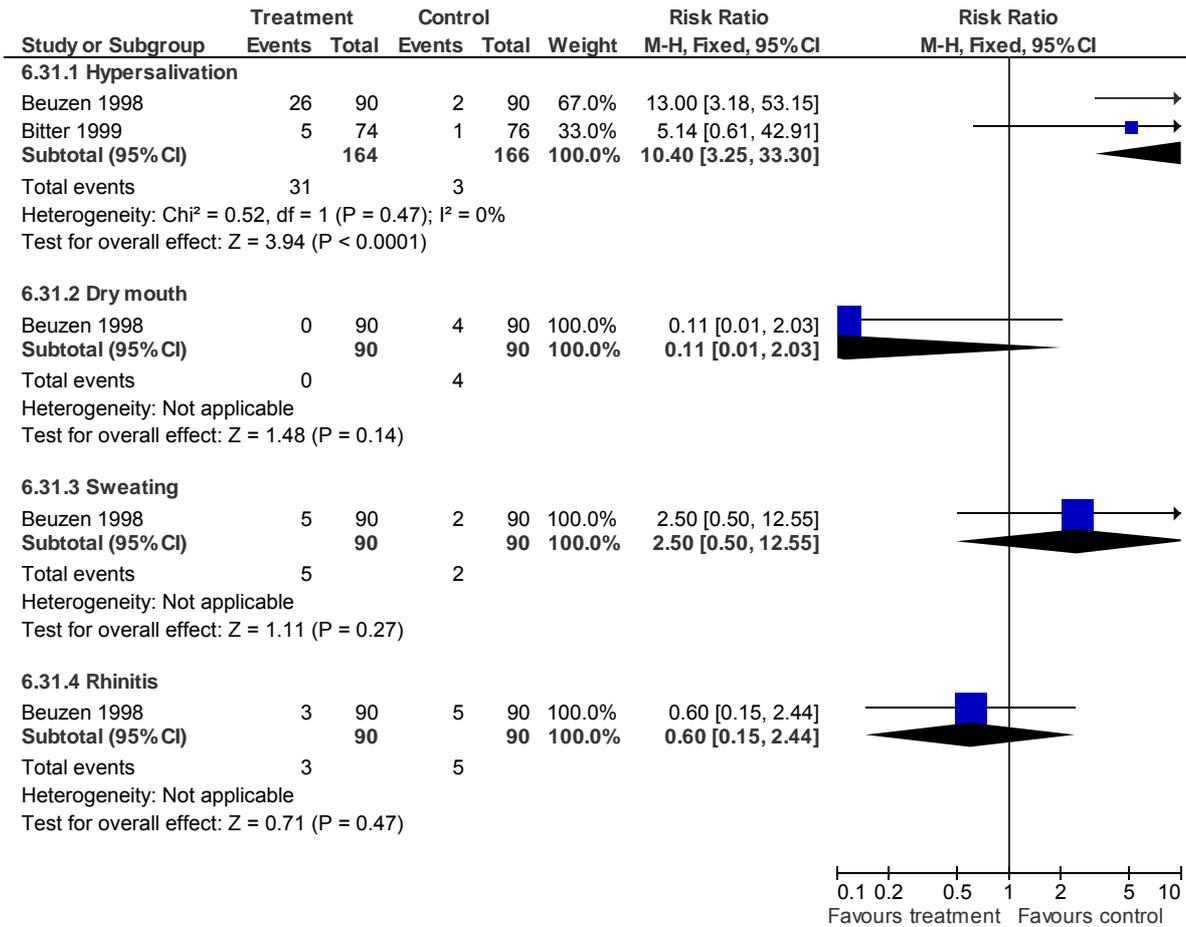


6.30 AE: 2. Neurologic SEs - Extrapyramidal Symptom Rating Scale (endpt mean) (medium-term)



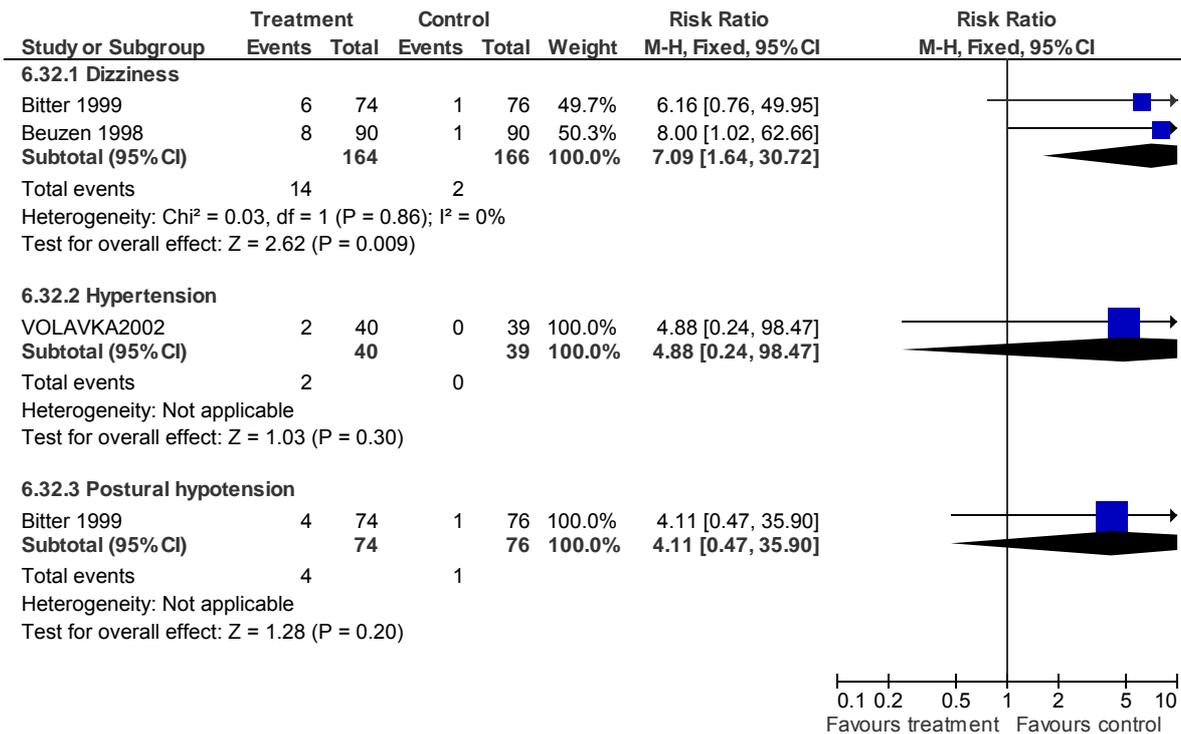
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.31 AE: 3. Autonomic SEs (medium-term)

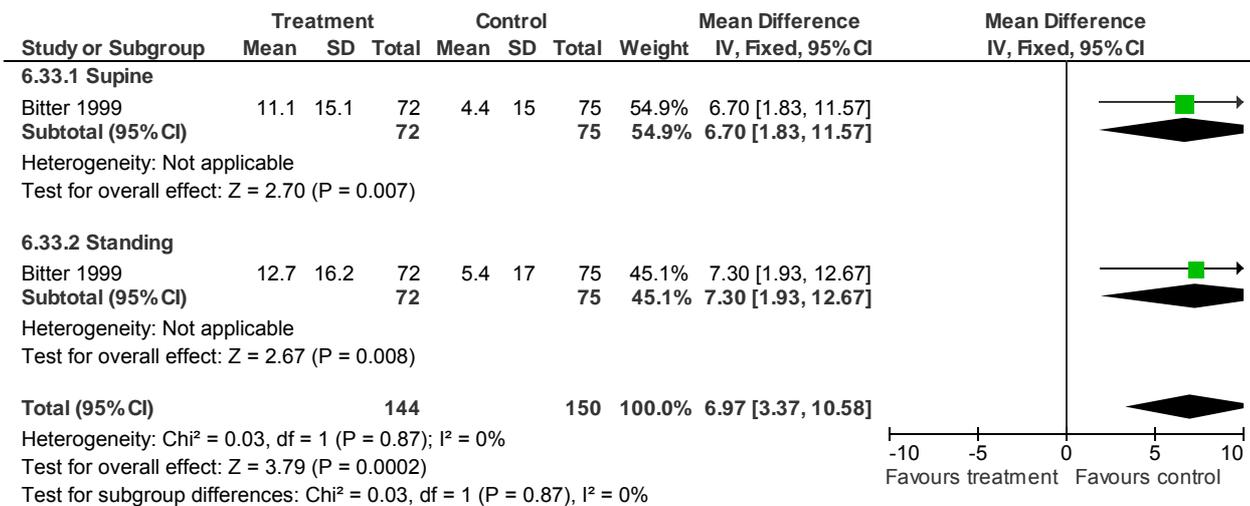


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.32 AE: 4. Cardiovascular SEs (medium-term)

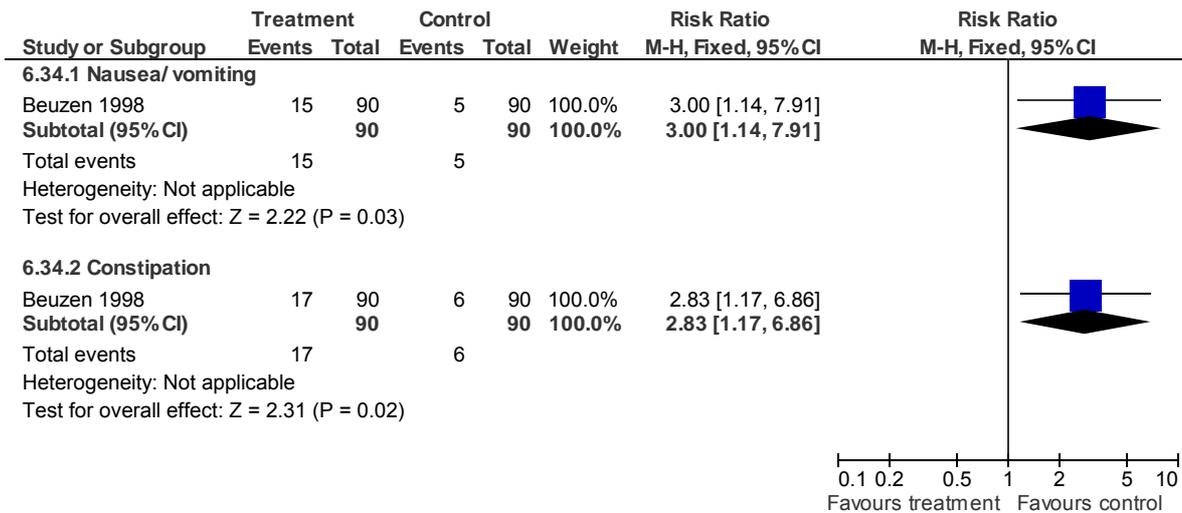


6.33 AE: 4. Cardiovascular SEs - heart rate (change from baseline) (medium-term)

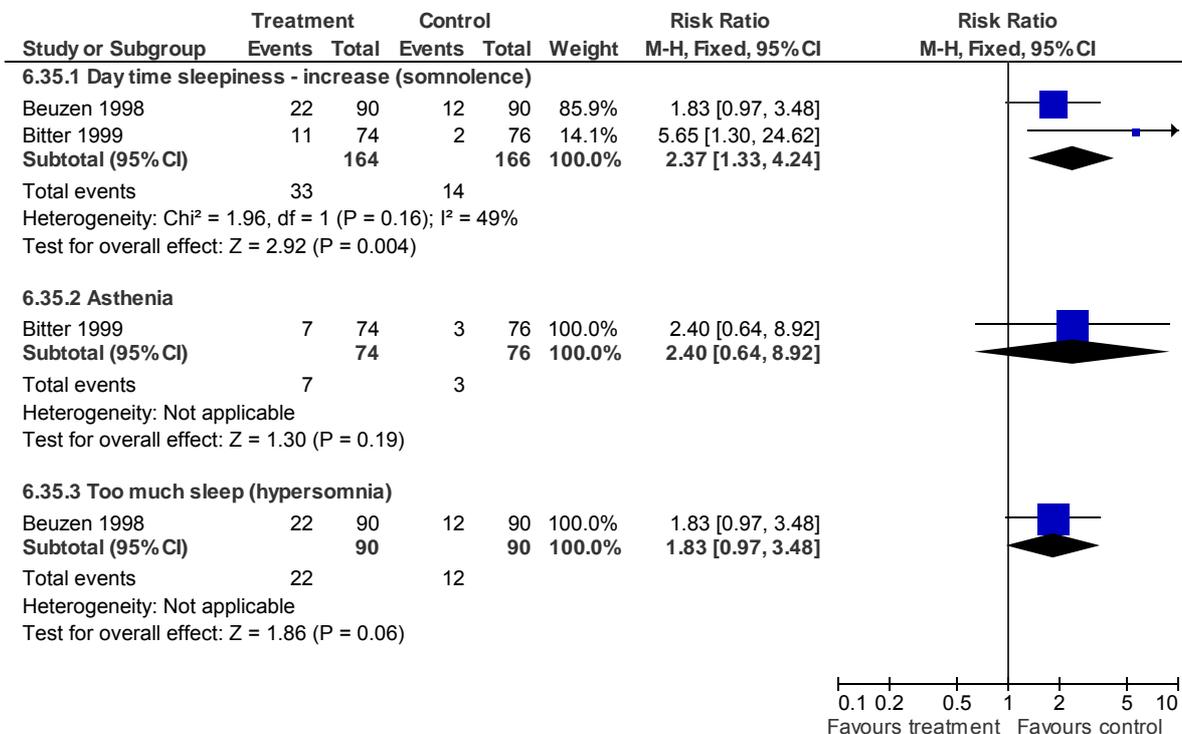


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.34 AE: 5. Gastrointestinal SEs (medium-term)

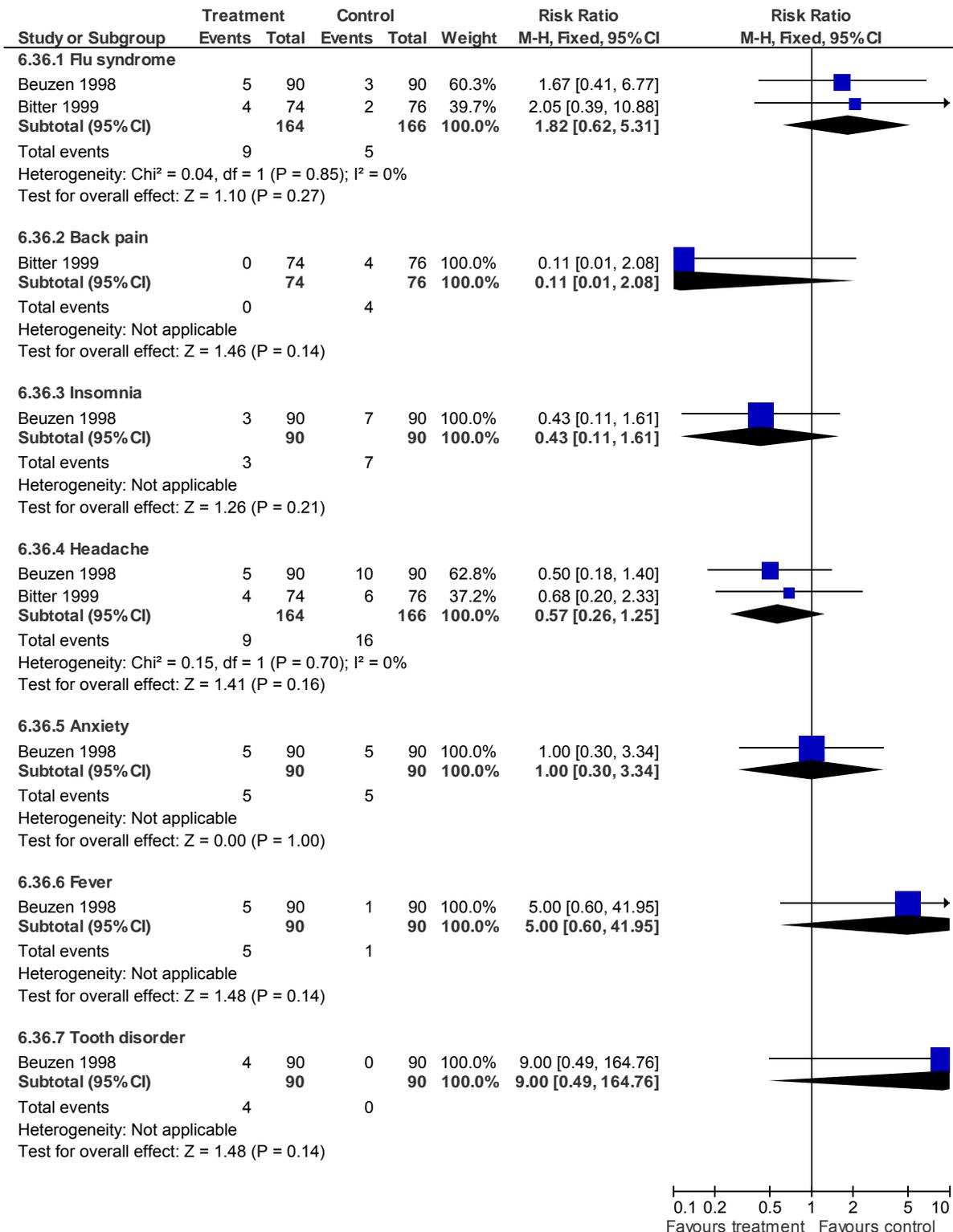


6.35 AE: 6. Sedation (medium-term)



Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

6.36 AE: 10. Other SEs (medium-term)



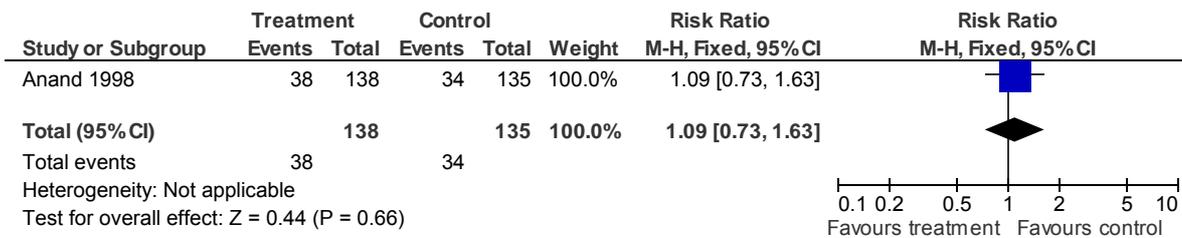
7 Clozapine vs. Risperidone (in people whose illness has not responded adequately to treatment)

Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

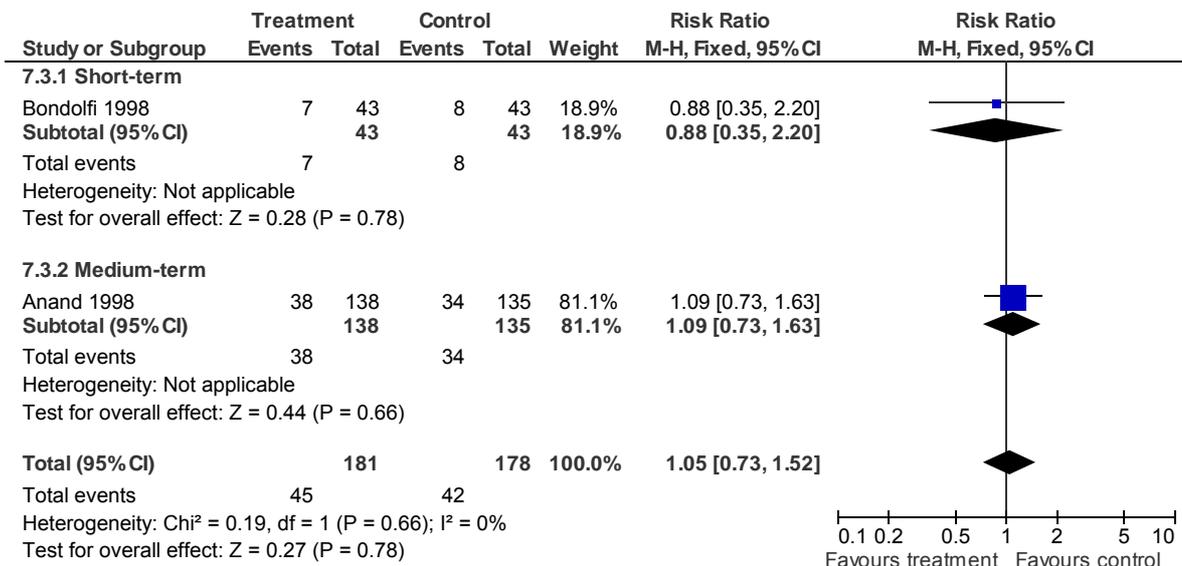
7.1 Global state: 1. Relapse (or deterioration in mental state) (short-term)



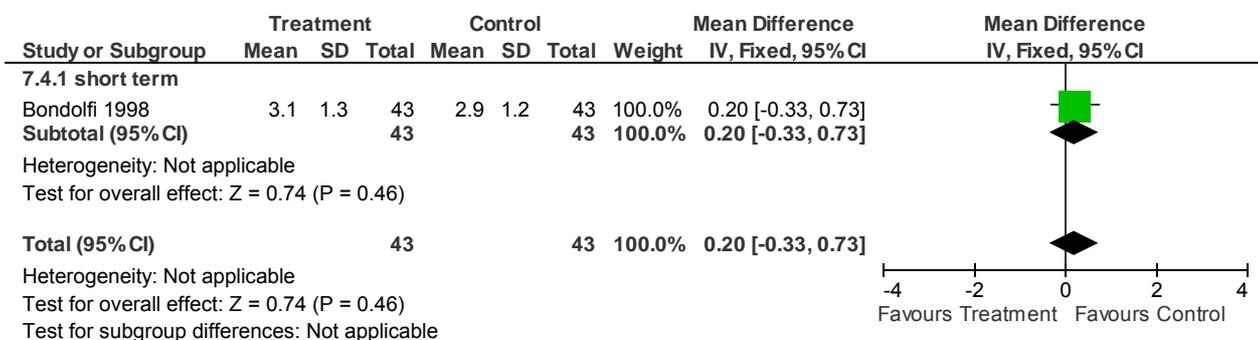
7.2 Global state: 1. Relapse (or deterioration in mental state) (medium-term)



7.3 Global state: 1. Relapse (or deterioration in mental state) (short-to-medium-term)

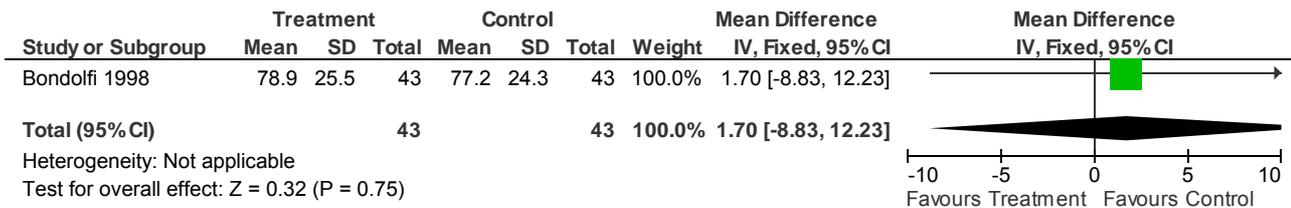


7.4 Global state: 2. CGI (endpoint; high = poor) (short-term)

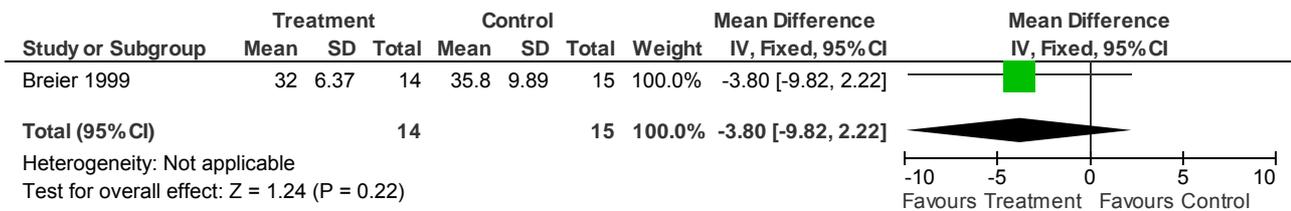


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

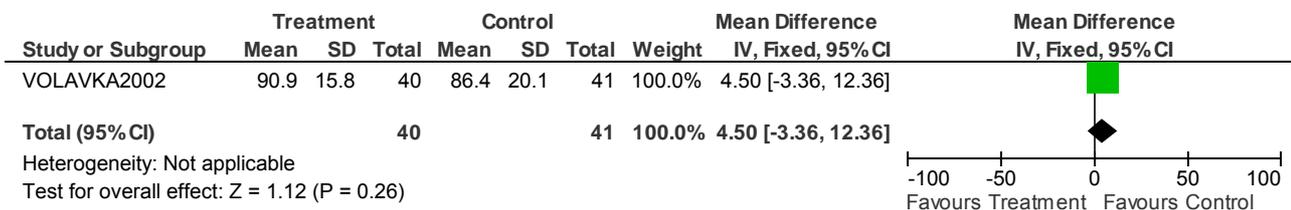
7.5 Mental state: 1. PANSS total (endpoint, high=poor) (short-term)



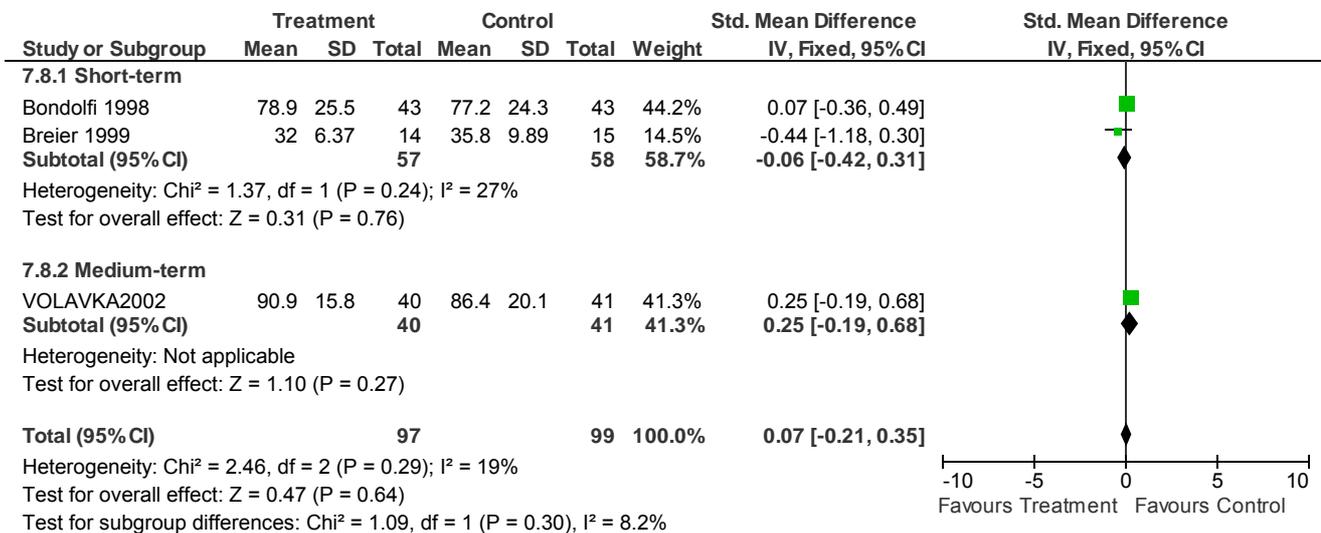
7.6 Mental state: 1. BPRS total (endpoint, high=poor) (short-term)



7.7 Mental state: 1. PANSS total (endpoint, high=poor) (medium-term)

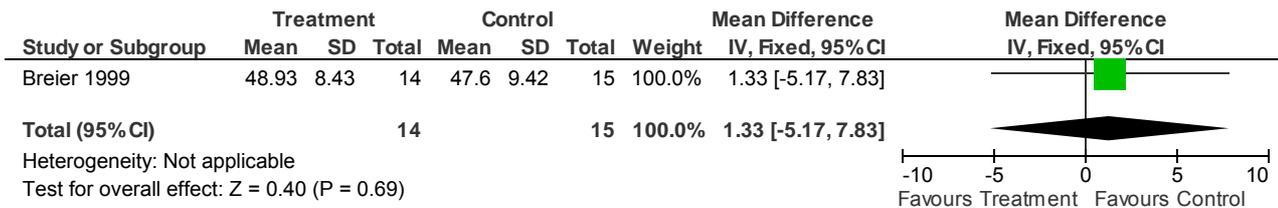


7.8 Mental state: 1. BPRS/PANSS total (endpoint, high=poor) (short-to-medium-term)

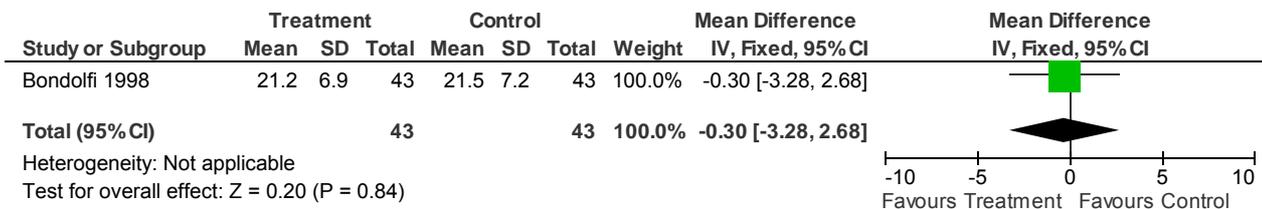


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

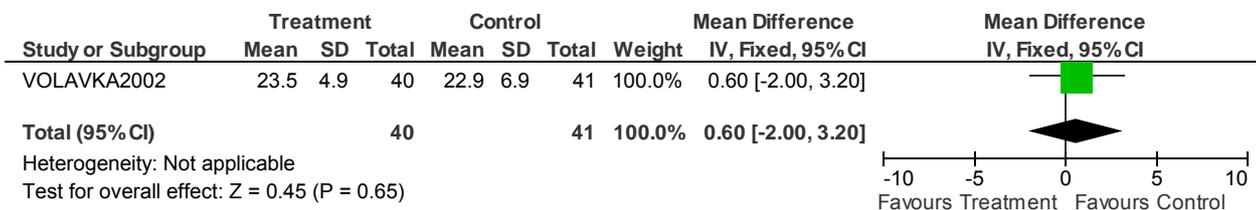
7.9 Mental state: 2. SANS (endpoint, high=poor) (short-term)



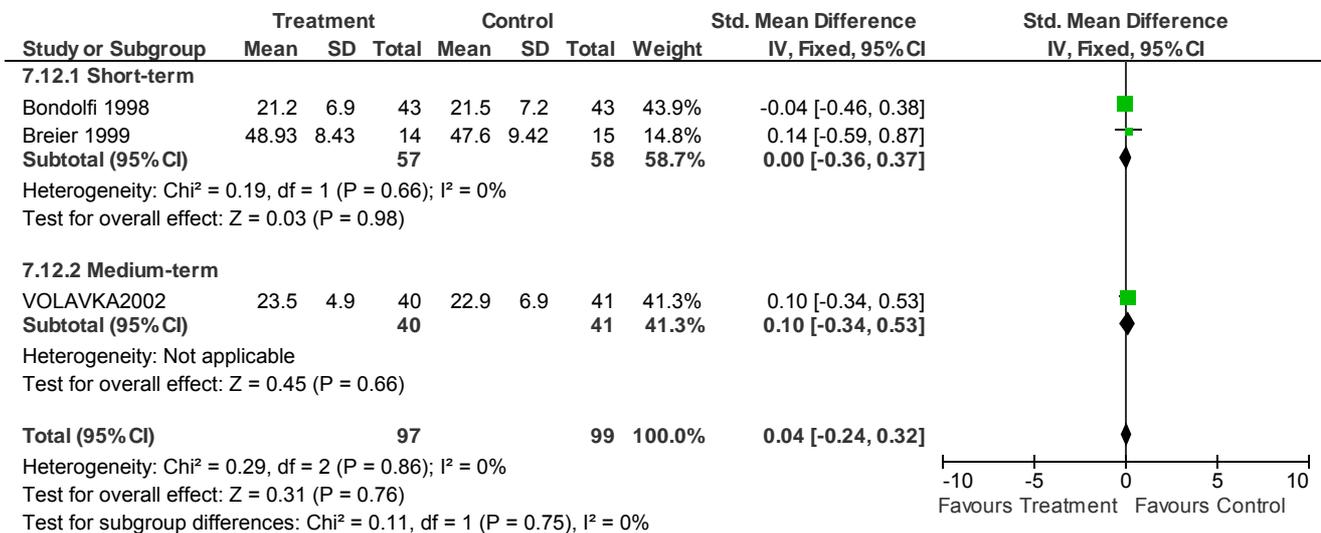
7.10 Mental state: 2. PANSS negative score (endpoint, high=poor) (short-term)



7.11 Mental state: 2. PANSS negative score (endpoint, high=poor) (medium-term)

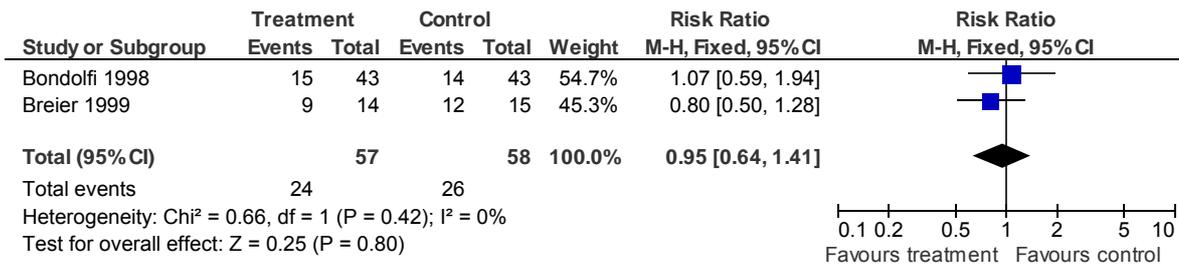


7.12 Mental state: 2. SANS/PANSS negative score (endpoint, high=poor) (short-to-medium-term)

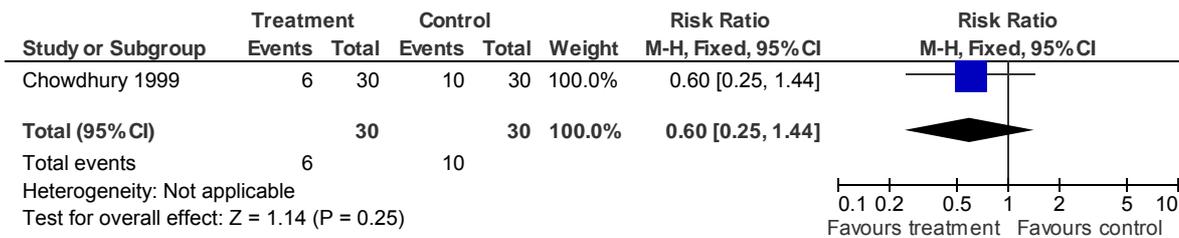


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

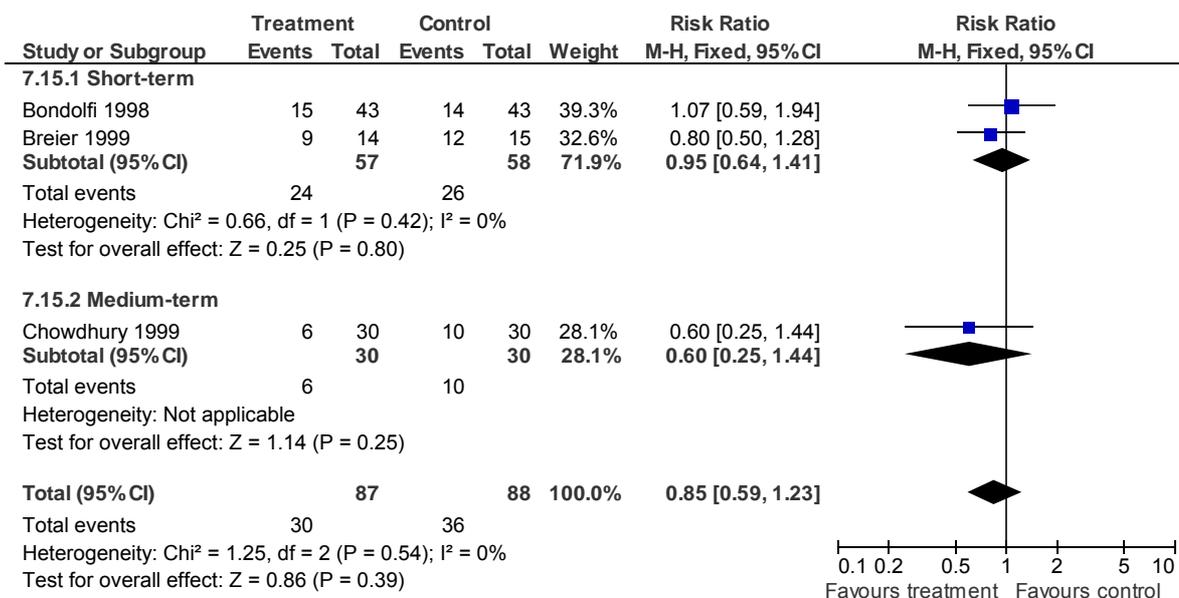
7.13 Mental state: 4. Non-response (<20% improvement in BPRS/PANSS) (short-term)



7.14 Mental state: 4. Non-response (<20% improvement in PANSS positive subscale) (medium-term)

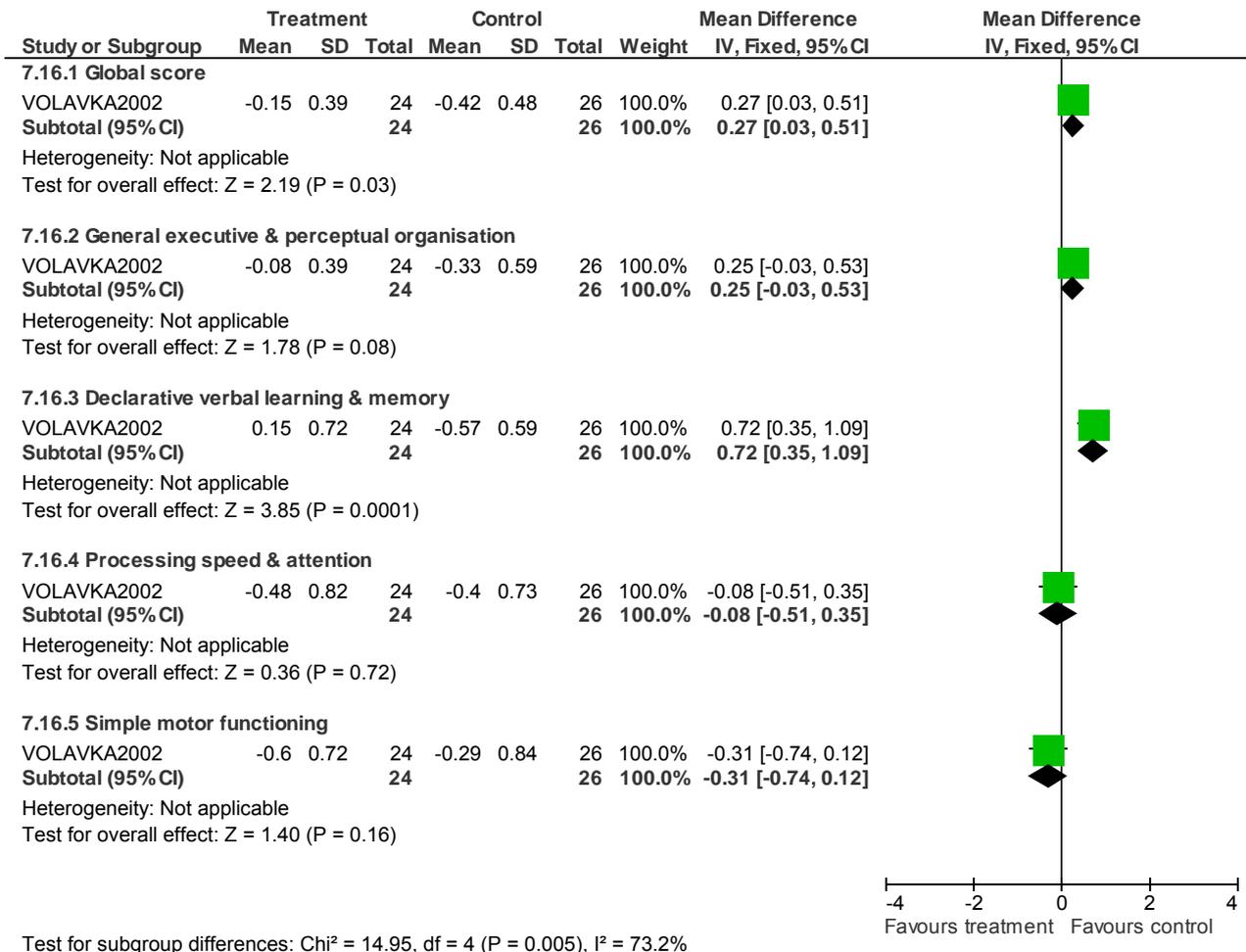


7.15 Mental state: 4. Non-response (<20% improvement in BPRS/PANSS total/positive subscale) (short-to-medium-term)

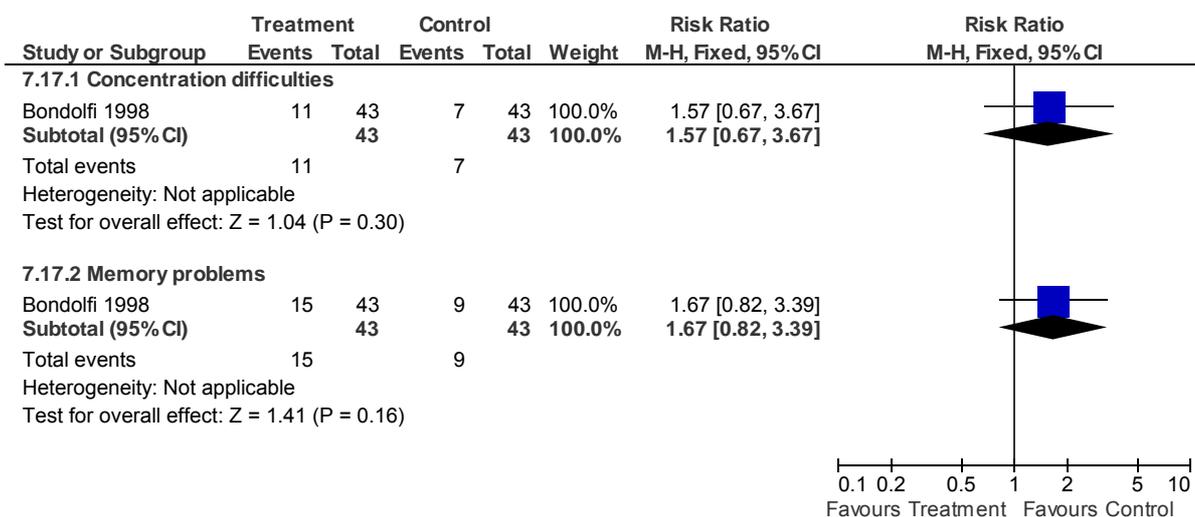


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

7.16 Cognitive functioning: 1. Global & domain scores (Z score change) (medium-term) (sign changed)

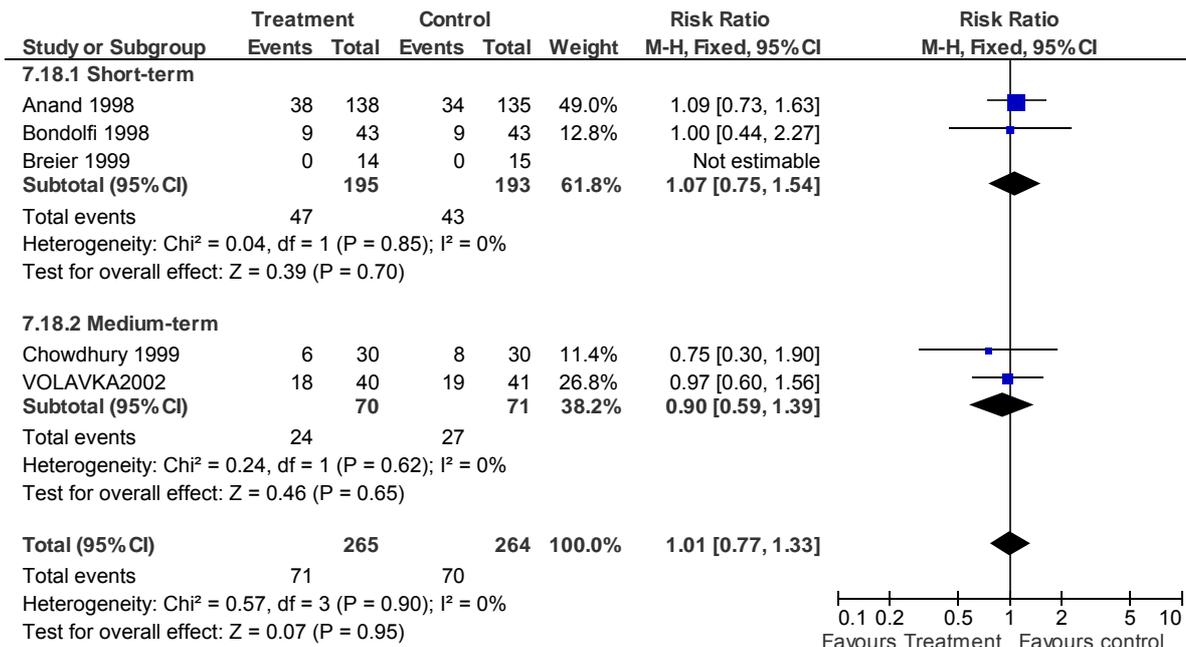


7.17 Cognitive functioning: 2. Problem with cognitive function (short-term)

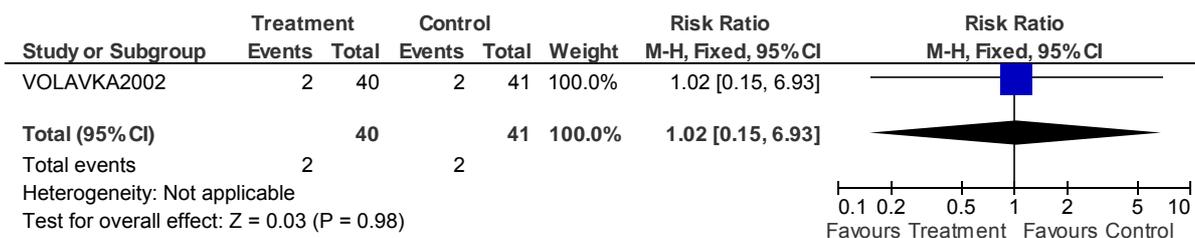


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

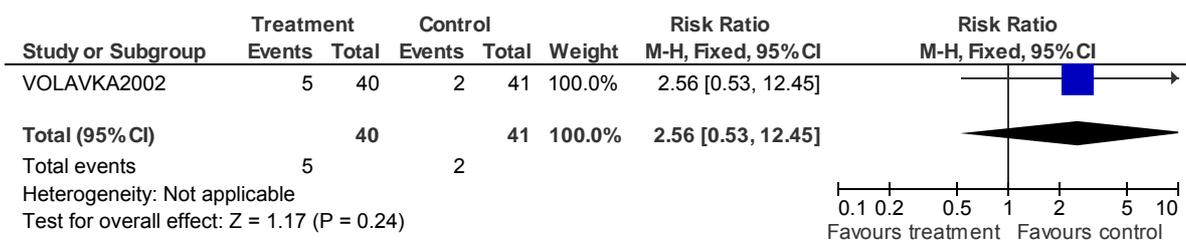
7.18 Leaving the study early: 1. Any reason (short-to-medium-term)



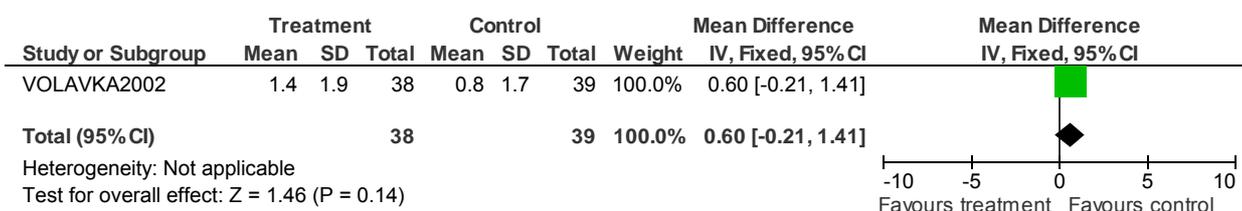
7.19 Leaving the study early: 2. Due to lack of efficacy (medium-term)



7.20 Leaving the study early: 3: Adverse event (medium-term)

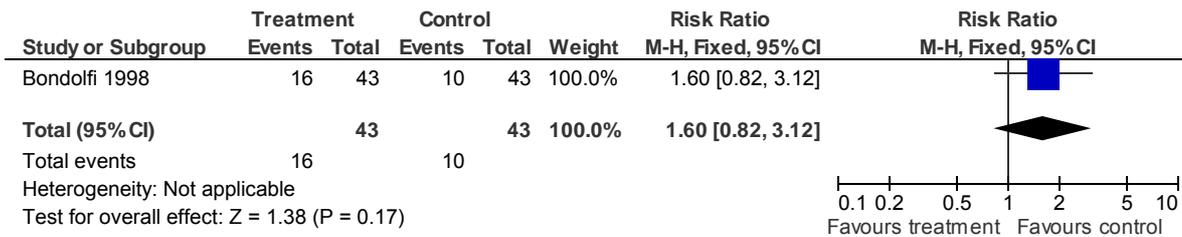


7.21 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)

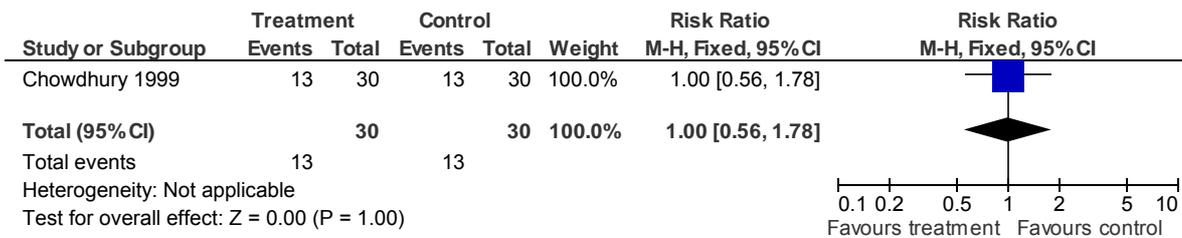


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

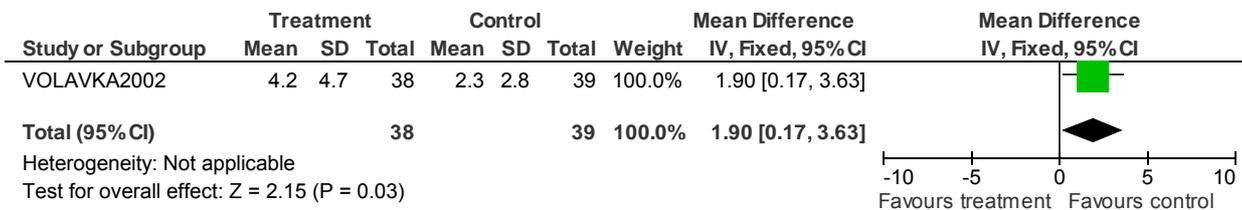
7.22 AE: 1. Metabolic SEs - Weight gain (short-term)



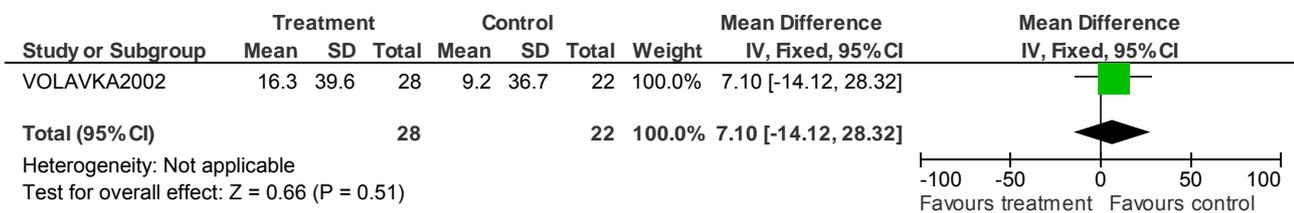
7.23 AE: 1. Metabolic SEs - Weight gain (medium-term)



7.24 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

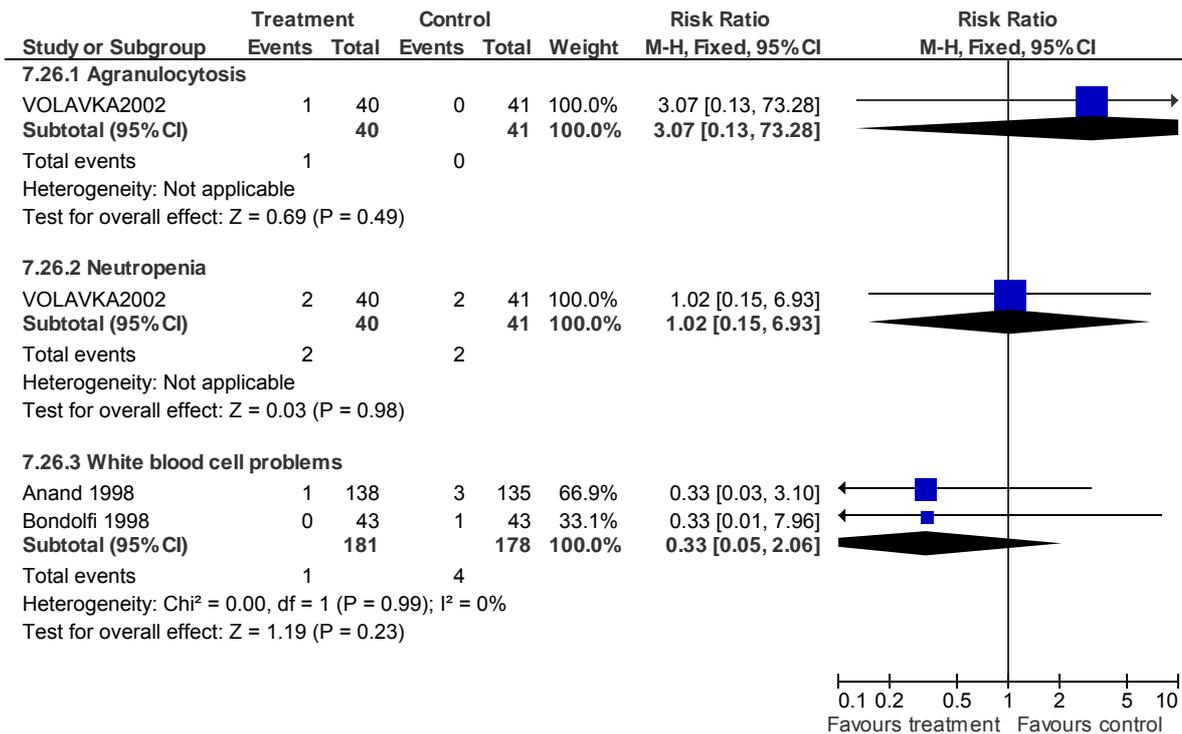


7.25 AE: 1. Metabolic SEs - Cholesterol mg/dL (change from baseline) (medium-term)

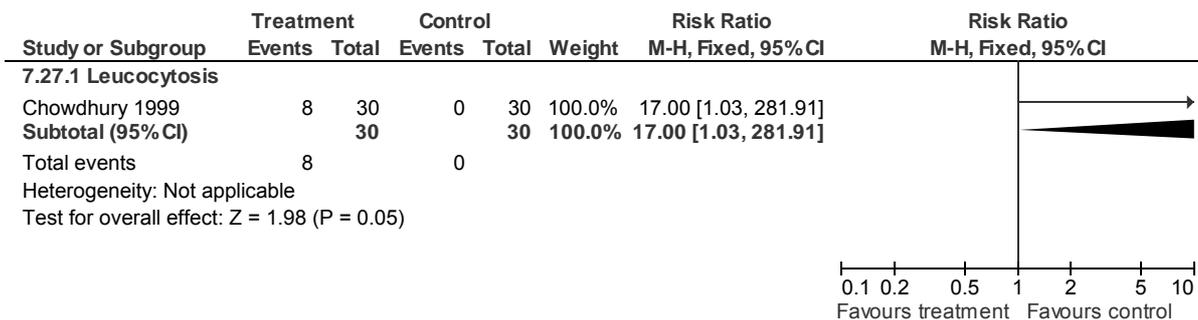


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

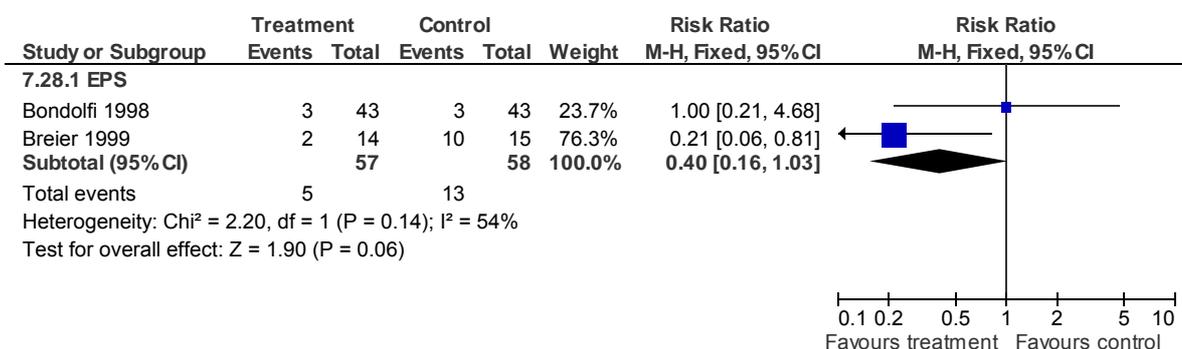
7.26 AE: 1. Metabolic SEs (treatment-emergent) (short-term)



7.27 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)

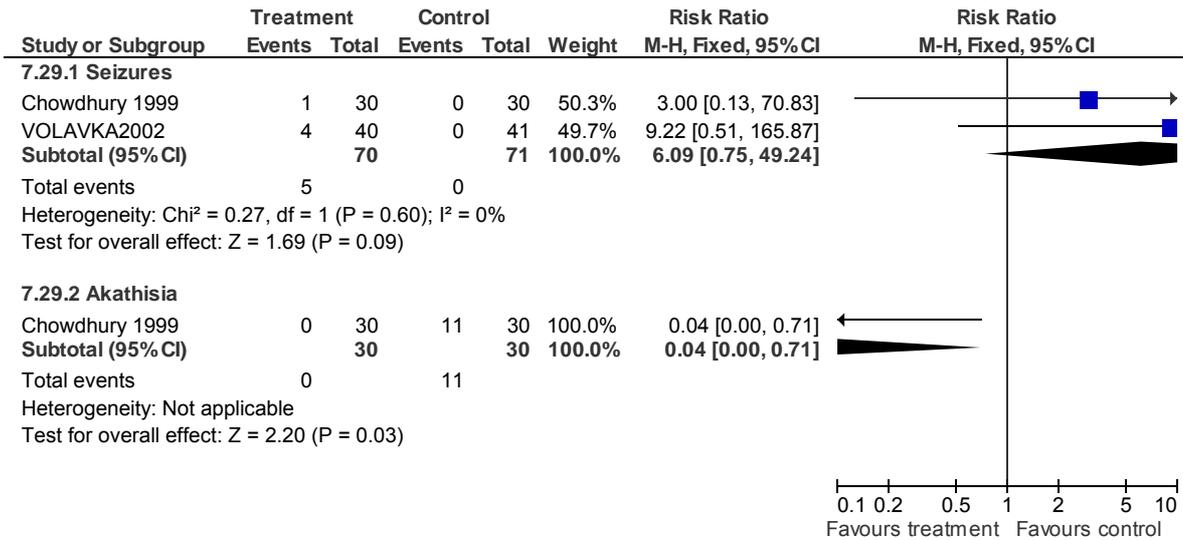


7.28 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

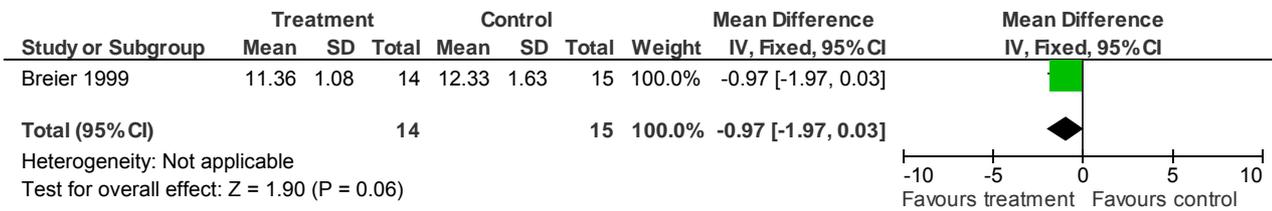


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

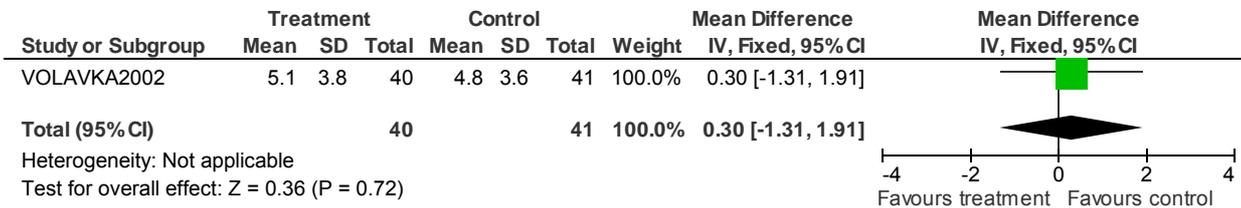
7.29 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



7.30 AE: 1. Neurologic SEs - Simpson-Angus Rating Scale (short-term)

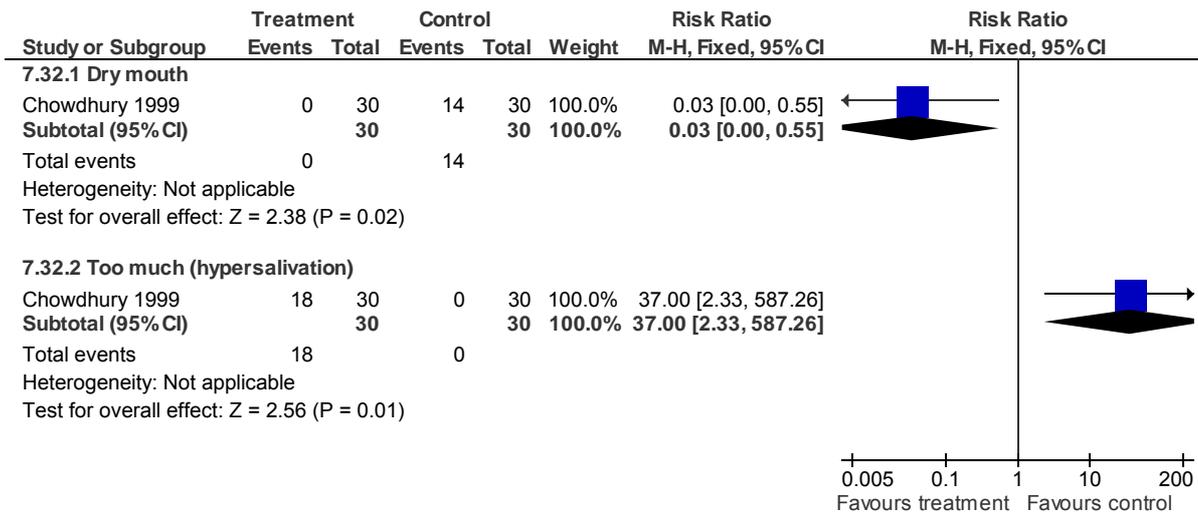


7.31 AE: 2. Neurologic SEs - Extrapyramidal Symptom Rating Scale (endpt mean) (medium-term)

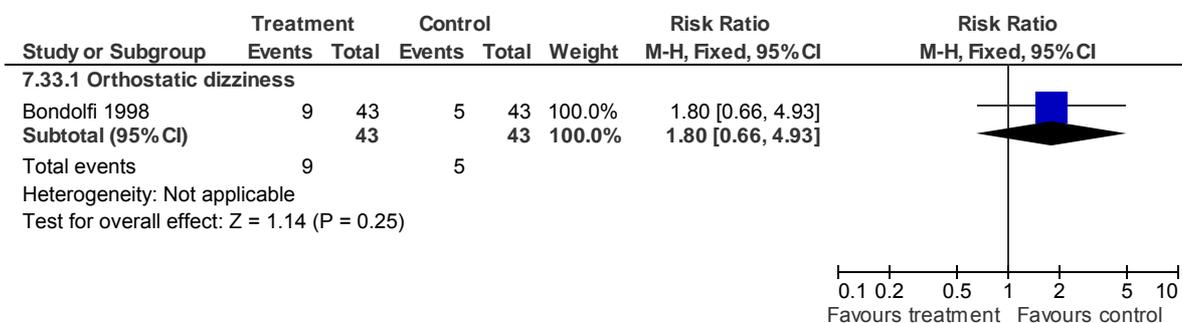


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

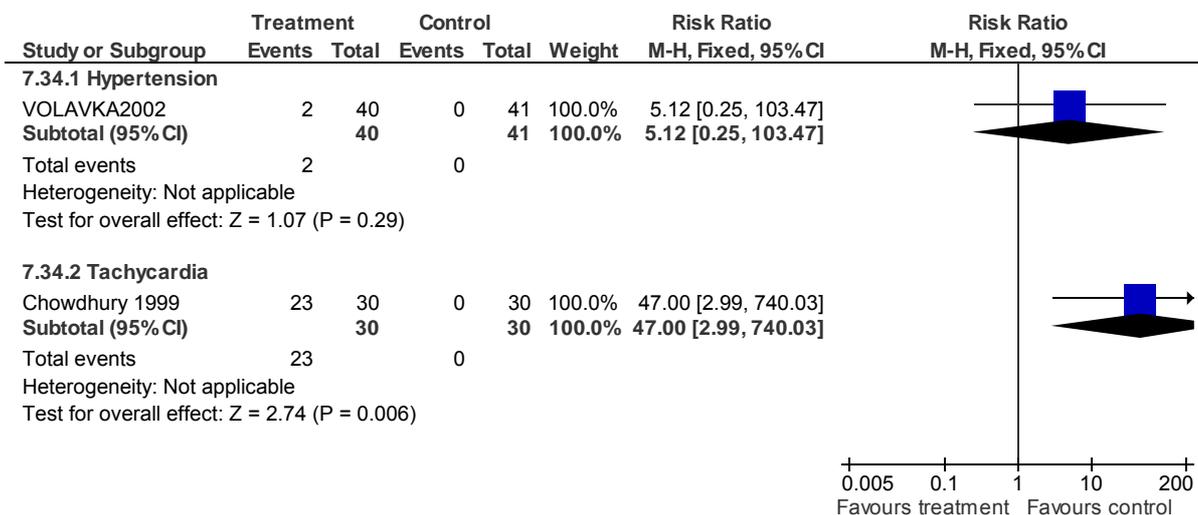
7.32 AE: 3. Autonomic SEs (medium-term)



7.33 AE: 4. Cardiovascular SEs (short-term)

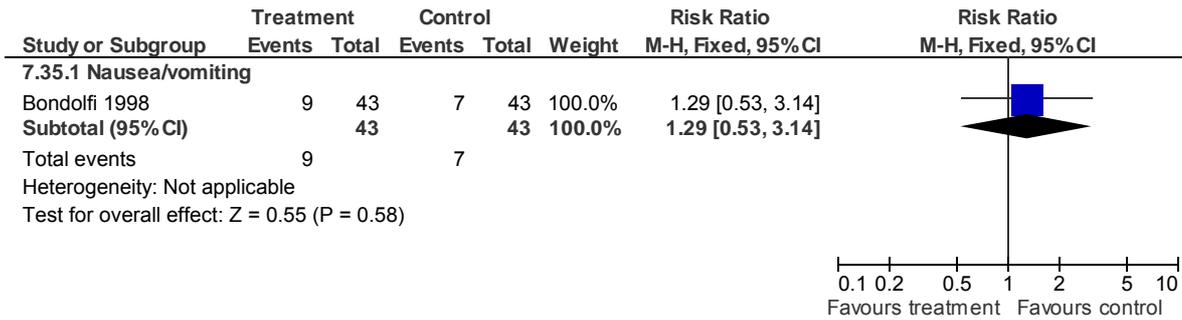


7.34 AE: 4. Cardiovascular SEs (medium-term)

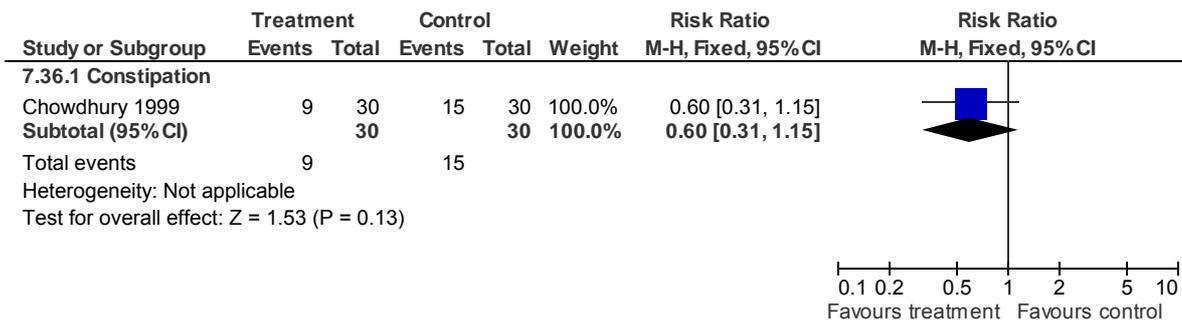


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

7.35 AE: 5. Gastrointestinal SEs (short-term)

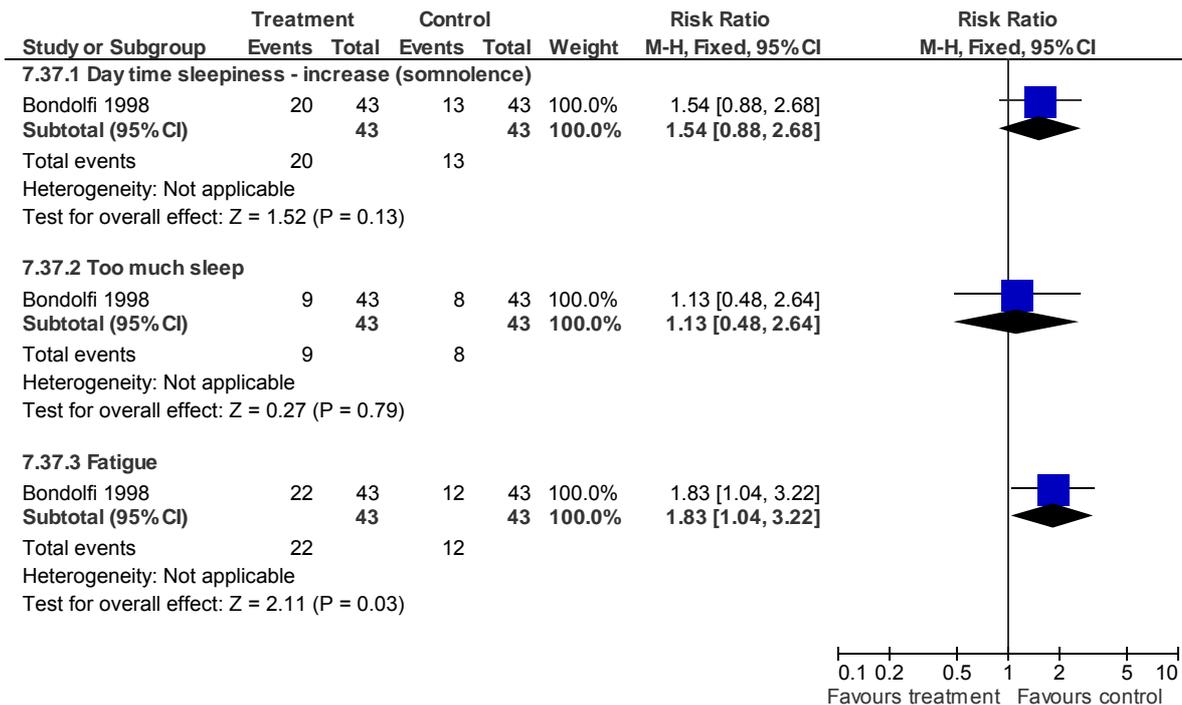


7.36 AE: 5. Gastrointestinal SEs (medium-term)

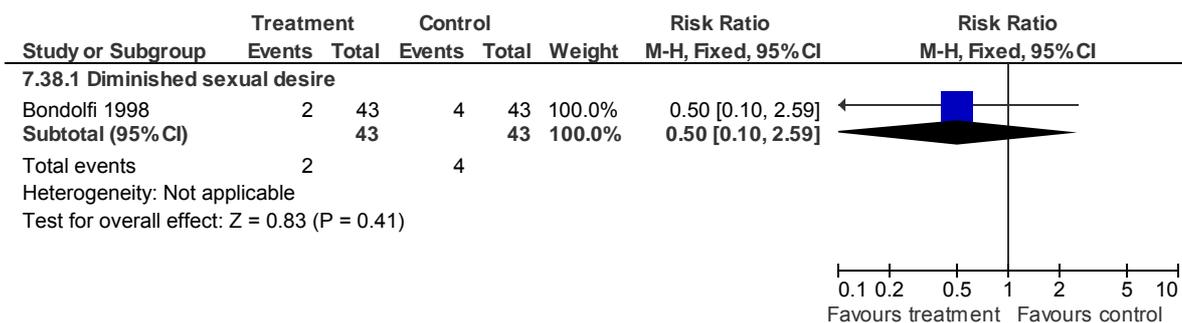


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

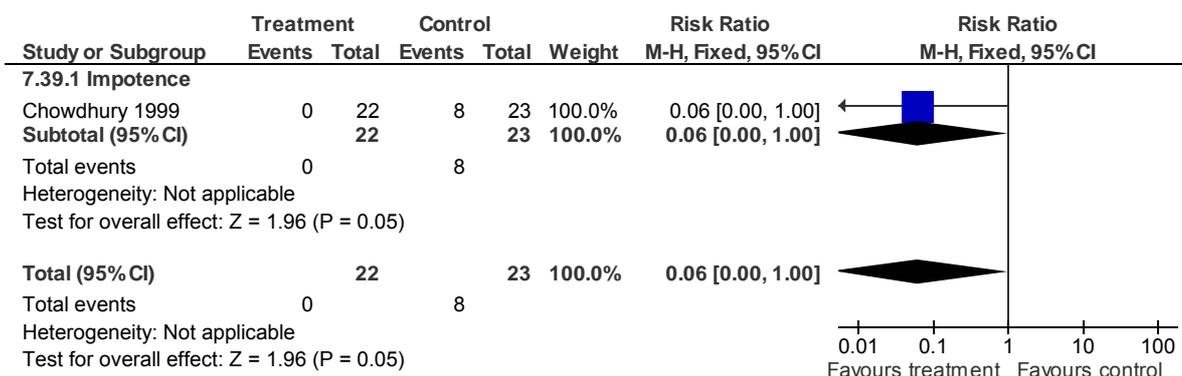
7.37 AE: 6. Sedation (short-term)



7.38 AE: 7. Sexual dysfunction (short-term)

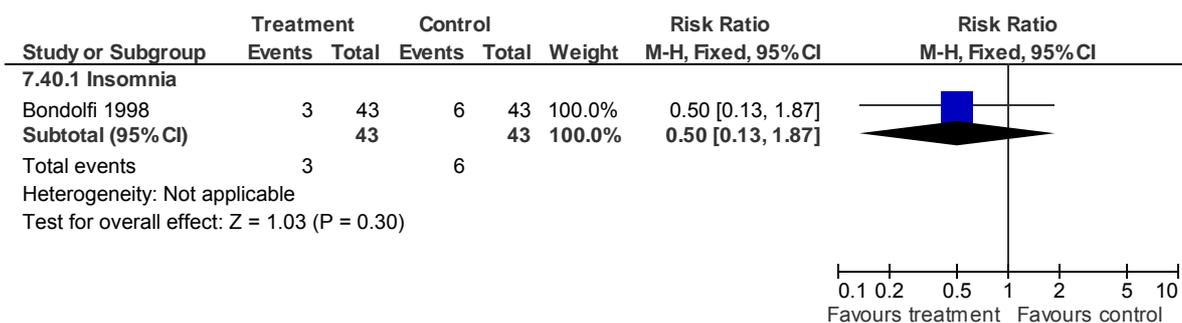


7.39 AE: 7: Sexual dysfunction (medium-term)

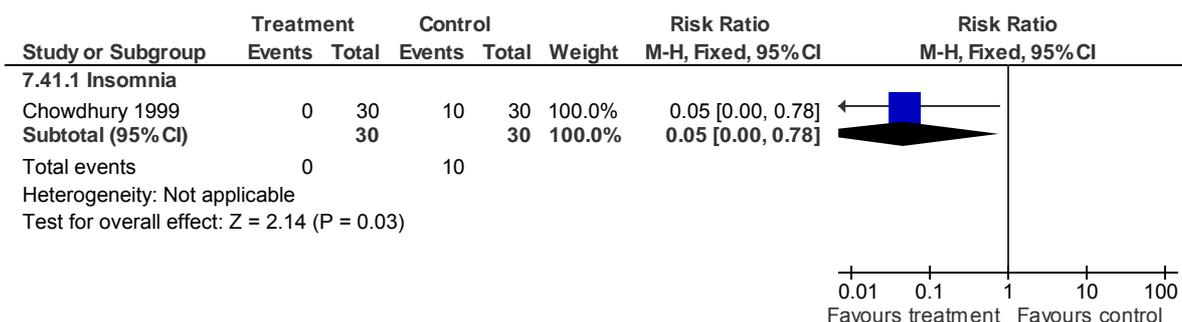


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

7.40 AE: 10. Other SEs (short-term)

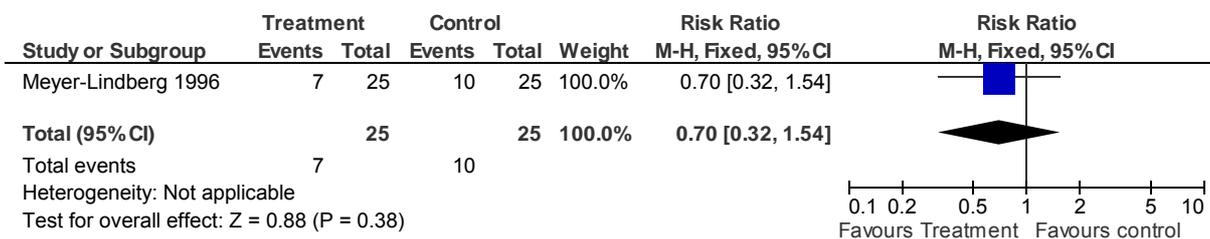


7.41 AE: 10. Other SEs (medium-term)



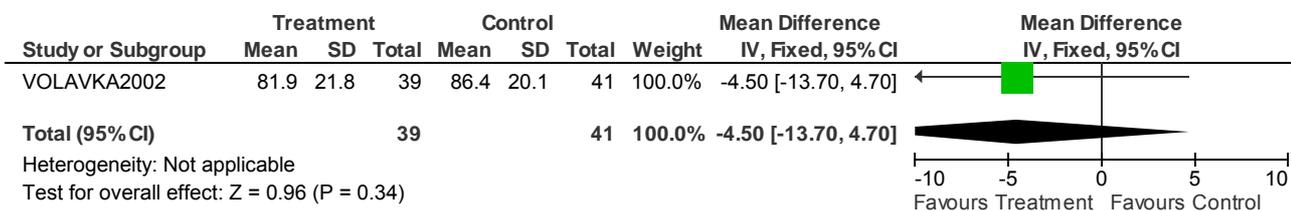
8 Clozapine vs. Zotepine (in people whose illness has not responded adequately to treatment)

8.1 Leaving the study early: 1. Any reason (short-term)



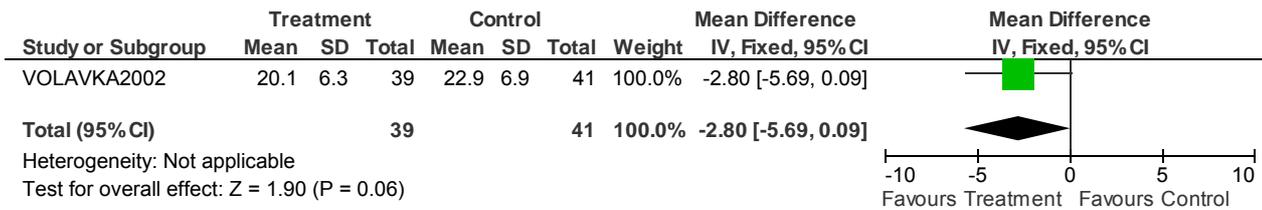
9 Olanzapine vs. Risperidone (in people whose illness has not responded adequately to treatment)

9.1 Mental state: 1. PANSS total (endpoint, high=poor) (medium-term)

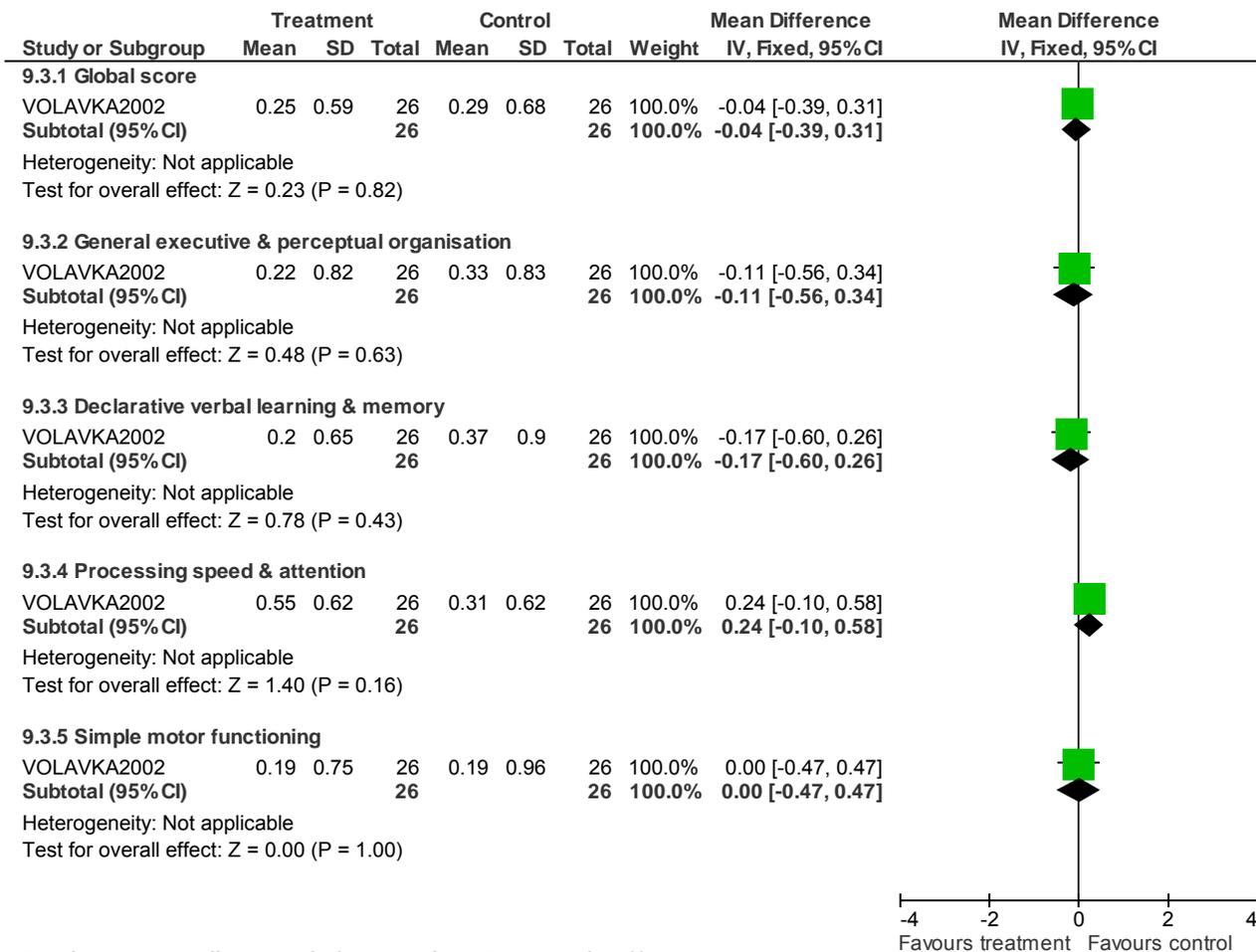


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

9.2 Mental state: 2. PANSS negative score (endpoint, high=poor) (medium-term)



9.3 Cognitive functioning: 1. Global & domain scores (medium-term)

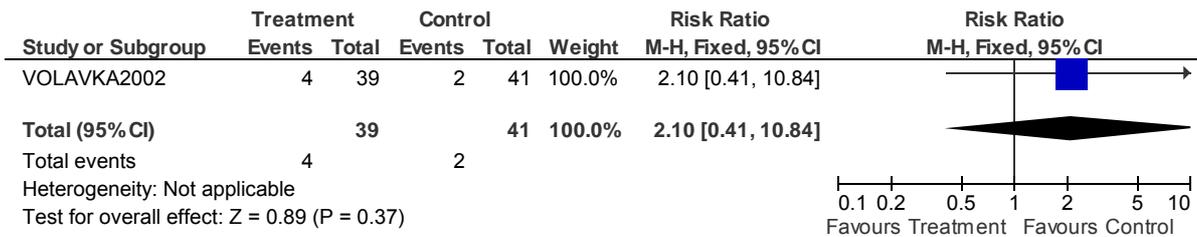


9.4 Leaving the study early: 1. Any reason (medium-term)

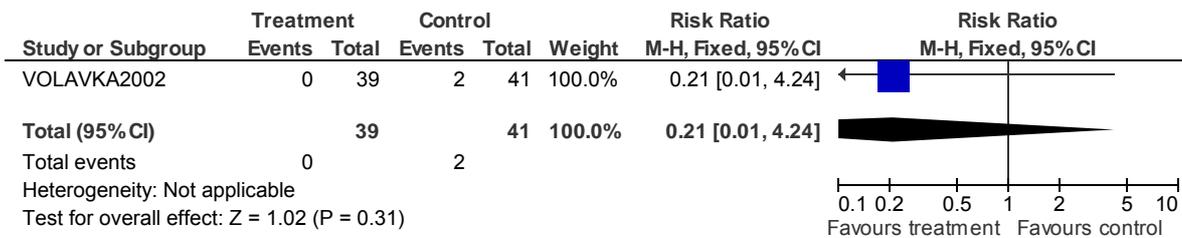


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

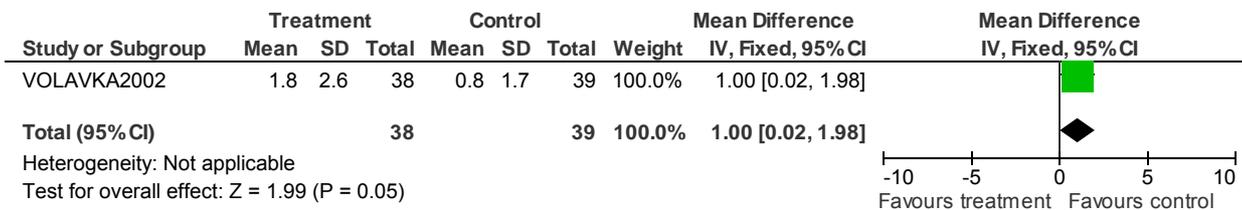
9.5 Leaving the study early: 2. Due to lack of efficacy (medium-term)



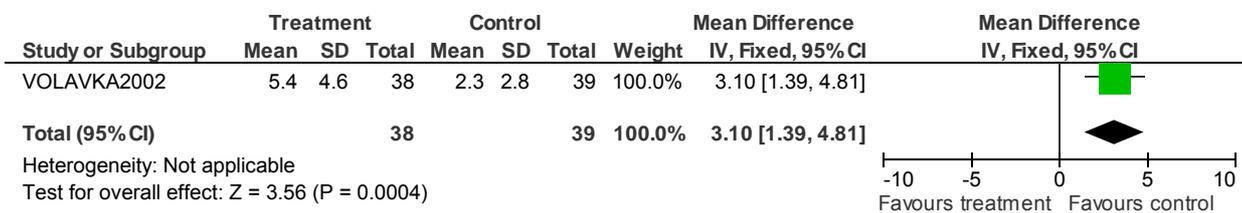
9.6 Leaving the study early: 3: Adverse event (medium-term)



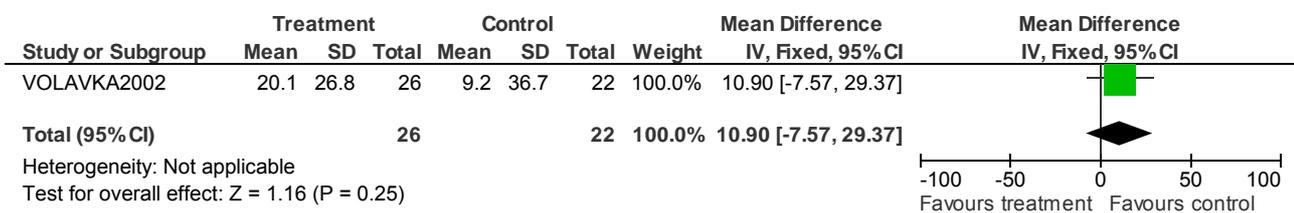
9.7 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)



9.8 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

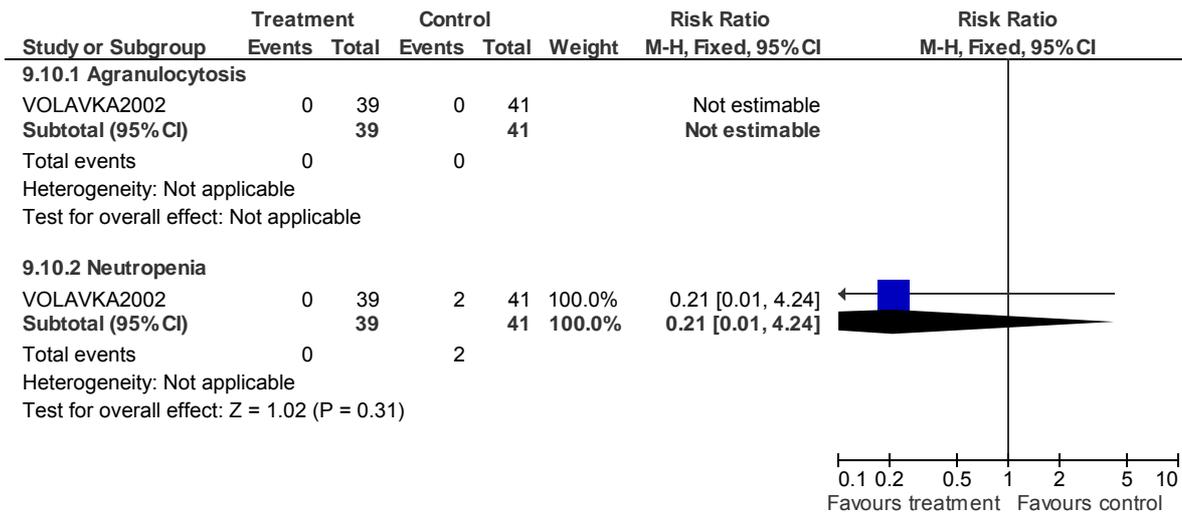


9.9 AE: 1. Metabolic SEs - Cholesterol mg/dL (change from baseline) (medium-term)



Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

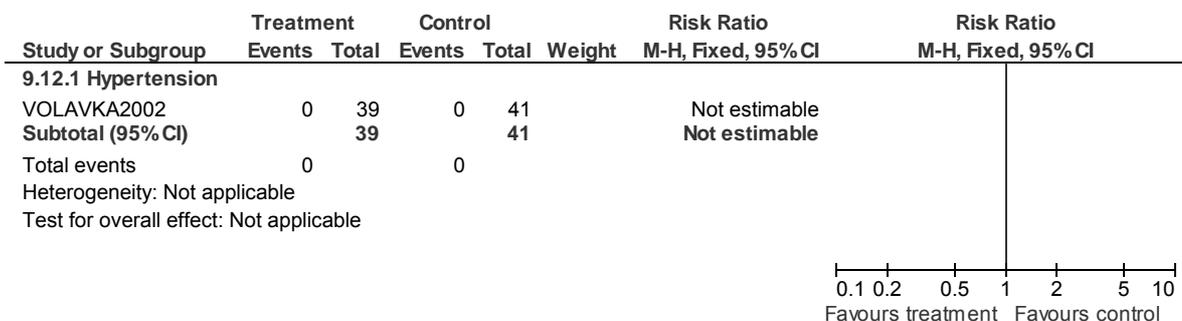
9.10 AE: 1. Metabolic SEs (treatment-emergent) (medium-term)



9.11 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

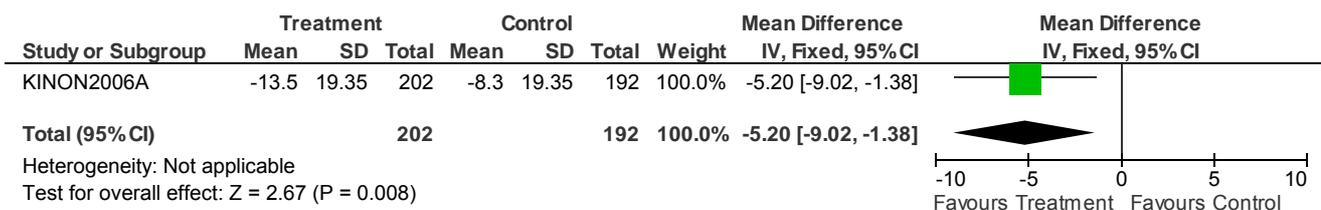


9.12 AE: 4. Cardiovascular SEs (medium-term)



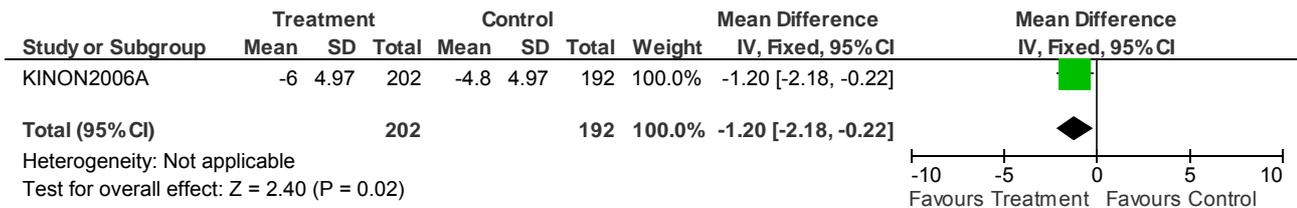
10 Olanzapine vs. Ziprasidone (in people whose illness has not responded adequately to treatment)

10.1 Mental state: 1. PANSS total (change from baseline) (medium-term)

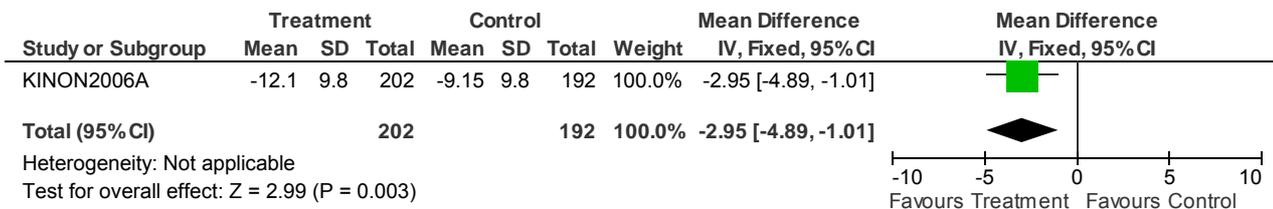


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

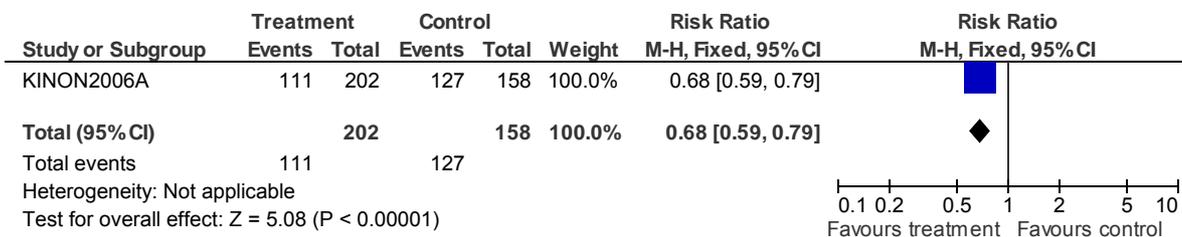
10.2 Mental state: 2. Depression - Calgary Depression Scale for Schizophrenia (CDSS; change) (medium-term)



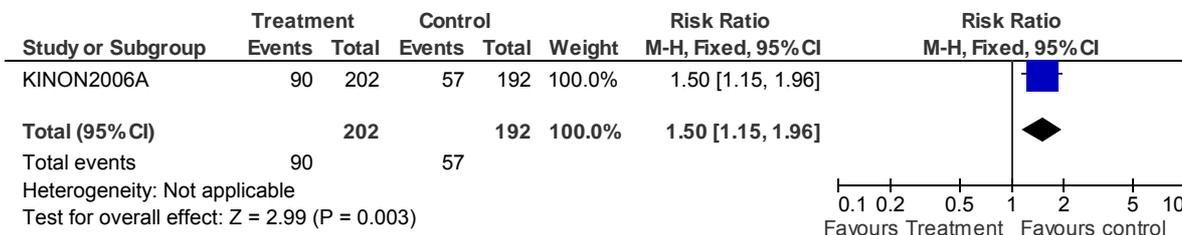
10.3 Mental state: 2. Depression (MADRS; change from baseline) (medium-term)



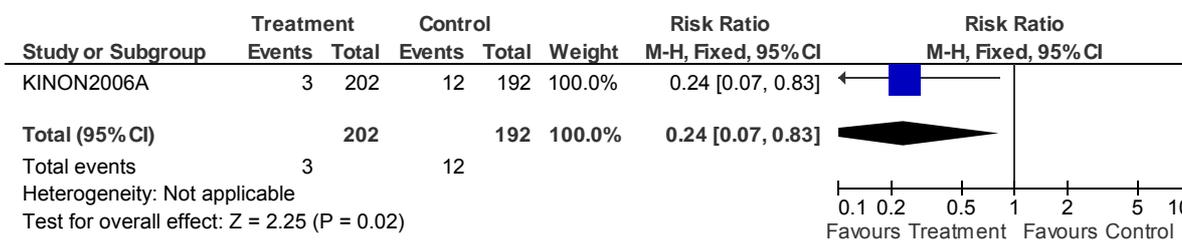
10.4 Psychosocial functioning: 1. No response (< 5 point improvement on GAF) (medium-term)



10.5 Leaving the study early: 1. Any reason (medium-term)

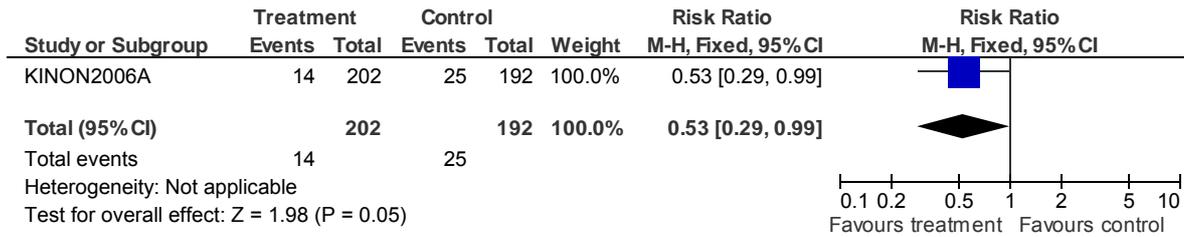


10.6 Leaving the study early: 2. Due to lack of efficacy (medium-term)

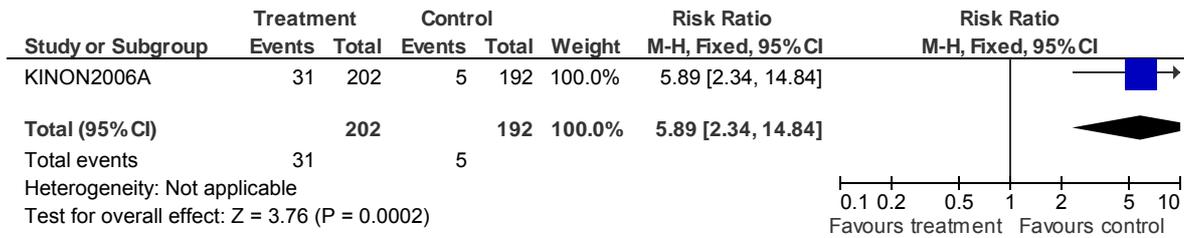


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

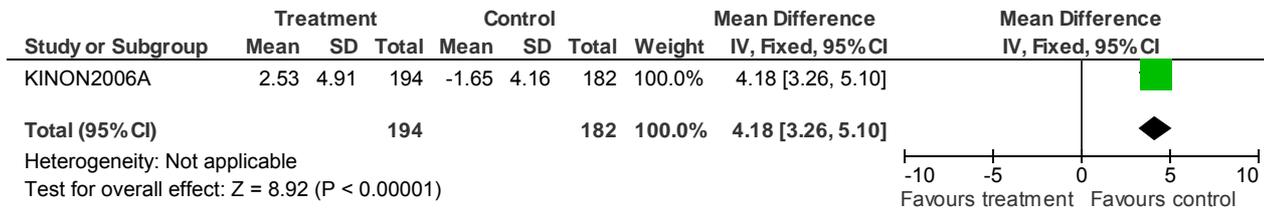
10.7 Leaving the study early: 3: Adverse event (medium-term)



10.8 AE: 1. Metabolic SEs - Weight gain (>=7% from baseline) (medium-term)

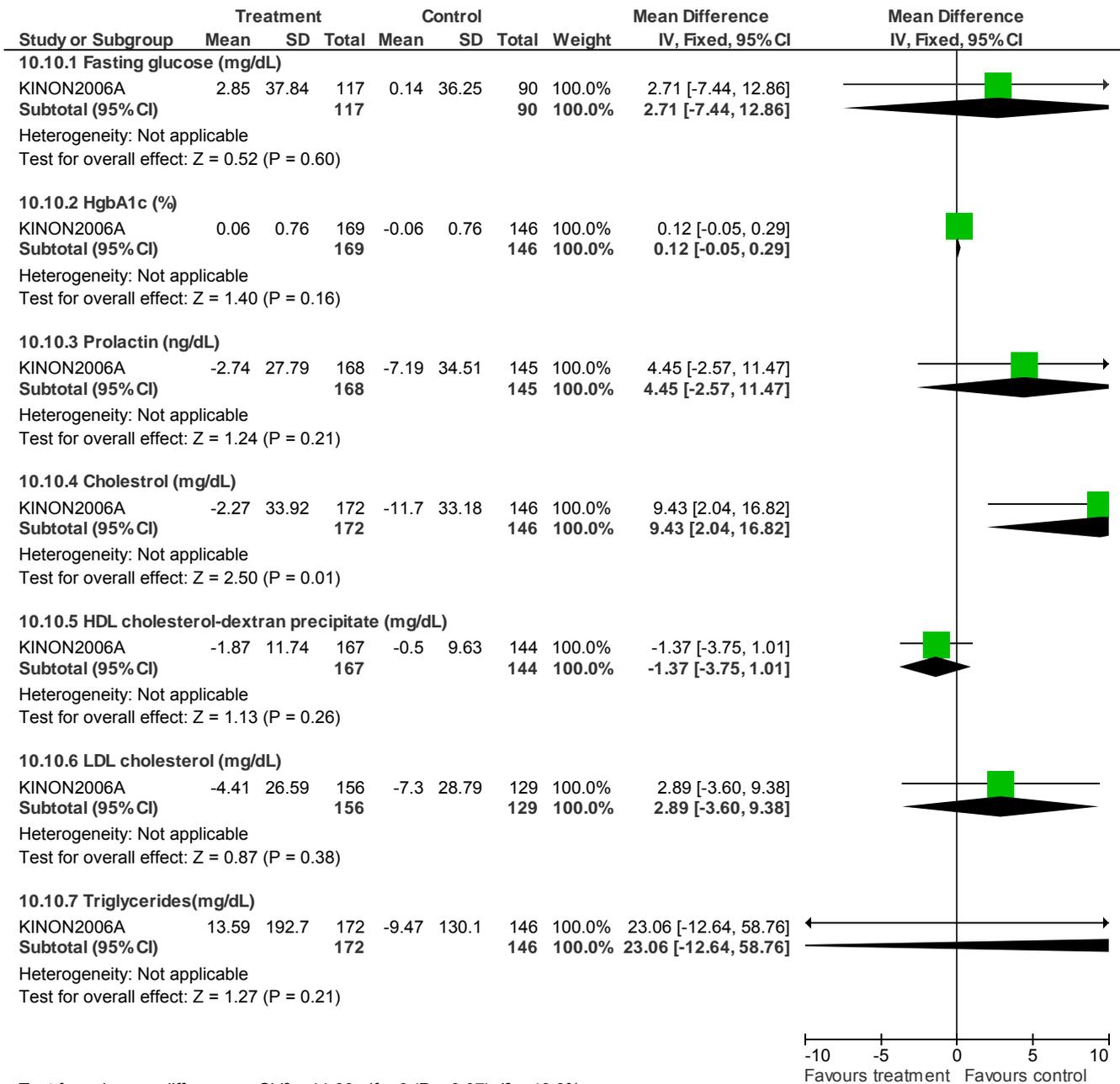


10.9 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)



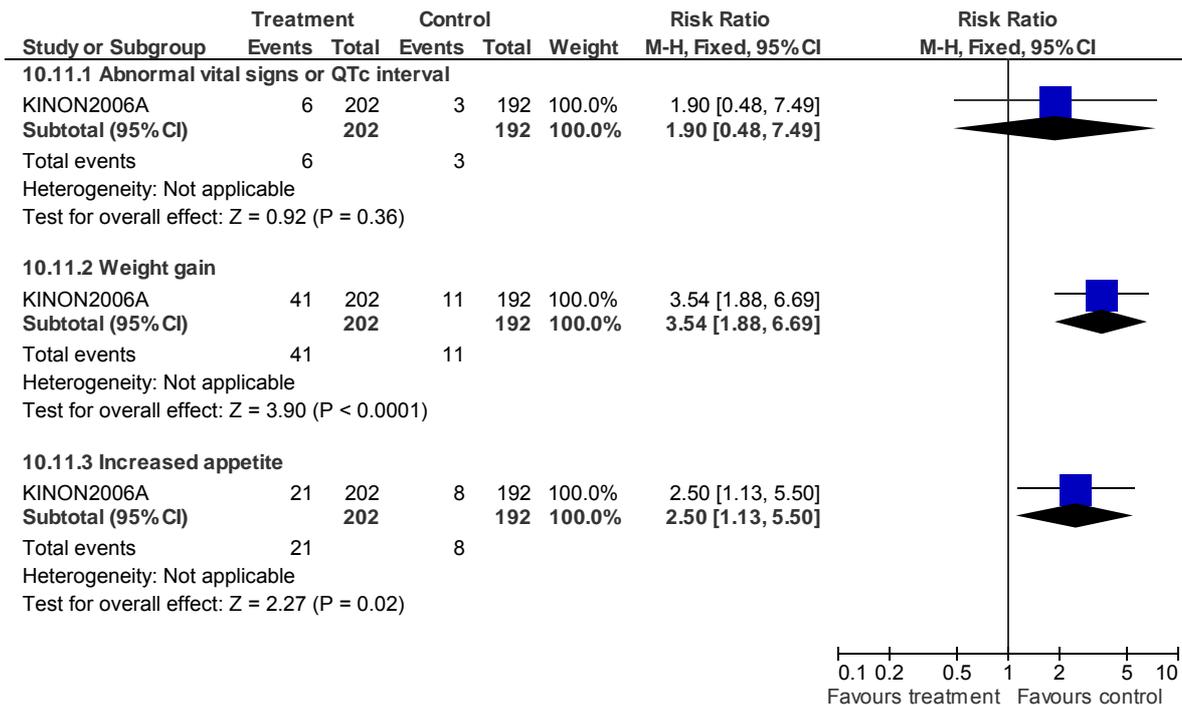
Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

10.10 AE: 1. Metabolic SEs - Various (change from baseline) (medium-term)

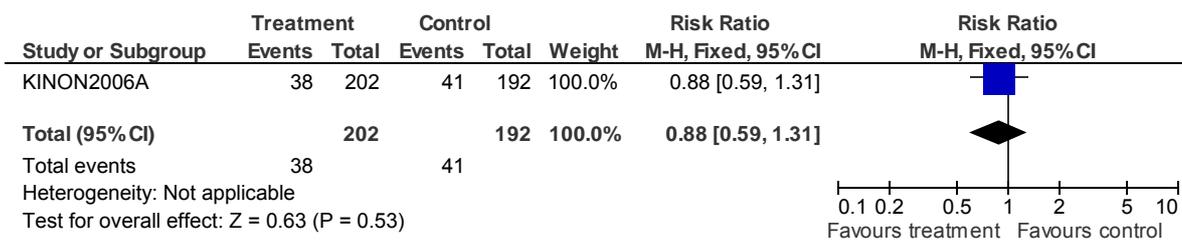


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

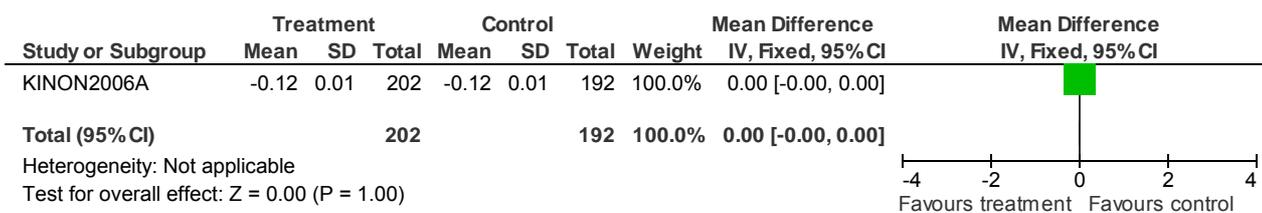
10.11 AE: 1. Metabolic SEs (treatment-emergent) (short-term)



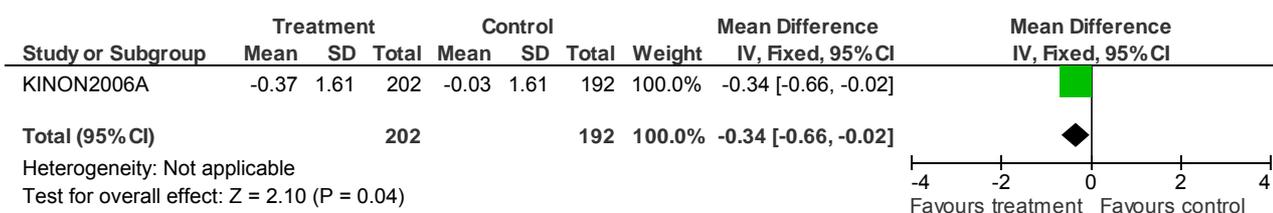
10.12 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)



10.13 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; change) (medium-term)

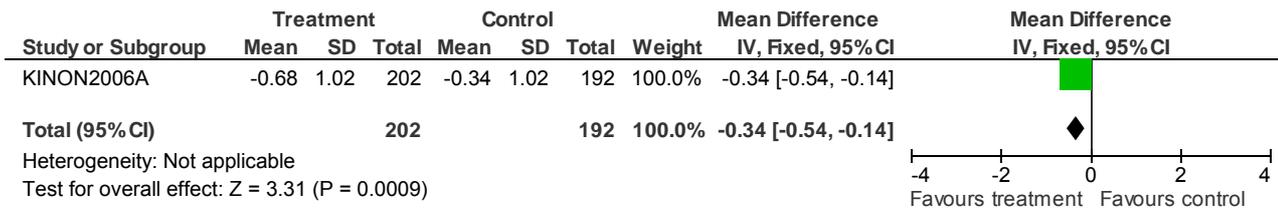


10.14 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; change) (medium-term)

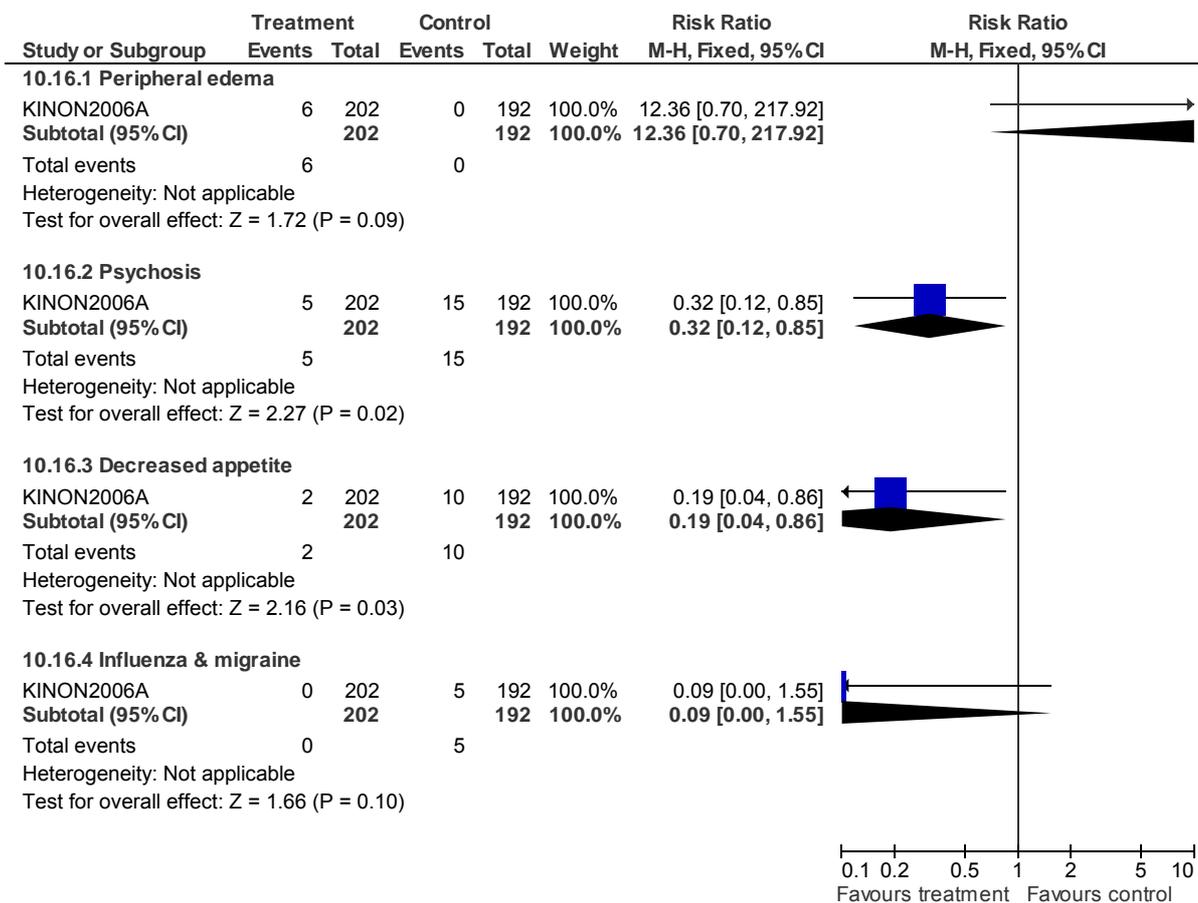


Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

10.15 AE: 2. Neurologic SEs - Abnormal Involuntary Movement Scale (AIMS; change) (medium-term)



10.16 AE: 10. Other SEs (medium-term)



11 Risperidone vs. Quetiapine (in people whose illness has not responded adequately to treatment)

11.1 Leaving the study early: 1. Any reason (medium-term)



Pharmacological clinical evidence: Promoting recovery (inadequate response to treatment)

11.2 Leaving the study early: 2. Due to lack of efficacy (medium-term)



11.3 Leaving the study early: 3: Adverse event (medium-term)

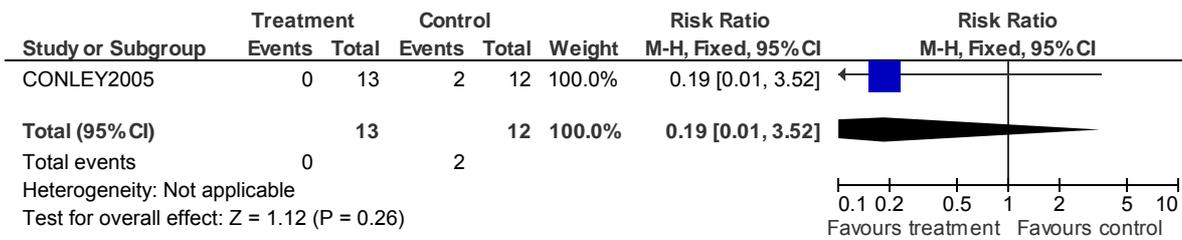


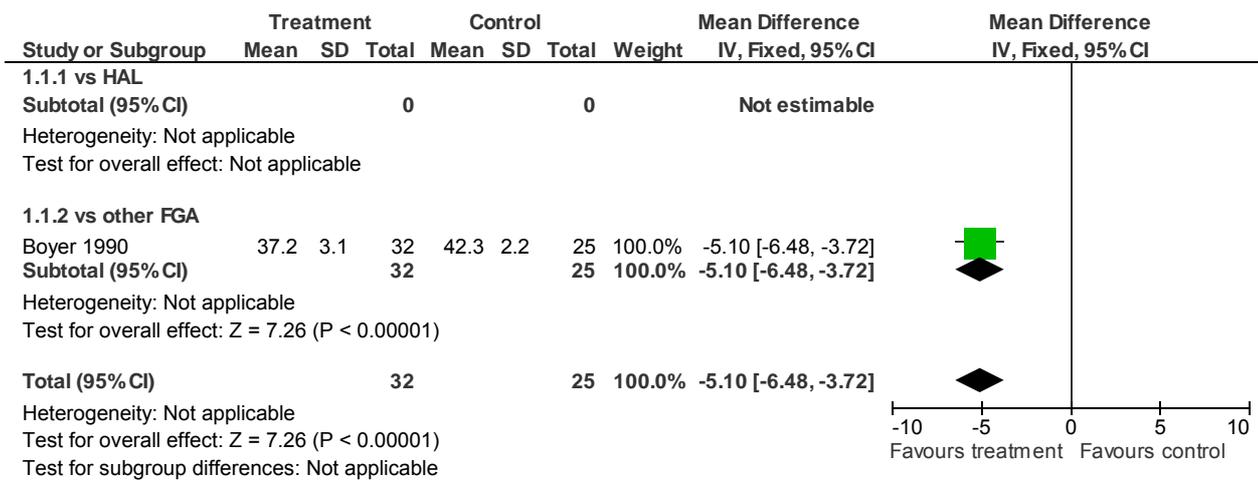
Table 7: Studies included in the review of antipsychotic medication for people with persistent negative symptoms

| Treatment | versus Comparator | | | | | | | |
|-----------|---|-------------------------------|---------------------------|---------------------------------|---|--|----------------------------|---|
| | AMI | FLUP | FLUPHEN | HAL | OLZ | QUE | RIS | ZIP |
| AMI | | | Boyer 1990 [6weeks, N=62] | Speller 1997 [52weeks, N=60] | Lecrubier 1999 [LECRUBIER2006] (OLZ) [26weeks, N=140] | | | Study 128-305 [OLIE2006] [12weeks, N=123] |
| OLZ | Lecrubier 1999 [LECRUBIER2006] [26weeks, N=140] | | | LINDENMAYER2007 [12weeks, N=35] | | KINON2006 B [26weeks, N=346] SIROTA2006 [12weeks, N=40] | | |
| QUE | | | | Murasaki 1999 [8weeks, N=197] | KINON2006B [26weeks, N=346] SIROTA2006 [12weeks, N=40] | | RIEDEL2005 [12weeks, N=44] | |
| RIS | | RUHRMANN2007 [25weeks, N=153] | | | | RIEDEL2005 [12weeks, N=44] | | |

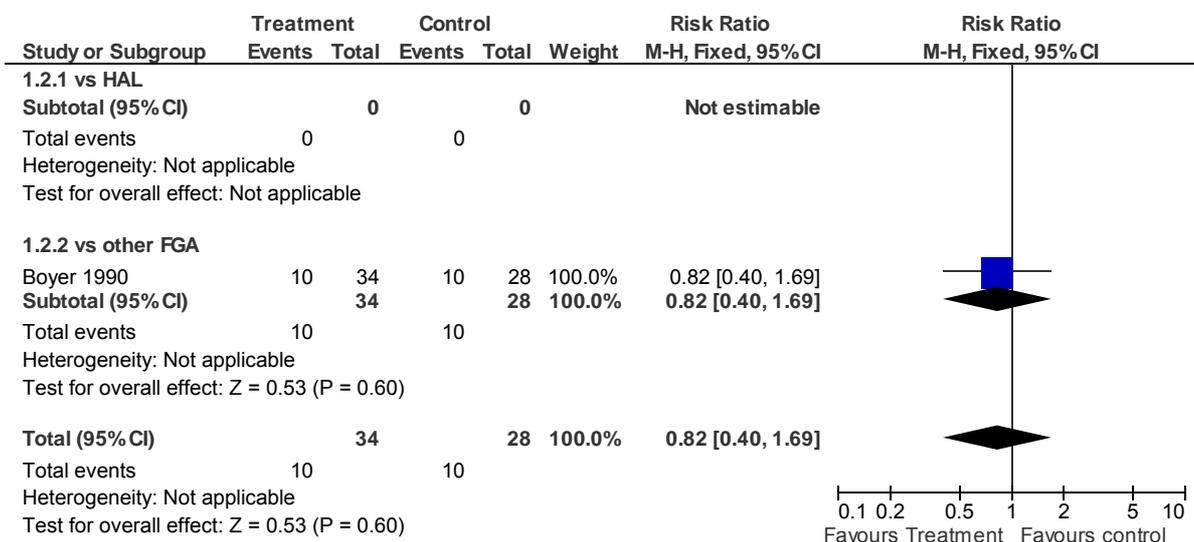
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

1 Amisulpride versus FGA (phase: persistent negative symptoms)

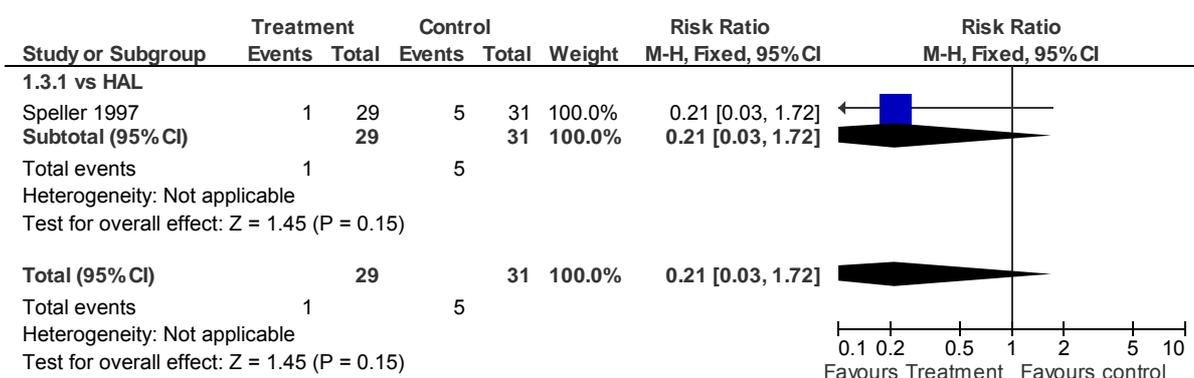
1.1 Mental state: 1. BPRS total endpoint scores (short-term)



1.2 Leaving the study early: 1. Any reason (short-term)

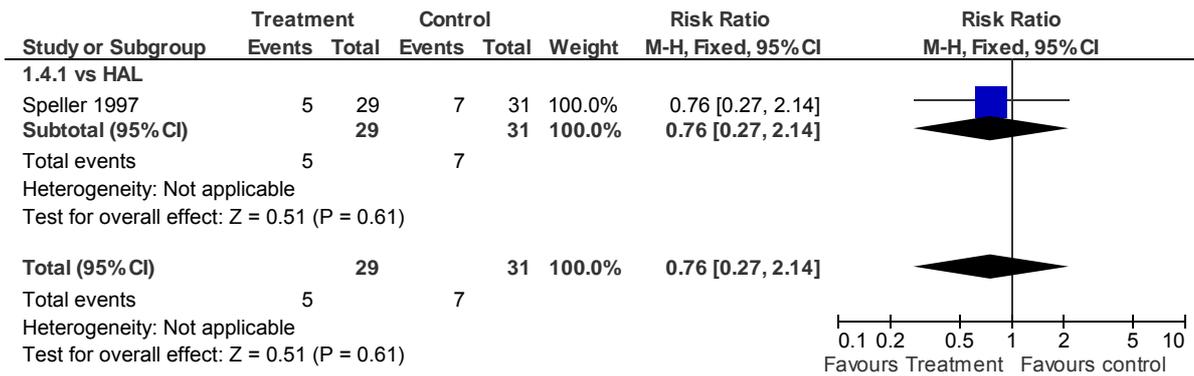


1.3 Leaving the study early: 1. Any reason (medium-term)

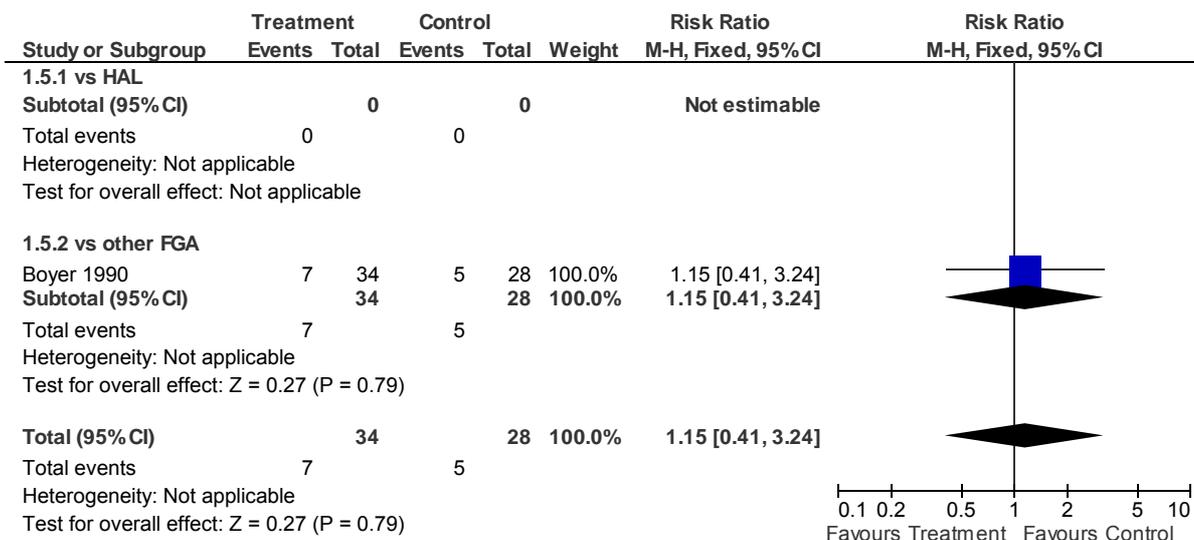


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

1.4 Leaving the study early: 1. Any reason (long-term)

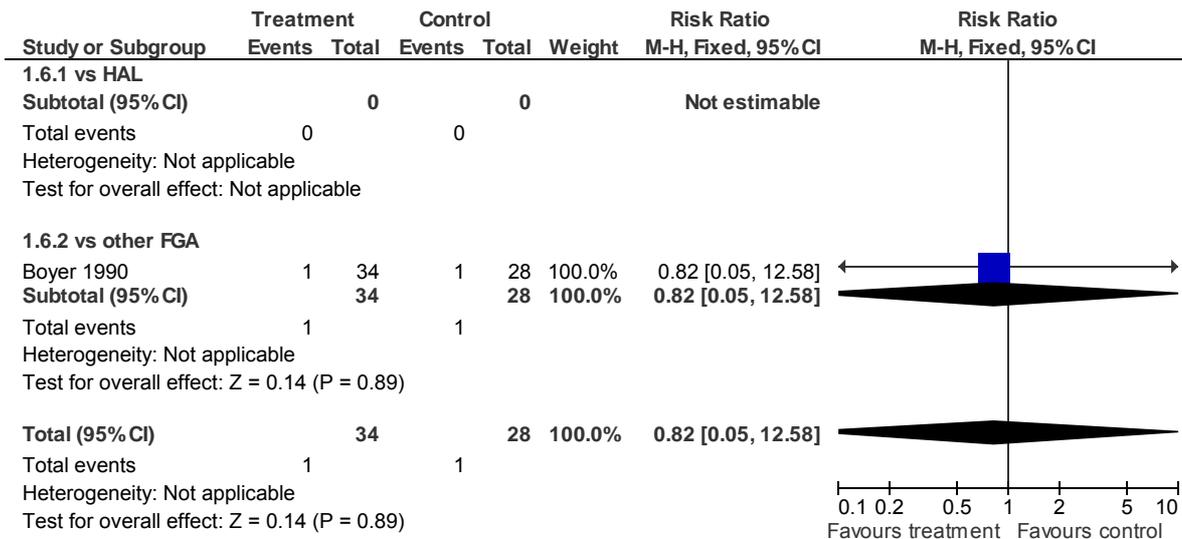


1.5 Leaving the study early: 2. Due to lack of efficacy (short-term)

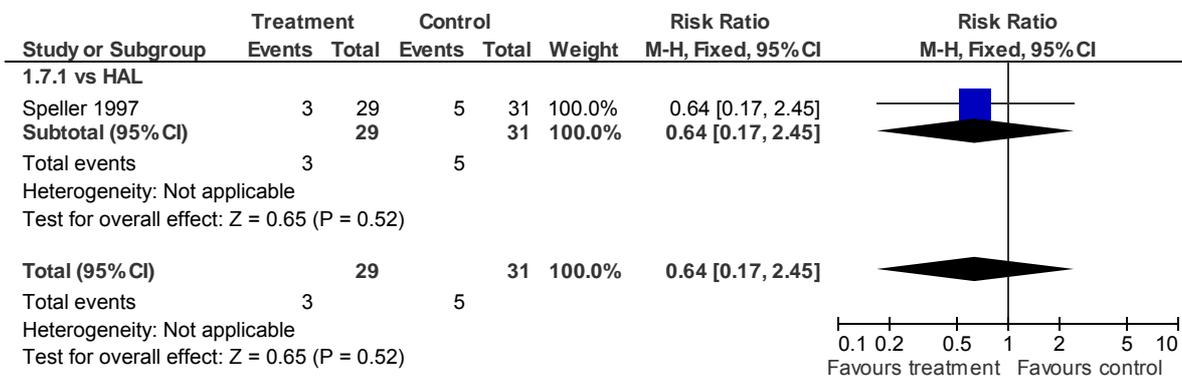


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

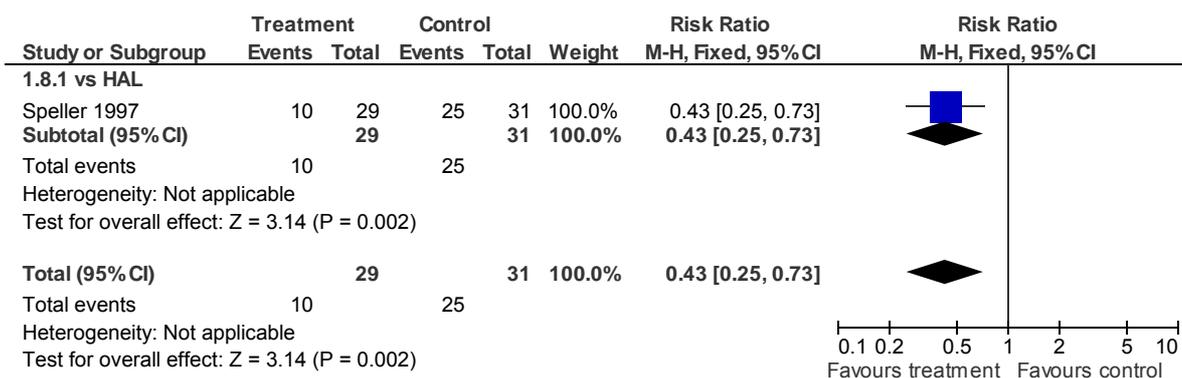
1.6 Leaving the study early: 3: Adverse event (short-term)



1.7 Leaving the study early: 3: Adverse event (long-term)

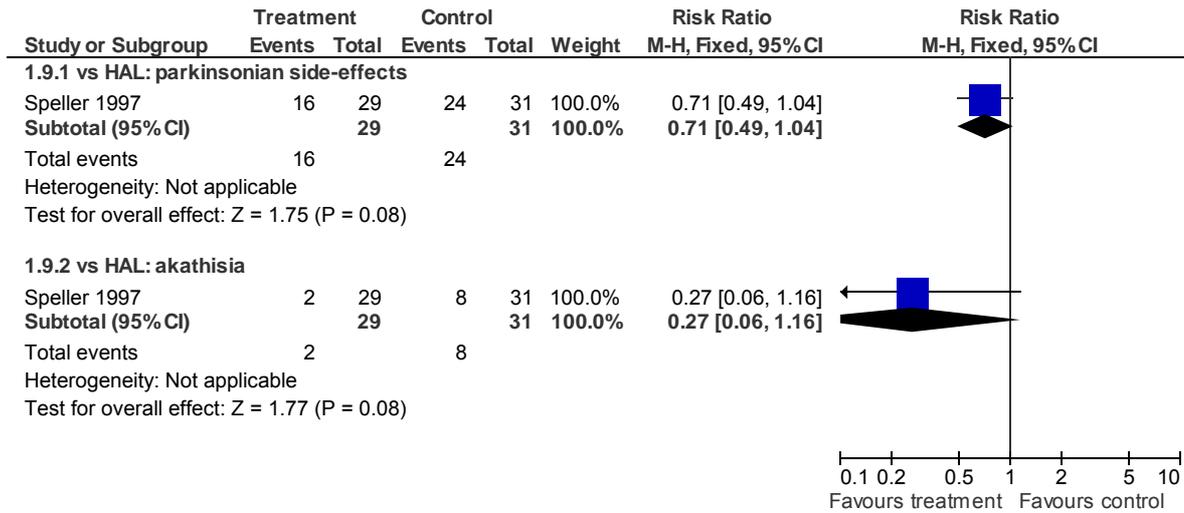


1.8 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)



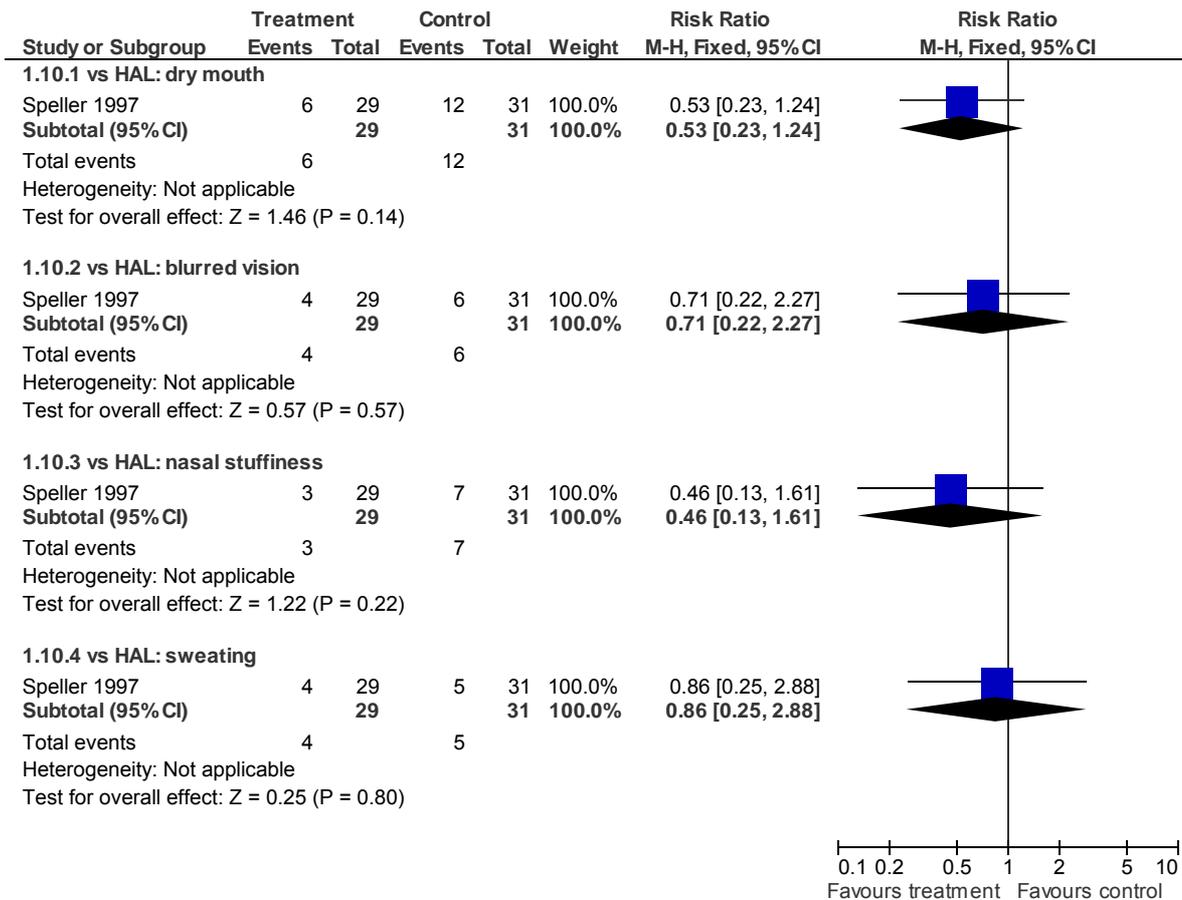
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

1.9 AE: 2. Neurologic SEs (treatment-emergent) (long-term)

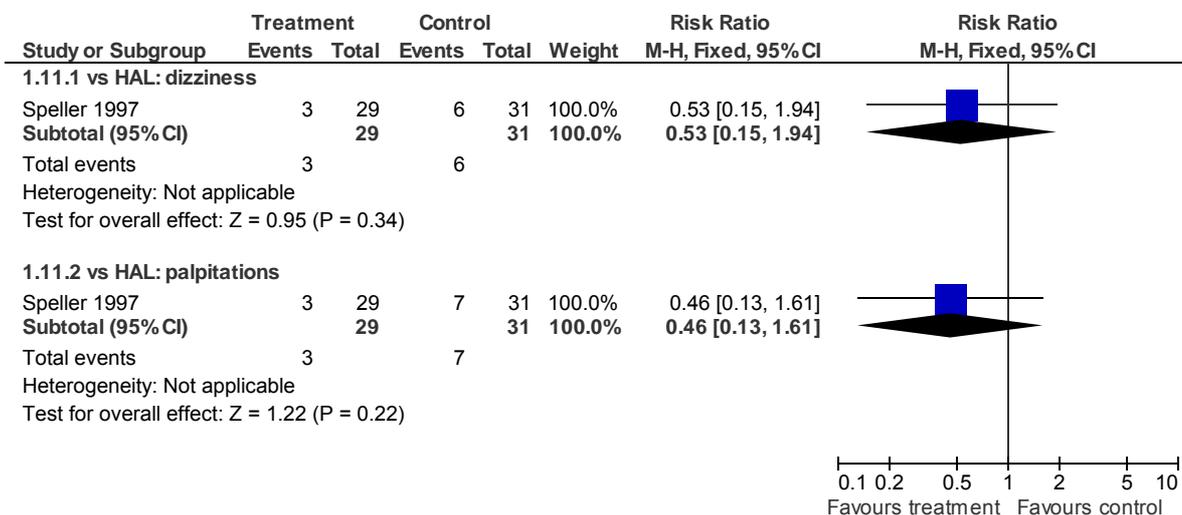


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

1.10 AE: 3. Autonomic SEs (long-term)

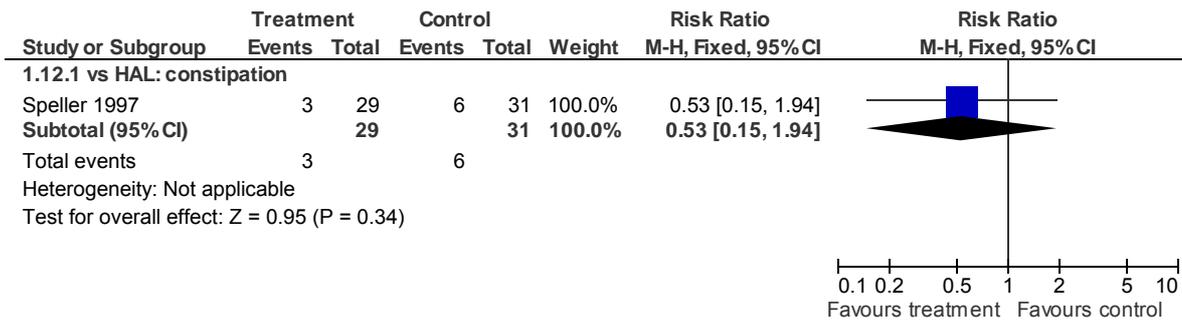


1.11 AE: 4. Cardiovascular SEs (long-term)

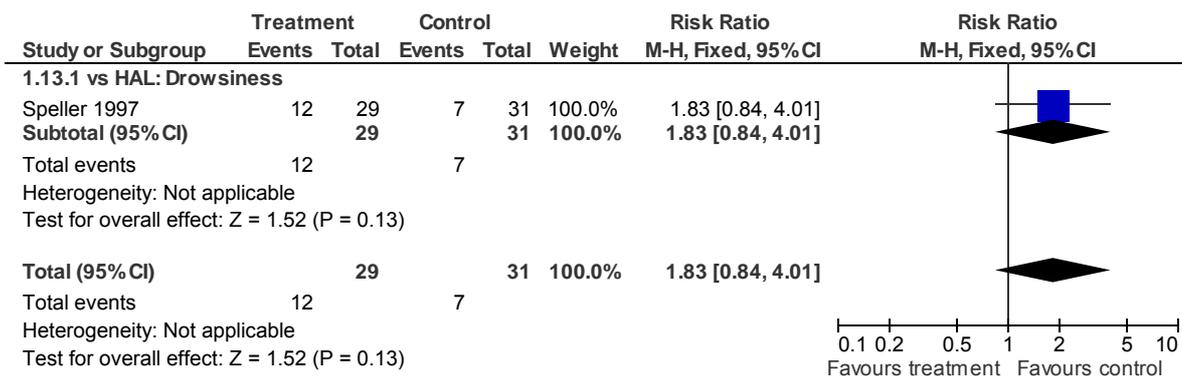


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

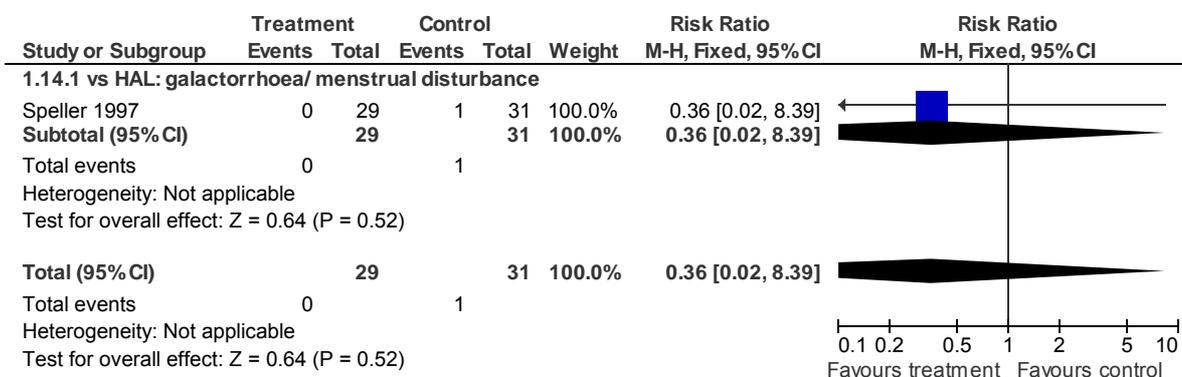
1.12 AE: 5. Gastrointestinal SEs (long-term)



1.13 AE: 6. Sedation (long-term)

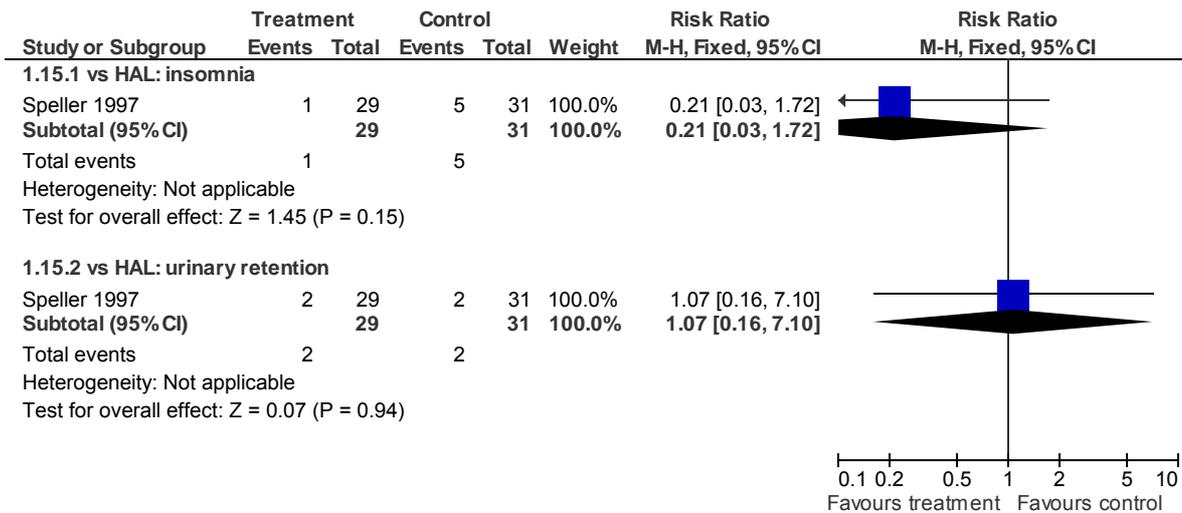


1.14 AE: 8. Menstrual problems (long-term)



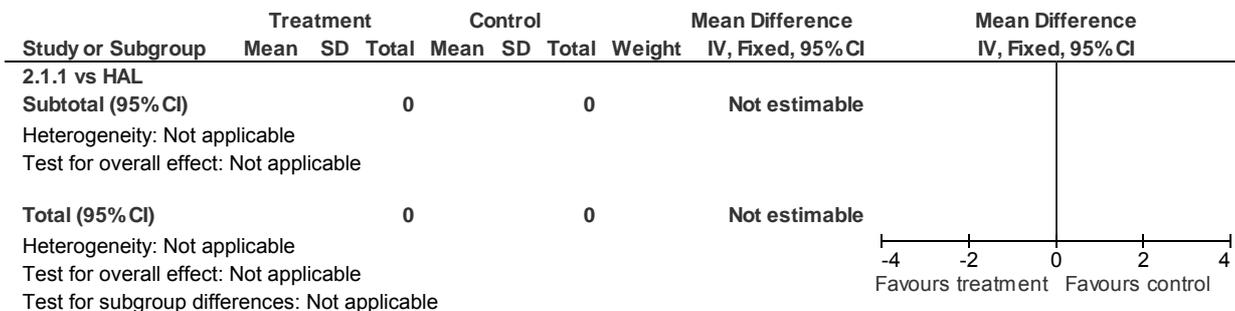
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

1.15 AE: 9. Other SEs (long-term)

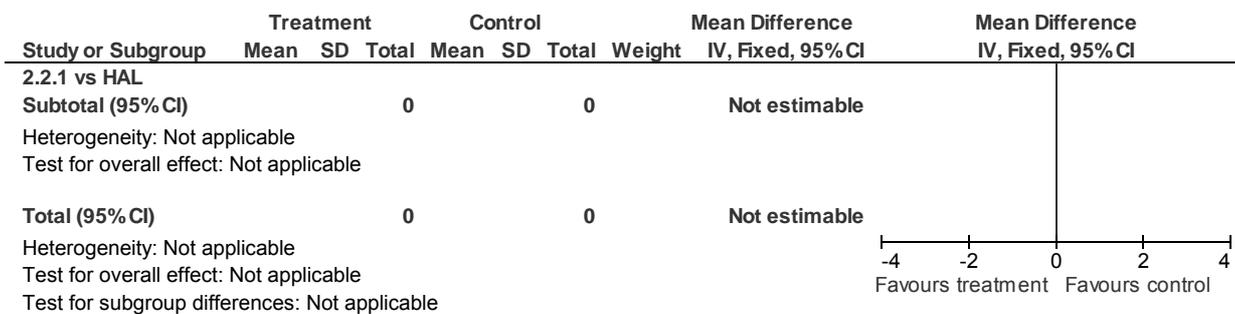


2 Quetiapine versus FGA (phase: persistent negative symptoms)

2.1 Mental state: 1. PANSS total (change from baseline) (short-term)

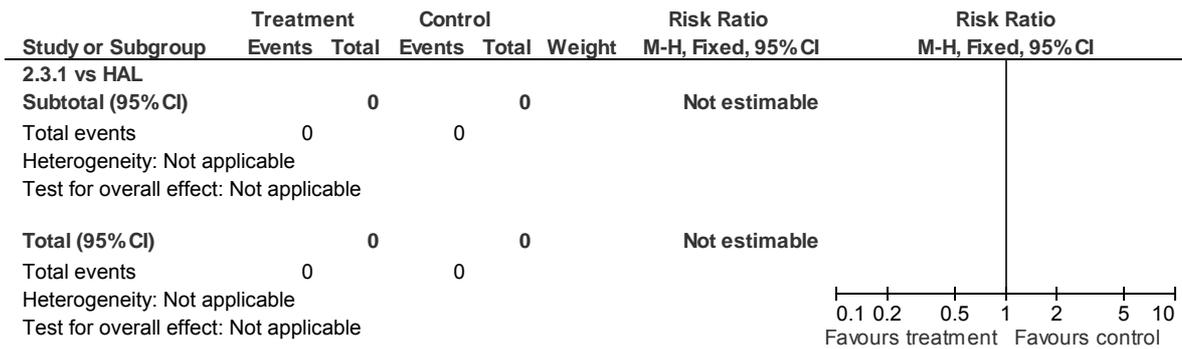


2.2 Mental state: 1. BPRS total (change from baseline) (short-term)

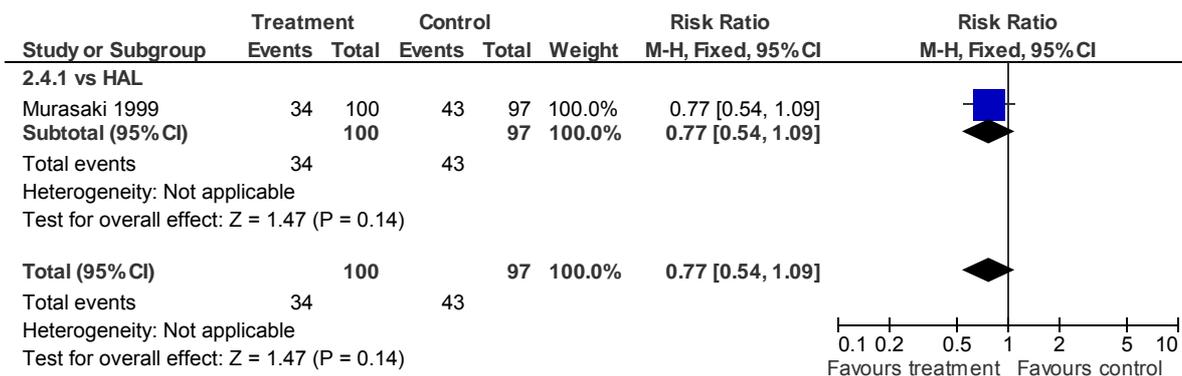


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

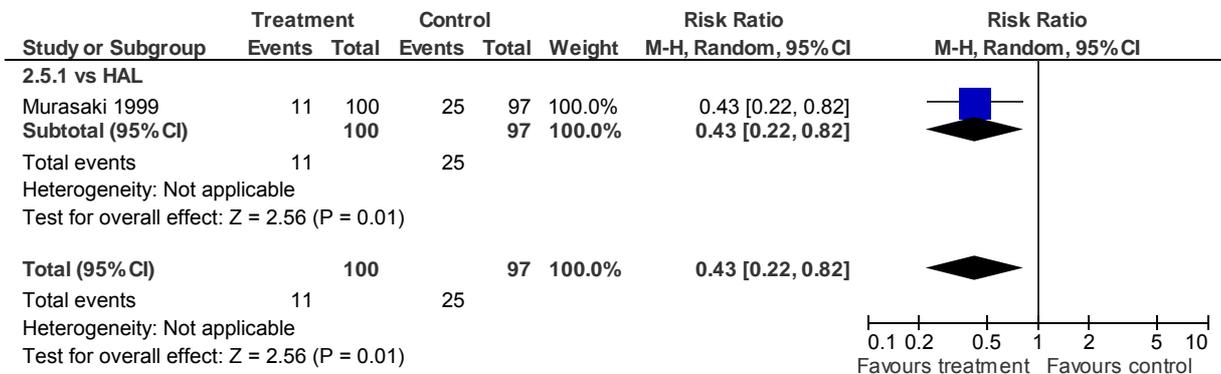
2.3 Mental state: 2. Non-response (<30% improvement on PANSS or CGI-I >2) (short-term)



2.4 Leaving the study early: 1. Any reason (short-term)



2.5 Leaving the study early: 2. Due to lack of efficacy (short-term)



Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

2.6 Leaving the study early: 3: Adverse event (short-term)

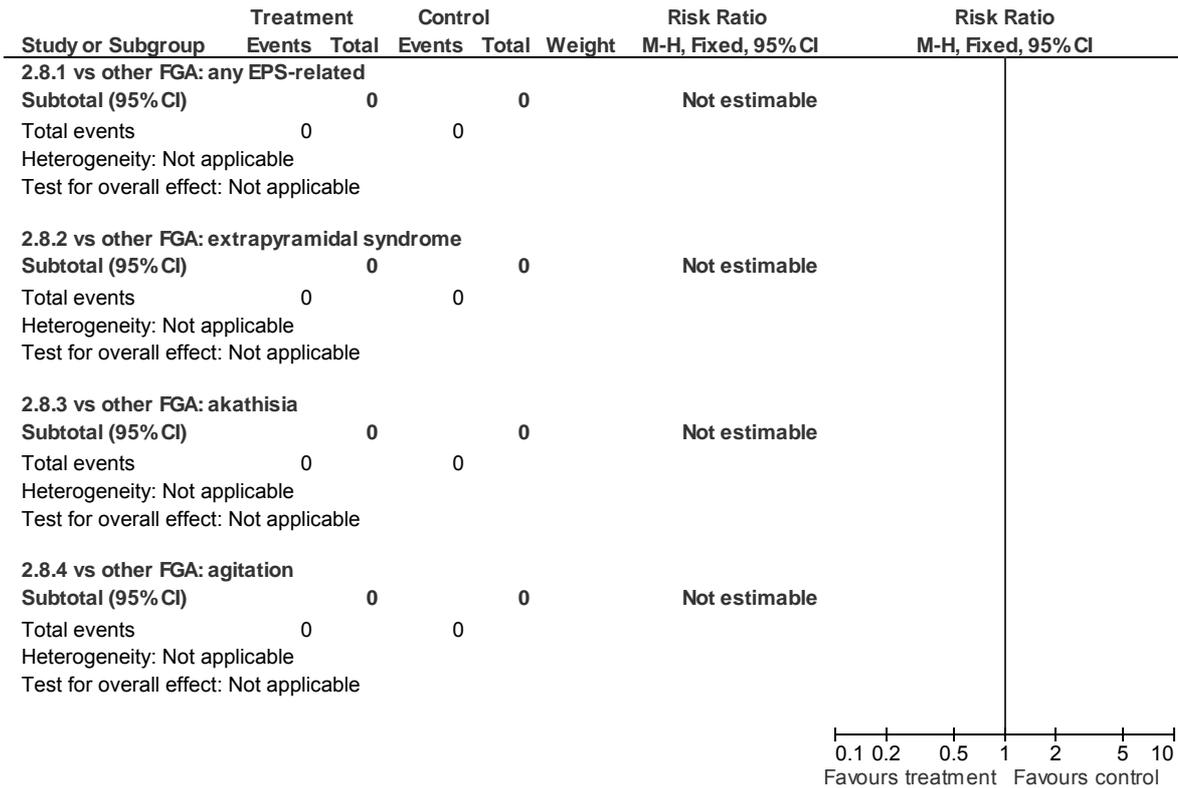
| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio | Risk Ratio |
|---|-----------|----------|---------|----------|--------|----------------------|--------------------|
| | Events | Total | Events | Total | | M-H, Fixed, 95% CI | M-H, Fixed, 95% CI |
| 2.6.1 vs HAL | | | | | | | |
| Subtotal (95% CI) | | 0 | | 0 | | Not estimable | |
| Total events | 0 | | 0 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | |
| Total (95% CI) | | | | | | | |
| Total (95% CI) | | 0 | | 0 | | Not estimable | |
| Total events | 0 | | 0 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | |

2.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio | Risk Ratio |
|---|-----------|----------|---------|----------|--------|----------------------|--------------------|
| | Events | Total | Events | Total | | M-H, Fixed, 95% CI | M-H, Fixed, 95% CI |
| 2.7.1 vs HAL | | | | | | | |
| Subtotal (95% CI) | | 0 | | 0 | | Not estimable | |
| Total events | 0 | | 0 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | |
| Total (95% CI) | | | | | | | |
| Total (95% CI) | | 0 | | 0 | | Not estimable | |
| Total events | 0 | | 0 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Not applicable | | | | | | | |

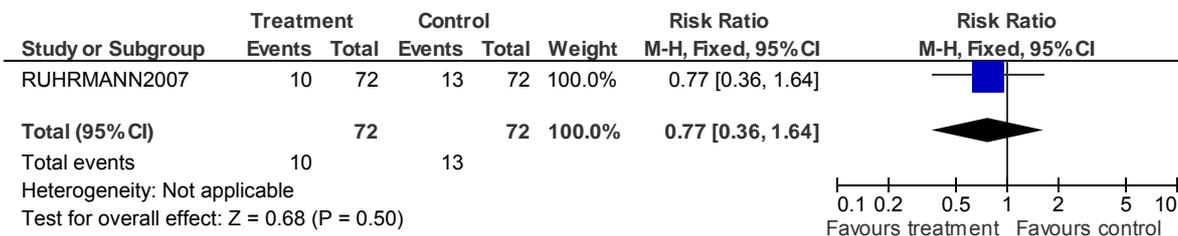
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

2.8 AE: 2. Neurologic SEs (treatment-emergent) (short-term)

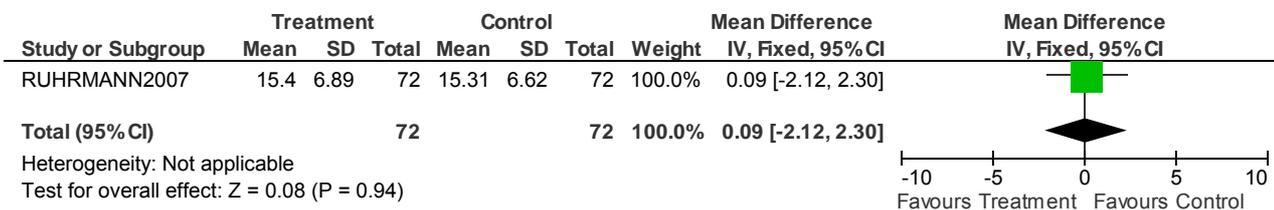


3 Risperidone versus FGA (flupentixol) (phase: persistent negative symptoms)

3.1 Global state: 1. Relapse (short-term)

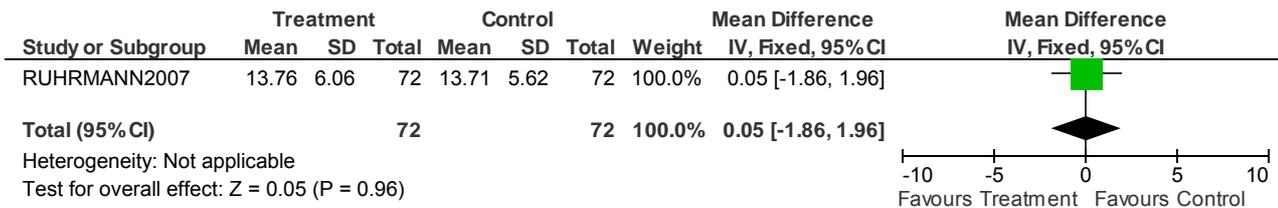


3.2 Mental state: 1. PANSS negative score (endpoint, high=poor) (medium-term)



Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

3.3 Mental state: 2. PANSS depressive/anxiety component (endpoint, high=poor) (medium-term)



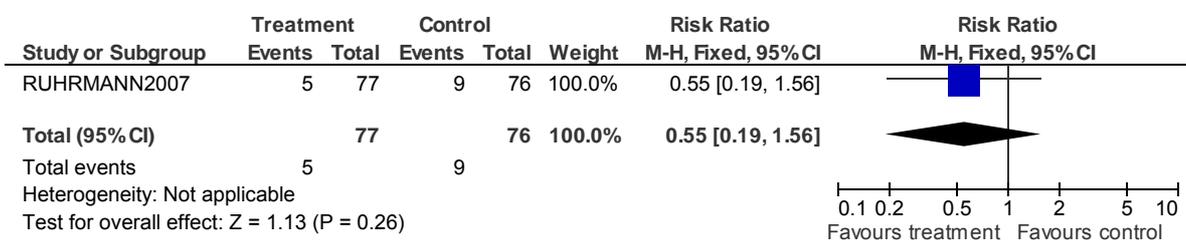
3.4 Leaving the study early: 1. Any reason (medium-term)



3.5 Leaving the study early: 2. Due to lack of efficacy (medium-term)

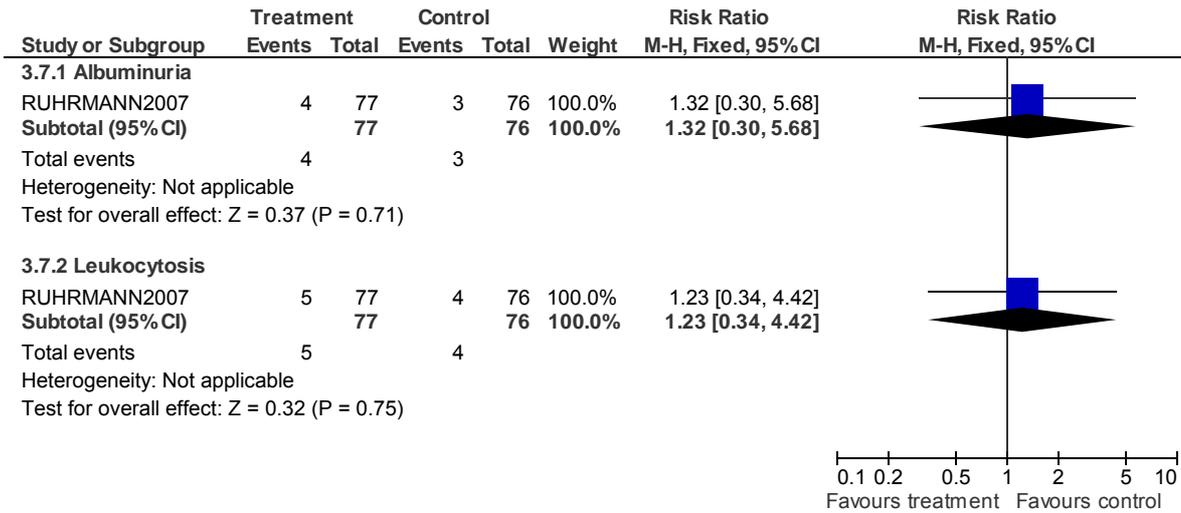


3.6 Leaving the study early: 3: Adverse event (medium-term)

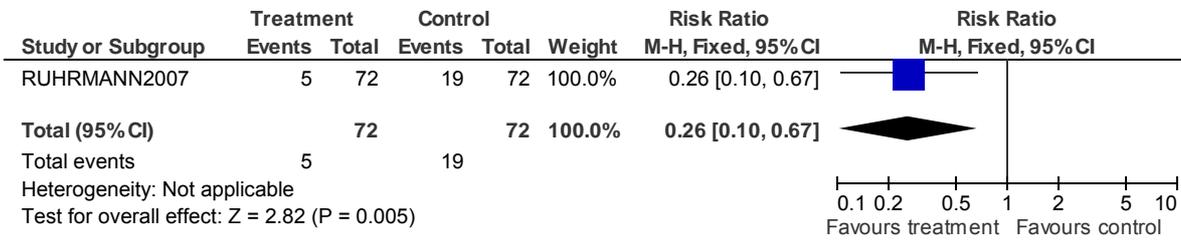


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

3.7 AE: 1. Metabolic SEs (treatment-emergent) (short-term)

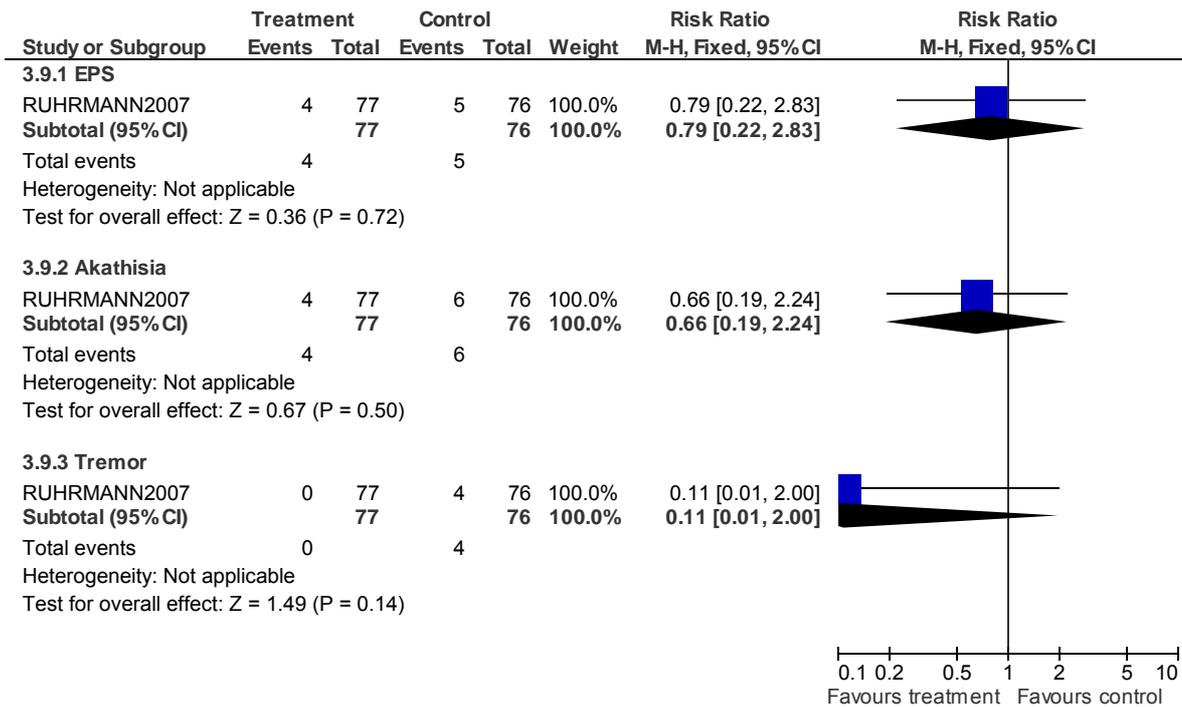


3.8 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)



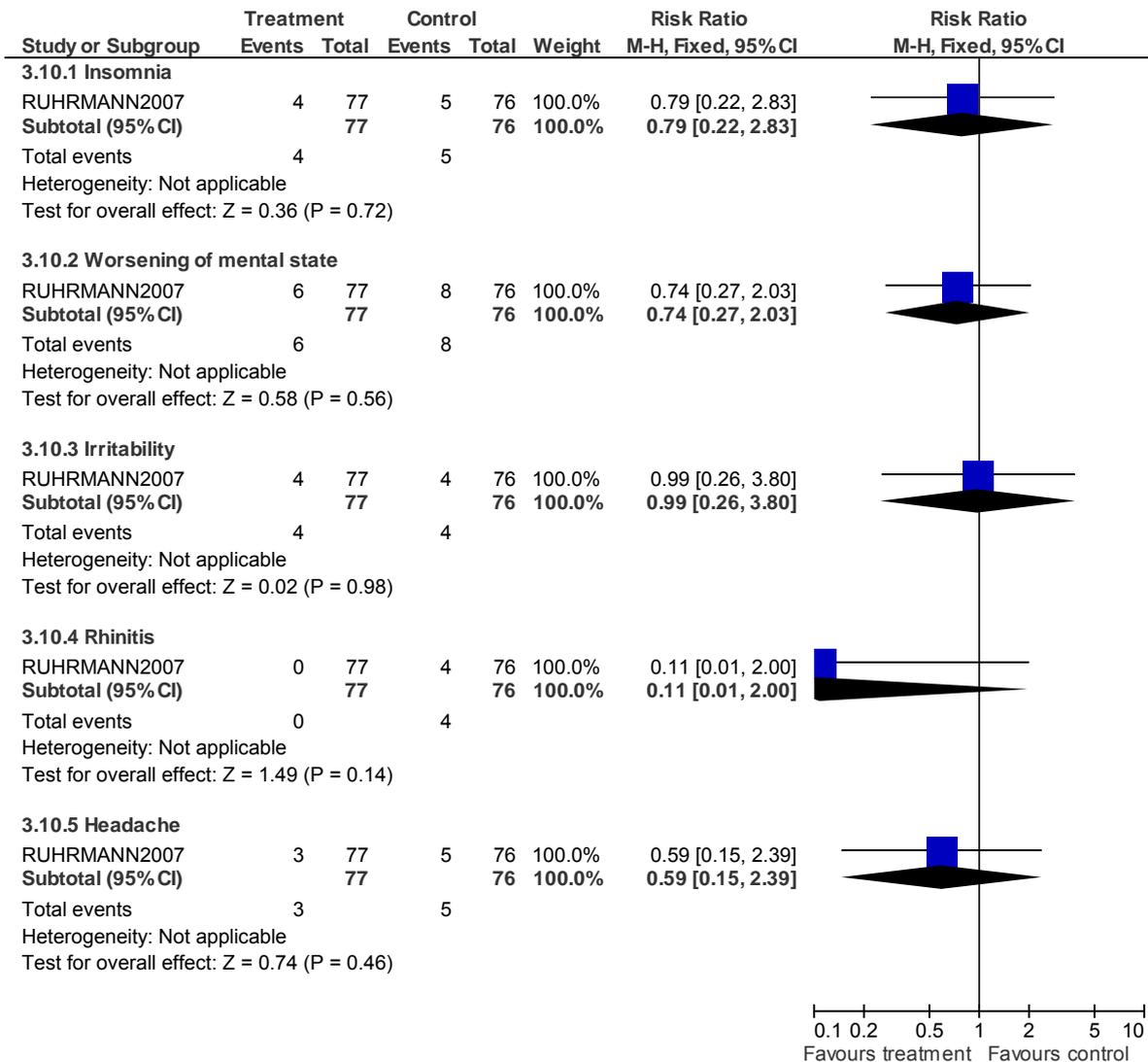
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

3.9 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



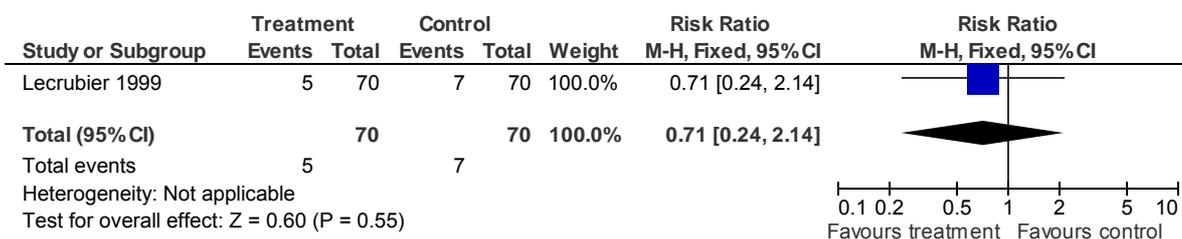
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

3.10 AE: 10. Other SEs (medium-term)



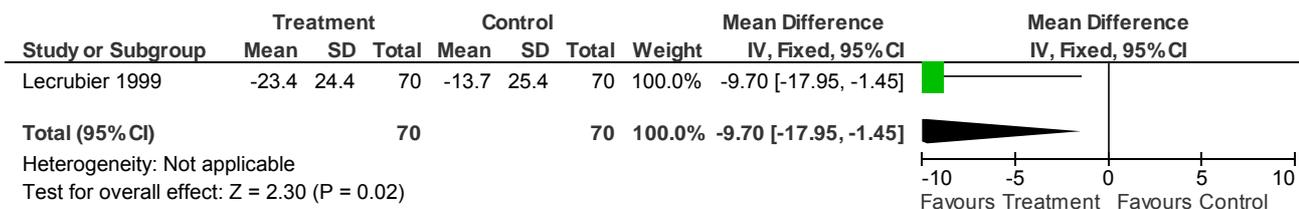
4 Olanzapine versus Amisulpride (phase: persistent negative symptoms)

4.1 Global state: 1. Relapse (medium-term)

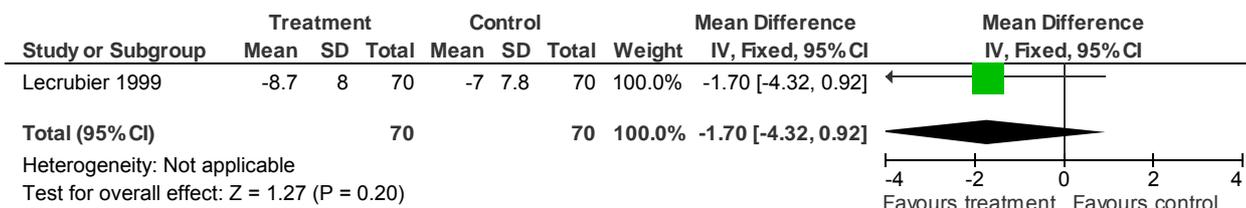


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

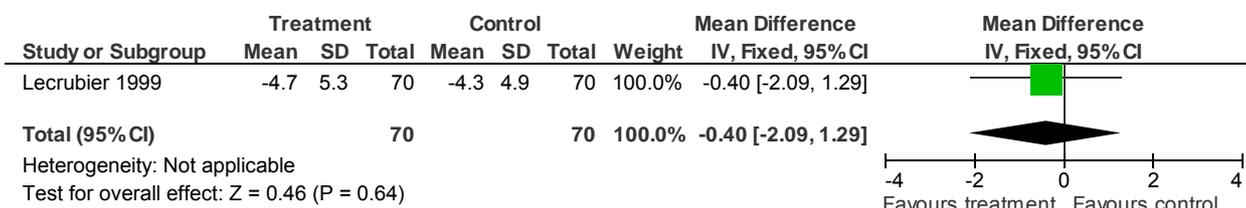
4.2 Mental state: 1. PANSS total (change from baseline) (Medium-term)



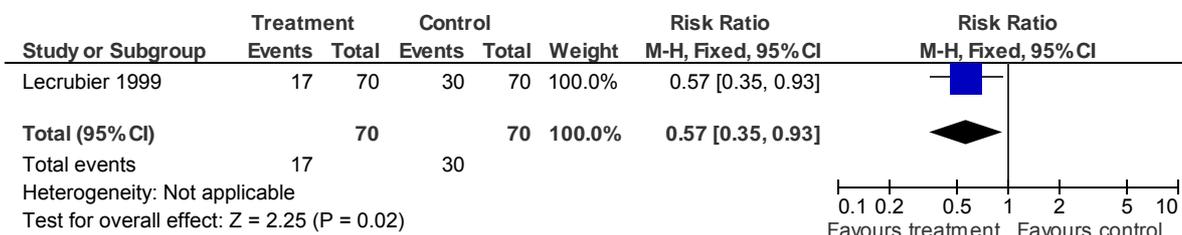
4.3 Mental state: 2. PANSS negative score (change from baseline) (medium-term)



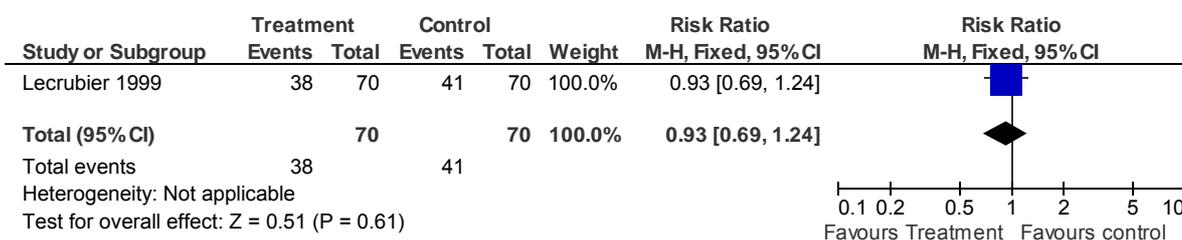
4.4 Mental state: 2. SANS summary score (change from baseline) (medium-term)



4.5 Mental state: 3. Non-response (<20% improvement in SANS & <10% improvement in PANSS) (medium-term)



4.6 Leaving the study early: 1. Any reason (medium-term)

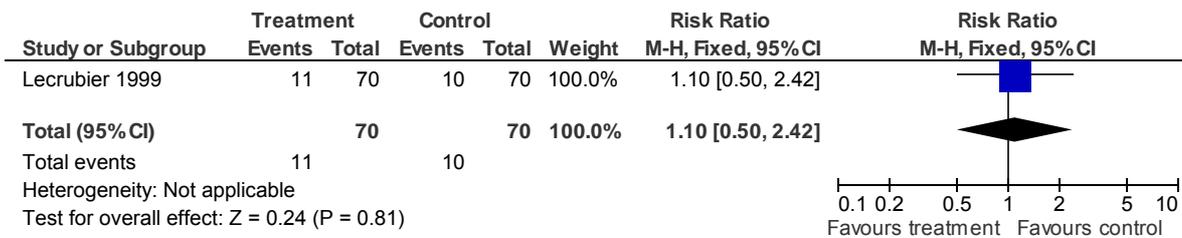


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

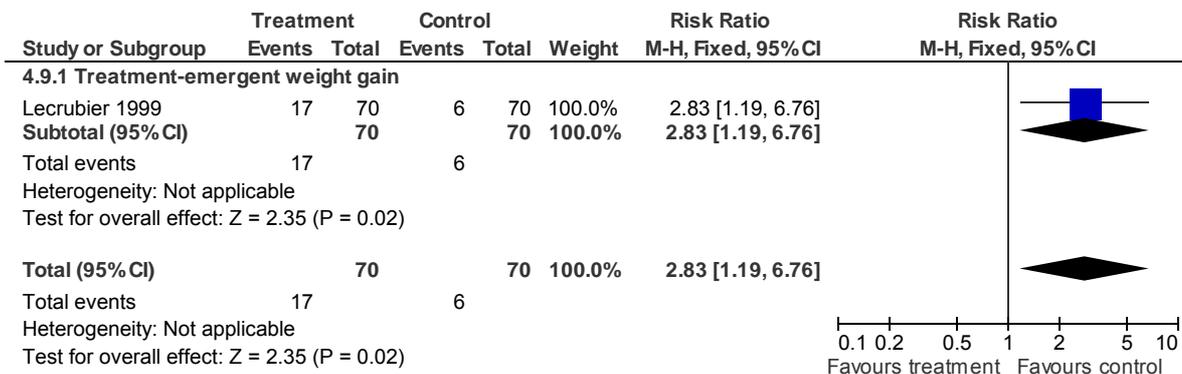
4.7 Leaving the study early: 2. Due to lack of efficacy (medium-term)



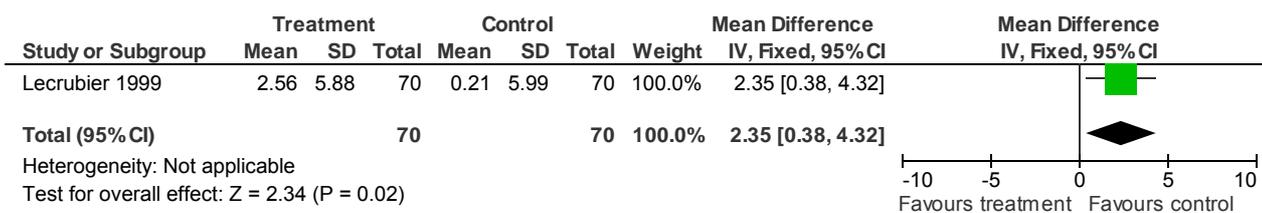
4.8 Leaving the study early: 3: Adverse event (medium-term)



4.9 AE: 1. Metabolic SEs - Weight gain

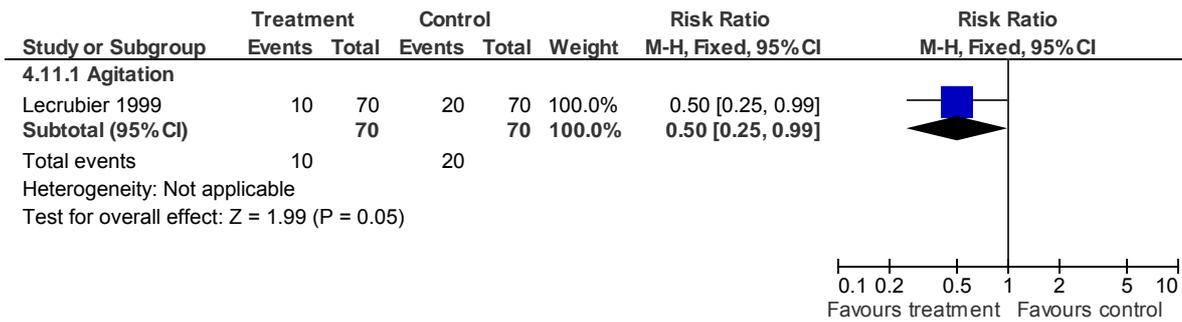


4.10 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

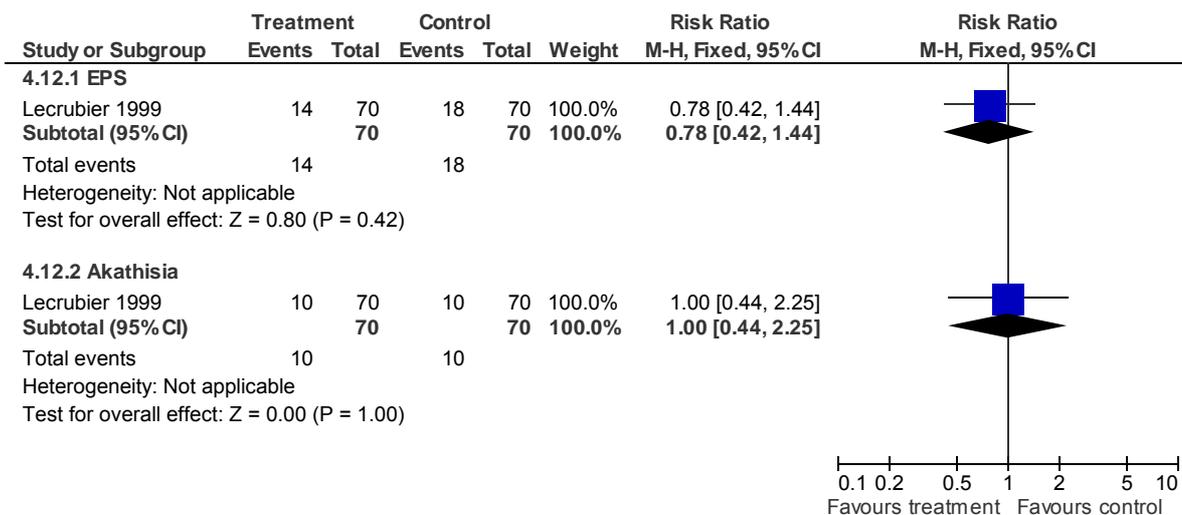


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

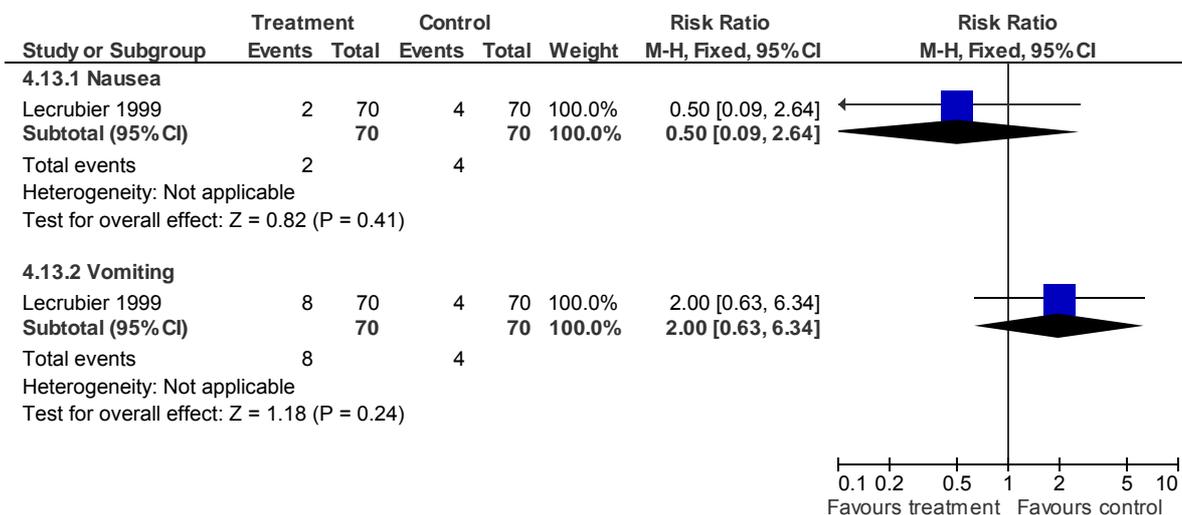
4.11 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



4.12 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

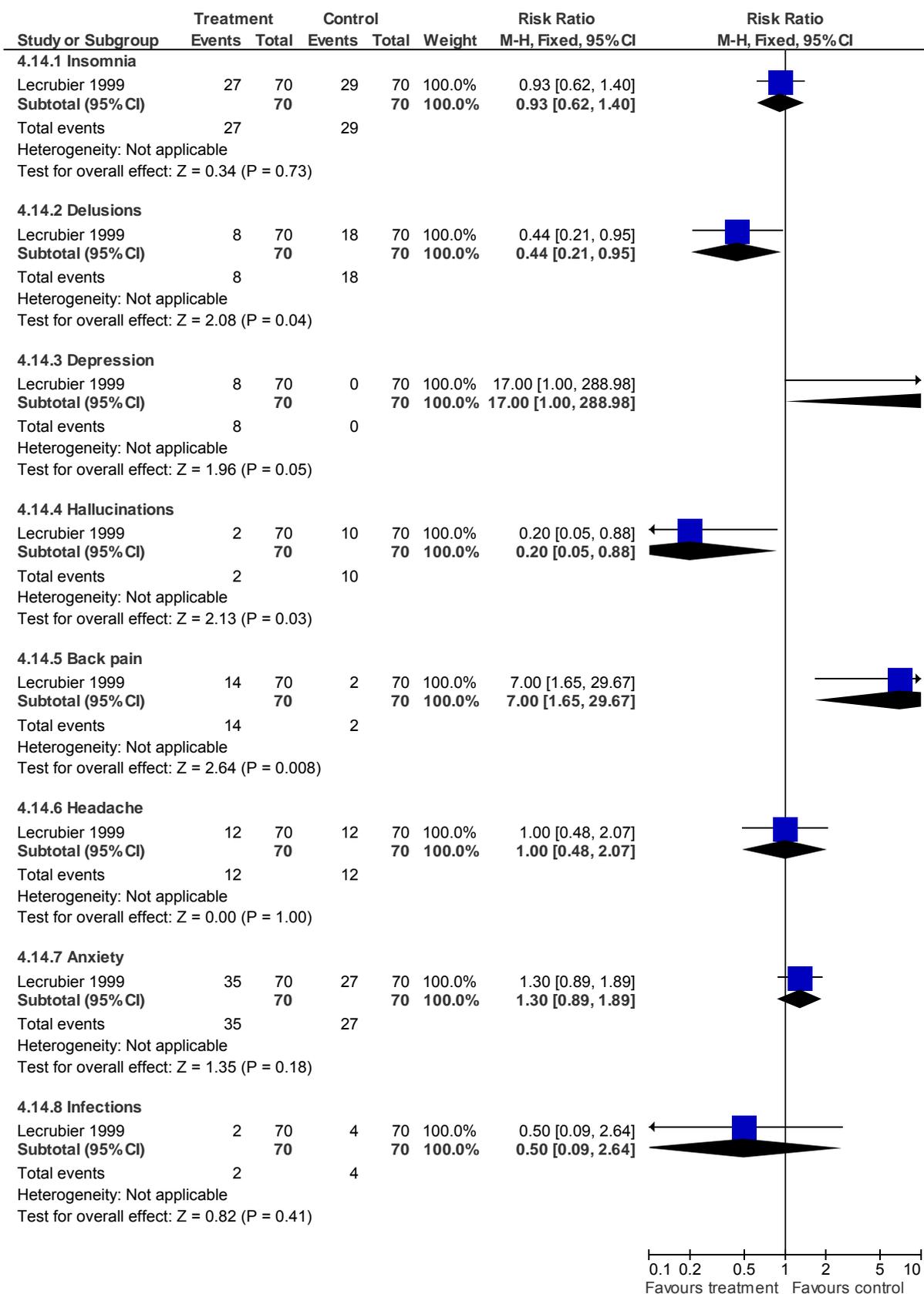


4.13 AE: 5. Gastrointestinal SEs (short-term)



Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

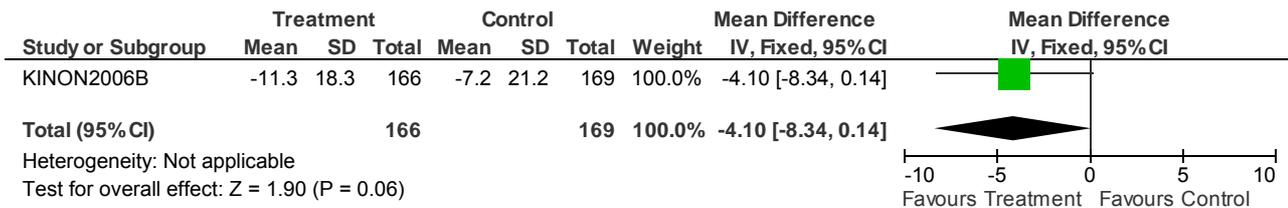
4.14 AE: 10. Other SEs (medium-term)



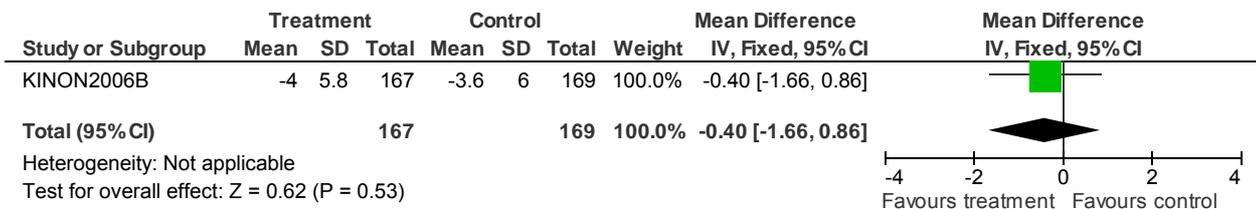
5 Olanzapine versus Quetiapine (phase: persistent negative symptoms)

Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

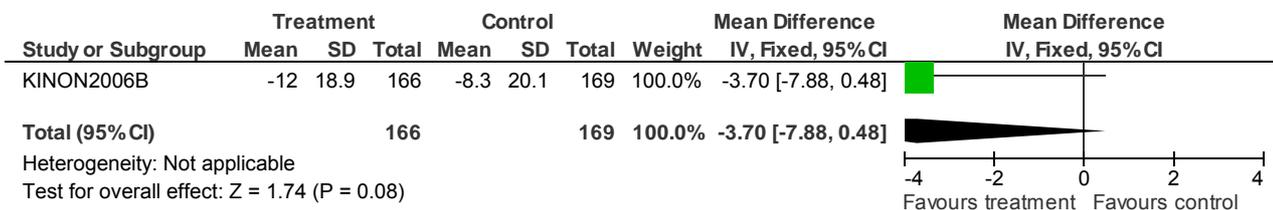
5.1 Mental state: 1. PANSS total (change from baseline) (medium-term)



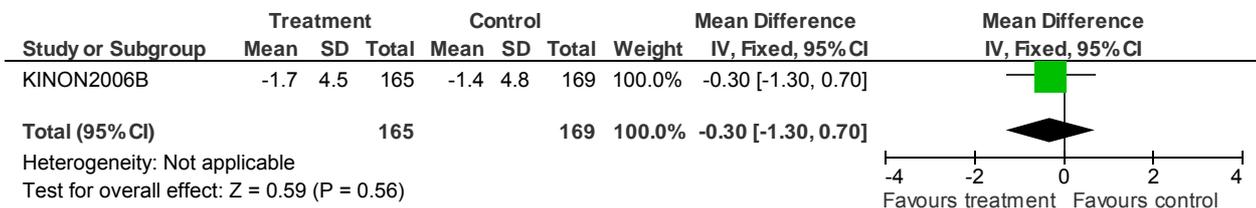
5.2 Mental state: 2. PANSS negative score (change from baseline) (medium-term)



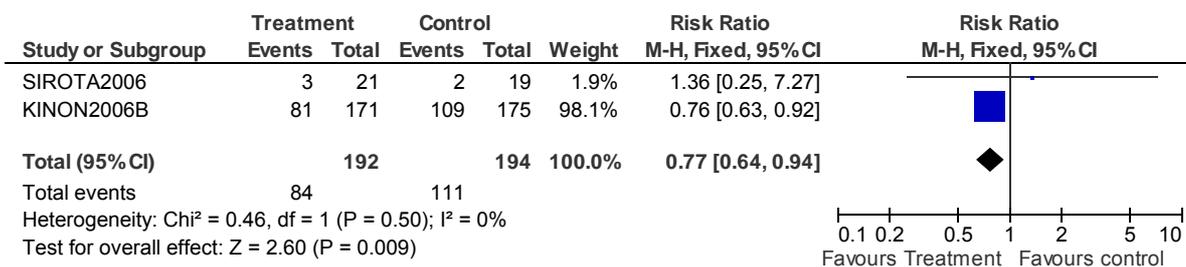
5.3 Mental state: 2. SANS total (change from baseline) (medium-term)



5.4 Mental state: 3. Calgary Depression Scale (change from baseline) (medium-term)

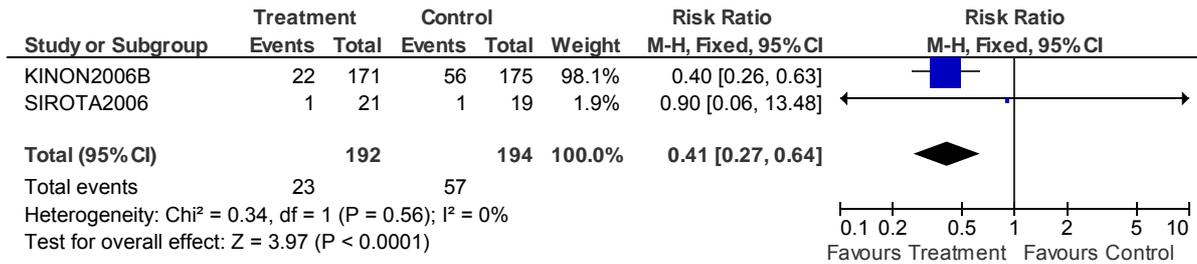


5.5 Leaving the study early: 1. Any reason (medium-term)

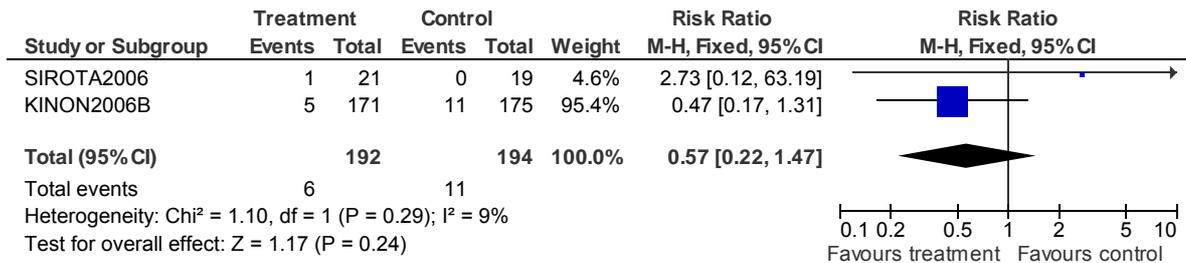


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

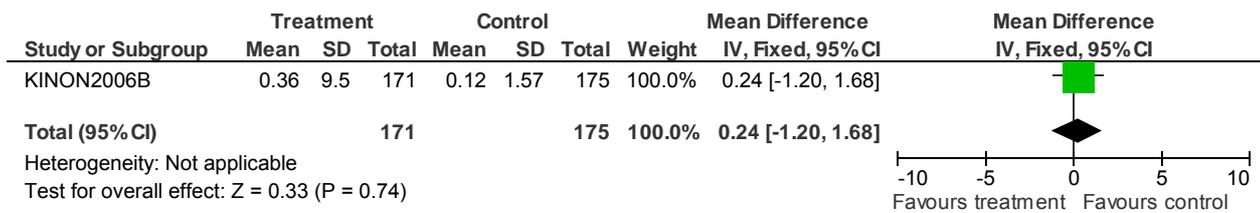
5.6 Leaving the study early: 2. Due to lack of efficacy (medium-term)



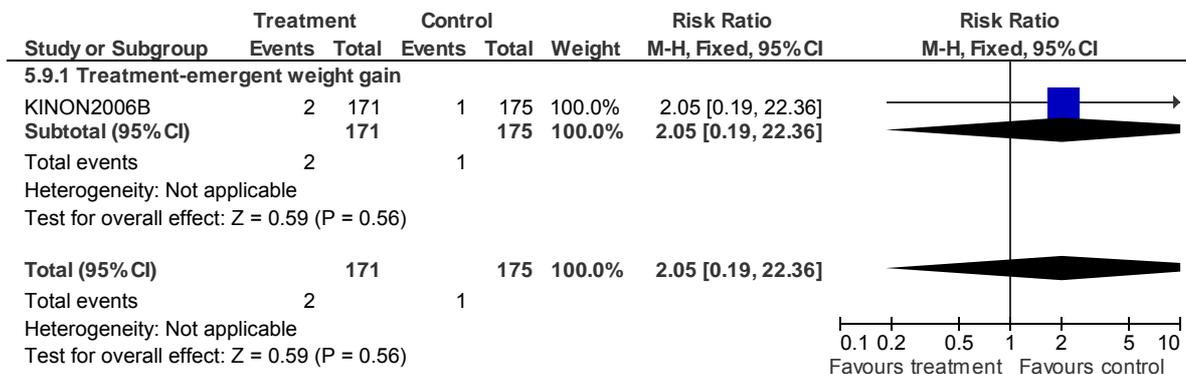
5.7 Leaving the study early: 3. Adverse event (medium-term)



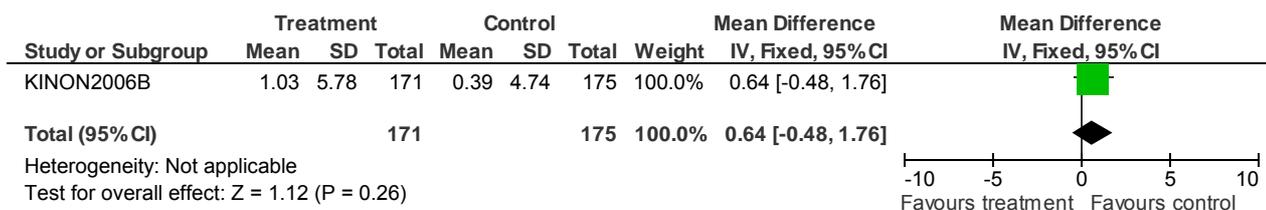
5.8 AE: 1. Metabolic SEs - BMI (change from baseline) (medium-term)



5.9 AE: 1. Metabolic SEs - Weight gain

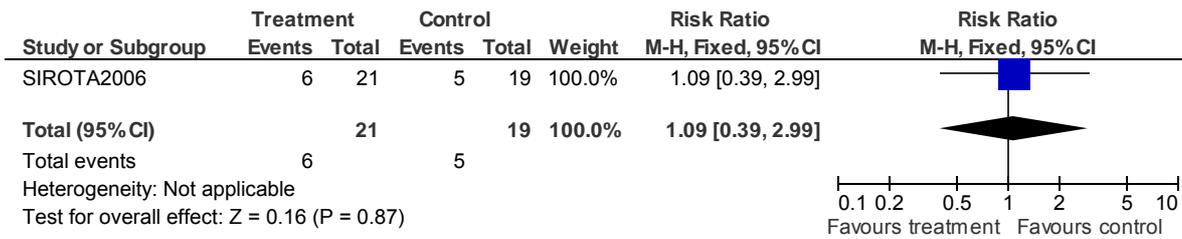


5.10 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

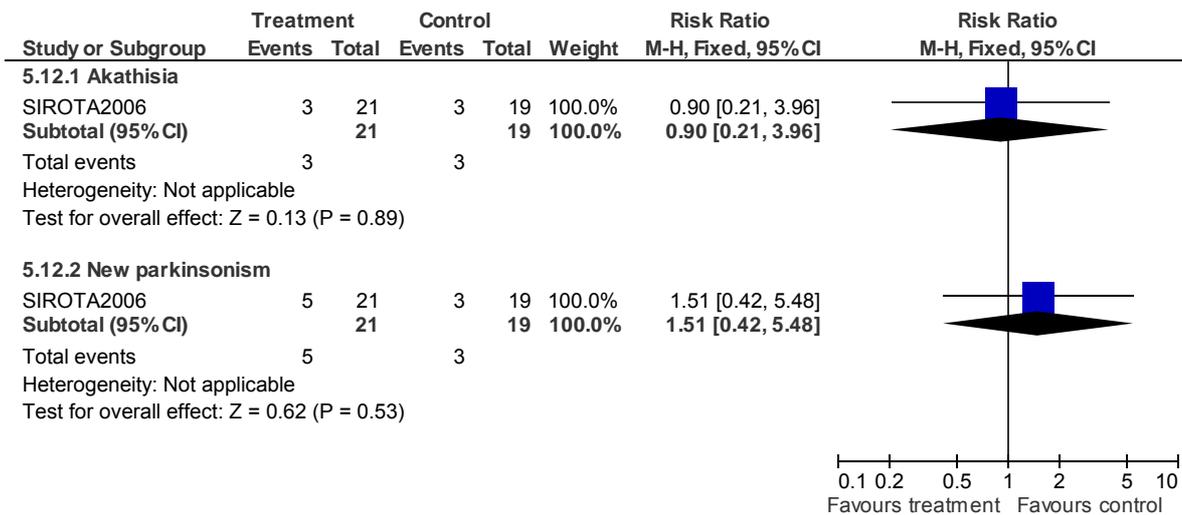


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

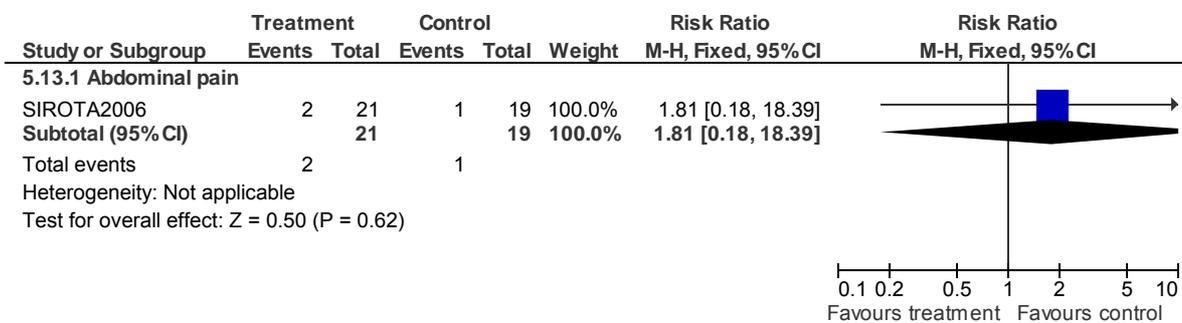
5.11 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)



5.12 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

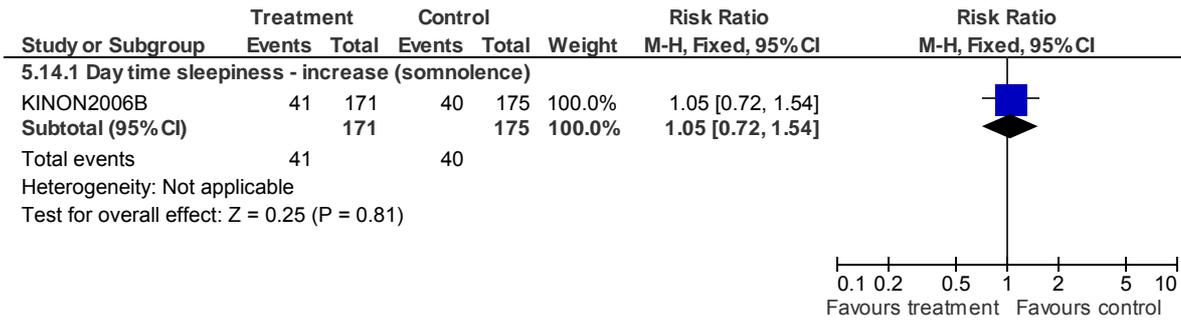


5.13 AE: 5. Gastrointestinal SEs (short-term)



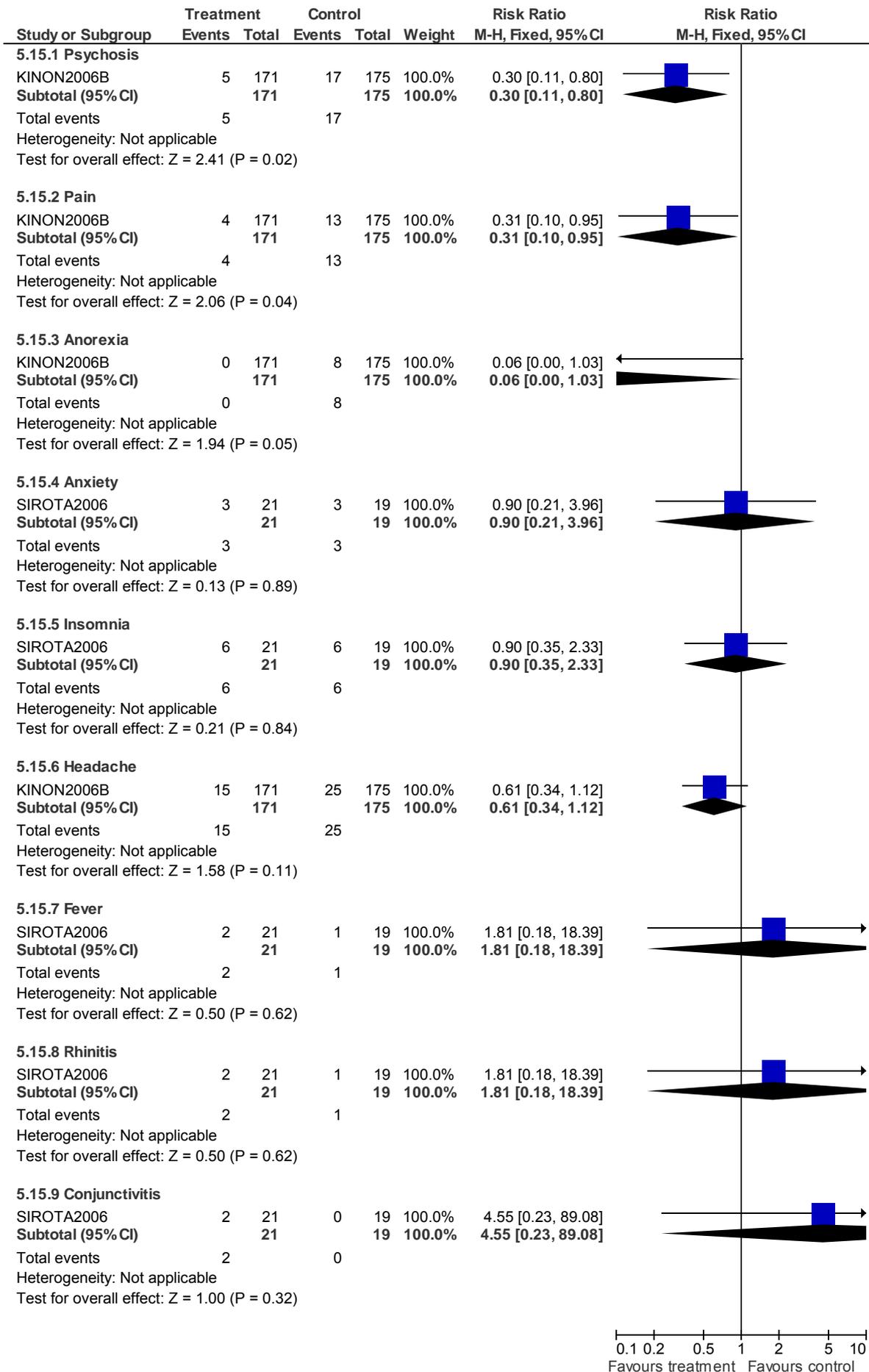
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

5.14 AE: 6. Sedation (short-term)



Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

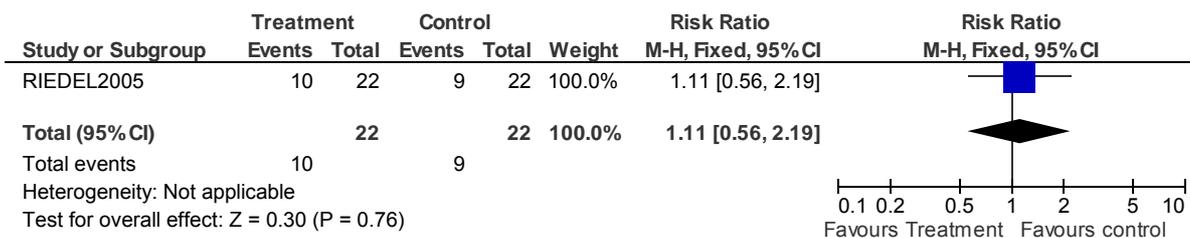
5.15 AE: 10. Other SEs (medium-term)



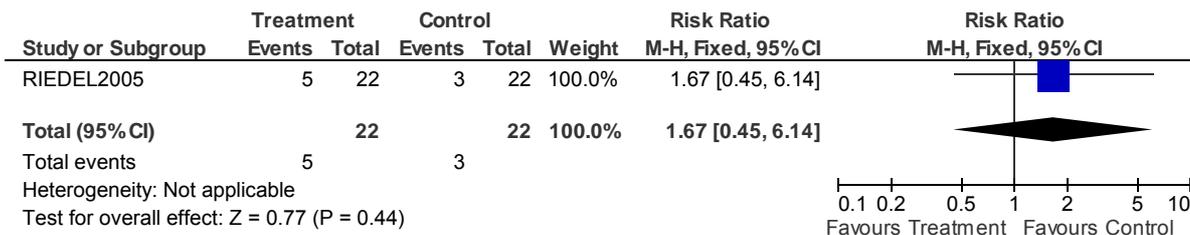
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

6 Risperidone versus Quetiapine (phase: persistent negative symptoms)

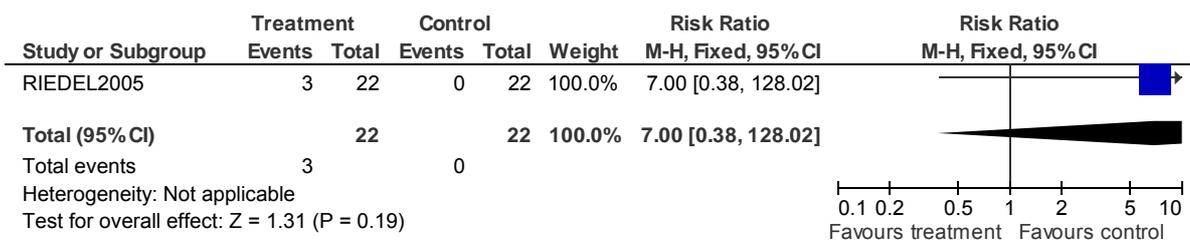
6.1 Leaving the study early: 1. Any reason (medium-term)



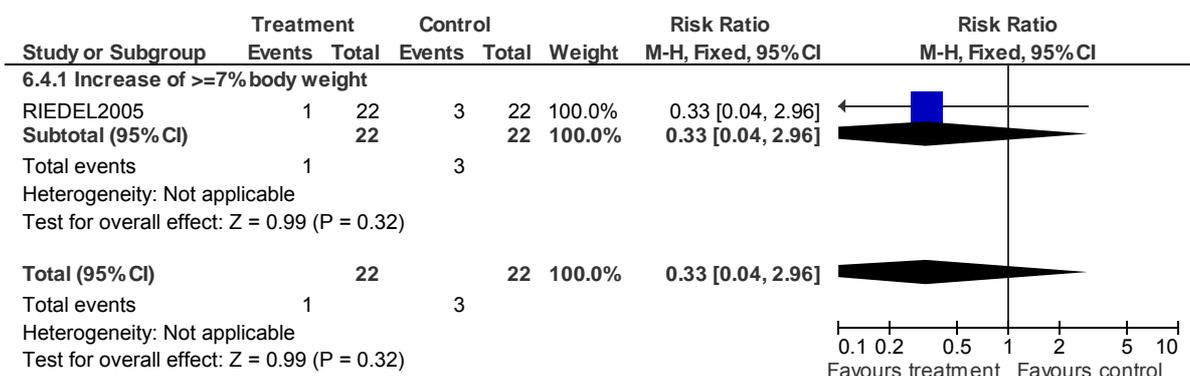
6.2 Leaving the study early: 2. Due to lack of efficacy (medium-term)



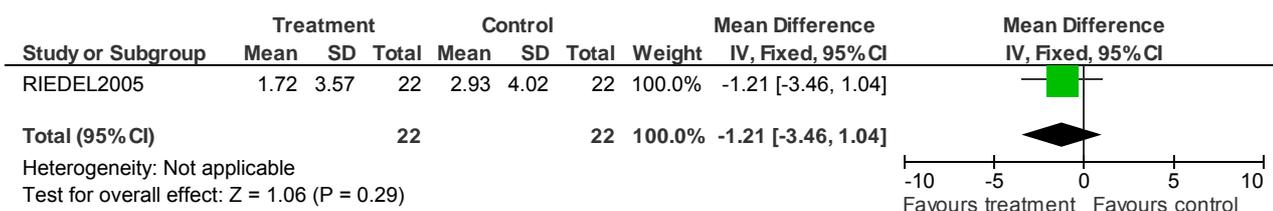
6.3 Leaving the study early: 3. Adverse event (medium-term)



6.4 AE: 1. Metabolic SEs - Weight gain

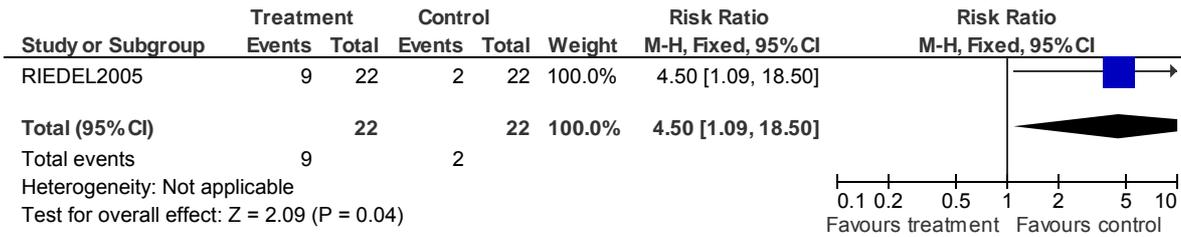


6.5 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)

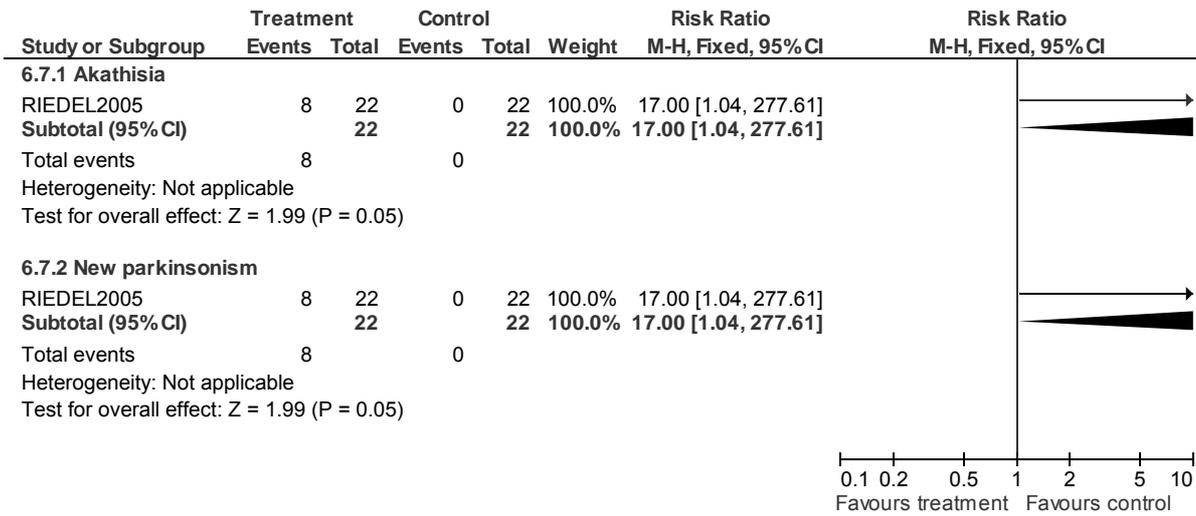


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

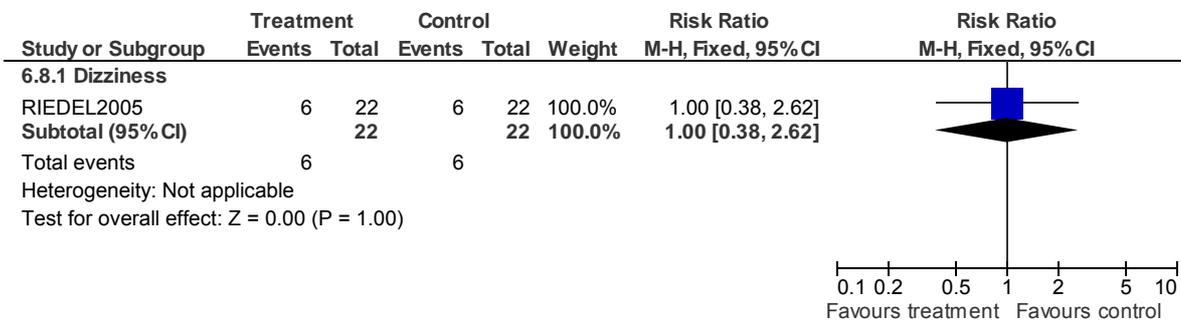
6.6 AE: 2. Neurologic SEs - Use of anticholinergic medication (medium-term)



6.7 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)

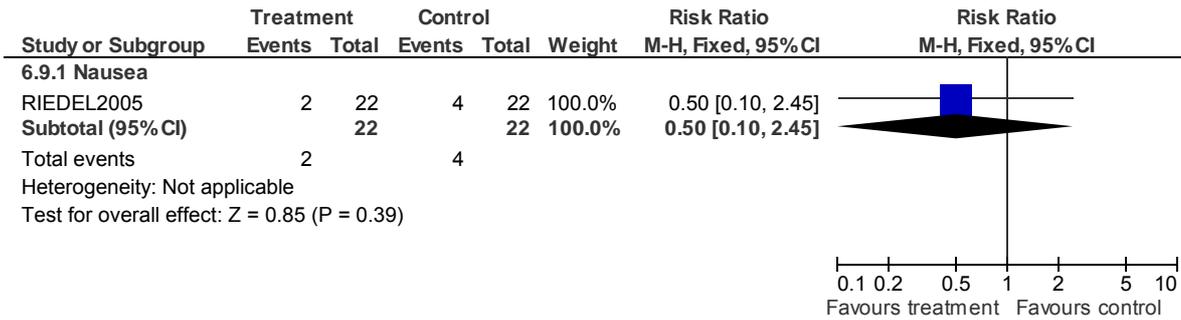


6.8 AE: 4. Cardiovascular SEs (short-term)

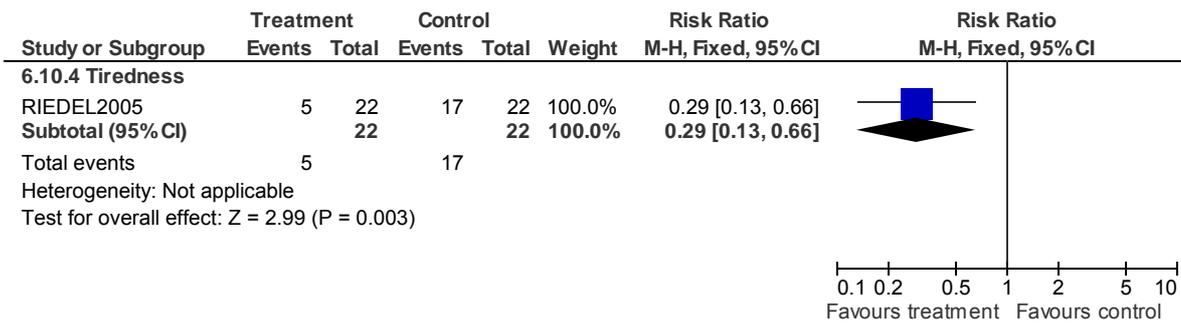


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

6.9 AE: 5. Gastrointestinal SEs (short-term)

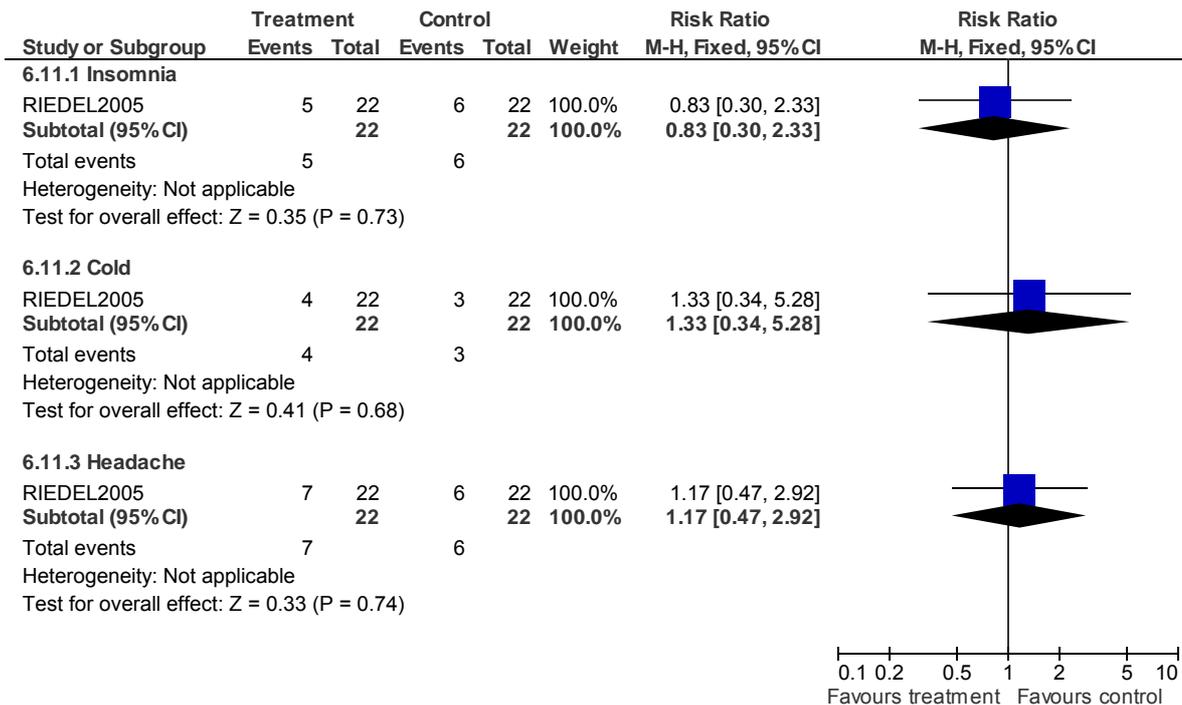


6.10 AE: 6. Sedation (short-term)



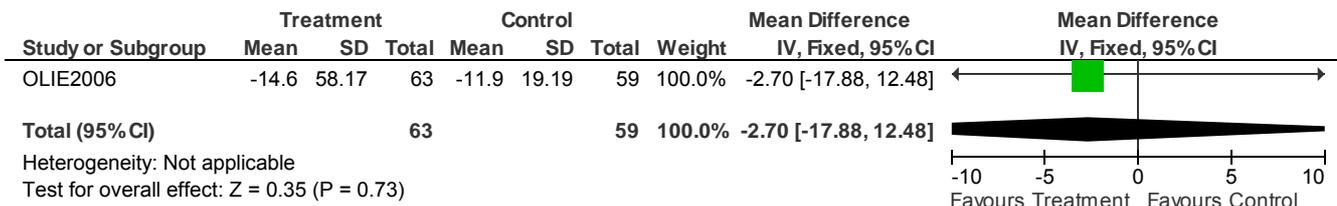
Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

6.11 AE: 10. Other SEs (short-term)

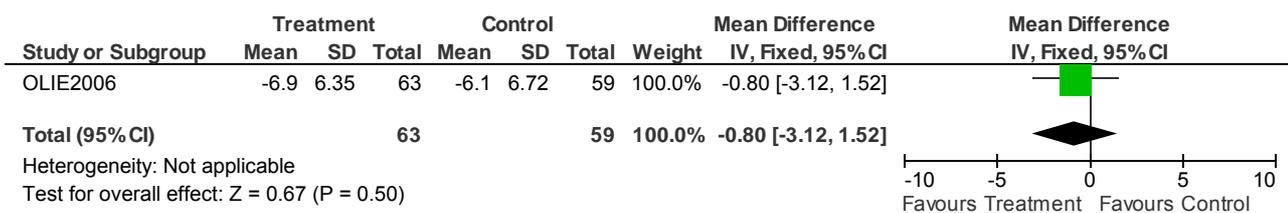


7 Amisulpride versus Ziprasidone (phase: persistent negative symptoms)

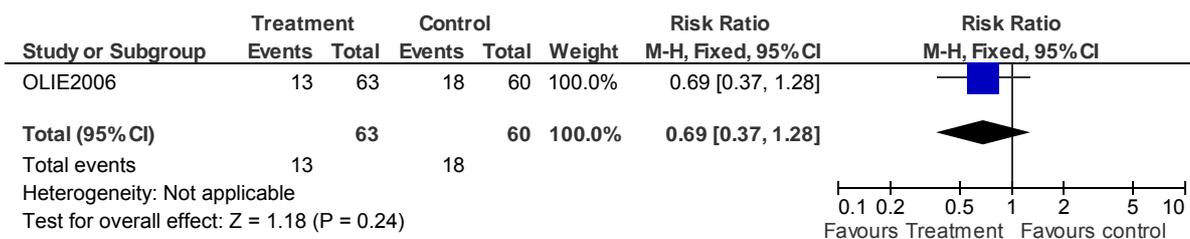
7.1 Mental state: 1. PANSS total (endpoint, high=poor) (medium-term)



7.2 Mental state: 2. PANSS negative score (change from baseline) (medium-term)



7.3 Leaving the study early: 1. Any reason (medium-term)

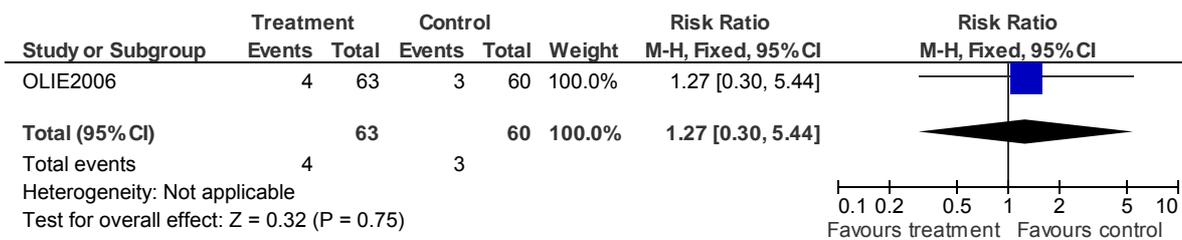


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

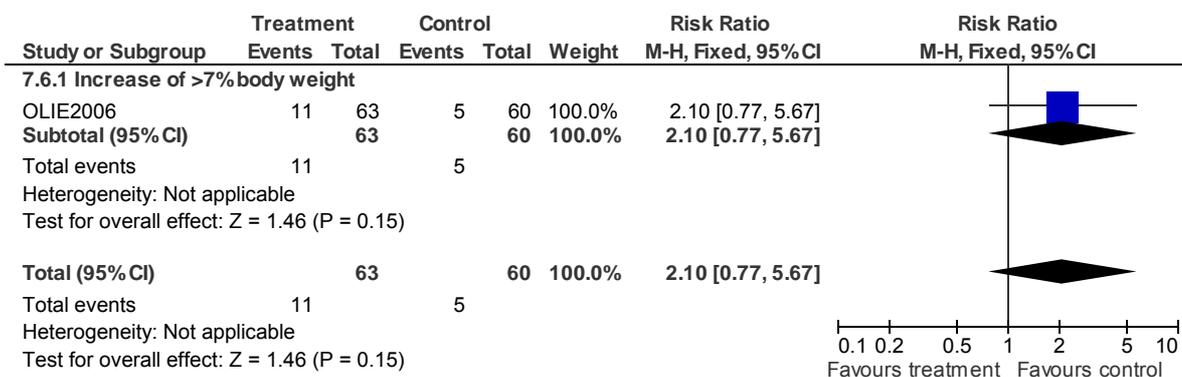
7.4 Leaving the study early: 2. Due to lack of efficacy (medium-term)



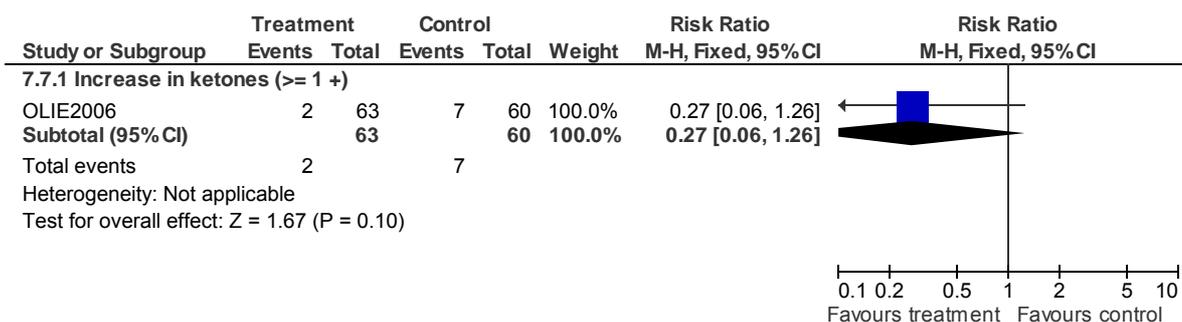
7.5 Leaving the study early: 3: Adverse event (medium-term)



7.6 AE: 1. Metabolic SEs - Weight gain

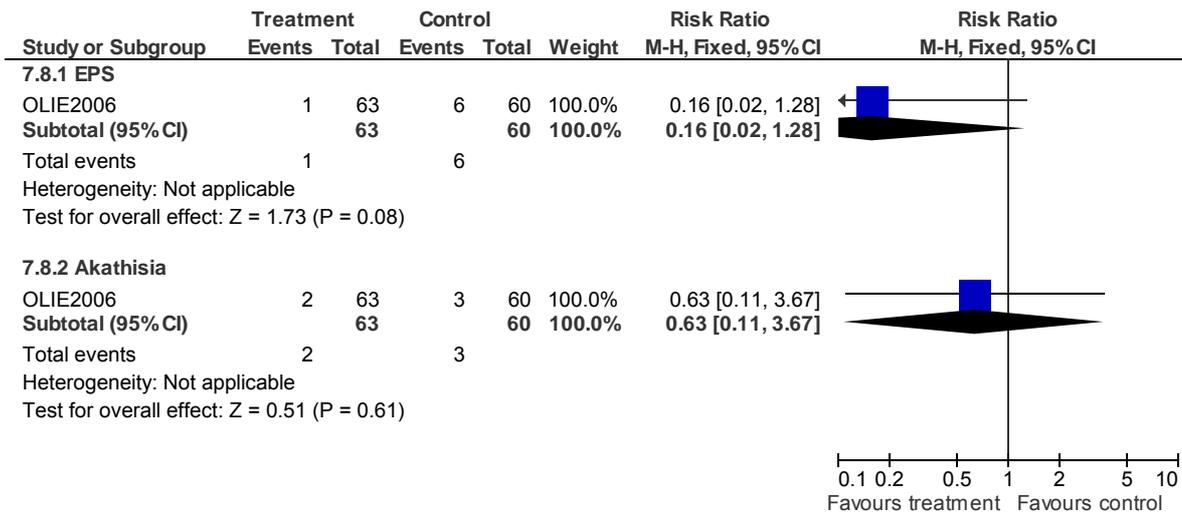


7.7 AE: 1. Metabolic SEs (treatment-emergent) (short-term)

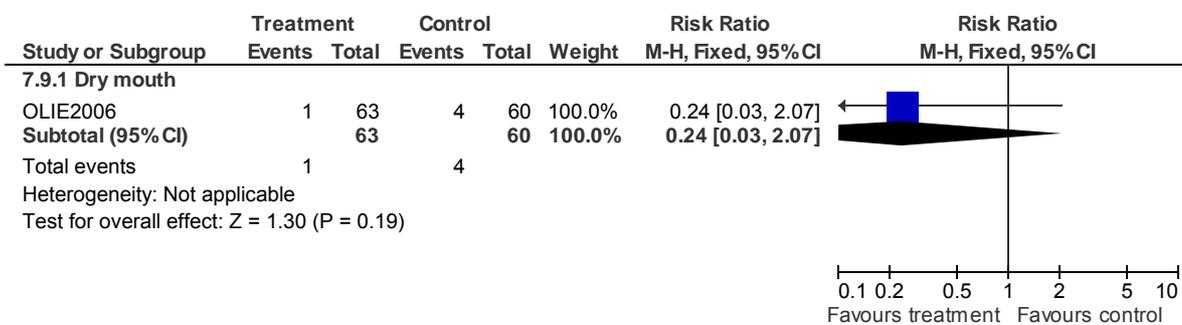


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

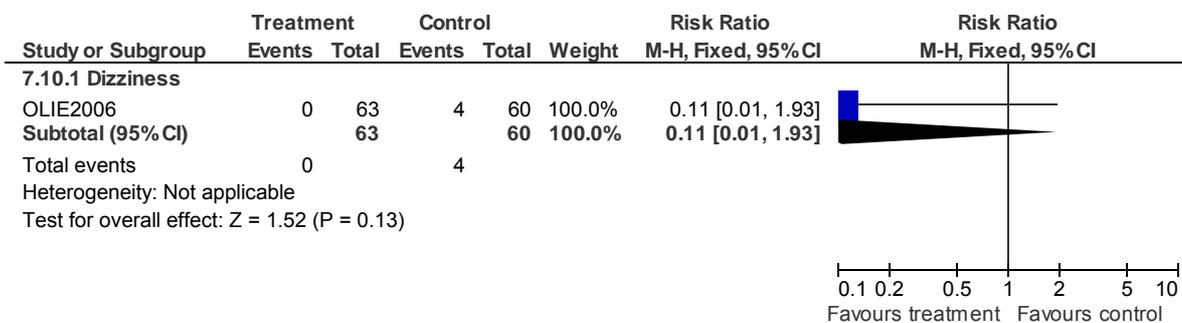
7.8 AE: 2. Neurologic SEs (treatment-emergent) (medium-term)



7.9 AE: 3. Autonomic SEs (short-term)

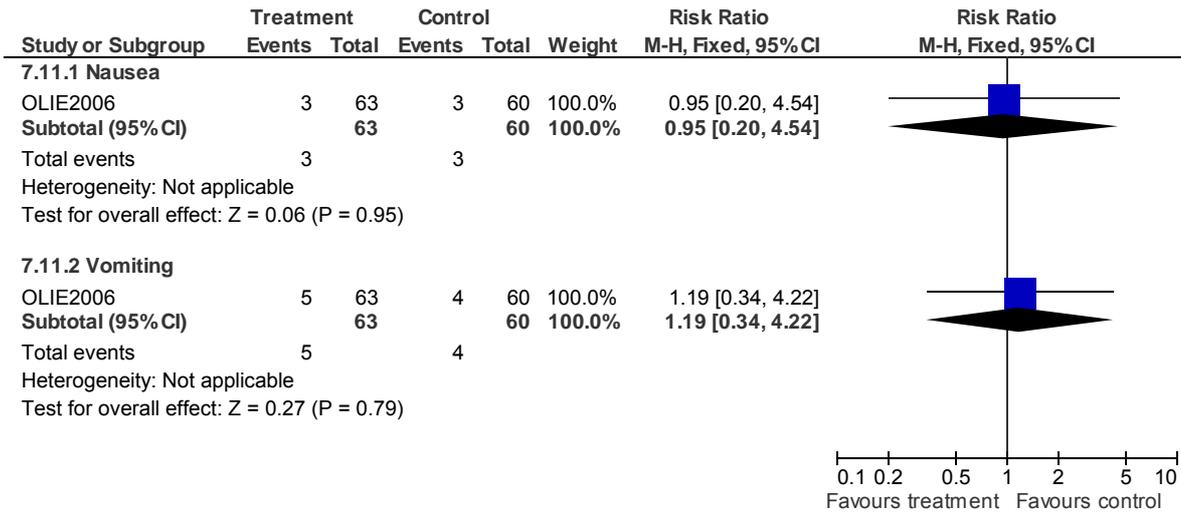


7.10 AE: 4. Cardiovascular SEs (short-term)

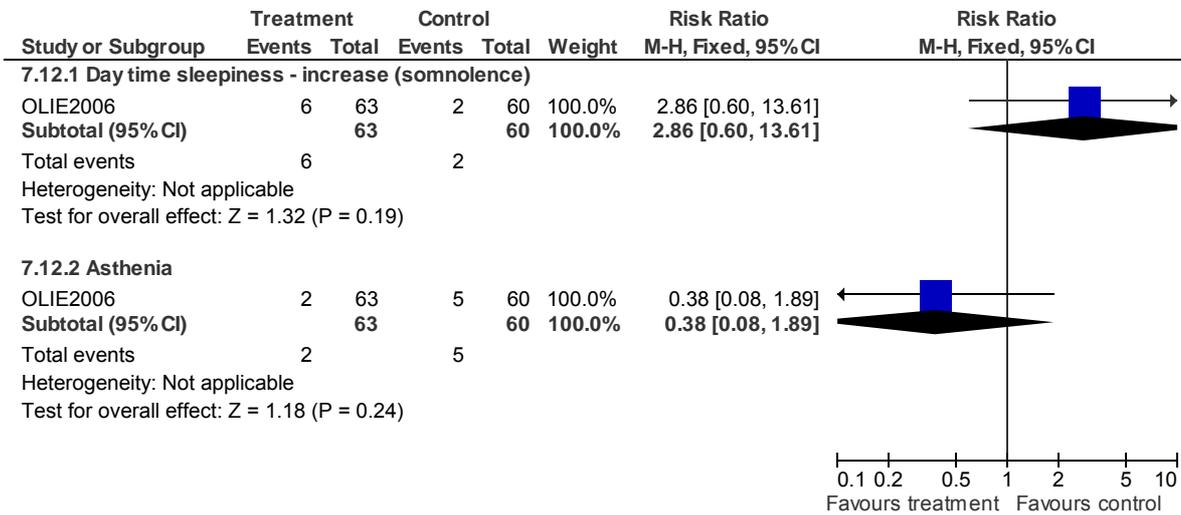


Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

7.11 AE: 5. Gastrointestinal SEs (short-term)



7.12 AE: 6. Sedation (short-term)



Pharmacological clinical evidence: Promoting recovery (persistent negative symptoms)

7.13 AE: 10. Other SEs (short-term)

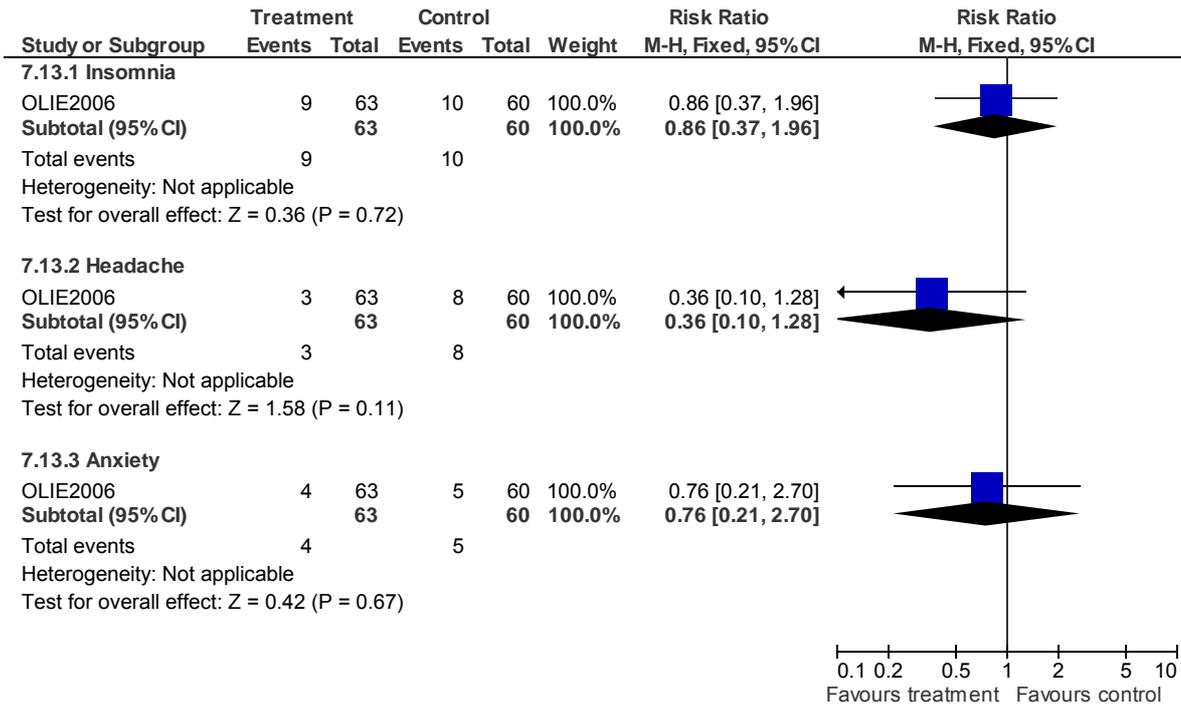
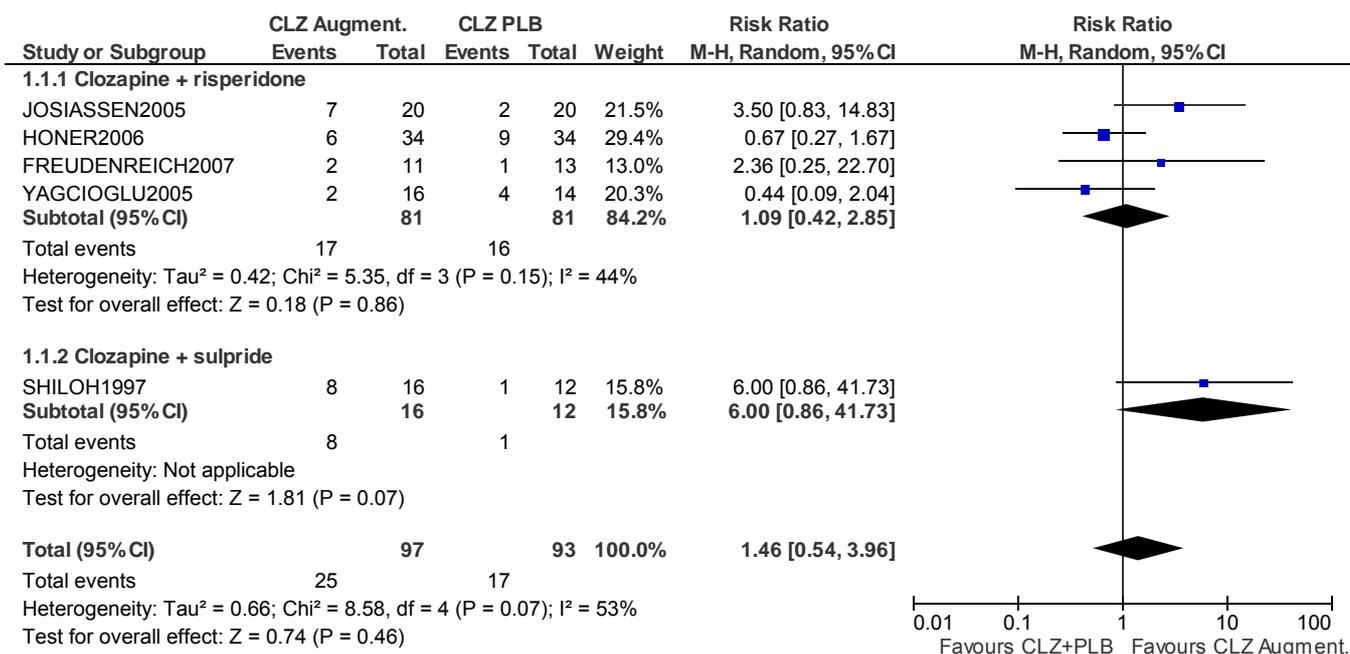
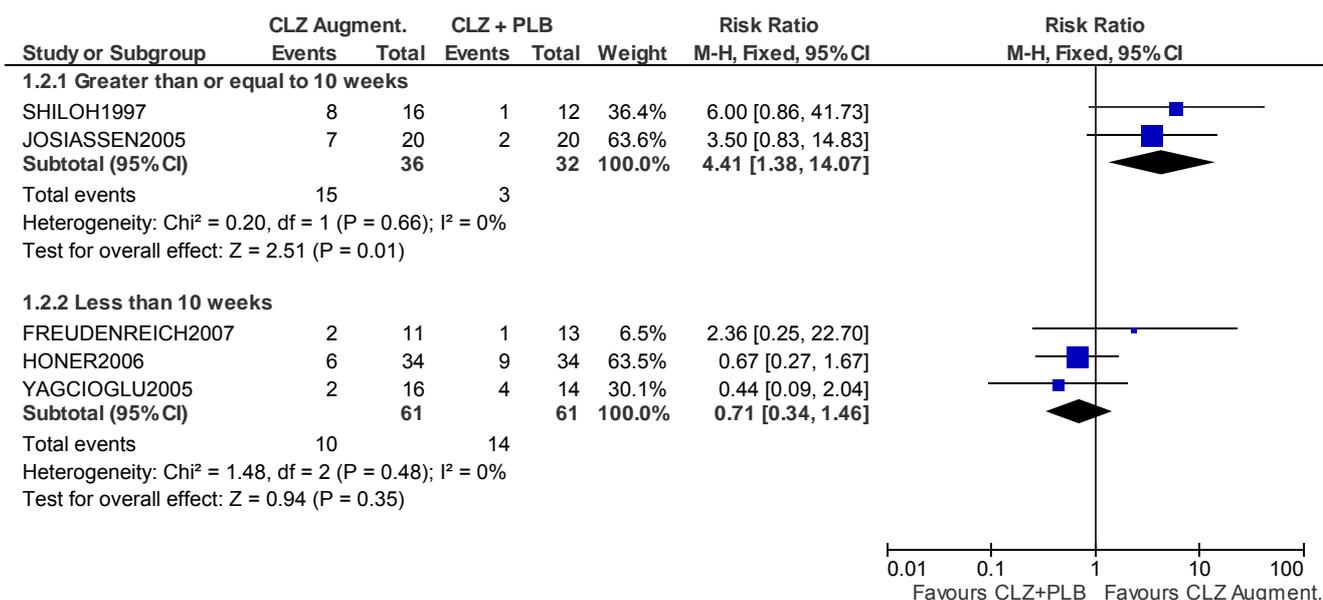


Table 8: Studies included in the augmentation review

| Treatment | versus Comparator | | |
|-----------|-----------------------------|---|-------------------------------|
| | ARI | RIS | SUL |
| CLZ | CHANG2008 [8weeks, N=62] | FREUDENREICH2007 [6weeks, N=24] HONER2006 [8weeks, N=68] JOSIASSEN2005 [12weeks, N=40] YAGCIOGLU2005 [6weeks, N=30] | SHILOH1997 [10weeks, N=28] |

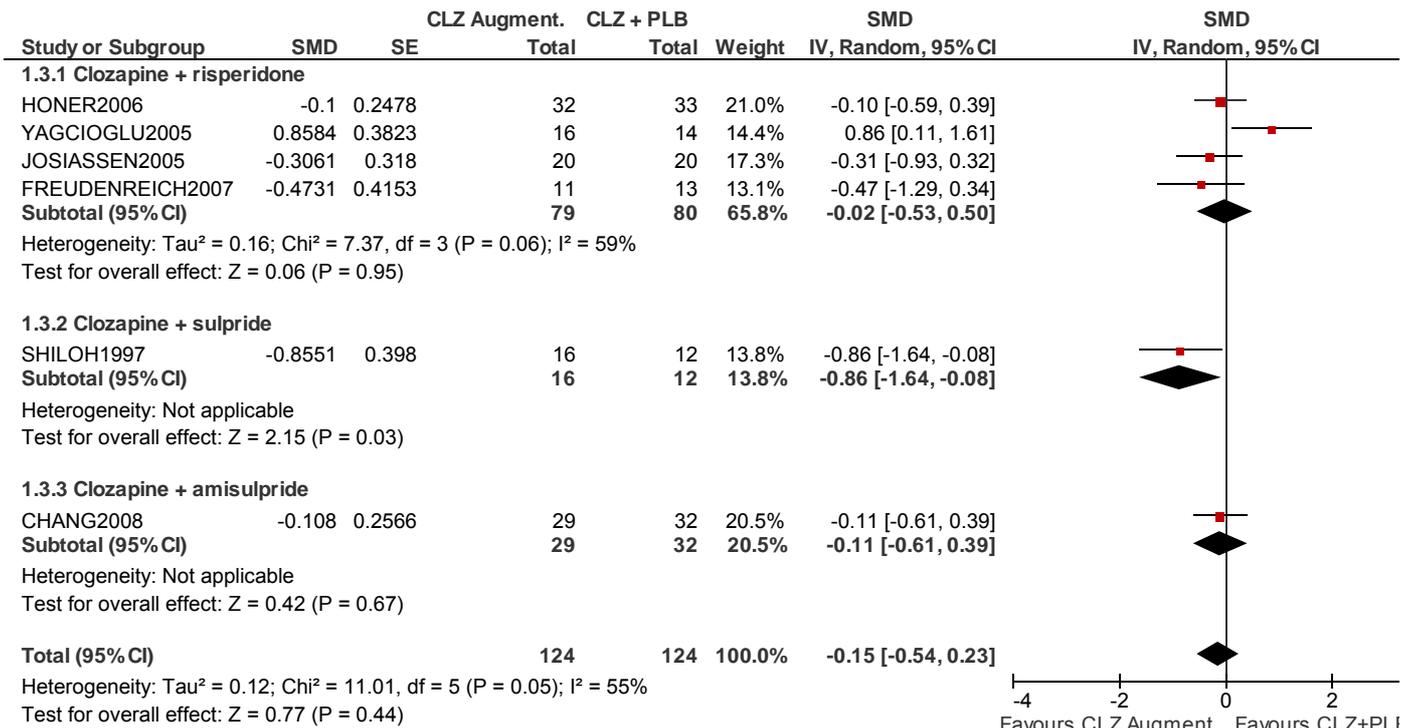
Pharmacological clinical evidence: Clozapine augmentation

1 Clozapine augmentation versus clozapine + placebo

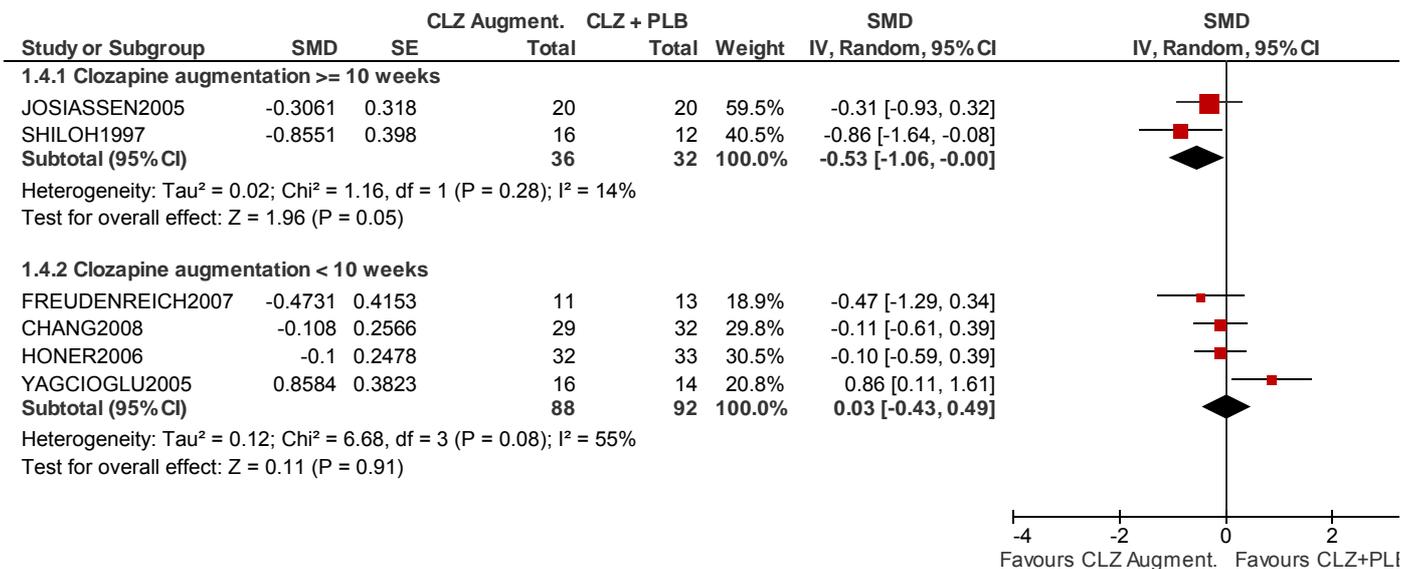
1.1 Number of responders (response defined as $\geq 20\%$ improvement in BPRS or PANSS) - by augmented drug1.2 Number of Responders (response defined as $\geq 20\%$ improvement in BPRS or PANSS) - by length of treatment

Pharmacological clinical evidence: Clozapine augmentation

1.3 PANSS or BPRS total score (change from baseline to endpoint)

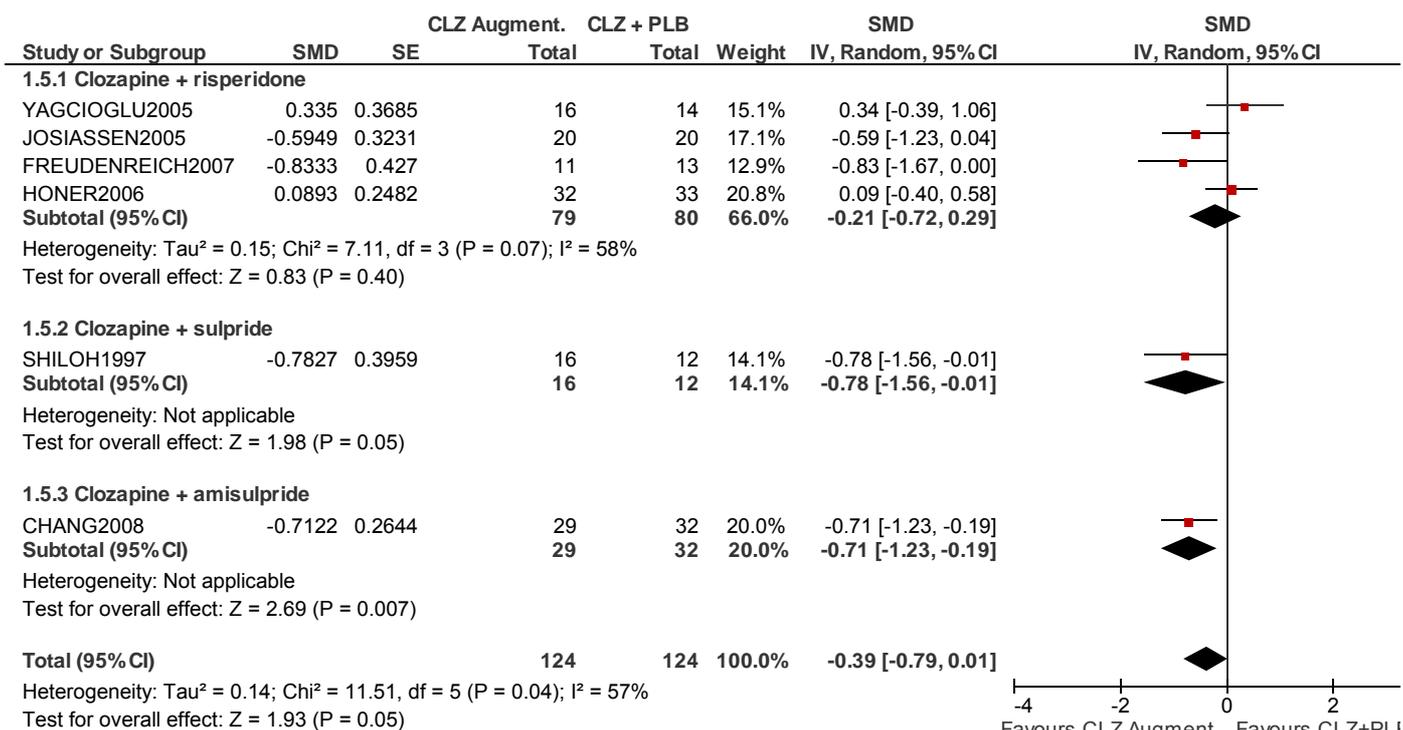


1.4 PANSS or BPRS total (change score) - by length of treatment



Pharmacological clinical evidence: Clozapine augmentation

1.5 PANSS or BPRS negative/SANS (change score)



1.6 PANSS or BPRS negative/SANS (change score) - by length of treatment

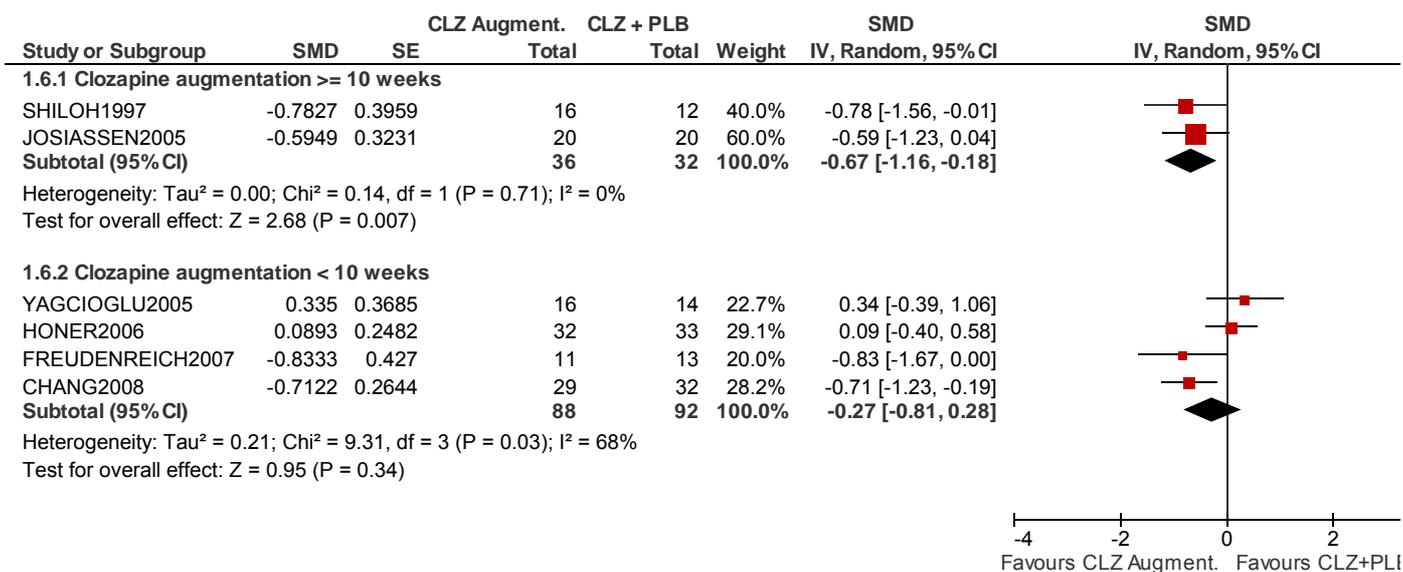


Table 9: Summary of studies included in the overall analysis of side effects

| Treatment | Comparator | | |
|--------------------------|-----------------------------|---|---|
| | Versus haloperidol (FGA) | Versus non-haloperidol FGA | Versus SGA |
| Amisulpride | Carriere2000 [16 weeks] | Boyer1990 (fluphenazine) [6 weeks] | Fleurot1997 (risperidone) [8 weeks] |
| | Delcker1990 [6 weeks] | Hillert1994 (flupentixol) [6 weeks] | HWANG2003 (risperidone) [6 weeks] |
| | Moller1997 [6 weeks] | | Lecrubier1999 (olanzapine) [26 weeks] |
| | Puech1998 [4 weeks] | | Lecrubier2000 (risperidone) [26 weeks] |
| | Speller1997 [52 weeks] | | MARTIN2002 (olanzapine) [24 weeks] |
| | Ziegler1989 [4 weeks] | | WAGNER2005 (olanzapine) [8 weeks] |
| | $k = 6$ | $k = 2$ | $k = 6$ |
| | Aripiprazole | KANE2002 [4 weeks] | KANE2007B (perphenazine) [6 weeks] |
| KASPER2003 [52 weeks] | | | MCQUADE2004 (olanzapine) [26 weeks]* |
| | | | POTKIN2003A (risperidone) [4 weeks] |
| | | | ZIMBROFF2007 (ziprasidone) [4 weeks] |
| $k = 2$ | $k = 1$ | $k = 4$ | |
| Clozapine | Buchanan1998 [10 weeks] | Claghorn1987 (chlorpromazine) [4–8 weeks] | Anand1998 (risperidone) [12 weeks] |
| | Rosenheck1997 [52 weeks] | Hong1997 (chlorpromazine) [12 weeks] | ATMACA2003 (olanzapine/quetiapine/risperidone) [6 weeks]* |
| | Tammaing1994 [52 weeks] | Kane1988 (chlorpromazine) [6 weeks] | Beuzen1998 (olanzapine) [18 weeks] |
| | VOLAVKA2002 [14 weeks] | LIEBERMAN2003B [52 weeks]* | Bitter1999 (olanzapine) [18 weeks] |
| | | | Bondolfi1998 (risperidone) [8 weeks] |
| | | | Breier1999 (risperidone) [18 weeks] |
| | | | Chowdhury1999 (risperidone) [16 weeks] |
| | | | MELTZER2003A (olanzapine) [104 weeks]* |
| | | | VOLAVKA2002 (olanzapine/ risperidone) [14 weeks] |
| | $k = 4$ | $k = 4$ | $k = 9$ |
| Olanzapine | Altamura1999 [14 weeks] | Conley1998a (chlorpromazine) [8 weeks] | ATMACA2003 (quetiapine/risperidone) [6 weeks]* |
| | Beasley1996a [6 weeks] | HGBL1997 (flupentixol) [4 weeks] | Conley 2001 (risperidone) [8 weeks] |
| | Beasley1997 [6 weeks] | Jakovljevic1999 (fluphenazine) [6 weeks] | DAVIDSON2007 (paliperidone) [6 weeks] |
| | Breier2000 [6 weeks] | Loza1999 (chlorpromazine) [6 weeks] | Gureje1998 (risperidone) [30 weeks] |
| | BUCHANAN2005 [16 weeks] | Naukarinen1999/HGBJ (perphenazine) [26 weeks] | Jones1998 (risperidone) [54 weeks] |
| | HGCJ1999 (HK) [14 weeks] | | KANE2007A (paliperidone) |
| | | | |
| | | | |

Pharmacological clinical evidence: Analysis of side effects

| | | | |
|---------------------|--|--|---|
| | HGCU1998 (Taiwan) [14 weeks] Jones1998 [54 weeks] KONGSAKON2006 [24 weeks] LIEBERMAN2003A [24 weeks] LINDENMAYER2007 [12 weeks] ROSENHECK2003 [52 weeks] STUDY-S029 [52 weeks] Tollefson1997 [6 weeks] Tran1998a [52 weeks] Tran1998b [52 weeks] Tran1998c [22-84 weeks] VOLAVKA2002 [14 weeks] | | [6 weeks] KINON2006B (quetiapine) [26 weeks] Lecrubier1999 (amisulpride) [26 weeks] MARDER2007 (paliperidone) [6 weeks] MARTIN2002 (amisulpride) [24 weeks] MCEVOY2007A (quetiapine/ risperidone) [52 weeks] MCQUADE2004 (aripiprazole) [26 weeks] * RIEDEL2007B (quetiapine) [8 weeks] StudyS036 (risperidone) [6 weeks] SIROTA2006 (quetiapine) [26 weeks] Tran1997 (risperidone) [28 weeks] VANNIMWEGEN2008 (risperidone) [6 weeks] VOLAVKA2002 (risperidone) [14 weeks] WAGNER2005 (amisulpride) [8 weeks] |
| | <i>k</i> = 18 | <i>k</i> = 5 | <i>k</i> = 19 |
| Paliperidone | - | - | DAVIDSON2007 (paliperidone) [6 weeks] KANE2007A (paliperidone) [6 weeks] MARDER2007 (paliperidone) [6 weeks] |
| | | | <i>k</i> = 3 |
| Quetiapine | Arvanitis1997 [6 weeks] Emsley1999 [8 weeks] Fleischhacker1996 [6 weeks] Murasaki1999 [8 weeks] Purdon2000 [26 weeks] | CONLEY2005 (fluphenazine) [12 weeks] Link1994 (chlorpromazine) [6 weeks] | ATMACA2003 (clozapine/ olanzapine/ risperidone) [6 weeks] * CONLEY2005 (risperidone) [12 weeks] KINON2006B (olanzapine) [26 weeks] RIEDEL2005 (risperidone) [12 weeks] RIEDEL2007B (olanzapine) [8 weeks] SIROTA2006 (olanzapine) [26 weeks] ZHONG2006 (risperidone) [8 weeks] |
| | <i>k</i> = 5 | <i>k</i> = 2 | <i>k</i> = 7 |
| Risperidone | Blin1996 [4 weeks] Ceskova1993 [8 weeks] Chouinard1993 [8 weeks] Claus1991 [12 weeks] Csernansky1999/ 2000 | CONLEY2005 (fluphenazine) [12 weeks] Hoyberg1993 (perphenazine) [8 weeks] Huttunen1995 (zuclopenthixol) [8 weeks] RUHRMANN2007 (flupentixol) [25 weeks] | ATMACA2003 (olanzapine/ quetiapine) [6 weeks] * AZORIN2006 (sertindole) [12 weeks] CHAN2007A (aripiprazole) [4 weeks] Conley2001 (olanzapine) [8 weeks] CONLEY2005 (quetiapine) |

Pharmacological clinical evidence: Analysis of side effects

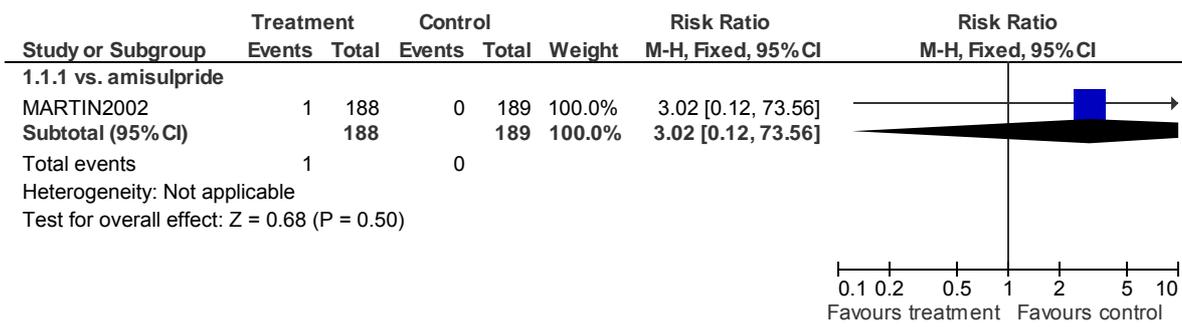
| | | | |
|-------------------|--------------------------------|-------------------------------|---|
| | [52 weeks] Emsley1995 | | [12 weeks] Fleurot1997 (amisulpride) |
| | [6 weeks] Heck2000 | | [8 weeks] Gureje1998 (olanzapine) |
| | [6 weeks] Janicak1999 | | [30 weeks] HWANG2003 (amisulpride) |
| | [6 weeks] Jones1998 | | [6 weeks] Jones1998 (olanzapine) |
| | [54 weeks] Kern1998 | | [54 weeks] Klieser1996 (zotepine) |
| | [8 weeks] LEE2007 | | [4 weeks] Lecrubier2000 (amisulpride) |
| | [24 weeks] Marder1994 | | [26 weeks] MCEVOY2007A (olanzapine/ quetiapine) |
| | [8 weeks] Mesotten1991 | | [52 weeks] POTKIN2003A (aripiprazole) |
| | [8 weeks] Min1993 | | [4 weeks] RIEDEL2005 (quetiapine) |
| | [8 weeks] MOLLER2008 | | [12 weeks] StudyS036 (olanzapine) |
| | [8 weeks] Peuskens1995 | | [6 weeks] Tran1997 (olanzapine) |
| | [8 weeks] SCHOOLER2005 | | [28 weeks] VANNIMWEGEN2008 (olanzapine) |
| | [104 weeks] SEE1999 | | [6 weeks] VOLAVKA2002 (clozapine/ olanzapine) |
| | [5 weeks] ZHANG2001 | | [14 weeks] ZHONG2006 (quetiapine) |
| | [12 weeks] VOLAVKA2002 | | [8 weeks] |
| | $k = 20$ | $k = 4$ | $k = 18$ |
| Sertindole | Hale 2000 | - | AZORIN2006 (risperidone) |
| | [8 weeks] Daniel 1998 | | [12 weeks] |
| | [52 weeks]* | | |
| | $k = 2$ | | $k = 1$ |
| Zotepine | Barnas1987 | Cooper1999a | Klieser1996 (risperidone) |
| | [7 weeks] Fleischhacker1989 | (chlorpromazine) [8 weeks] | [4 weeks] |
| | [6 weeks] Klieser1996 | | |
| | [4 weeks] KnollCTR | | |
| | (StudyZT4002) | | |
| | [26 weeks] Petit1996 | | |
| | [8 weeks] | | |
| | $k = 5$ | $k = 1$ | $k = 1$ |

Note. * Study did not meet the inclusion criteria for any other review reported in this chapter.

Pharmacological clinical evidence: Analysis of side effects

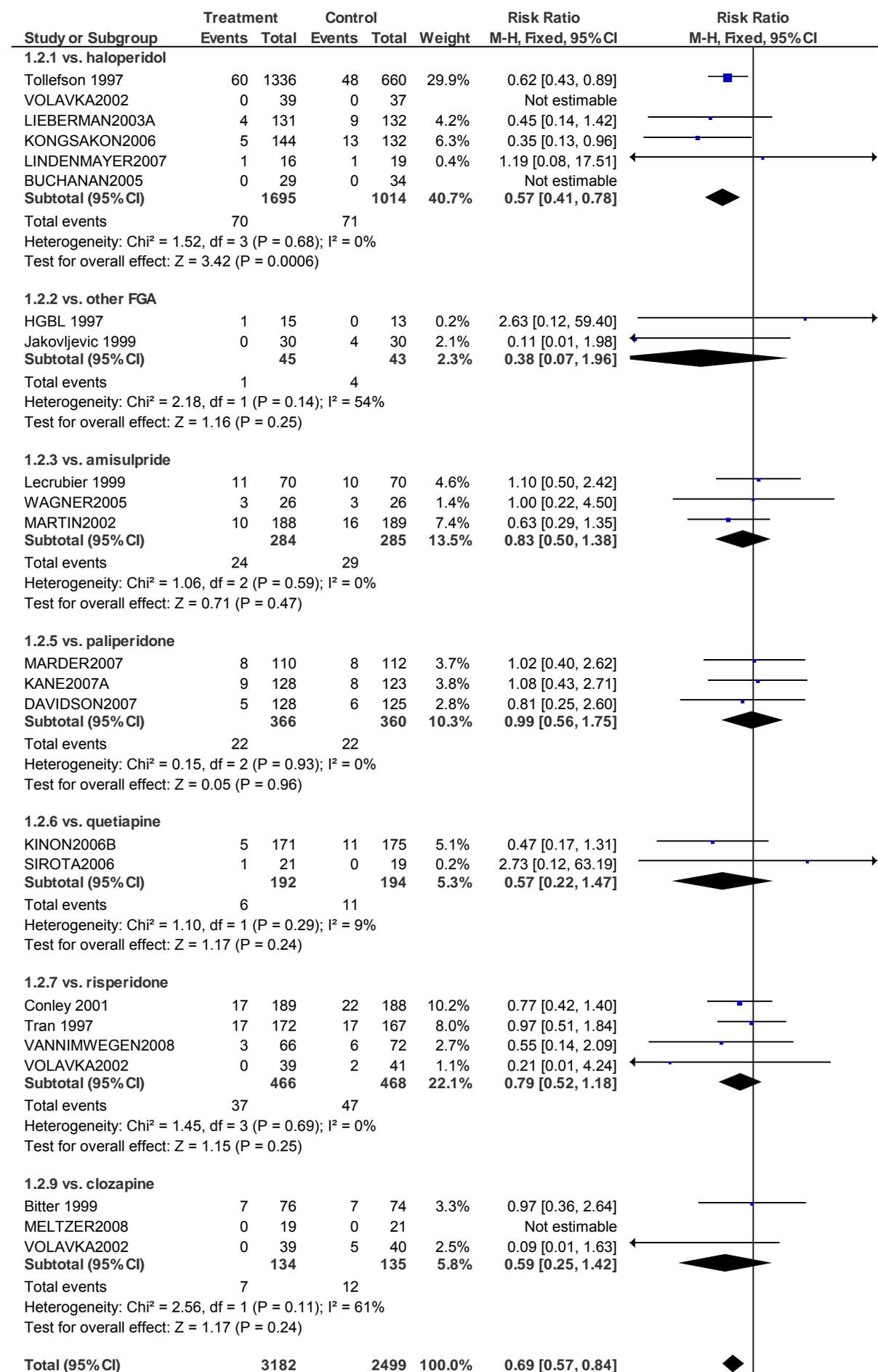
1 Olanzapine versus another antipsychotic drug (overall SE analysis)

1.1 Mortality - Suicide (medium-term)



Pharmacological clinical evidence: Analysis of side effects

1.2 Leaving the study early: 3: Adverse event (short-to-medium-term)



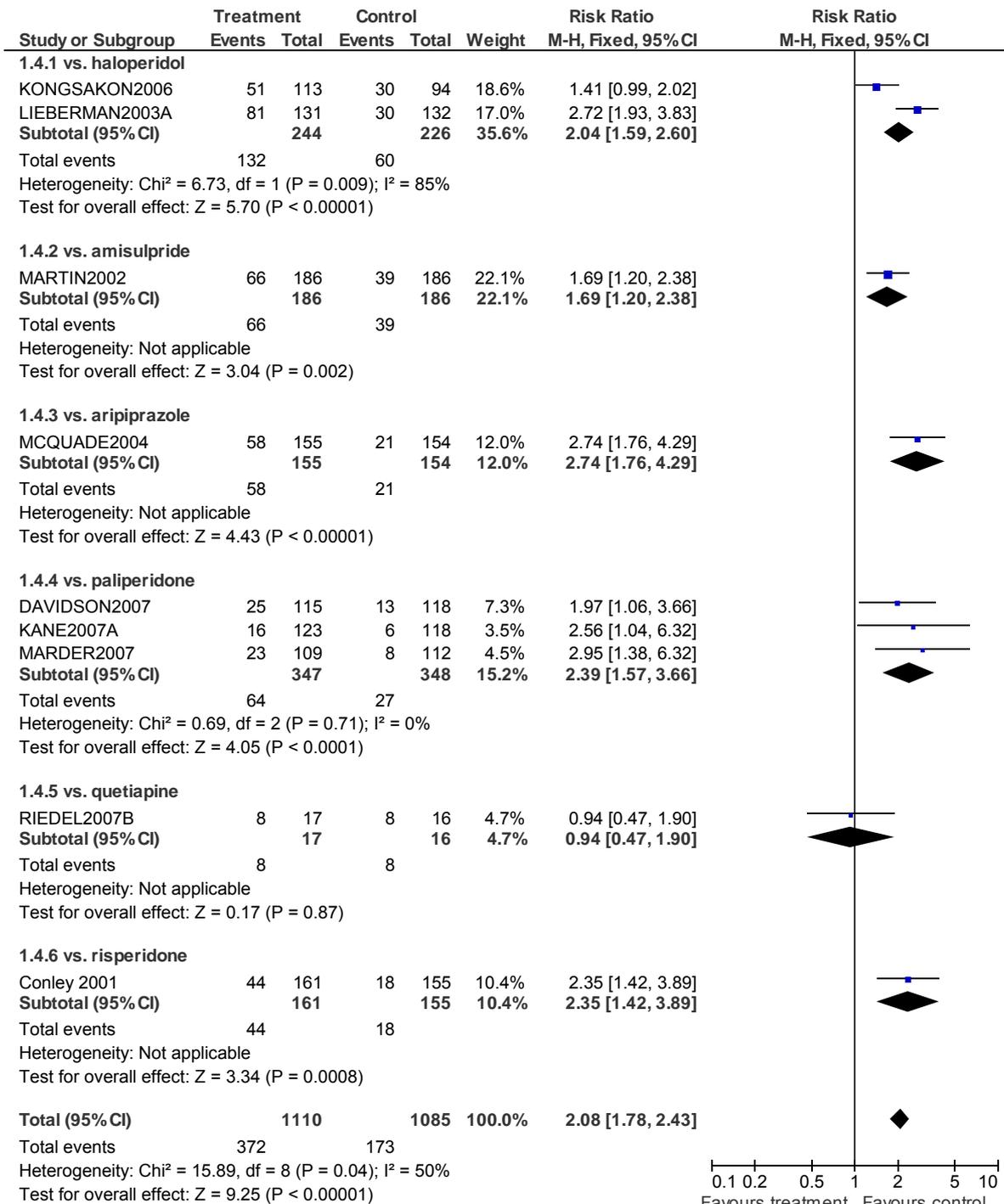
Pharmacological clinical evidence: Analysis of side effects

| | | | |
|--|-----|-----|--|
| Total events | 167 | 196 | |
| Heterogeneity: Chi ² = 13.86, df = 19 (P = 0.79); I ² = 0% | | | |
| Test for overall effect: Z = 3.65 (P = 0.0003) | | | |

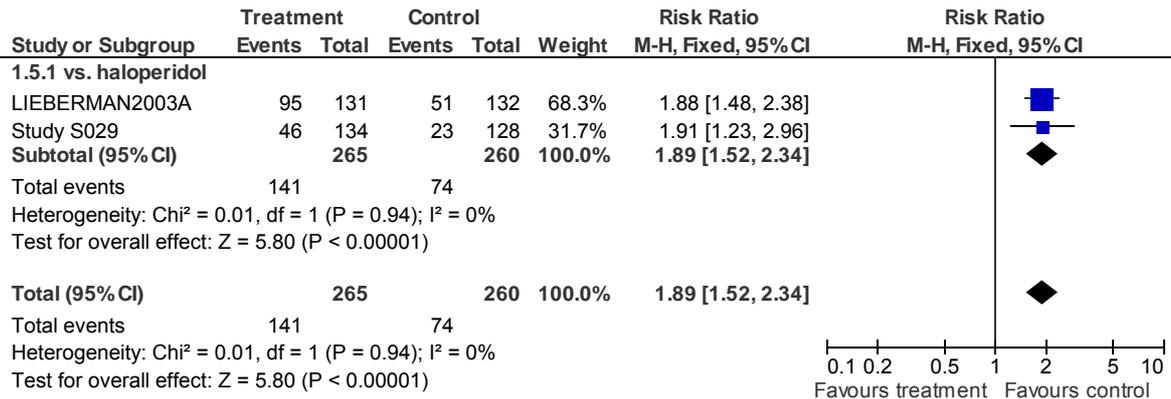
1.3 Leaving the study early: 3: Adverse event (long-term)

| Study or Subgroup | Treatment | | Control | | Weight | Risk Ratio | |
|--|-----------|-------------|---------|------------|---------------|--------------------|---------------------|
| | Events | Total | Events | Total | | M-H, Fixed, 95% CI | M-H, Fixed, 95% CI |
| 1.3.1 vs. haloperidol | | | | | | | |
| Jones 1998 | 2 | 21 | 7 | 23 | 6.3% | 0.31 | [0.07, 1.34] |
| Tran 1998a+b+c | 54 | 627 | 20 | 180 | 29.3% | 0.78 | [0.48, 1.26] |
| ROSENHECK2003 | 15 | 159 | 6 | 150 | 5.8% | 2.36 | [0.94, 5.92] |
| LIEBERMAN2003A | 7 | 131 | 19 | 132 | 17.8% | 0.37 | [0.16, 0.85] |
| Study S029 | 9 | 141 | 14 | 134 | 13.5% | 0.61 | [0.27, 1.36] |
| Subtotal (95% CI) | | 1079 | | 619 | 72.7% | 0.73 | [0.53, 1.01] |
| Total events | 87 | | 66 | | | | |
| Heterogeneity: Chi ² = 10.33, df = 4 (P = 0.04); I ² = 61% | | | | | | | |
| Test for overall effect: Z = 1.89 (P = 0.06) | | | | | | | |
| 1.3.6 vs. quetiapine | | | | | | | |
| MCEVOY2007A | 14 | 133 | 13 | 134 | 12.2% | 1.09 | [0.53, 2.22] |
| Subtotal (95% CI) | | 133 | | 134 | 12.2% | 1.09 | [0.53, 2.22] |
| Total events | 14 | | 13 | | | | |
| Heterogeneity: Not applicable | | | | | | | |
| Test for overall effect: Z = 0.22 (P = 0.82) | | | | | | | |
| 1.3.7 vs. risperidone | | | | | | | |
| Jones 1998 | 2 | 21 | 3 | 21 | 2.8% | 0.67 | [0.12, 3.59] |
| MCEVOY2007A | 14 | 133 | 13 | 133 | 12.2% | 1.08 | [0.53, 2.20] |
| Subtotal (95% CI) | | 154 | | 154 | 15.1% | 1.00 | [0.52, 1.93] |
| Total events | 16 | | 16 | | | | |
| Heterogeneity: Chi ² = 0.26, df = 1 (P = 0.61); I ² = 0% | | | | | | | |
| Test for overall effect: Z = 0.00 (P = 1.00) | | | | | | | |
| Total (95% CI) | | 1366 | | 907 | 100.0% | 0.82 | [0.62, 1.07] |
| Total events | 117 | | 95 | | | | |
| Heterogeneity: Chi ² = 12.00, df = 7 (P = 0.10); I ² = 42% | | | | | | | |
| Test for overall effect: Z = 1.49 (P = 0.14) | | | | | | | |

Pharmacological clinical evidence: Analysis of side effects

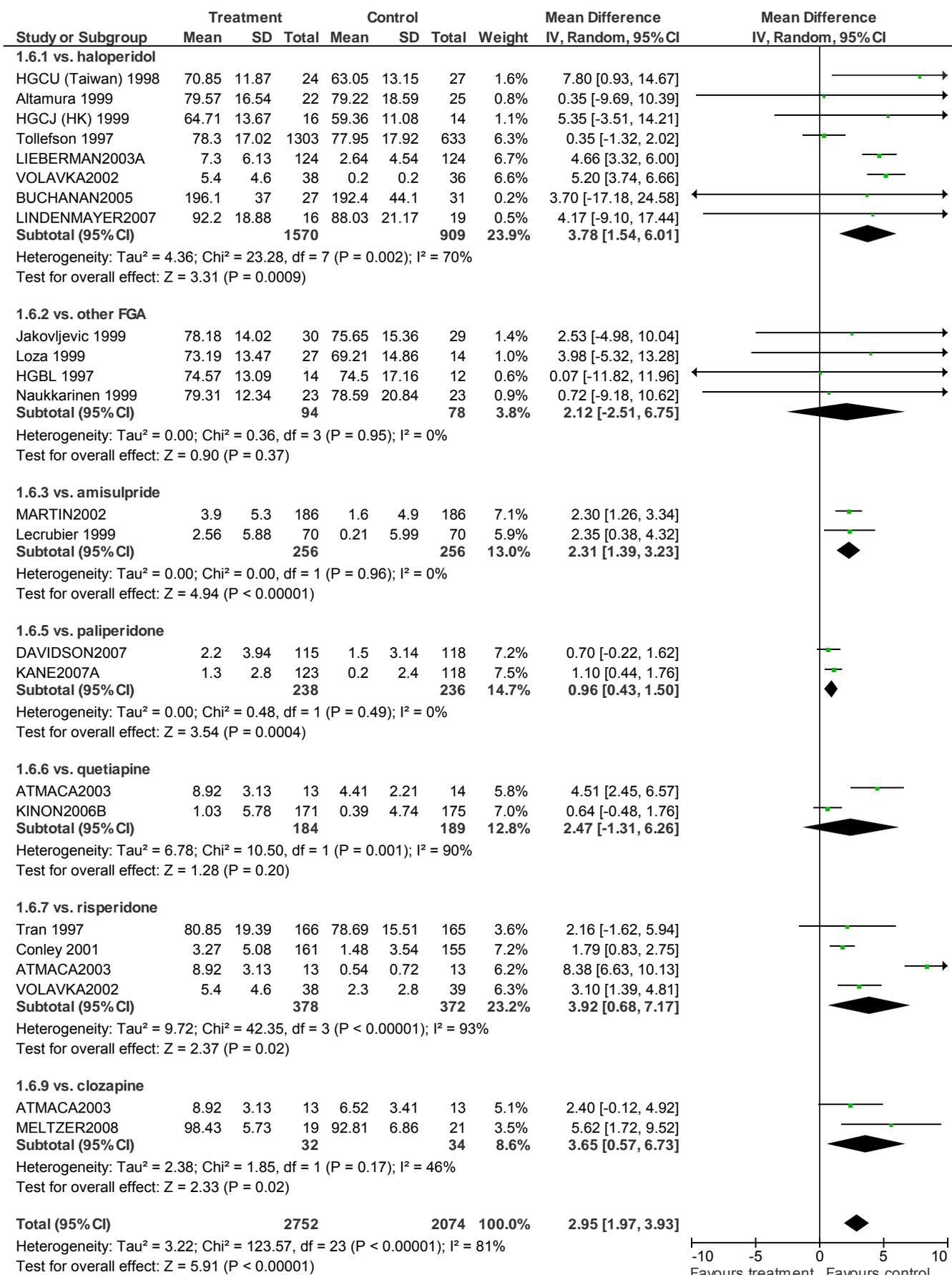
1.4 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline) (short-to-medium-term)

Pharmacological clinical evidence: Analysis of side effects

1.5 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline) (long-term)

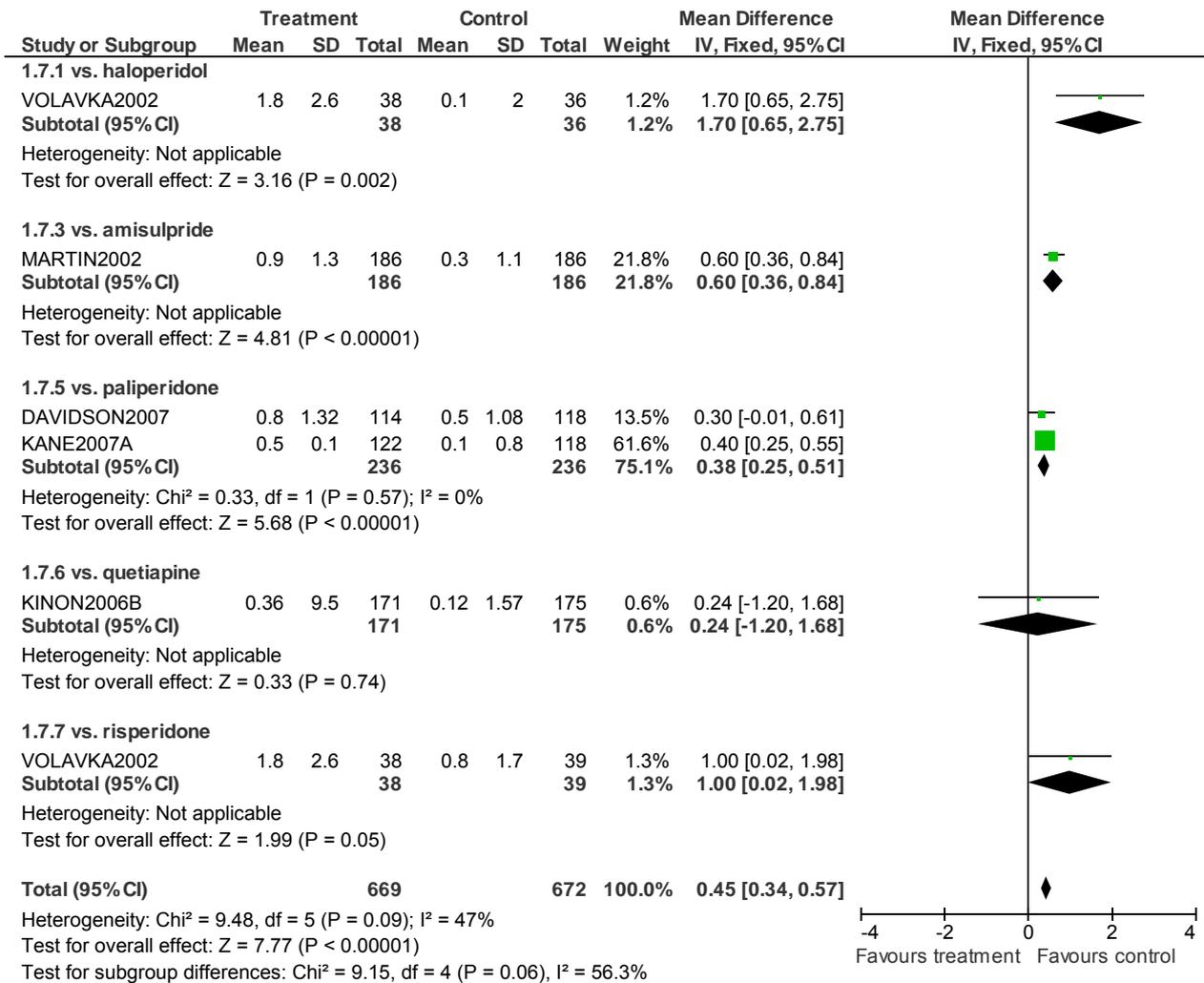
Pharmacological clinical evidence: Analysis of side effects

1.6 AE: 1. Metabolic SEs - Weight (endpoint or change; kg) (short-to-medium-term)

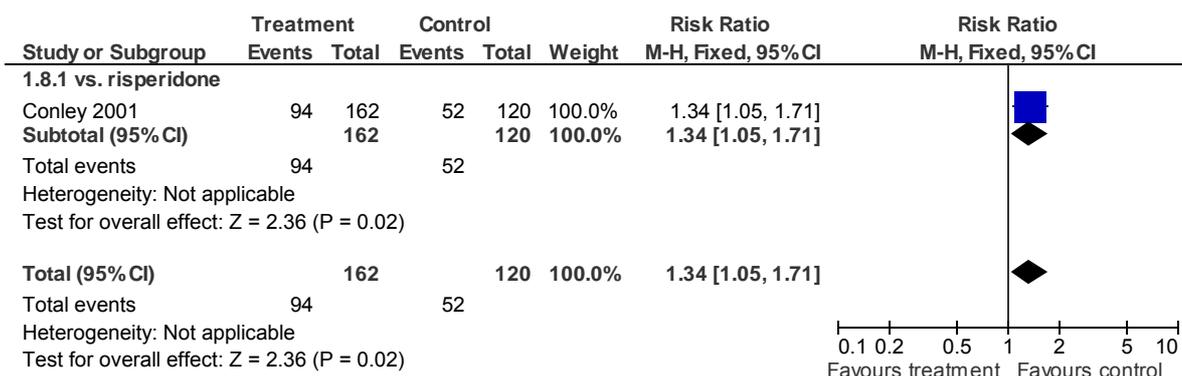


Pharmacological clinical evidence: Analysis of side effects

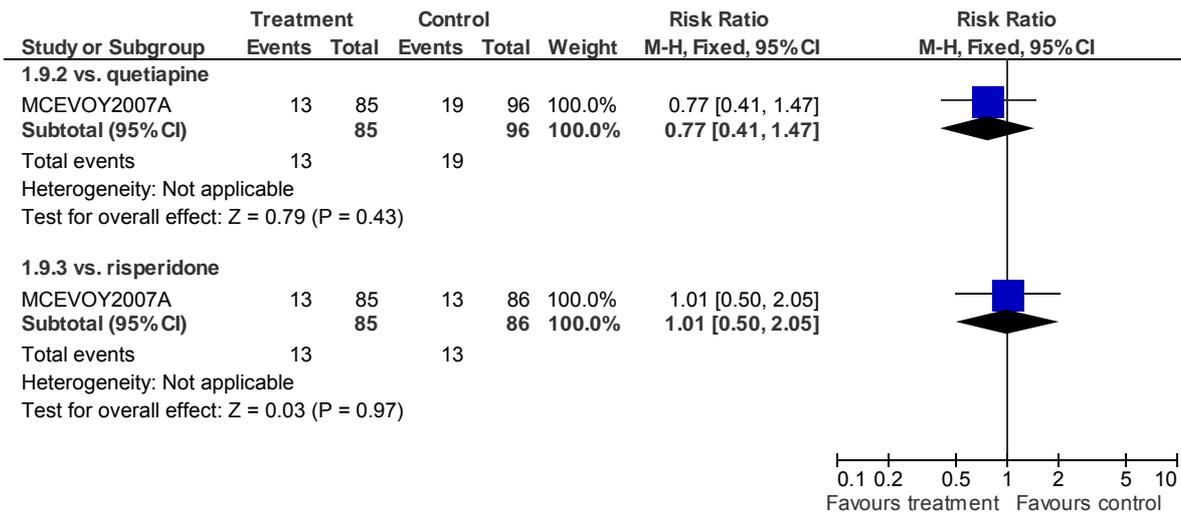
1.7 AE: 1. Metabolic SEs - BMI (change) (short-to-medium-term)



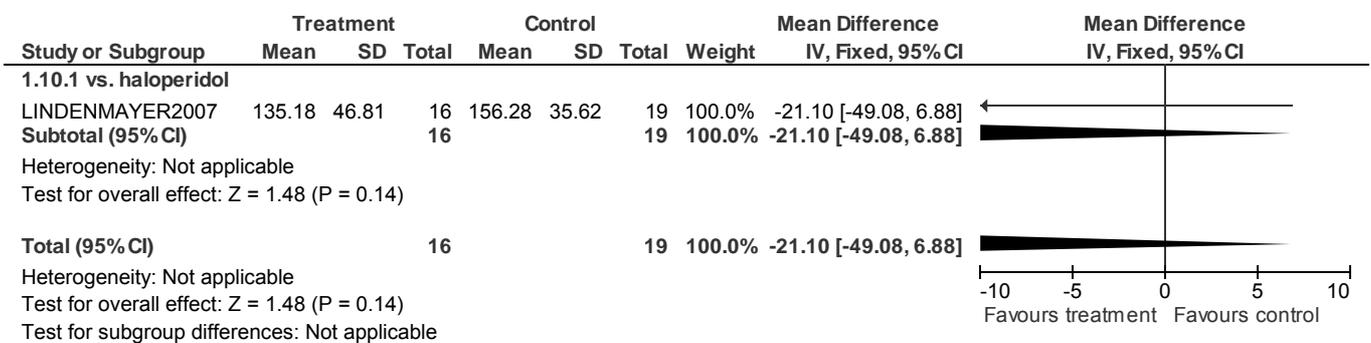
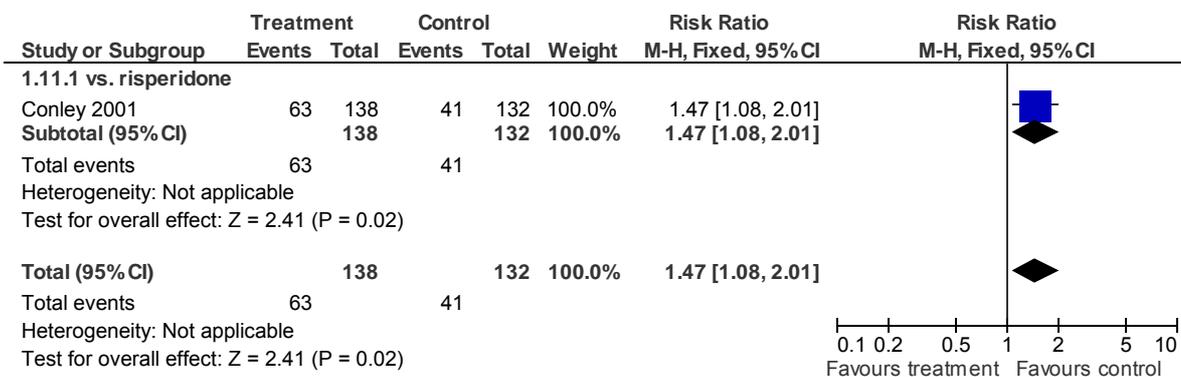
1.8 AE: 1. Metabolic SEs - LDL-C (>5% increase) (short-term)



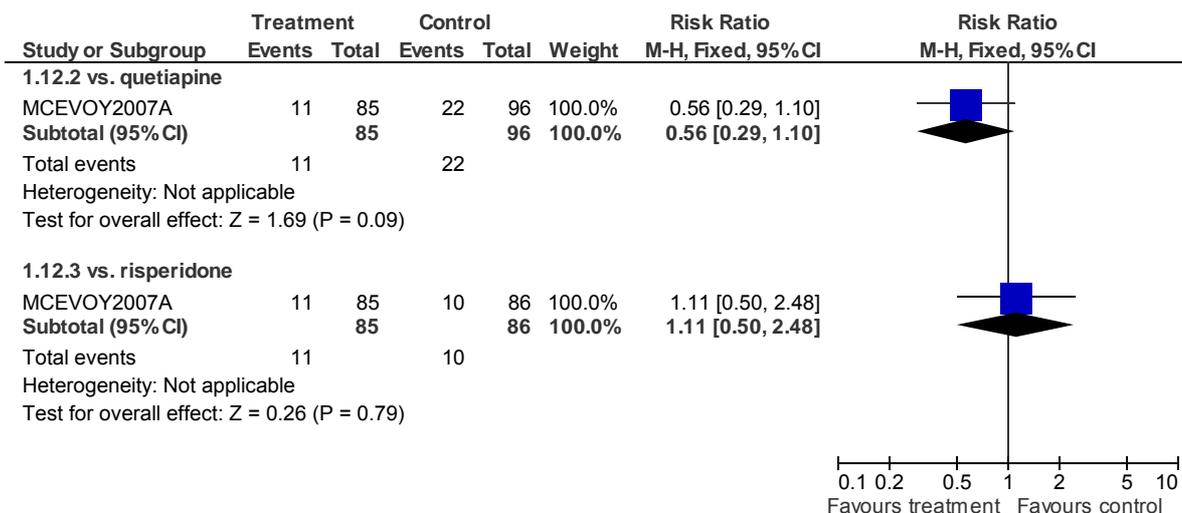
Pharmacological clinical evidence: Analysis of side effects

1.9 AE: 1. Metabolic SEs - Fasting total cholesterol level (≥ 200 mg/dl) (medium-term)

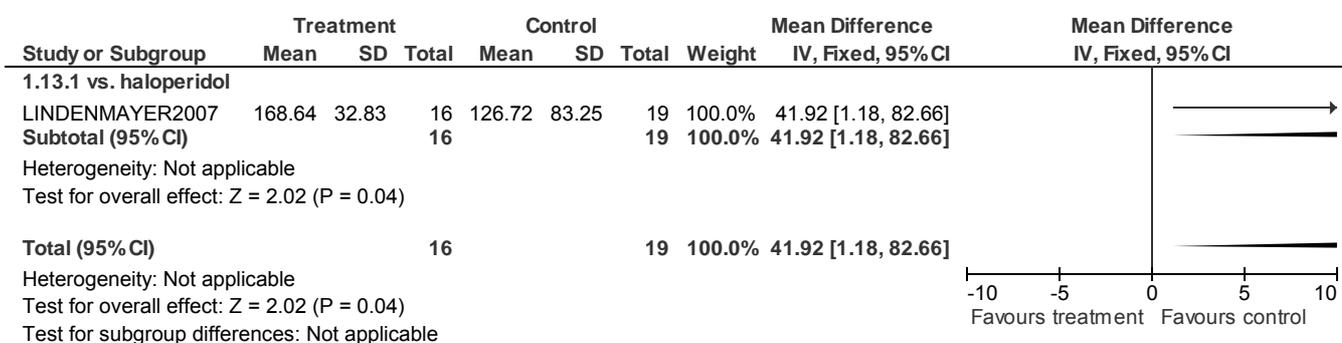
1.10 AE: 1. Metabolic SEs - Cholesterol (mg/dL; endpoint) (medium-term)

1.11 AE: 1. Metabolic SEs - Triglycerides ($>10\%$ increase) (short-term)

Pharmacological clinical evidence: Analysis of side effects

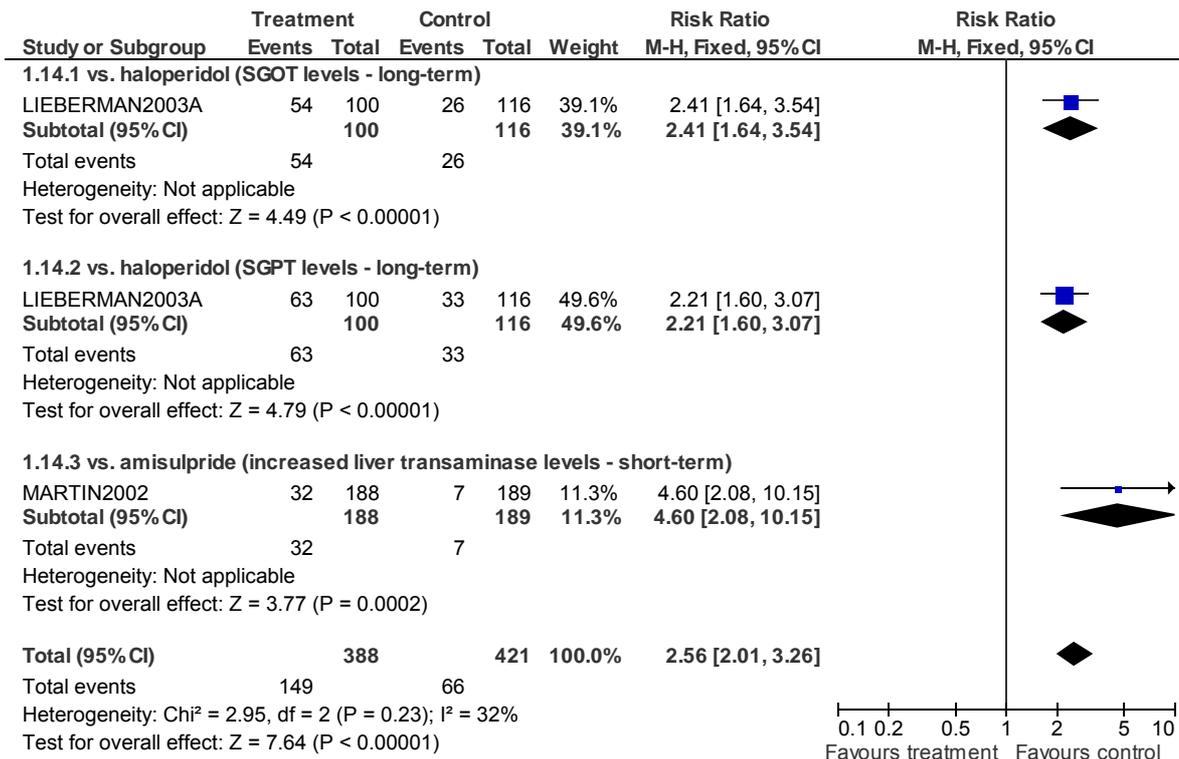
1.12 AE: 1. Metabolic SEs - Fasting triglycerides level (≥ 150 mg/dl) (medium-term)

1.13 AE: 1. Metabolic SEs - Triglycerides (mg/dL; endpoint) (medium-term)

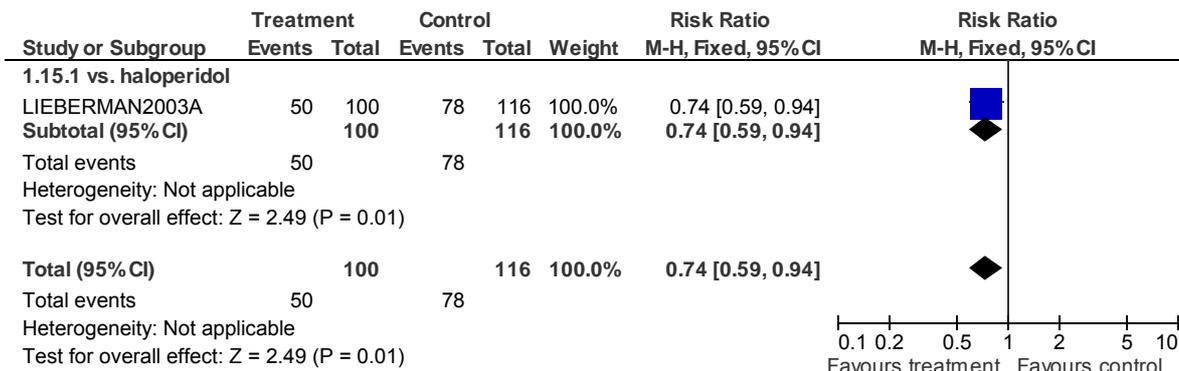


Pharmacological clinical evidence: Analysis of side effects

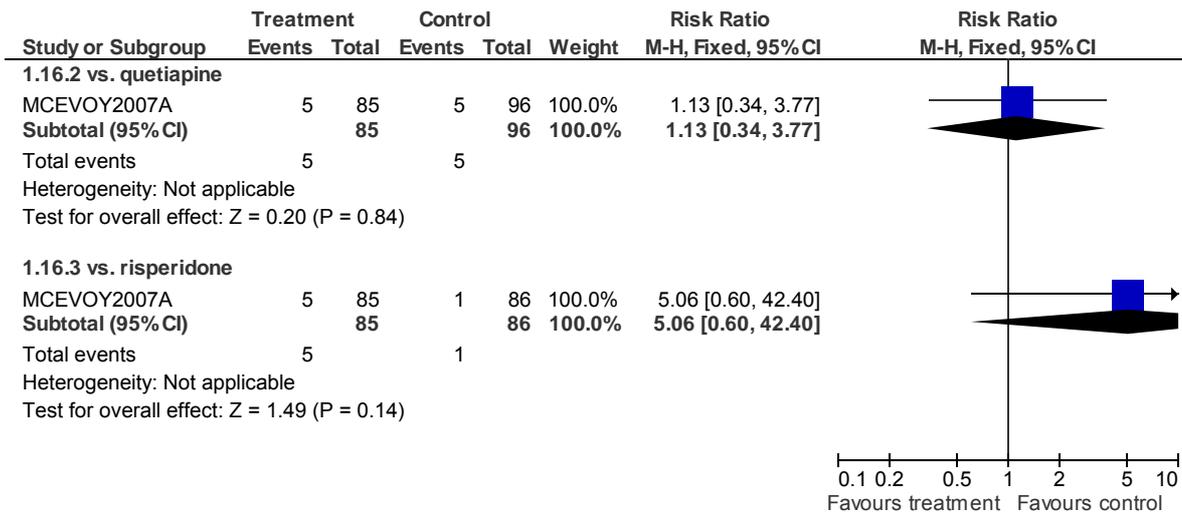
1.14 AE: 1. Metabolic SEs - Abnormal liver enzyme levels



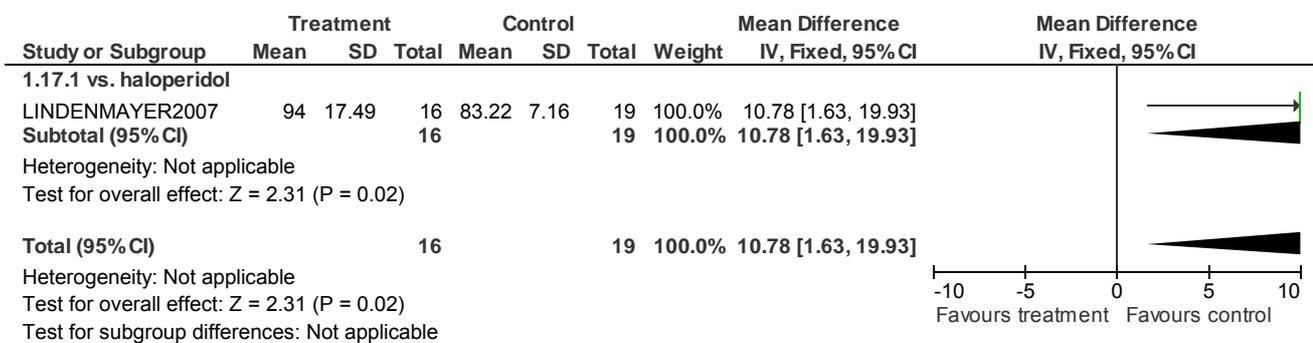
1.15 AE: 1. Metabolic SEs - Abnormal prolactin levels (long-term)



Pharmacological clinical evidence: Analysis of side effects

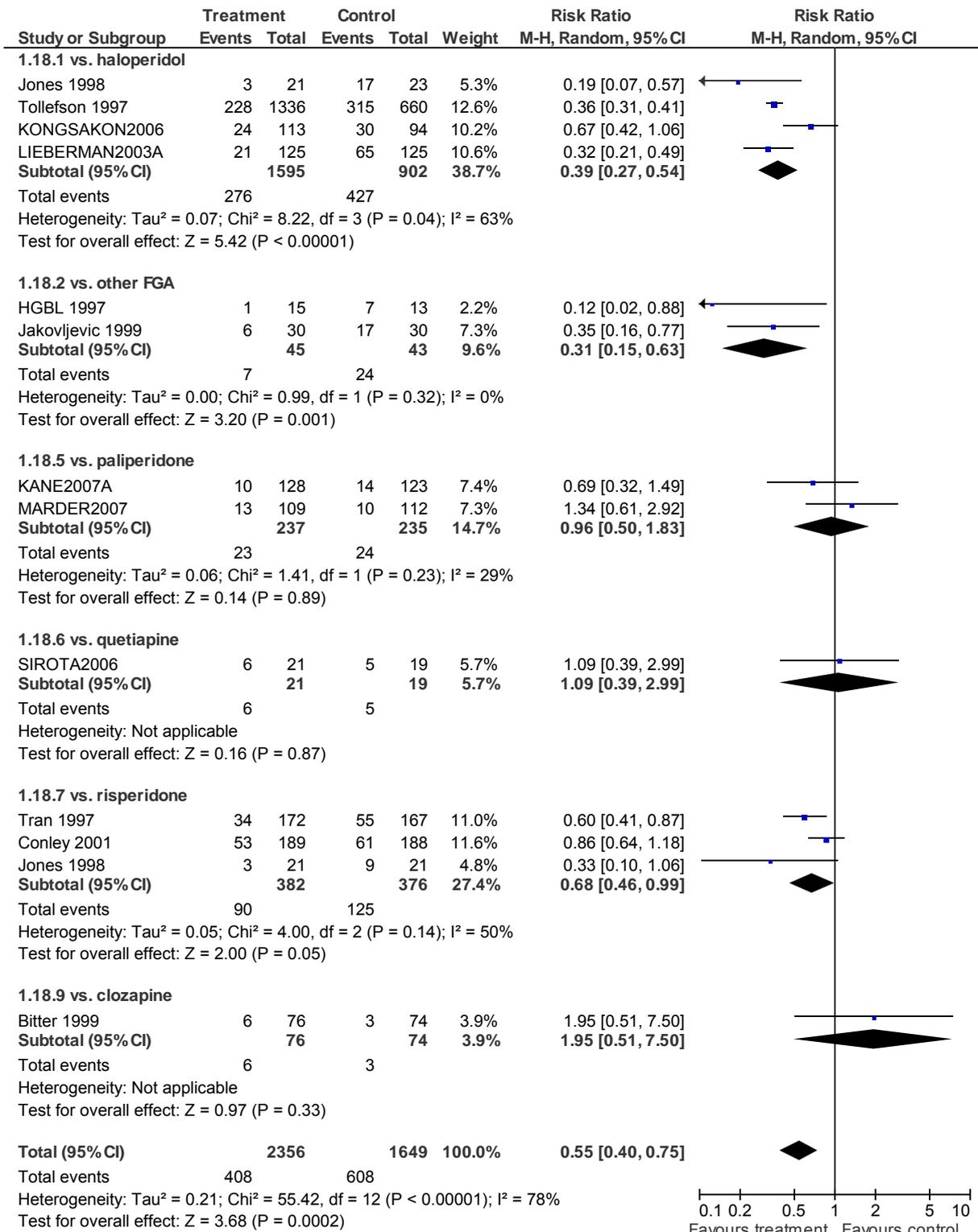
1.16 AE: 1. Metabolic SEs - Fasting glucose level (≥ 100 mg/dl) (medium-term)

1.17 AE: 1. Metabolic SEs - Glucose (mg/dL; endpoint) (medium-term)



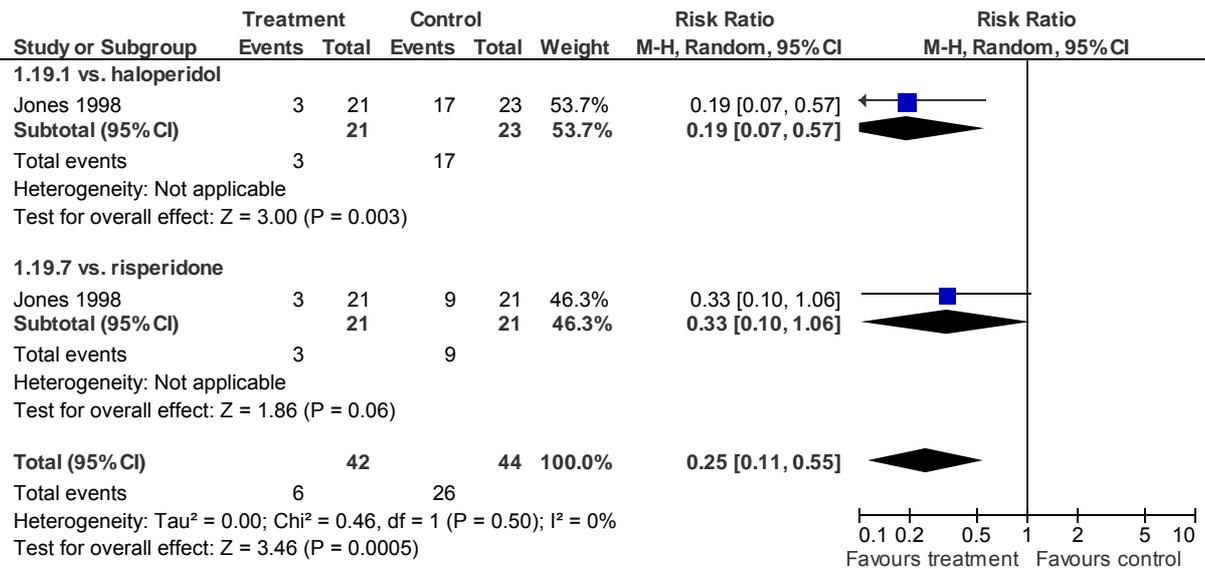
Pharmacological clinical evidence: Analysis of side effects

1.18 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-to-medium-term)



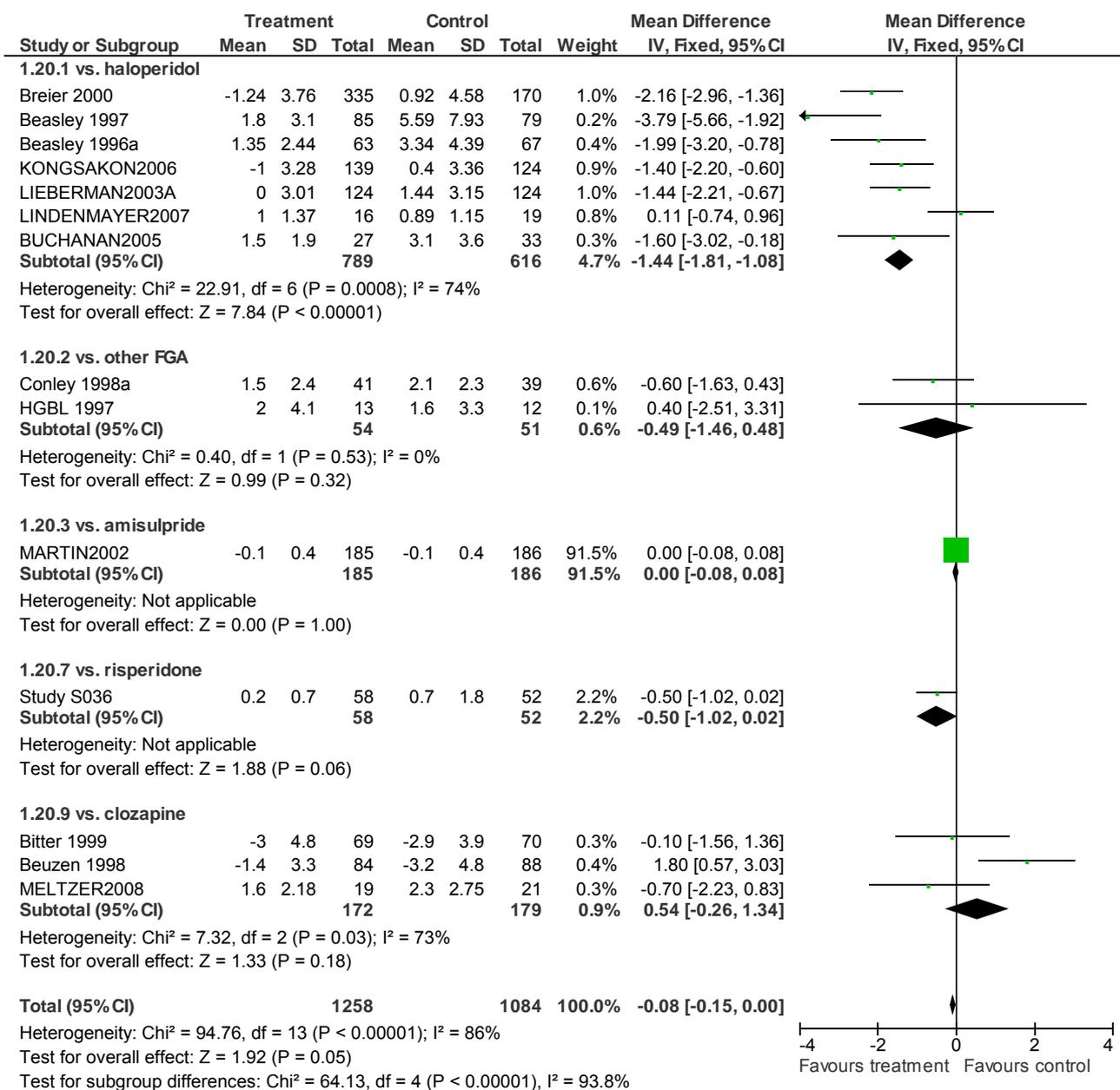
Pharmacological clinical evidence: Analysis of side effects

1.19 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)



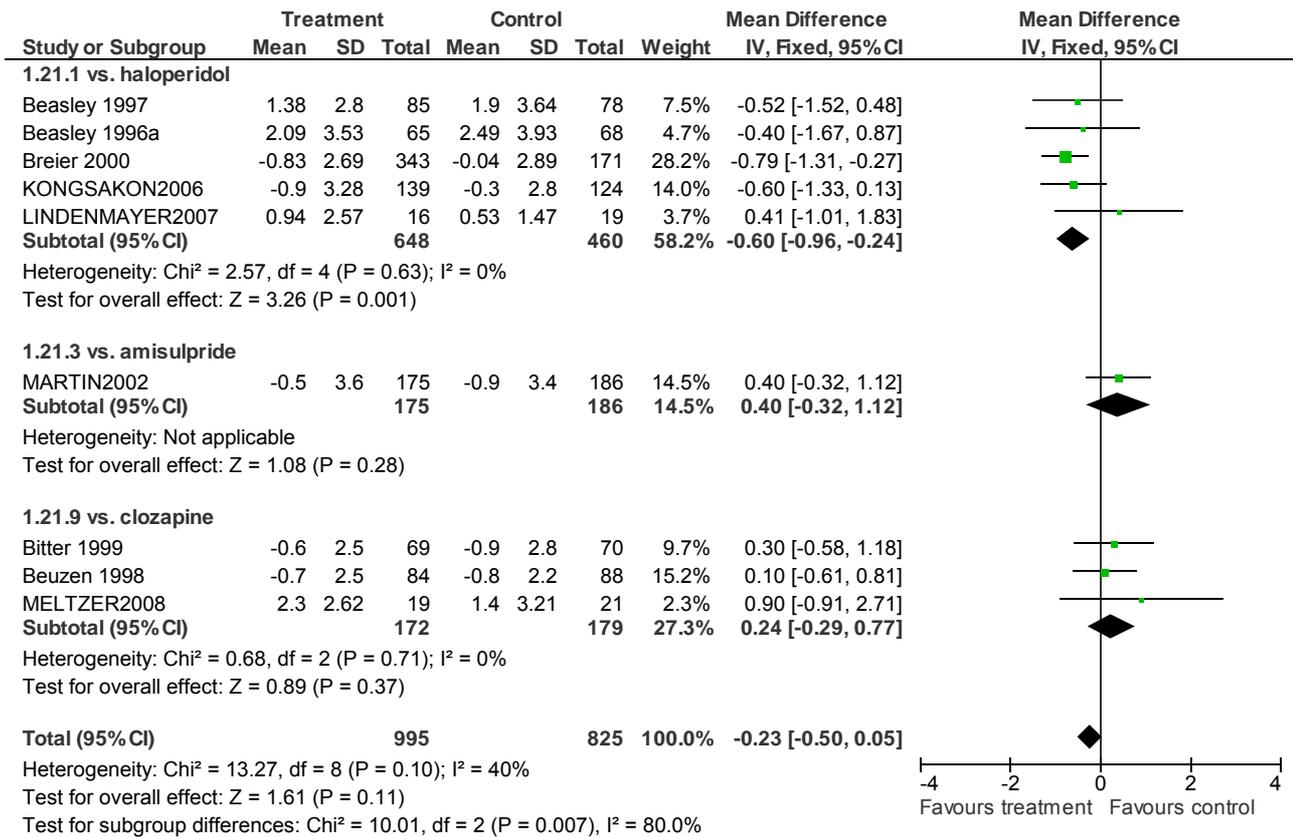
Pharmacological clinical evidence: Analysis of side effects

1.20 AE: 2. Neurologic SEs - Simpson-Angus Scale (endpoint/change) (short-to-medium-term)



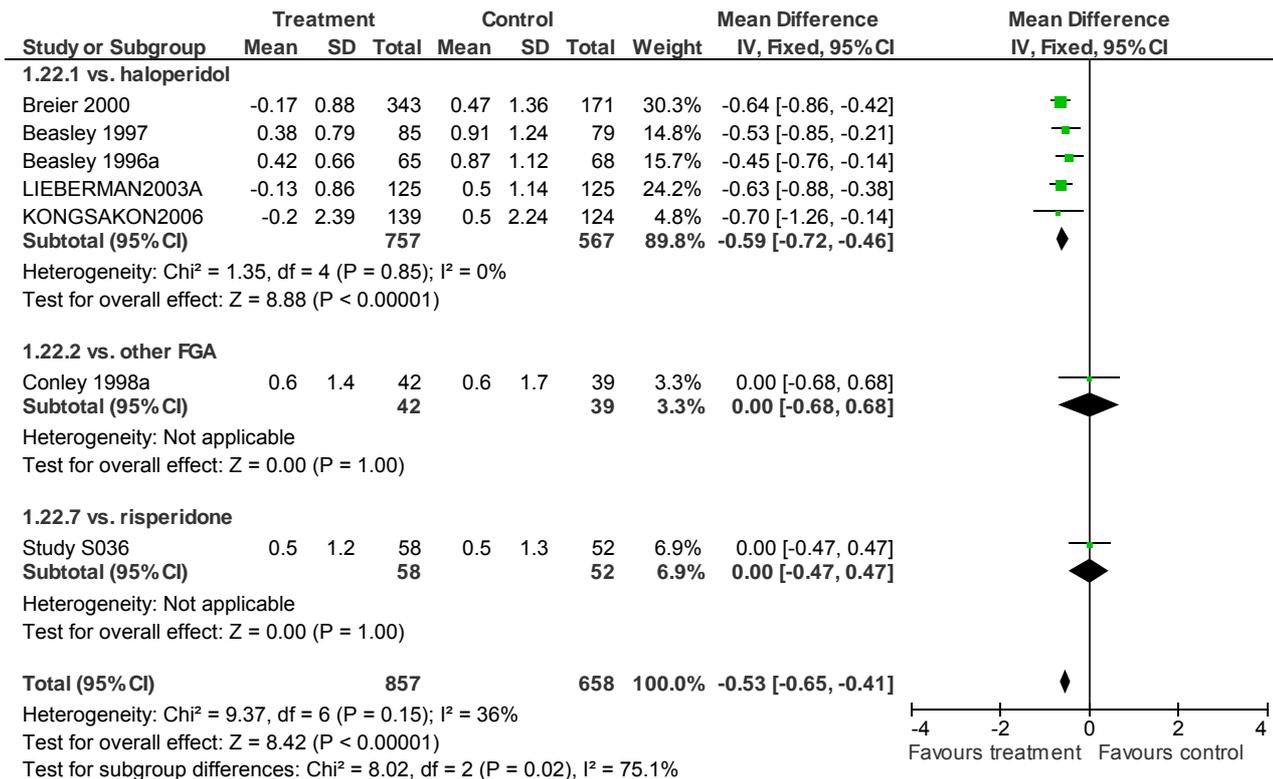
Pharmacological clinical evidence: Analysis of side effects

1.21 AE: 2. Neurologic SEs - AIMS (change/endpoint) (medium-term)

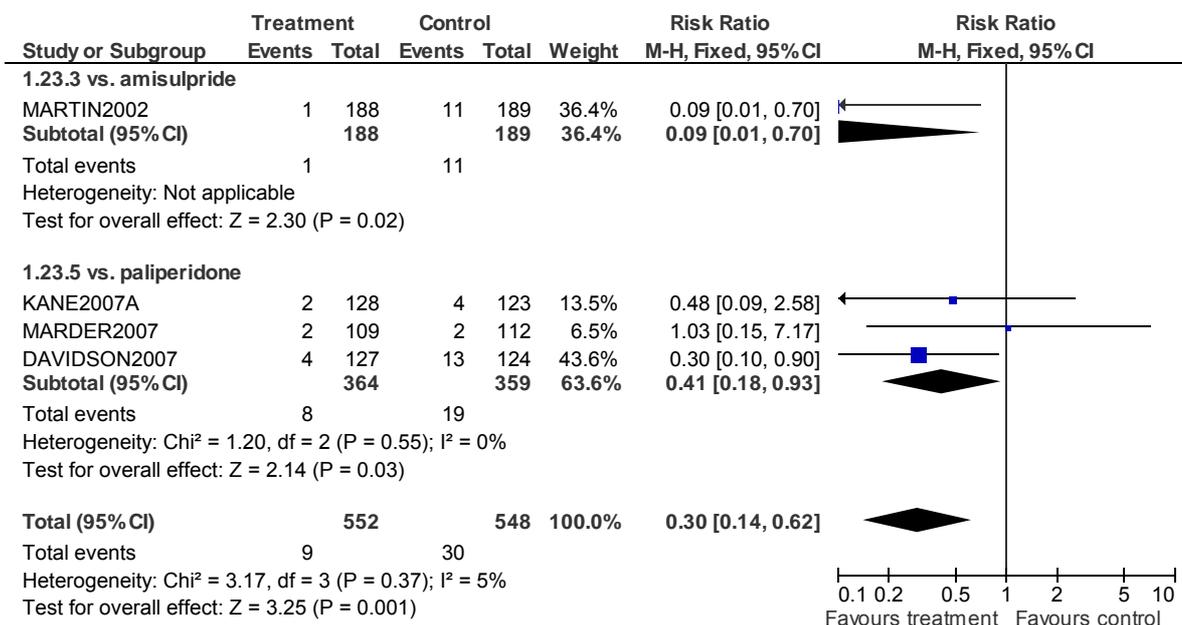


Pharmacological clinical evidence: Analysis of side effects

1.22 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; endpt mean) (short-term)

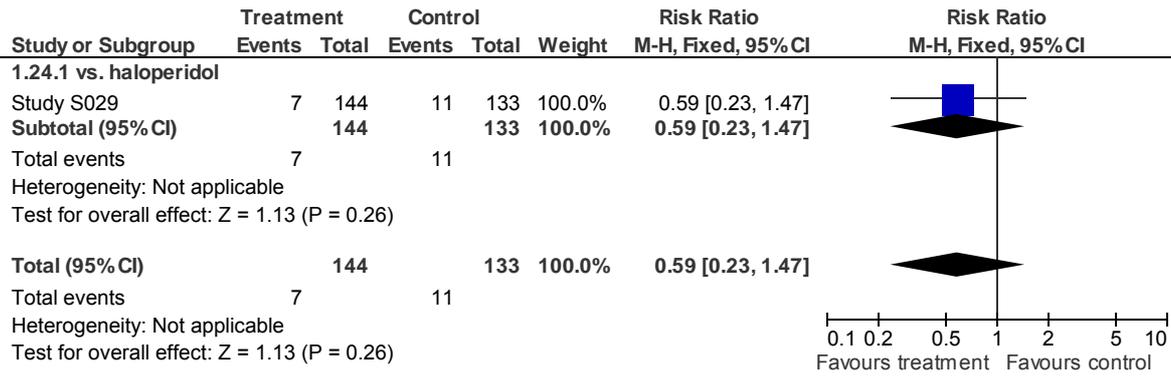


1.23 AE: 2. Neurologic SEs - Extrapyramidal disorder (treatment-emergent) (short-term)



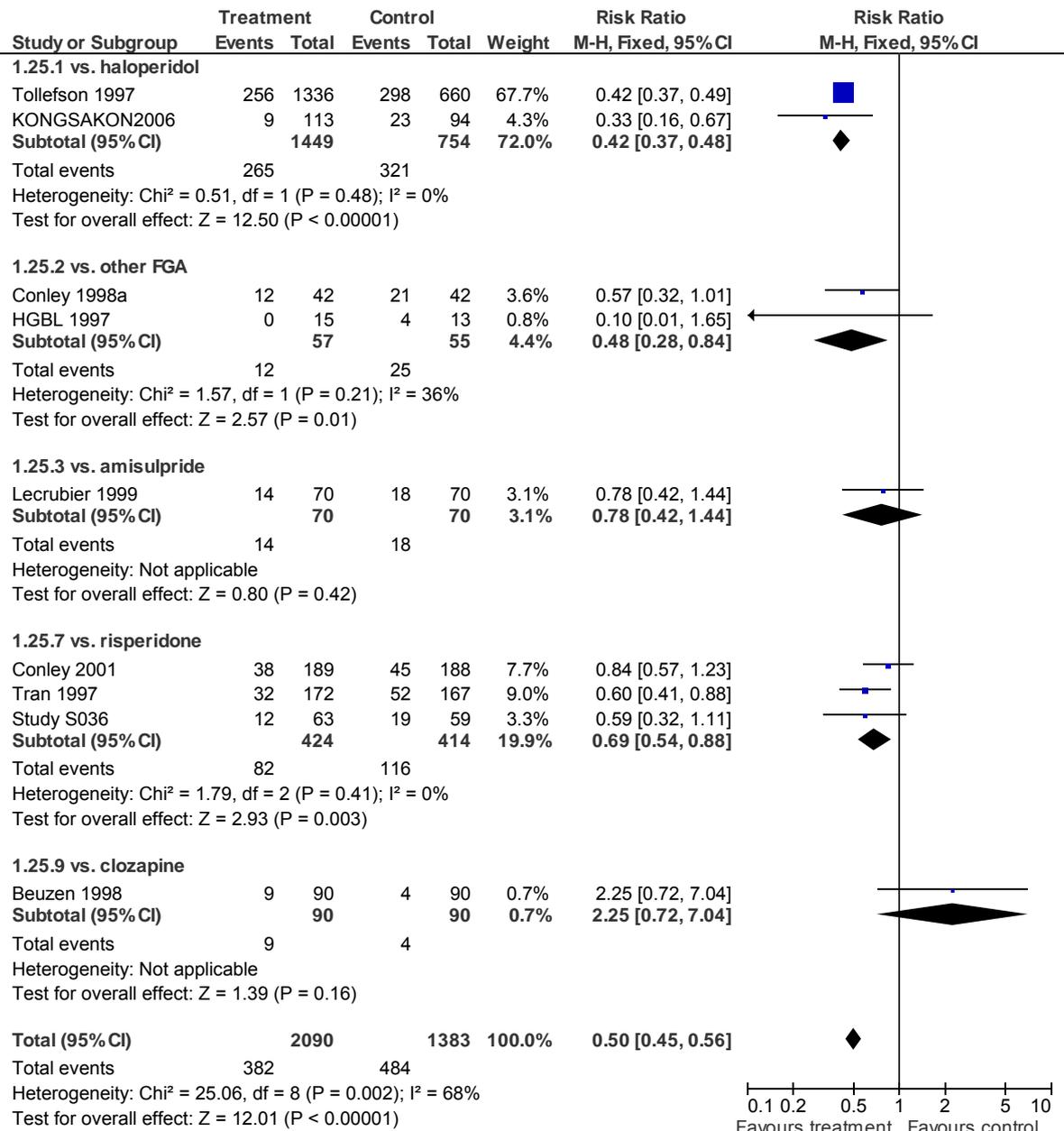
Pharmacological clinical evidence: Analysis of side effects

1.24 AE: 2. Neurologic SEs - Extrapyramidal disorder (treatment-emergent) (long-term)



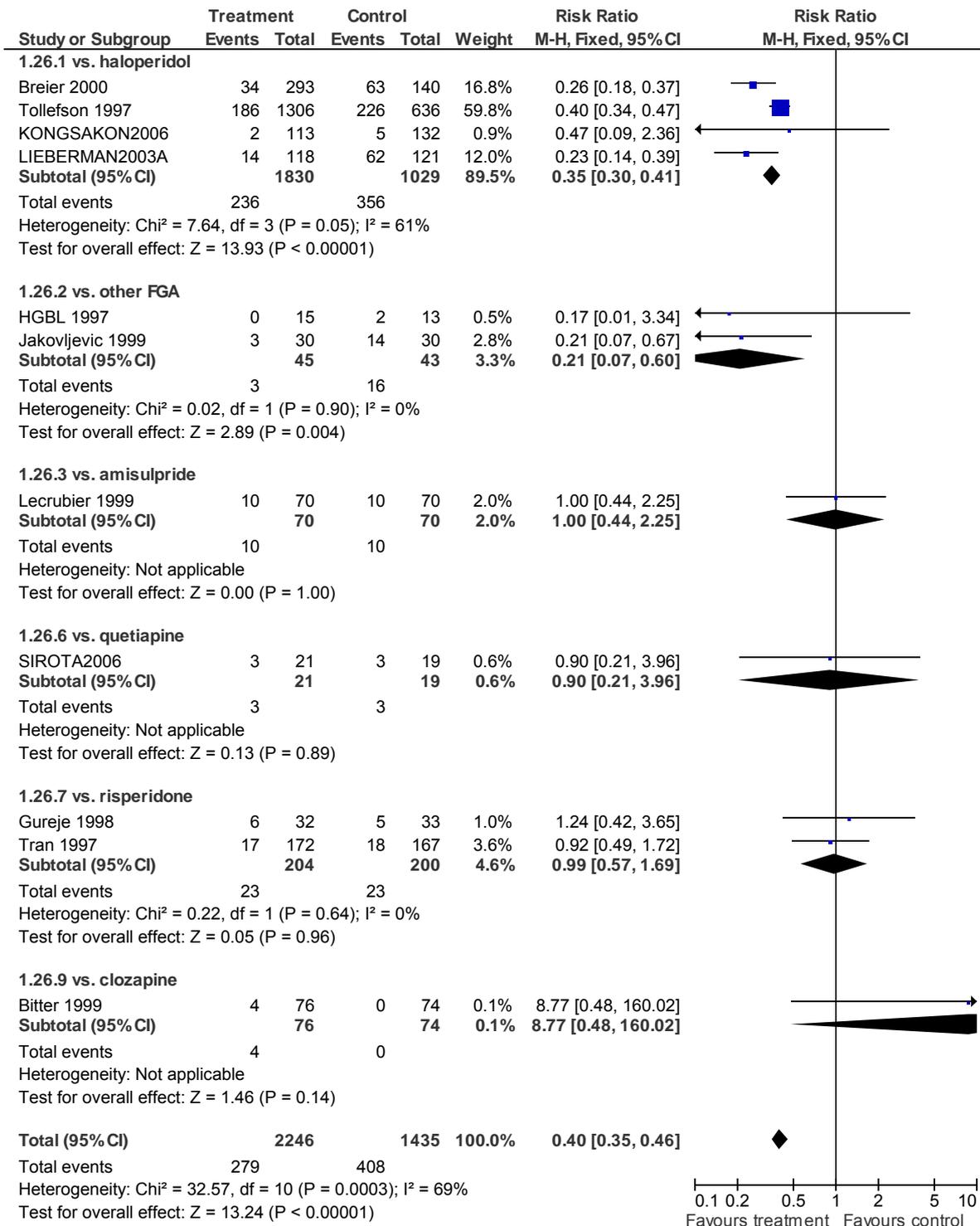
Pharmacological clinical evidence: Analysis of side effects

1.25 AE: 2. Neurologic SEs (treatment-emergent) - Any EPS (short-to-medium-term)



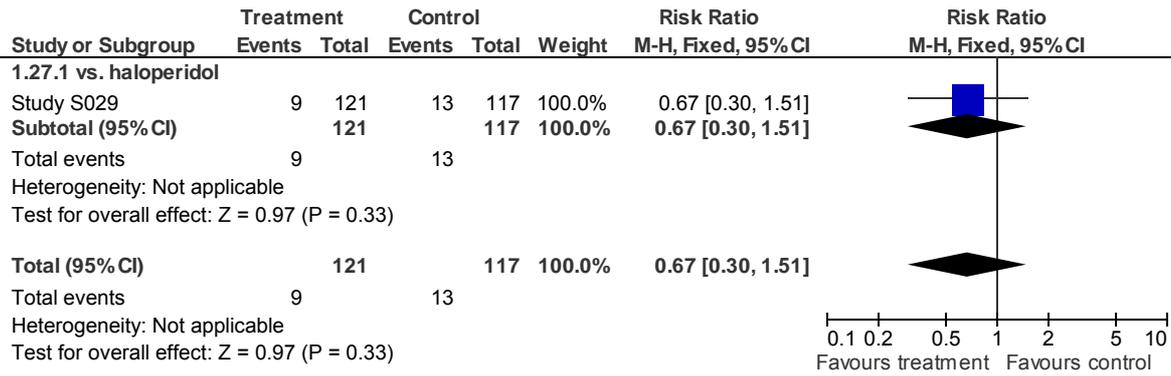
Pharmacological clinical evidence: Analysis of side effects

1.26 AE: 2. Neurologic SEs (treatment-emergent) - Akathisia (short-to-medium-term)



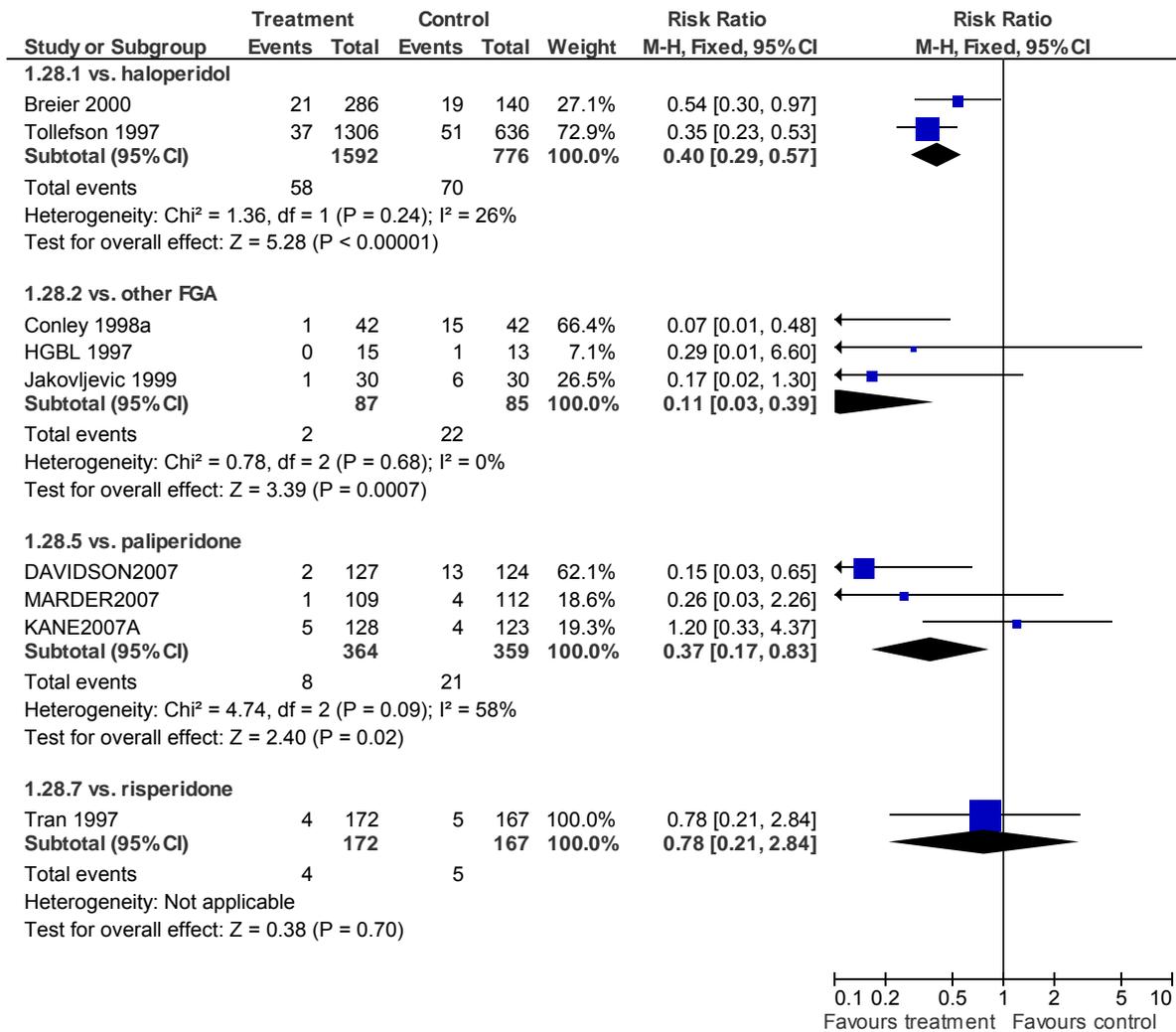
Pharmacological clinical evidence: Analysis of side effects

1.27 AE: 2. Neurologic SEs (treatment-emergent) - Akathisia (long-term)

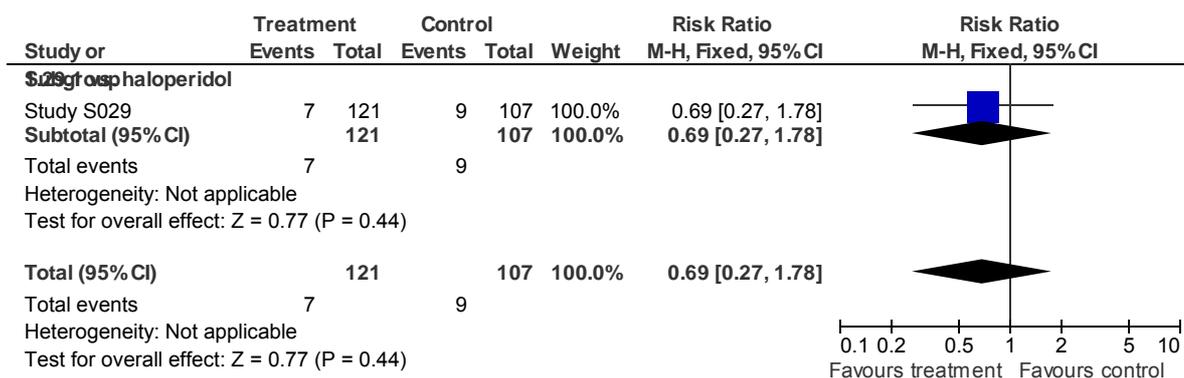


Pharmacological clinical evidence: Analysis of side effects

1.28 AE: 2. Neurologic SEs (treatment-emergent) - Tardive dyskinesia/dyskinetic movements (short-to-medium)

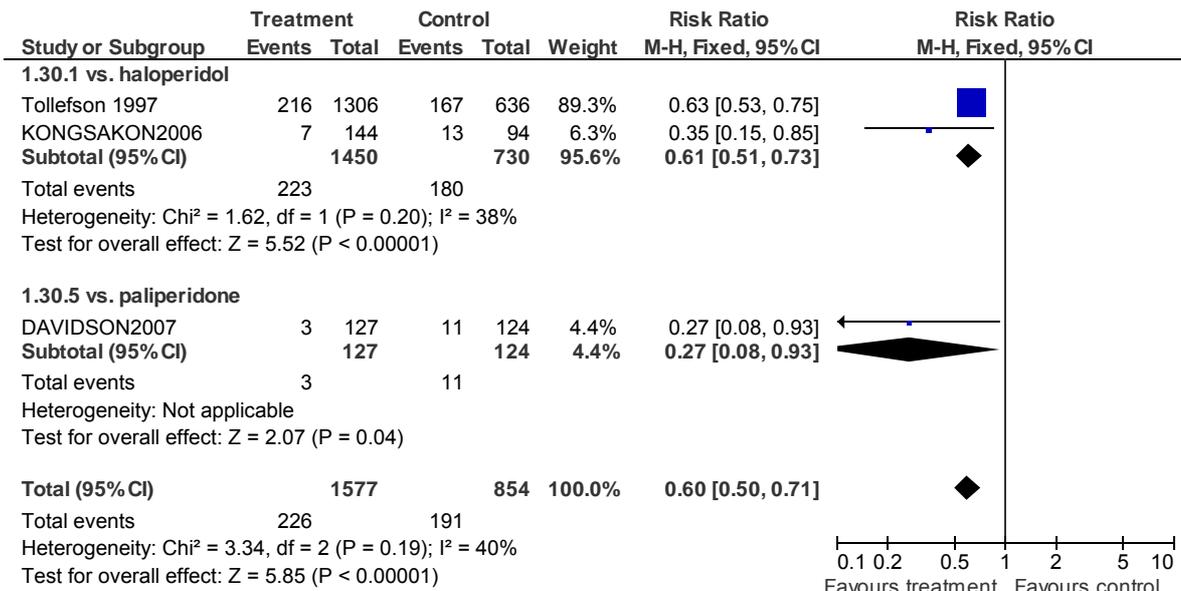


1.29 AE: 2. Neurologic SEs (treatment-emergent) - Dyskinesia (long-term)

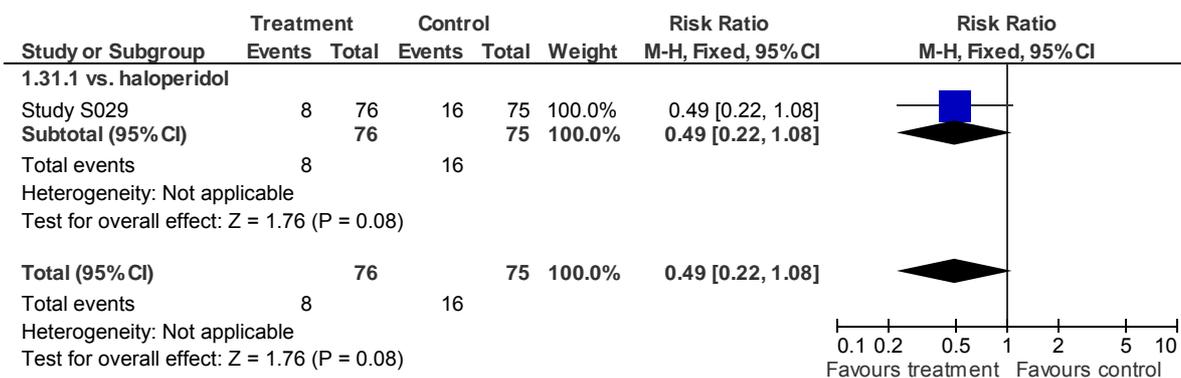


Pharmacological clinical evidence: Analysis of side effects

1.30 AE: 2. Neurologic SEs (treatment-emergent) - Tremor (short-to-medium-term)



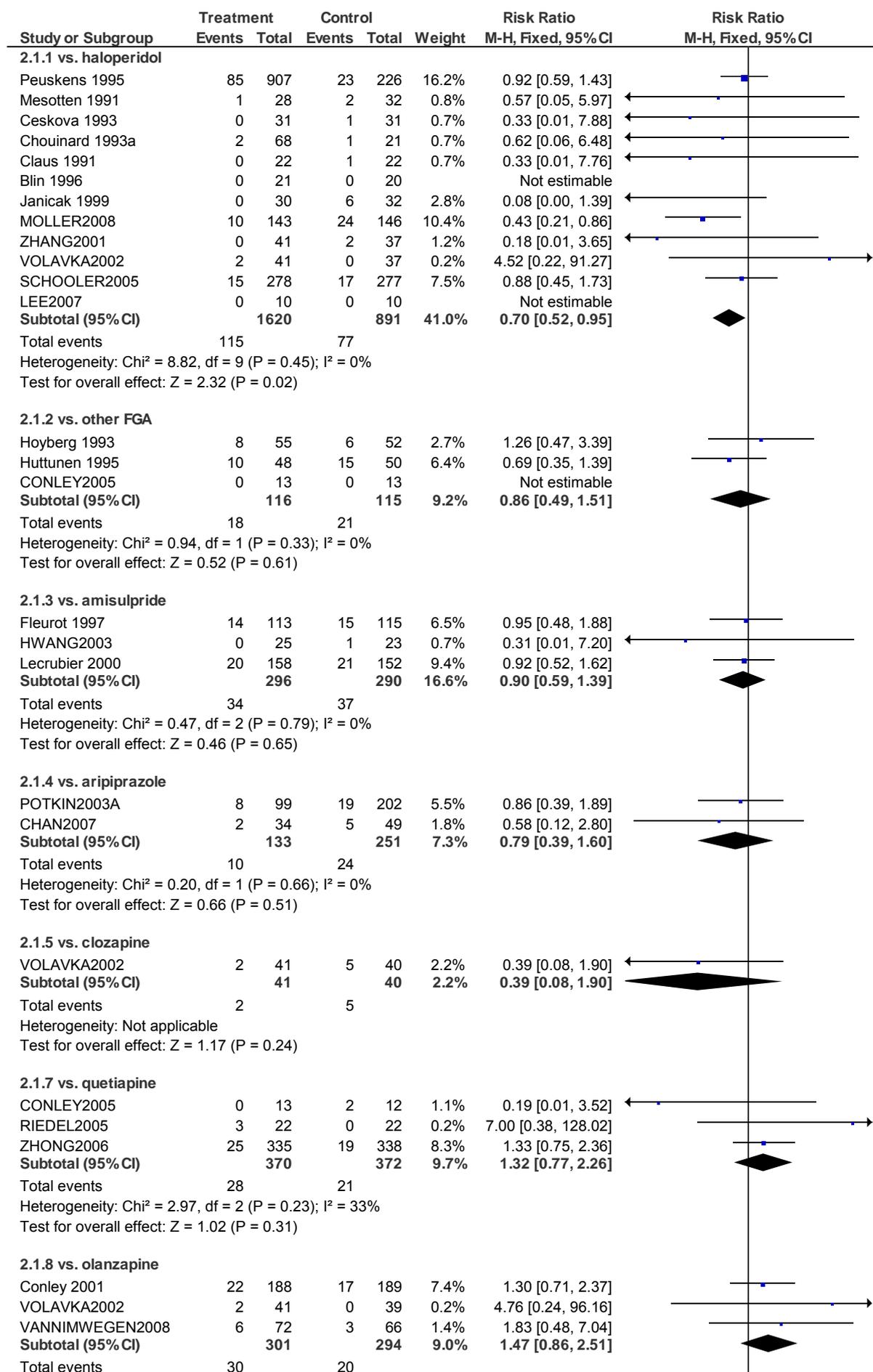
1.31 AE: 2. Neurologic SEs (treatment-emergent) - Parkinsonism (long-term)



2 Risperidone versus another antipsychotic drug (overall SE analysis)

Pharmacological clinical evidence: Analysis of side effects

2.1 Leaving the study early: 3: Adverse event (short-to-medium-term)



Pharmacological clinical evidence: Analysis of side effects

Heterogeneity: $\text{Chi}^2 = 0.85$, $\text{df} = 2$ ($P = 0.65$); $I^2 = 0\%$

Test for overall effect: $Z = 1.41$ ($P = 0.16$)

2.1.10 vs. sertindole

| | | | | | | |
|--------------------------|---|-----------|----|-----------|-------------|--------------------------|
| AZORIN2006 | 9 | 89 | 12 | 97 | 5.0% | 0.82 [0.36, 1.85] |
| Subtotal (95% CI) | | 89 | | 97 | 5.0% | 0.82 [0.36, 1.85] |

| | | | | | | |
|--------------|---|--|----|--|--|--|
| Total events | 9 | | 12 | | | |
|--------------|---|--|----|--|--|--|

Heterogeneity: Not applicable

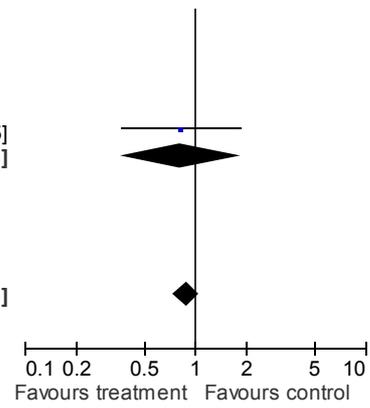
Test for overall effect: $Z = 0.48$ ($P = 0.63$)

| | | | | | | |
|-----------------------|--|-------------|--|-------------|---------------|--------------------------|
| Total (95% CI) | | 2966 | | 2350 | 100.0% | 0.88 [0.74, 1.06] |
|-----------------------|--|-------------|--|-------------|---------------|--------------------------|

| | | | | | | |
|--------------|-----|--|-----|--|--|--|
| Total events | 246 | | 217 | | | |
|--------------|-----|--|-----|--|--|--|

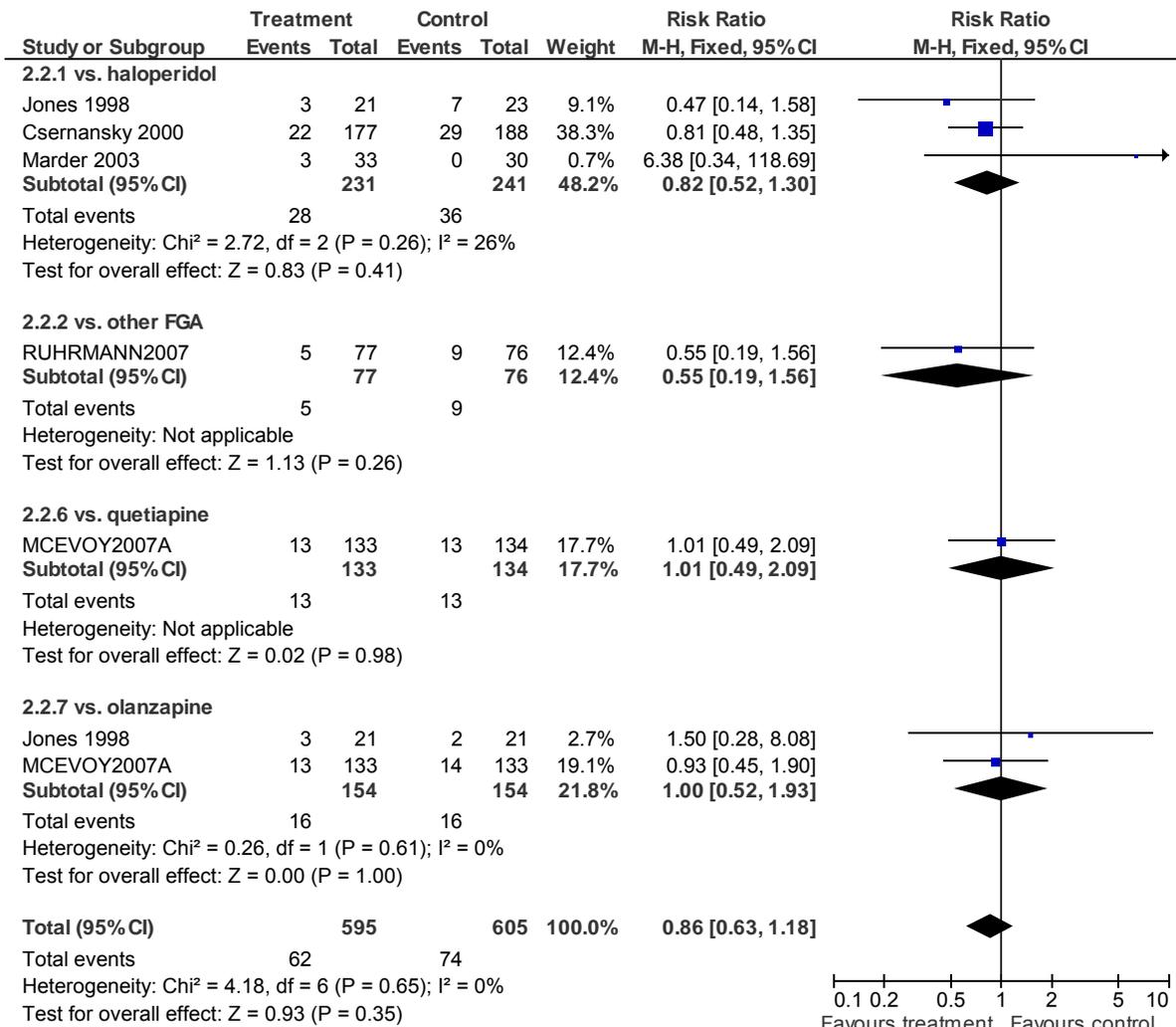
Heterogeneity: $\text{Chi}^2 = 21.75$, $\text{df} = 24$ ($P = 0.59$); $I^2 = 0\%$

Test for overall effect: $Z = 1.35$ ($P = 0.18$)

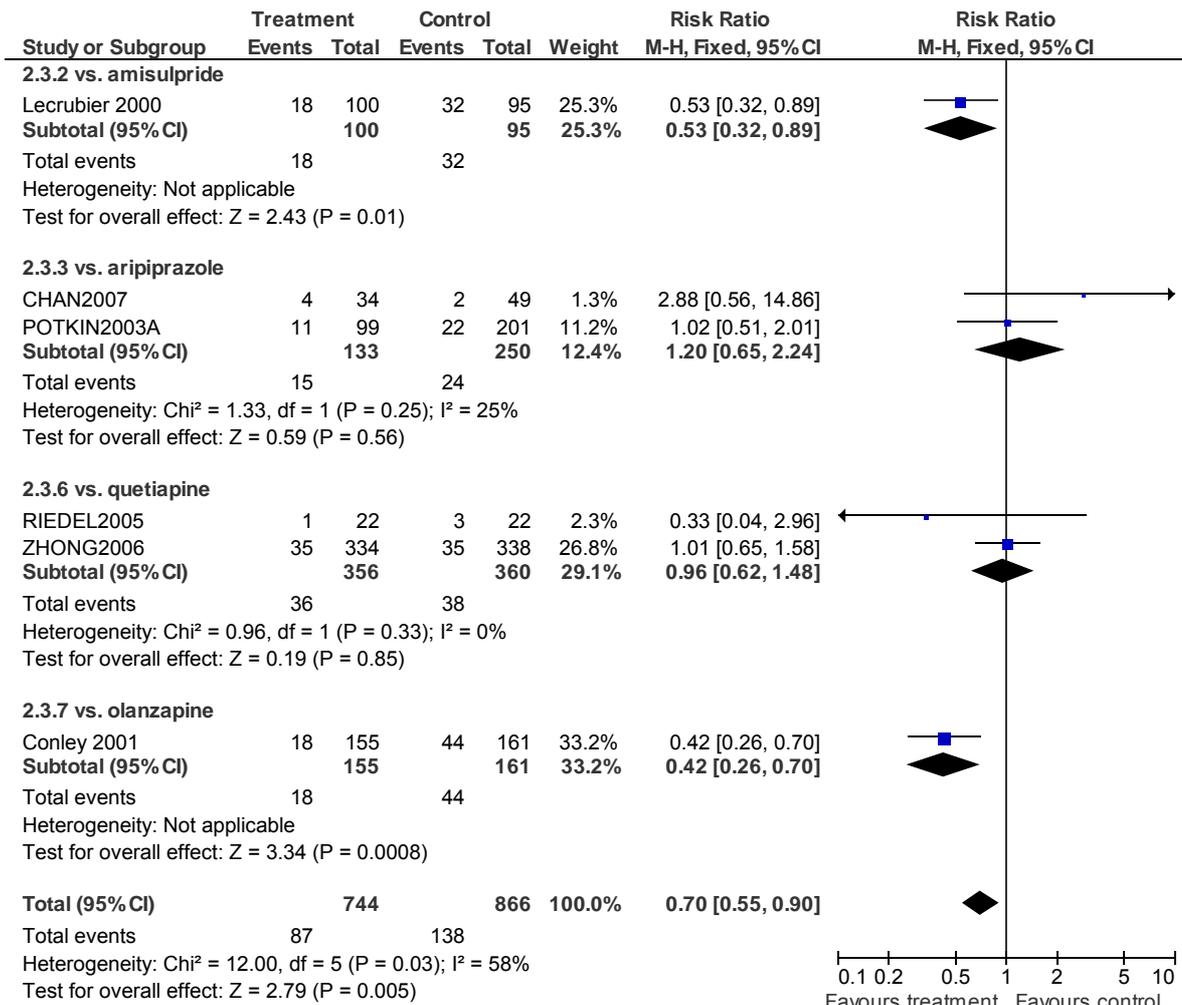


Pharmacological clinical evidence: Analysis of side effects

2.2 Leaving the study early: 3: Adverse event (long-term)

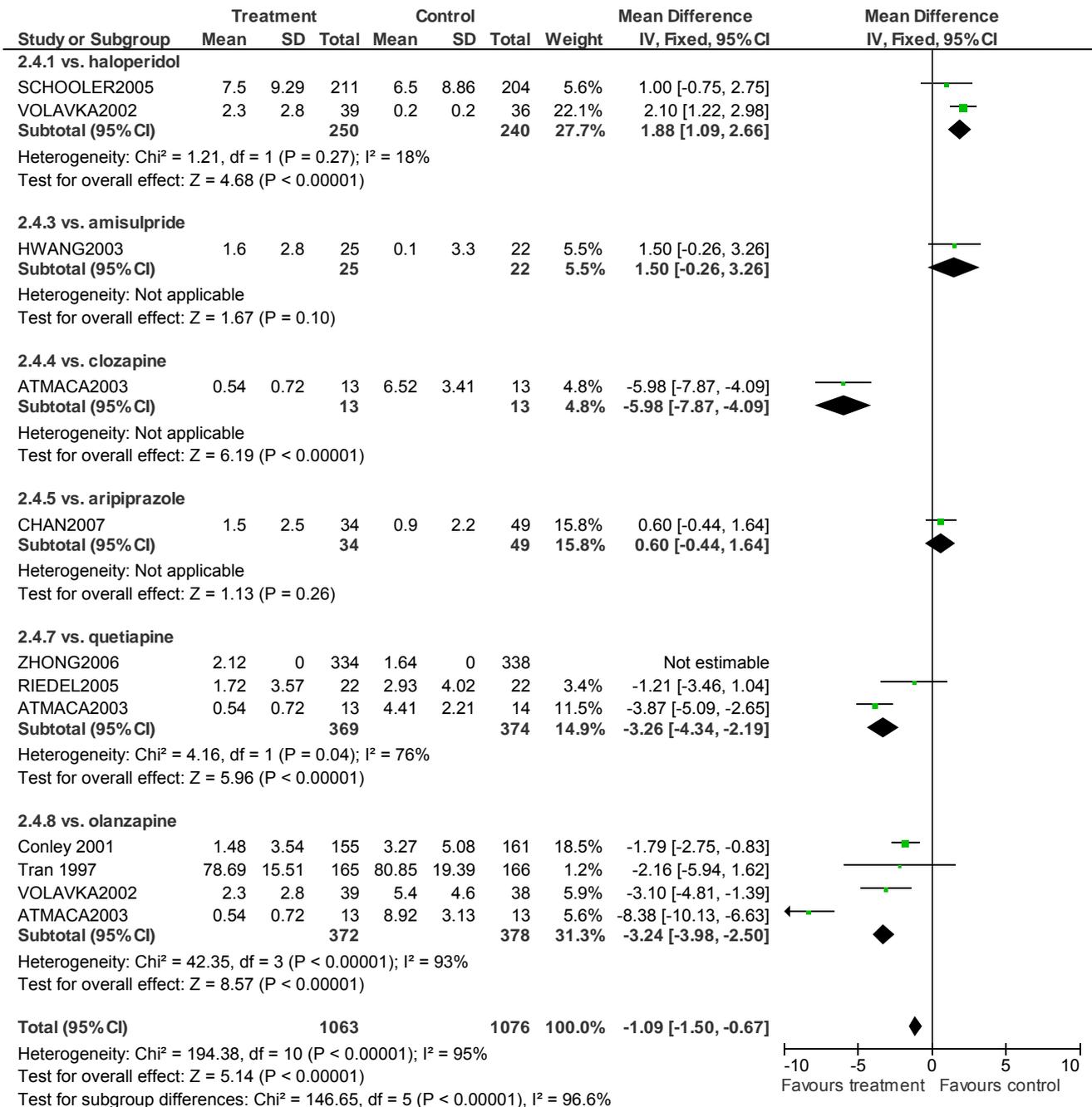


Pharmacological clinical evidence: Analysis of side effects

2.3 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline) (short-to-medium-term)

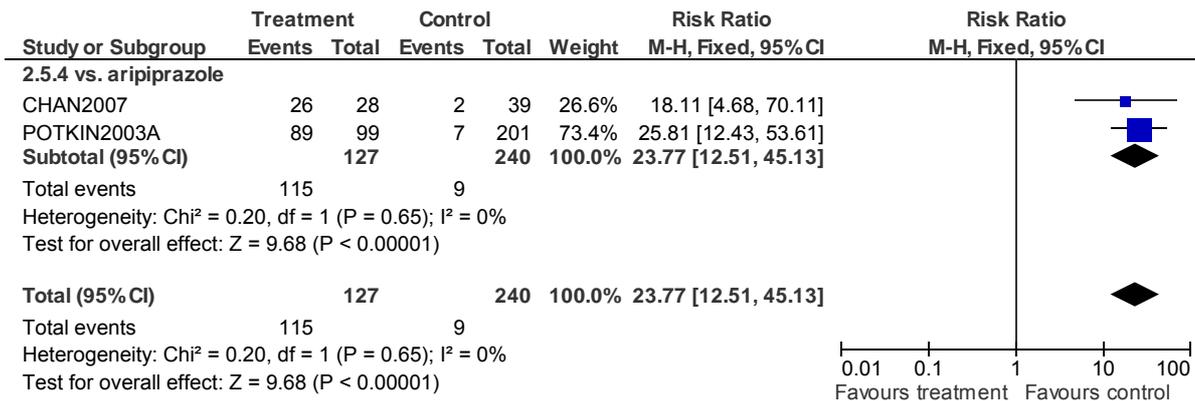
Pharmacological clinical evidence: Analysis of side effects

2.4 AE: 1. Metabolic SEs - Weight (endpoint or change; kg) (short-to-medium-term)

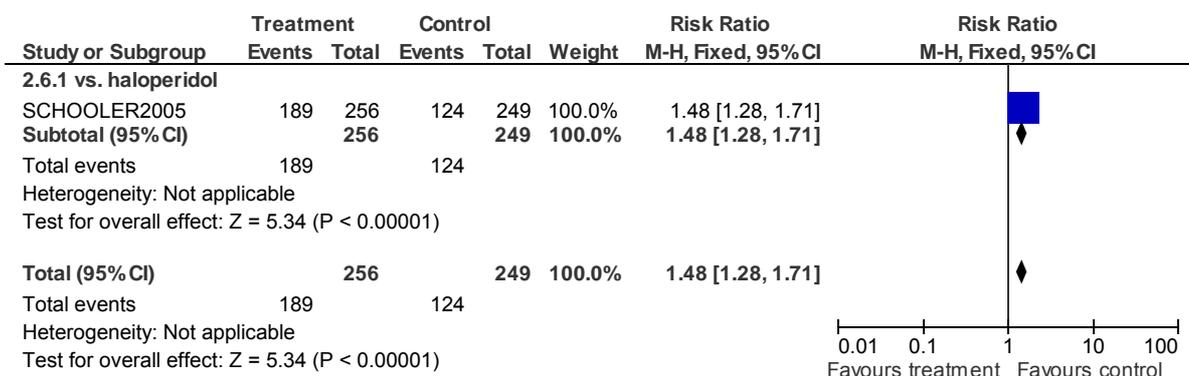


Pharmacological clinical evidence: Analysis of side effects

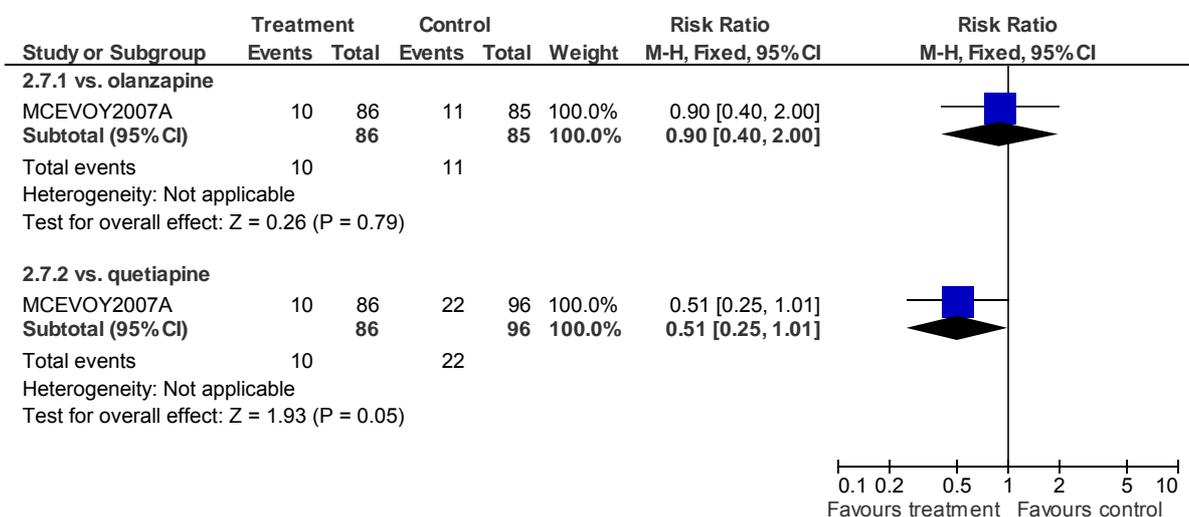
2.5 AE: 1. Metabolic SEs - Abnormal prolactin levels (short-to-medium-term)



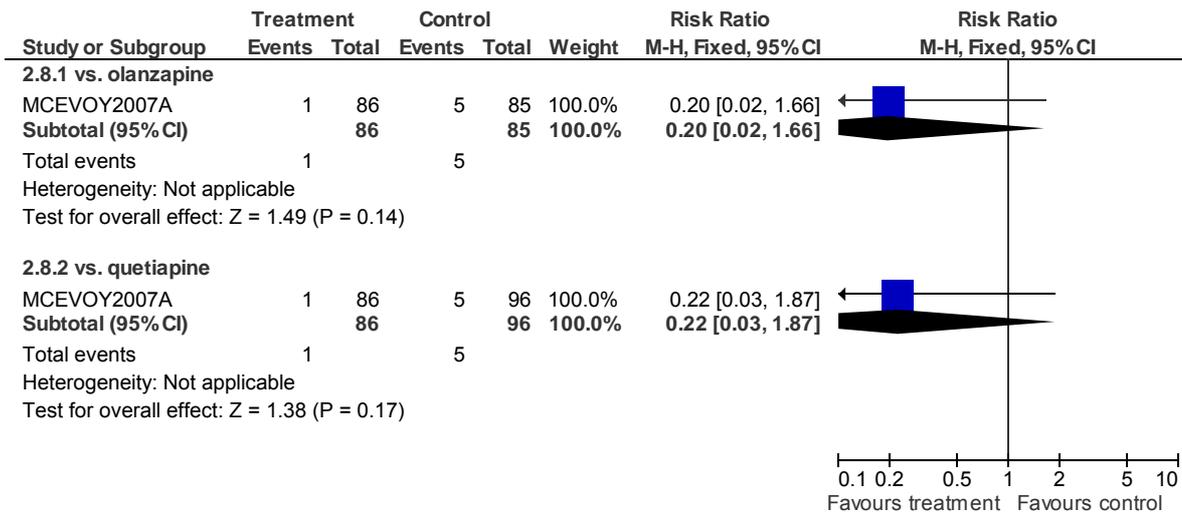
2.6 AE: 1. Metabolic SEs - Abnormal prolactin levels (long-term)



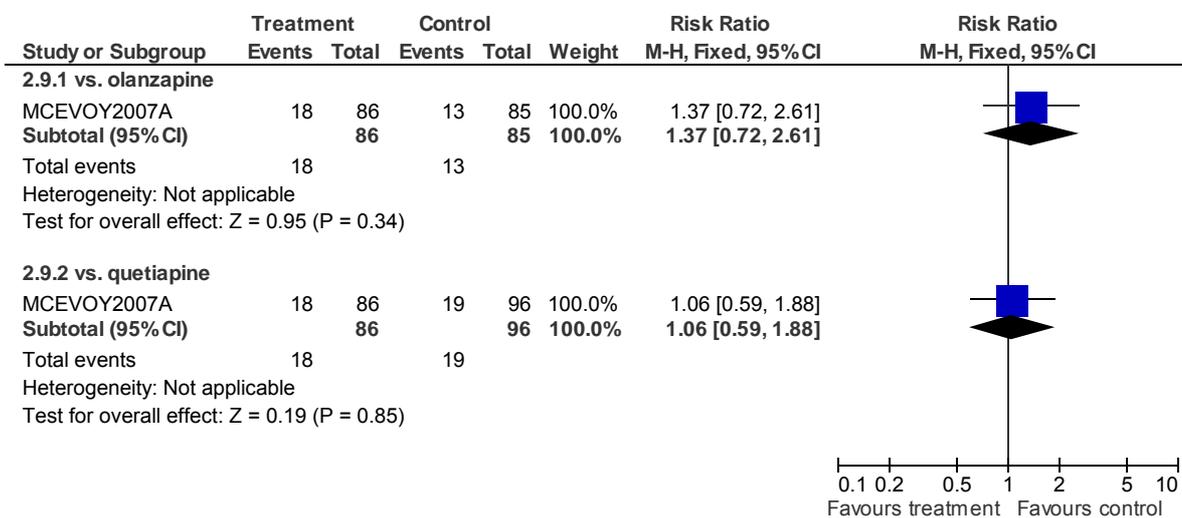
2.7 AE: 1. Metabolic SEs - Fasting triglycerides level (>= 150 mg/dl) (medium-term)



Pharmacological clinical evidence: Analysis of side effects

2.8 AE: 1. Metabolic SEs - Fasting glucose level (≥ 100 mg/dl) (medium-term)

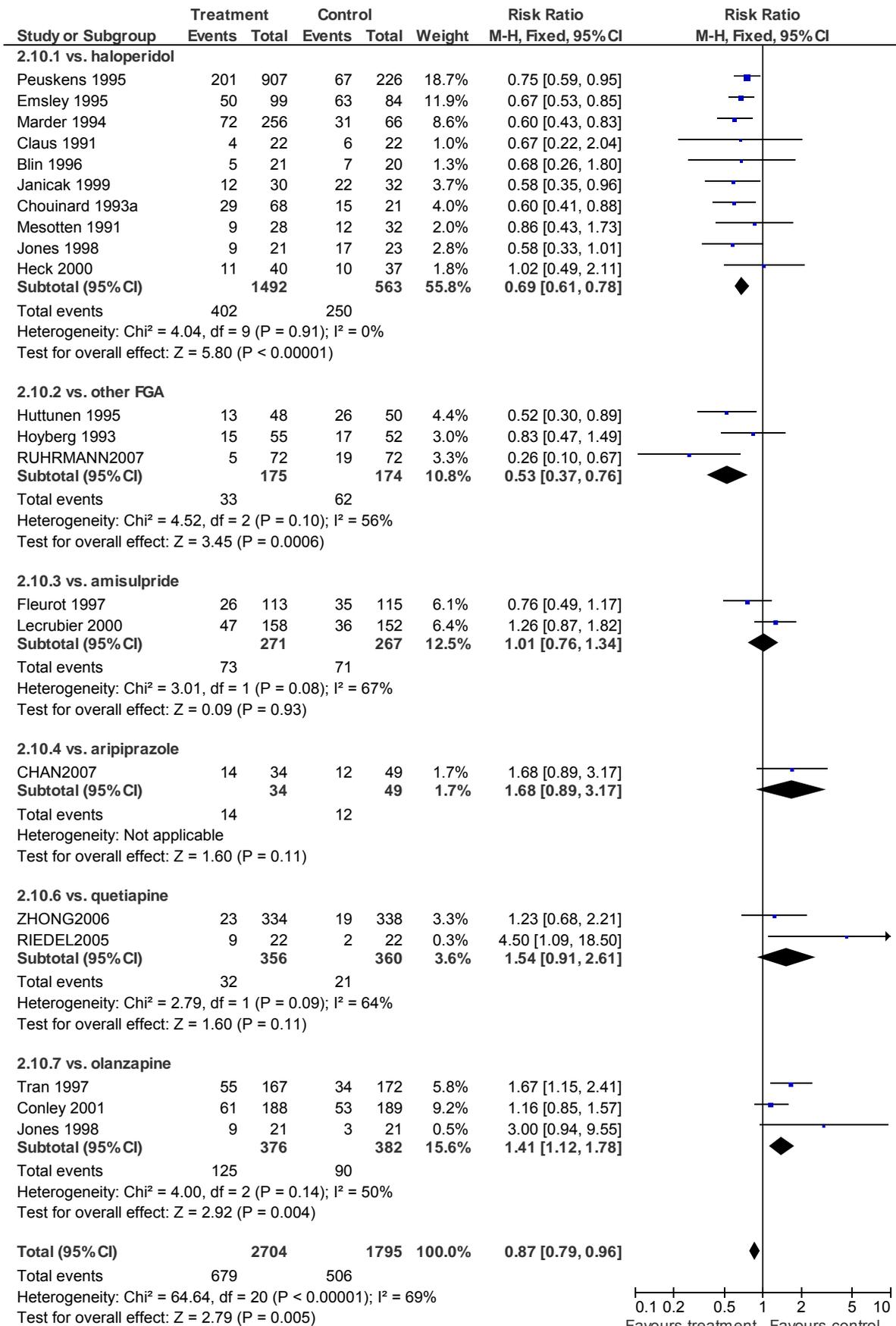
0.1 0.2 0.5 1 2 5 10
Favours treatment Favours control

2.9 AE: 1. Metabolic SEs - Fasting total cholesterol level (≥ 200 mg/dl) (medium-term)

0.1 0.2 0.5 1 2 5 10
Favours treatment Favours control

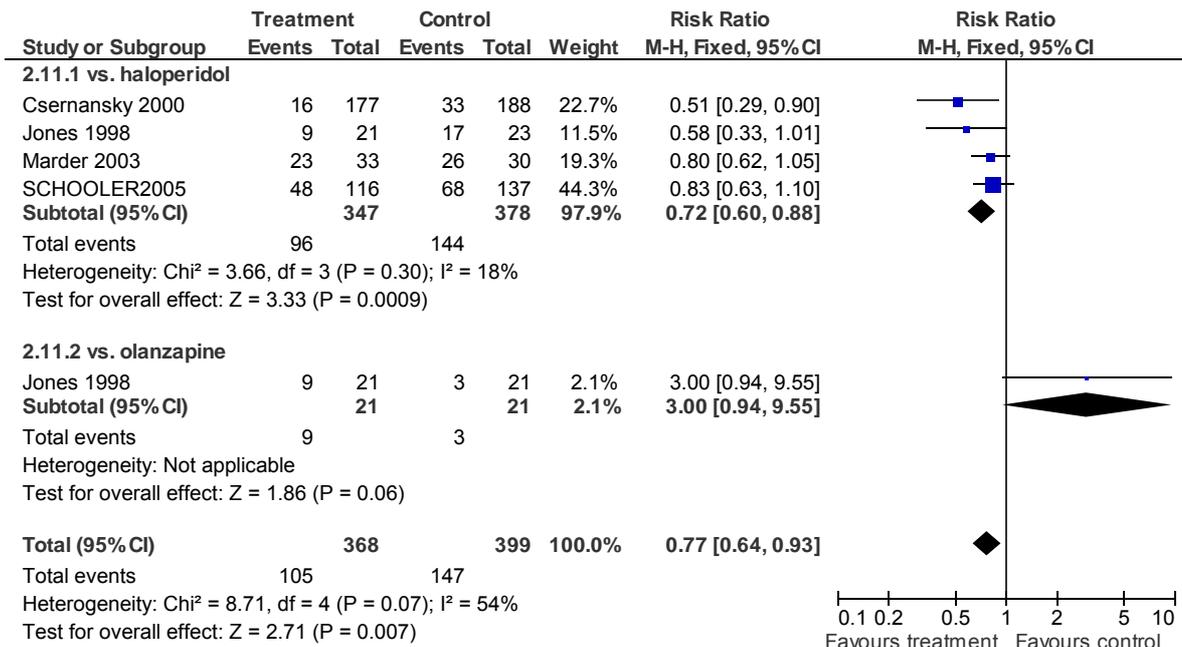
Pharmacological clinical evidence: Analysis of side effects

2.10 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-to-medium-term)



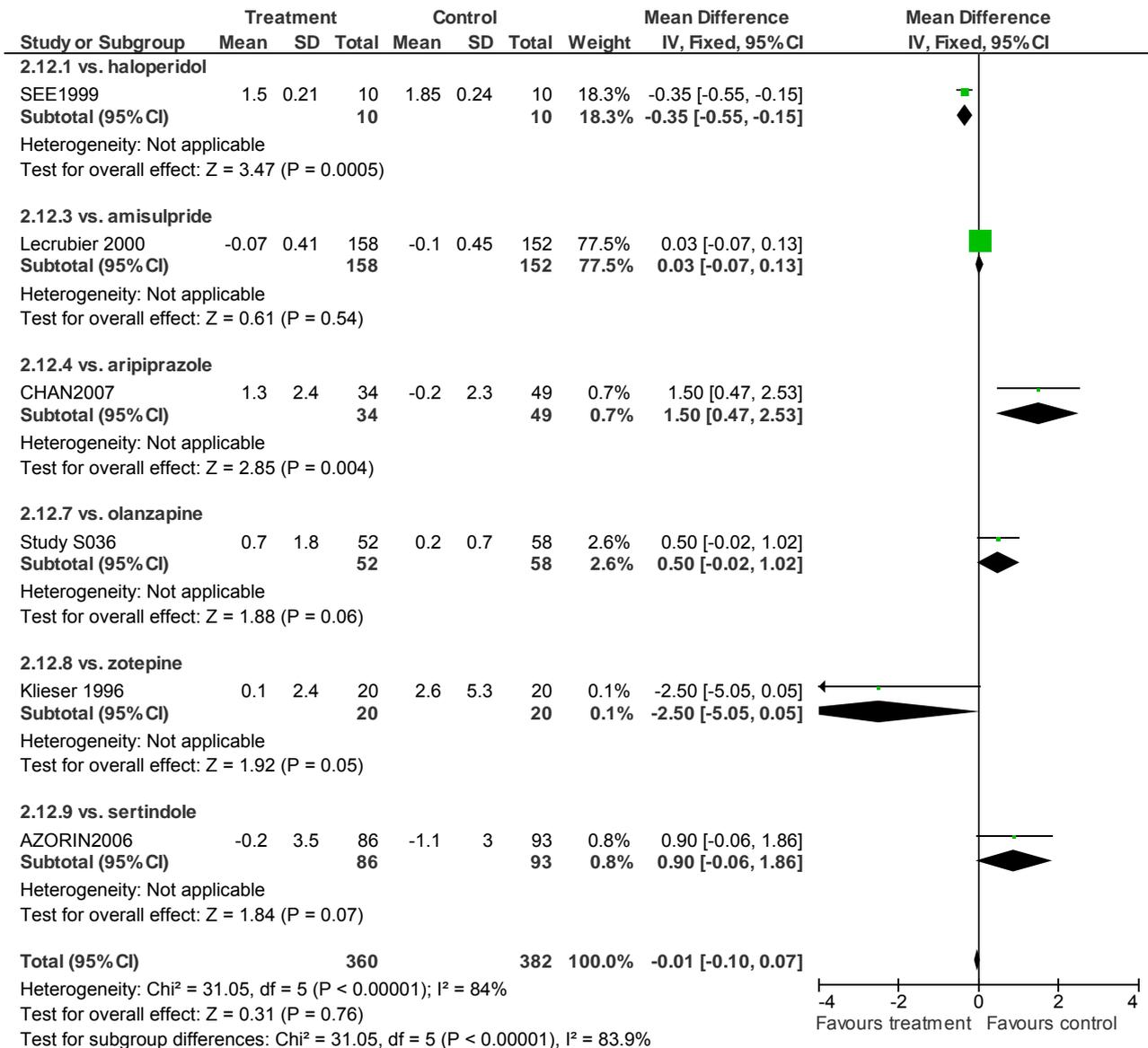
Pharmacological clinical evidence: Analysis of side effects

2.11 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)



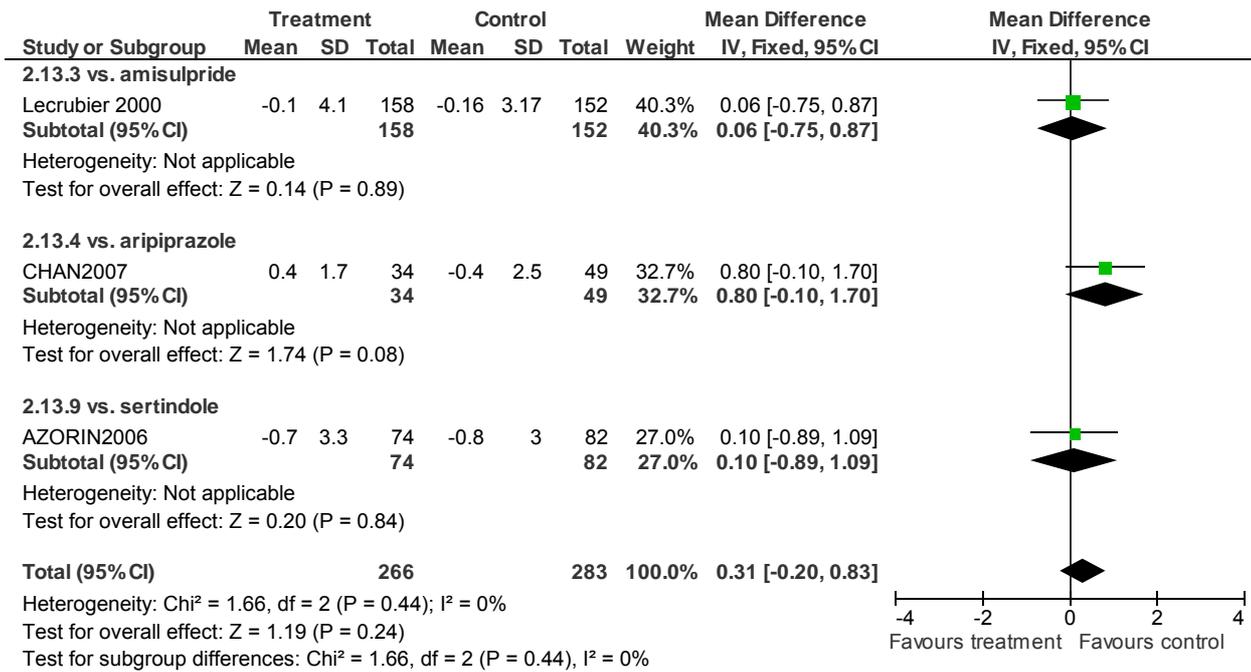
Pharmacological clinical evidence: Analysis of side effects

2.12 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; endpoint/change) (short-to-medium-term)

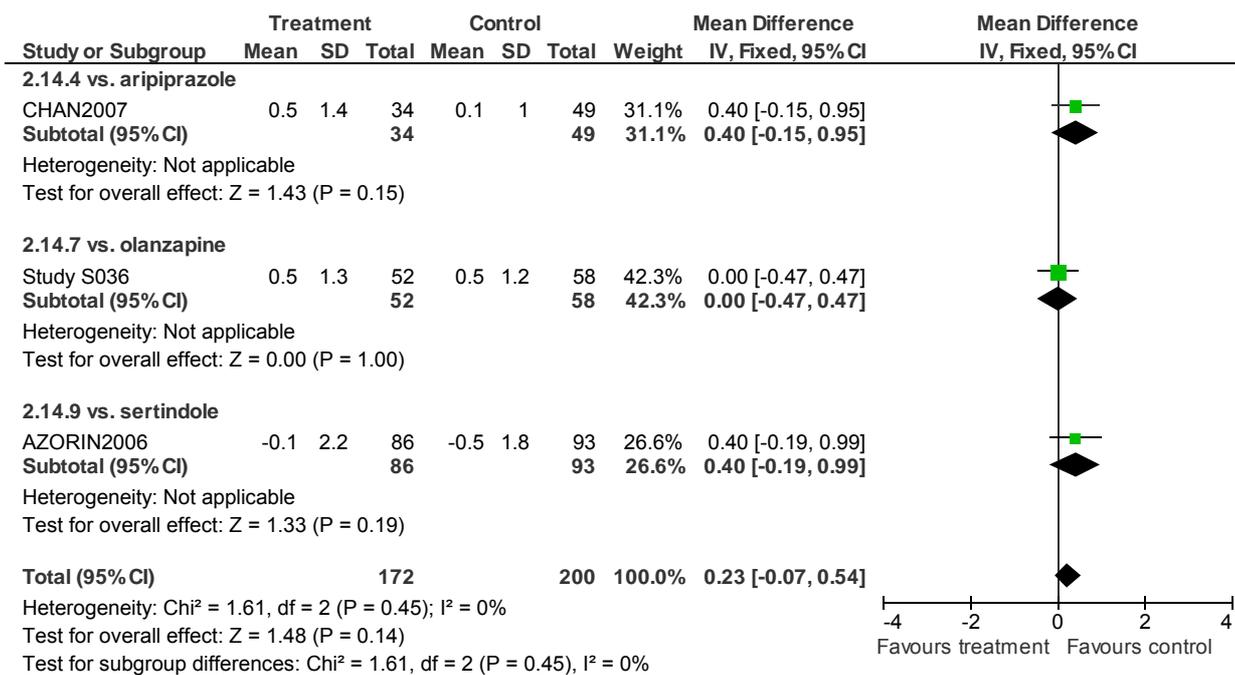


Pharmacological clinical evidence: Analysis of side effects

2.13 AE: 2. Neurologic SEs - Involuntary Movement Scale (AIMS; change from baseline) (medium-term)

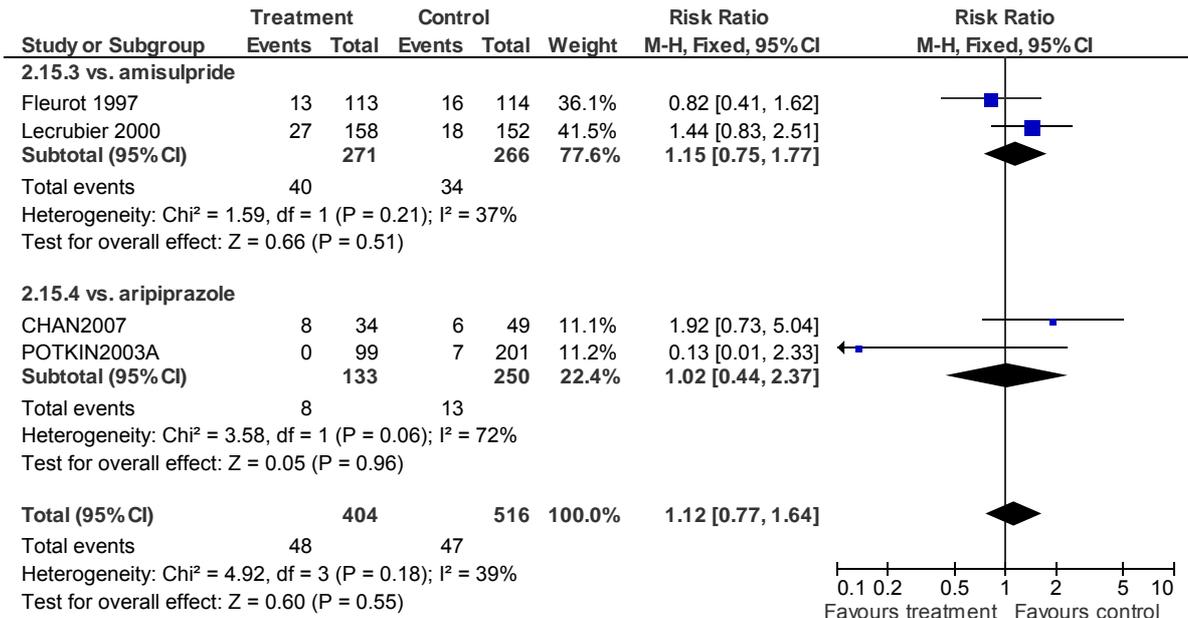


2.14 AE: 2. Neurologic SEs - Barnes Akathisia Scale (BAS; endpt/change) (short-term)



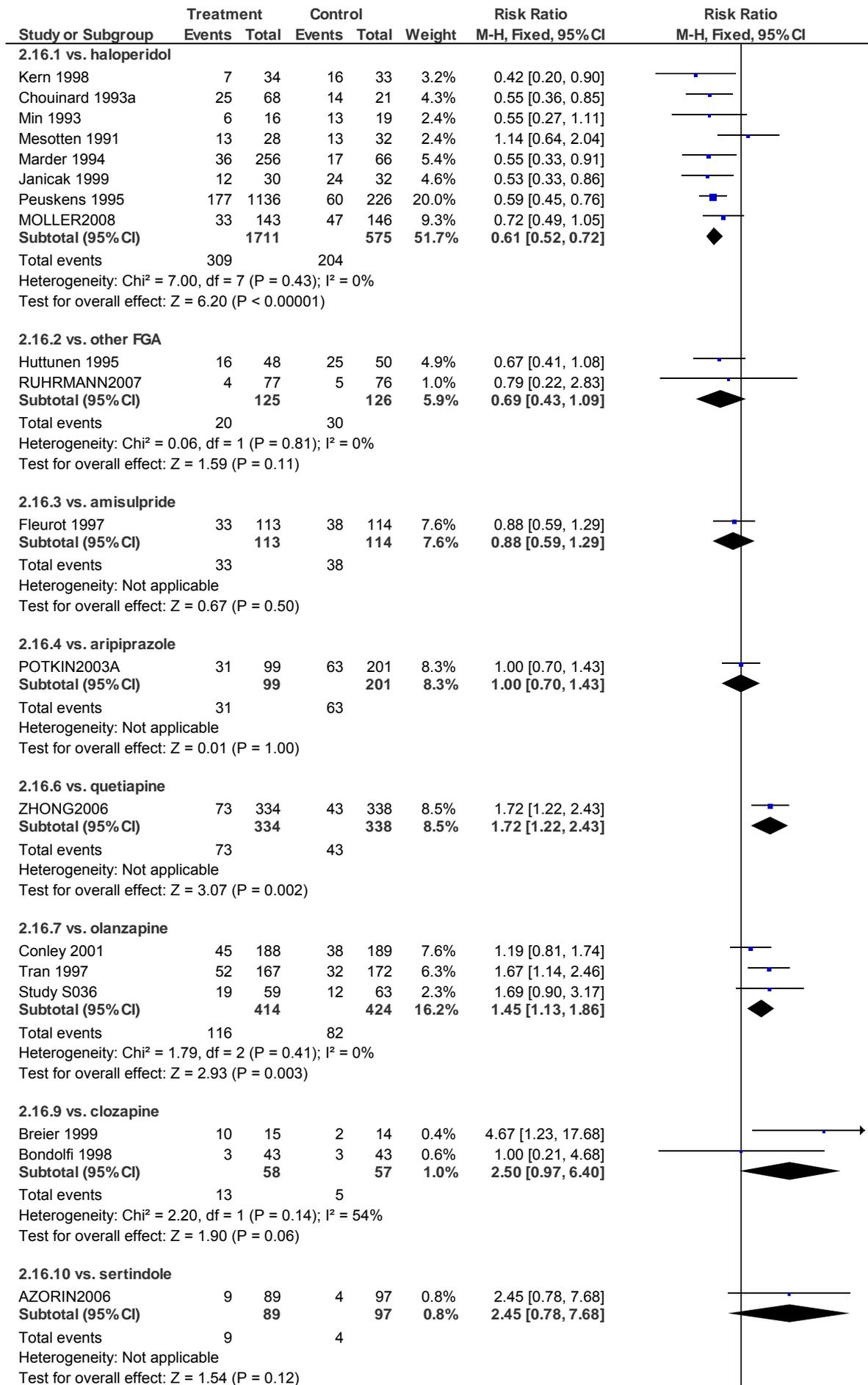
Pharmacological clinical evidence: Analysis of side effects

2.15 AE: 2. Neurologic SEs - Extrapyramidal disorder/syndrome (treatment-emergent) (short-term)



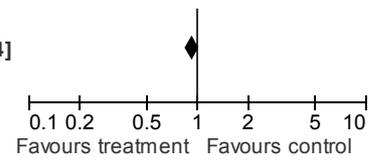
Pharmacological clinical evidence: Analysis of side effects

2.16 AE: 2. Neurologic SEs (treatment-emergent) - Any EPS (short-to-medium-term)



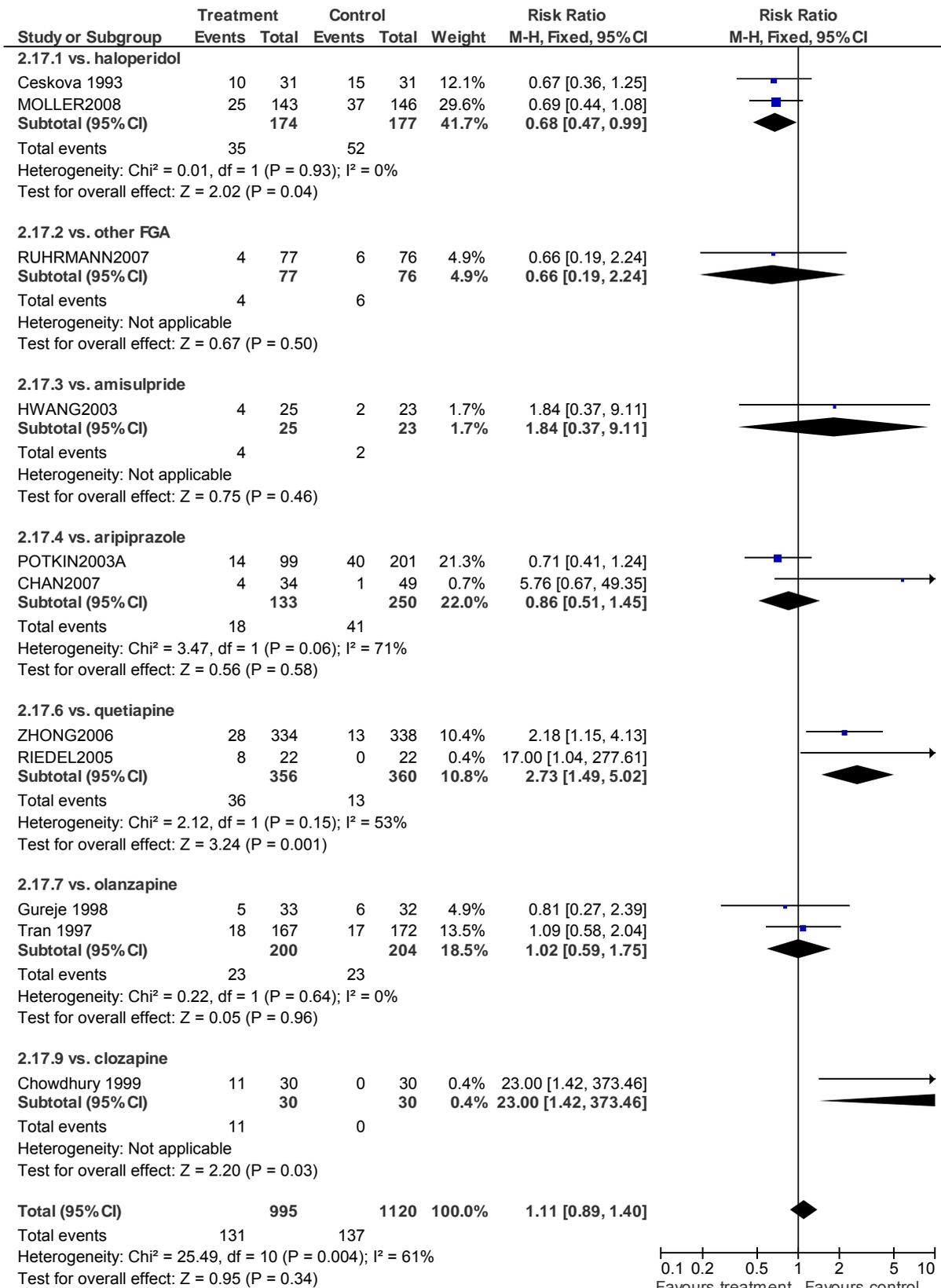
Pharmacological clinical evidence: Analysis of side effects

Total (95% CI) 2943 1932 100.0% 0.93 [0.84, 1.04]
Total events 604 469
Heterogeneity: $\text{Chi}^2 = 72.79$, $\text{df} = 18$ ($P < 0.00001$); $I^2 = 75\%$
Test for overall effect: $Z = 1.31$ ($P = 0.19$)



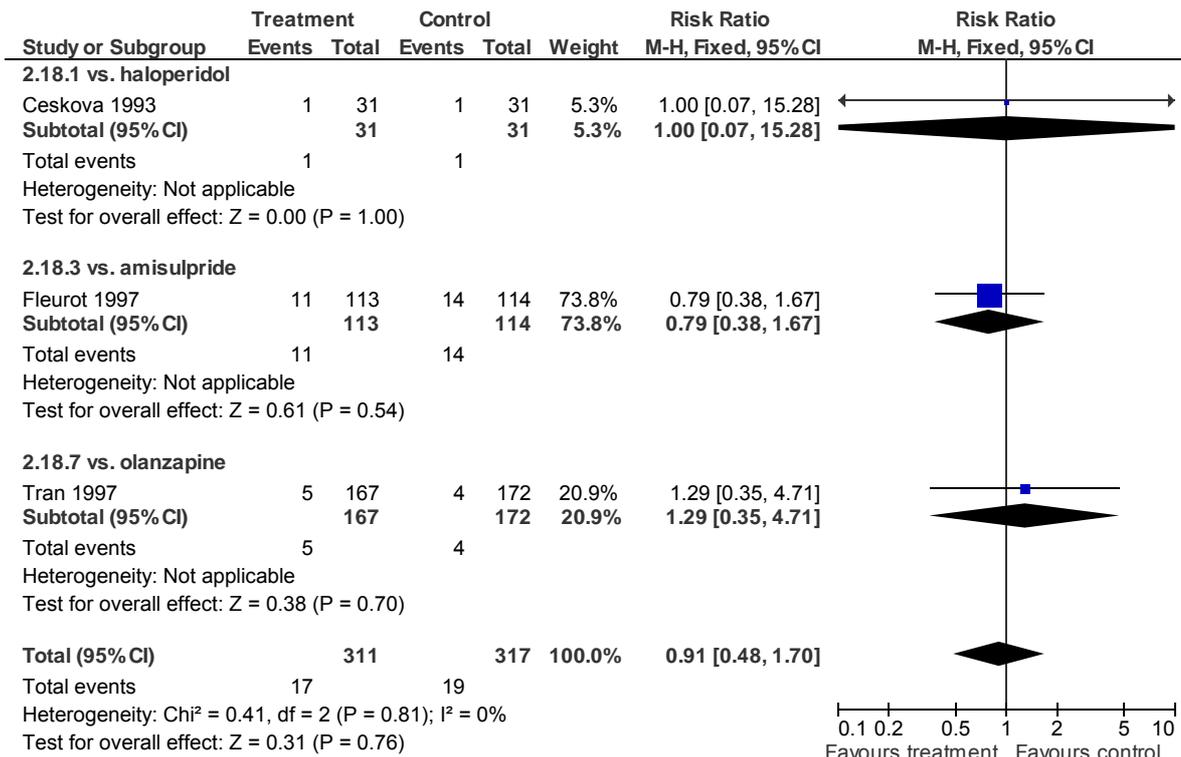
Pharmacological clinical evidence: Analysis of side effects

2.17 AE: 2. Neurologic SEs (treatment-emergent) - Akathisia (short-to-medium-term)

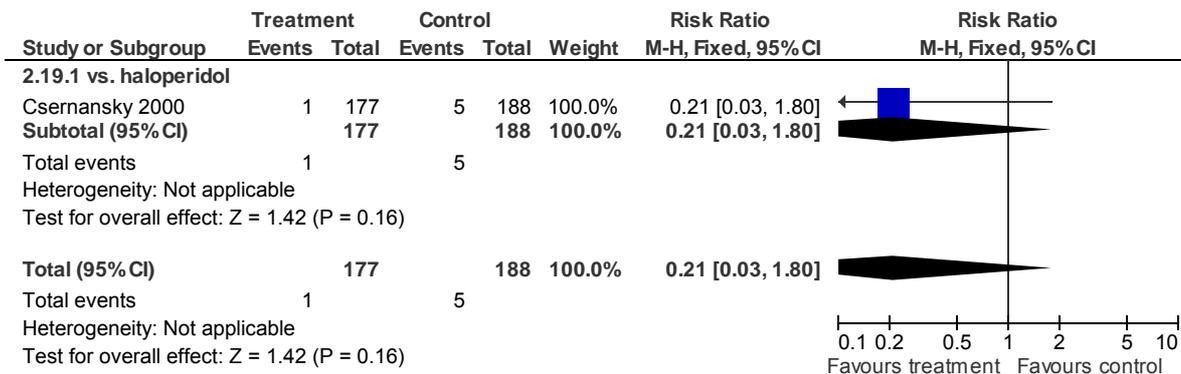


Pharmacological clinical evidence: Analysis of side effects

2.18 AE: 2. Neurologic SEs (treatment-emergent) - Tardive dyskinesia/dyskinetic movements (short-to-medium)

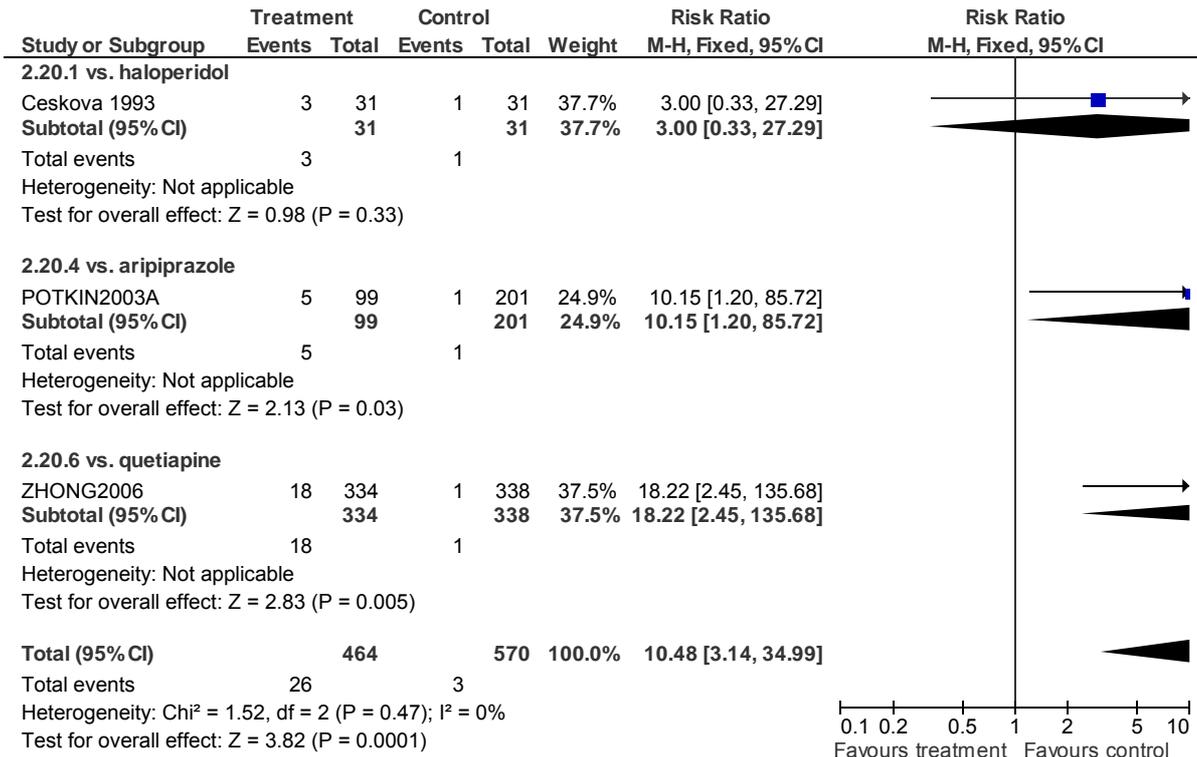


2.19 AE: 2. Neurologic SEs (treatment-emergent) - Tardive dyskinesia (long-term)



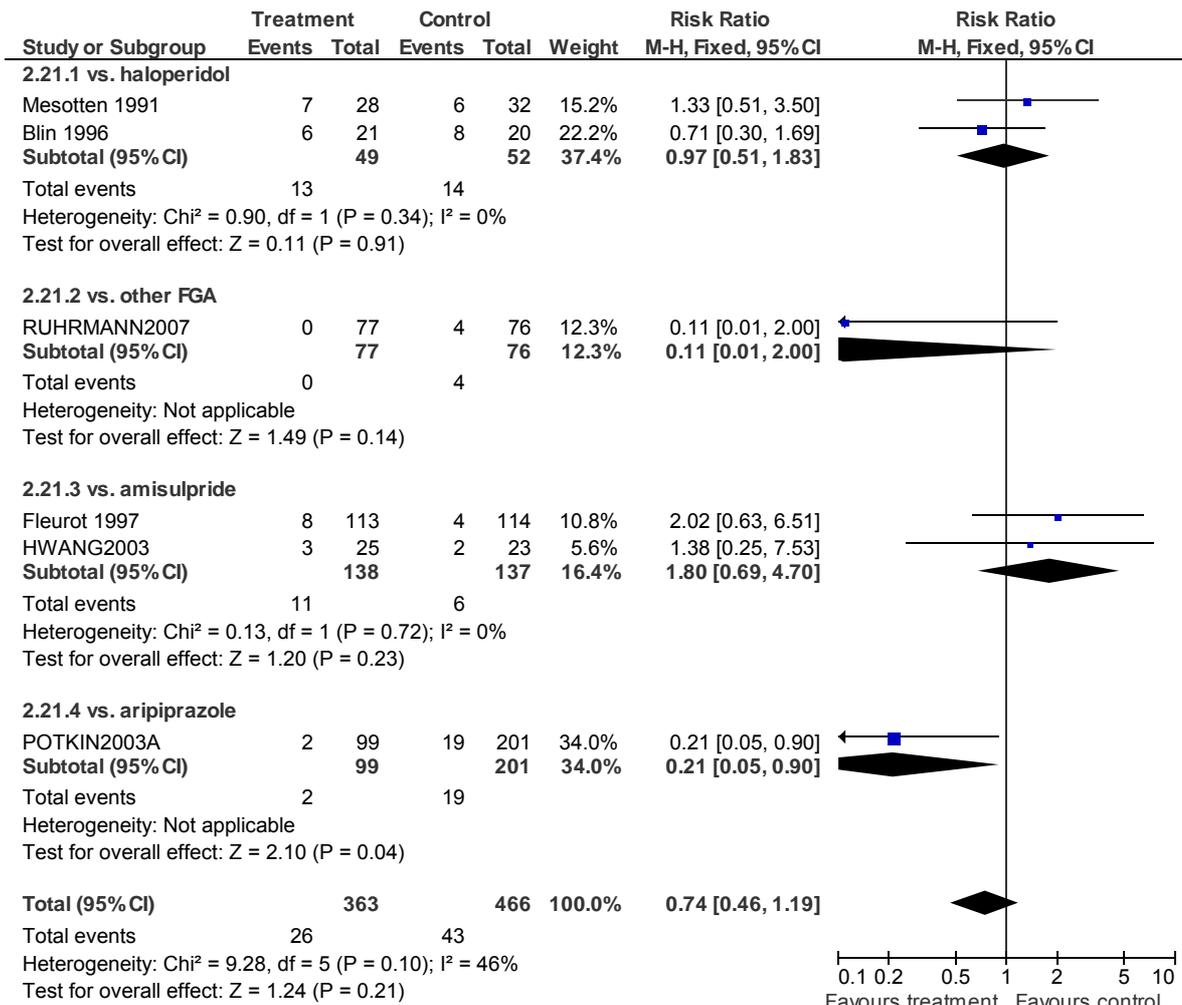
Pharmacological clinical evidence: Analysis of side effects

2.20 AE: 2. Neurologic SEs (treatment-emergent) - Acute dystonia (short-to-medium-term)



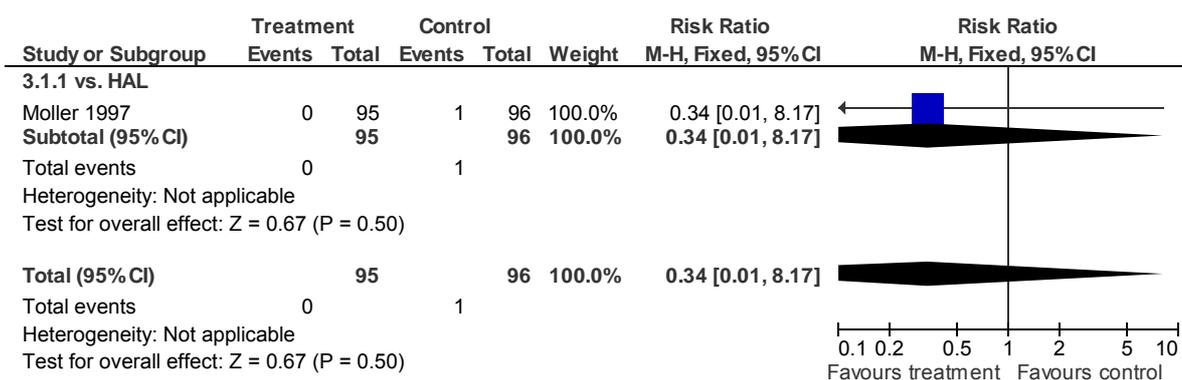
Pharmacological clinical evidence: Analysis of side effects

2.21 AE: 2. Neurologic SEs (treatment-emergent) - Tremor (short-to-medium-term)



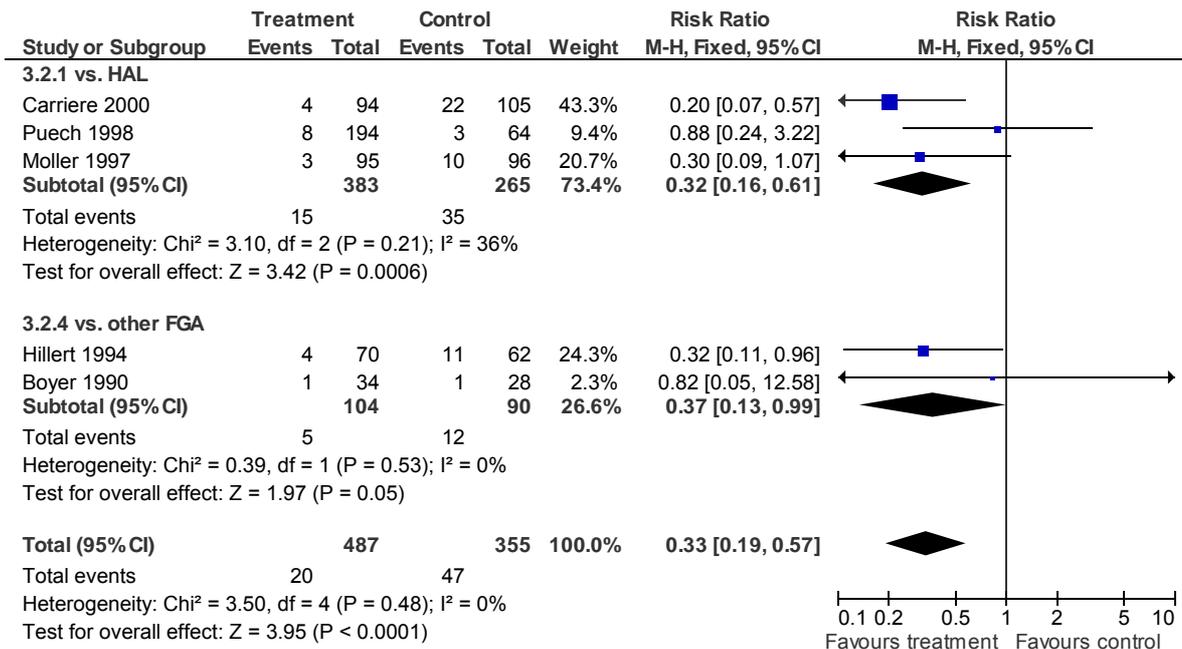
3 Amisulpride versus FGA (overall SE analysis)

3.1 Mortality: 1. Suicide

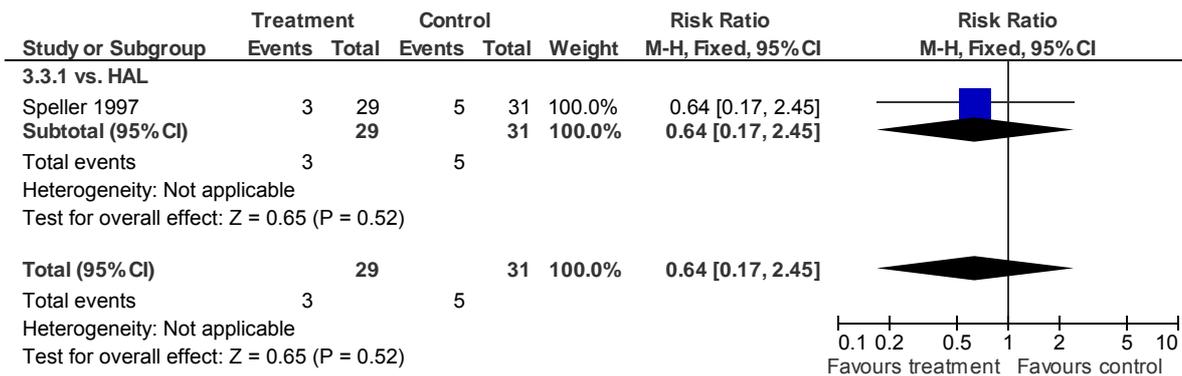


Pharmacological clinical evidence: Analysis of side effects

3.2 Leaving the study early: 3: Adverse event (short-to-medium-term)

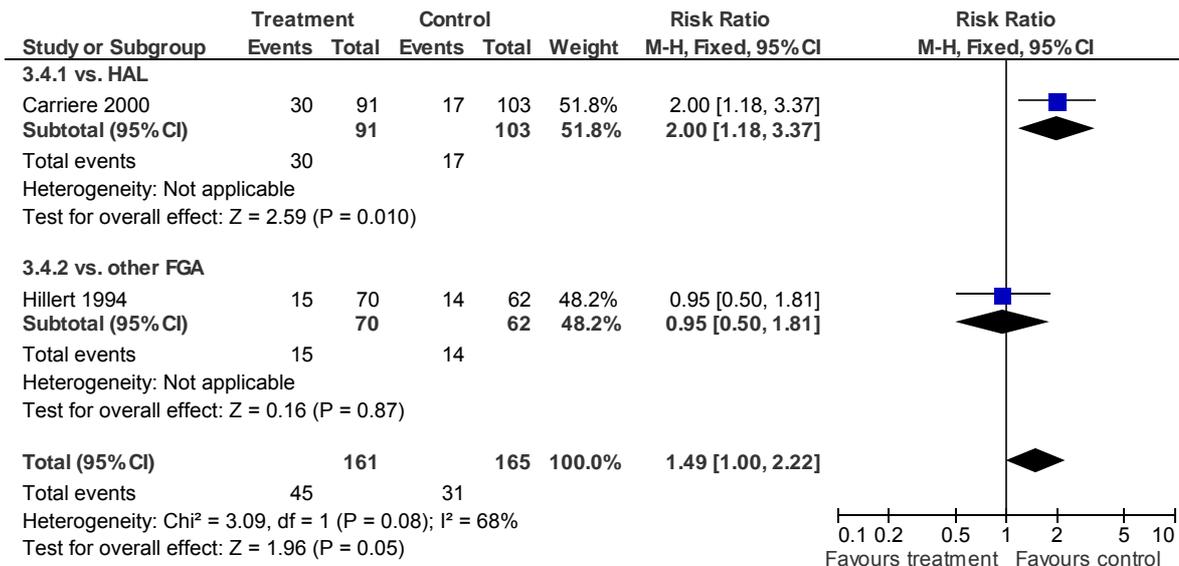


3.3 Leaving the study early: 3: Adverse event (long-term)

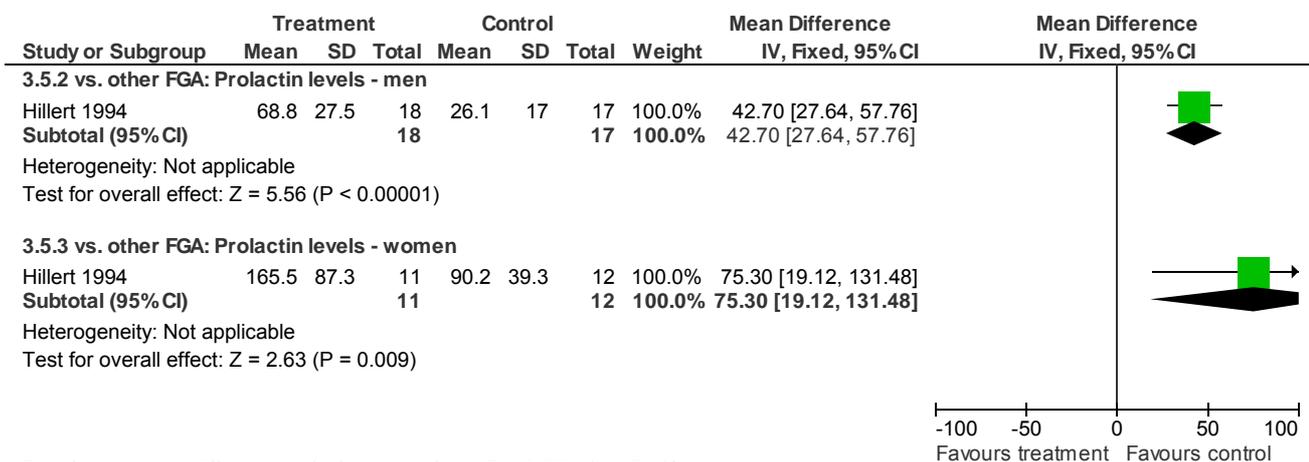


Pharmacological clinical evidence: Analysis of side effects

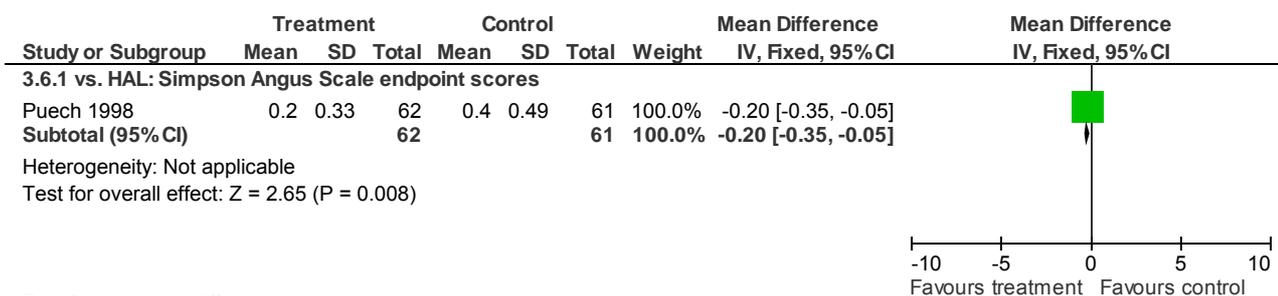
3.4 AE: 1. Metabolic SEs - Weight gain (short-to-medium-term)



3.5 AE: 1. Metabolic SEs - Prolactin-related (short term)

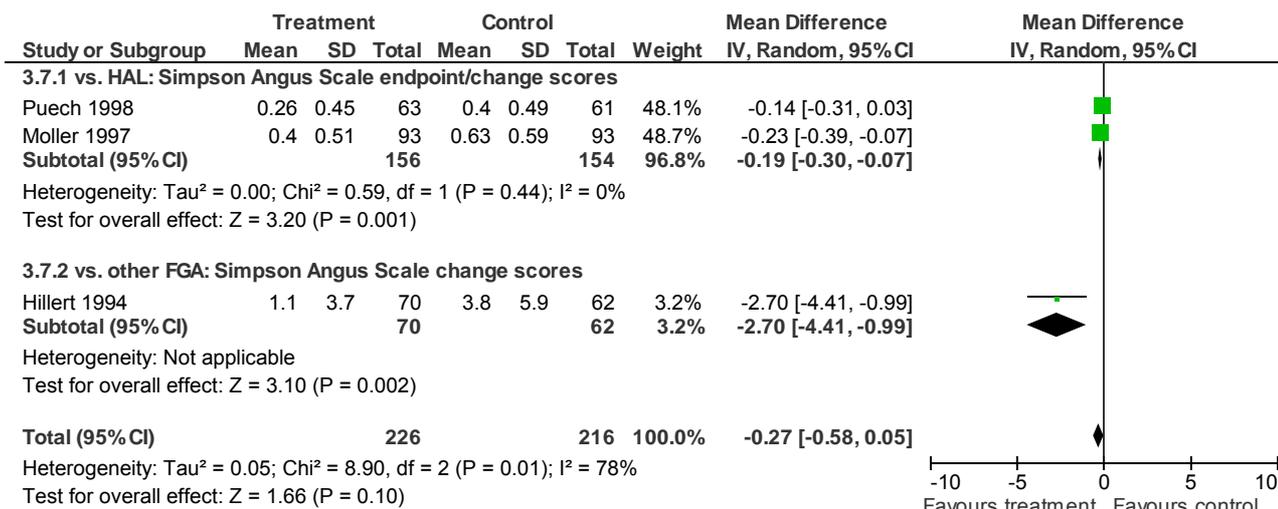


3.6 AE: 2. Neurologic SEs (<500 mg/day amisulpride) (short-term)

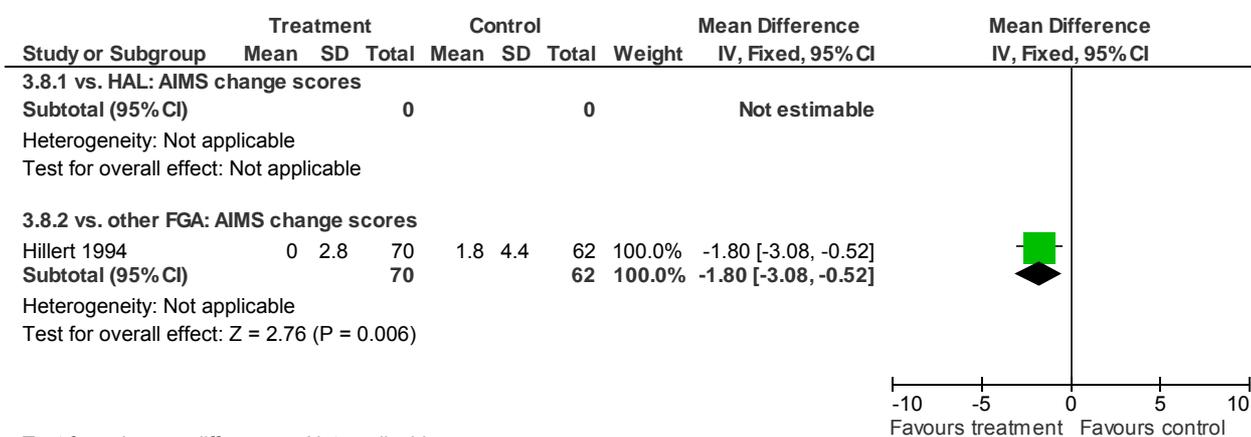


Pharmacological clinical evidence: Analysis of side effects

3.7 AE: 2. Neurologic SEs (>500 mg/day amisulpride) (short-term)

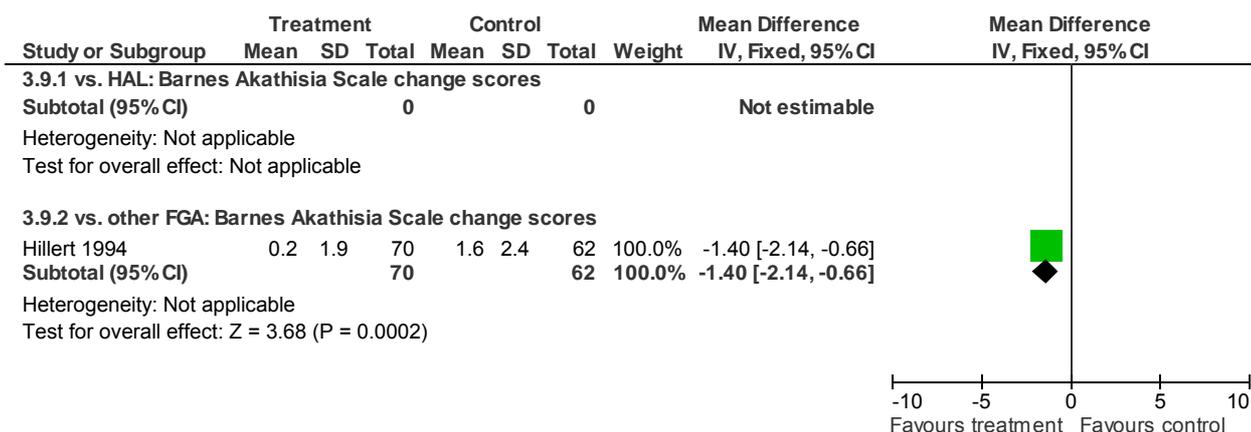


3.8 AE: 2. Neurologic SEs - EPS (>500 mg/day amisulpride) (short-term)



Test for subgroup differences: Not applicable

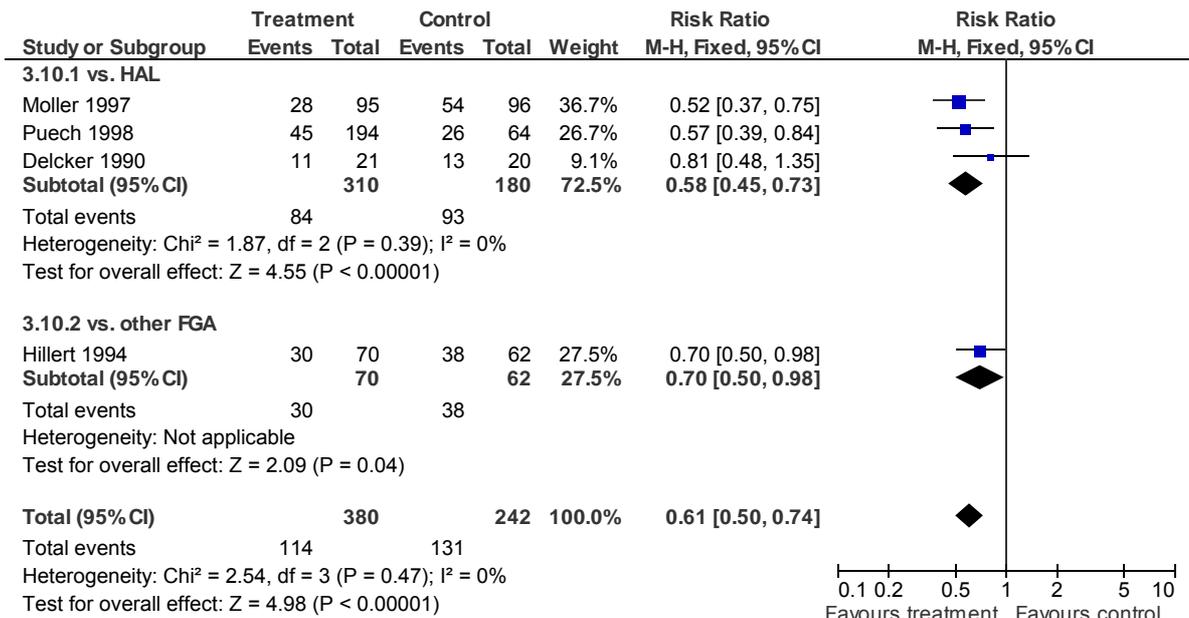
3.9 AE: 2. Neurologic SEs - Akathisia (>500 mg/day amisulpride) (short-term)



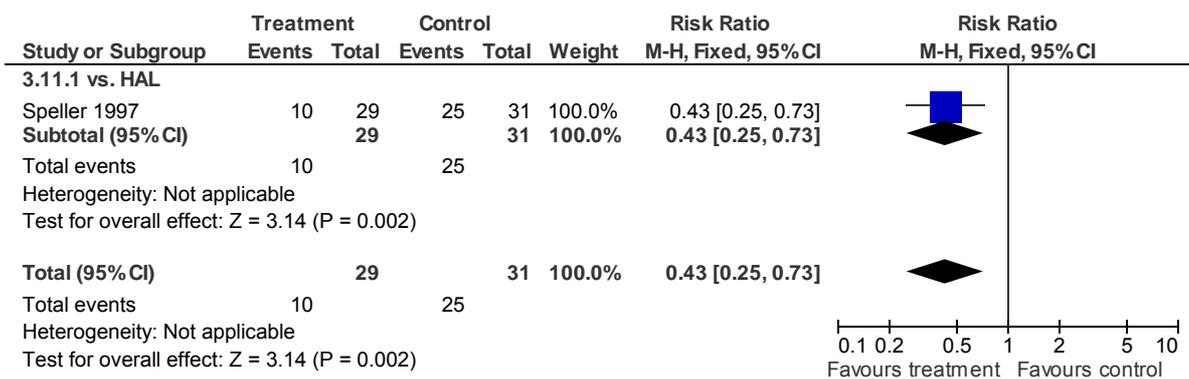
Test for subgroup differences: Not applicable

Pharmacological clinical evidence: Analysis of side effects

3.10 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

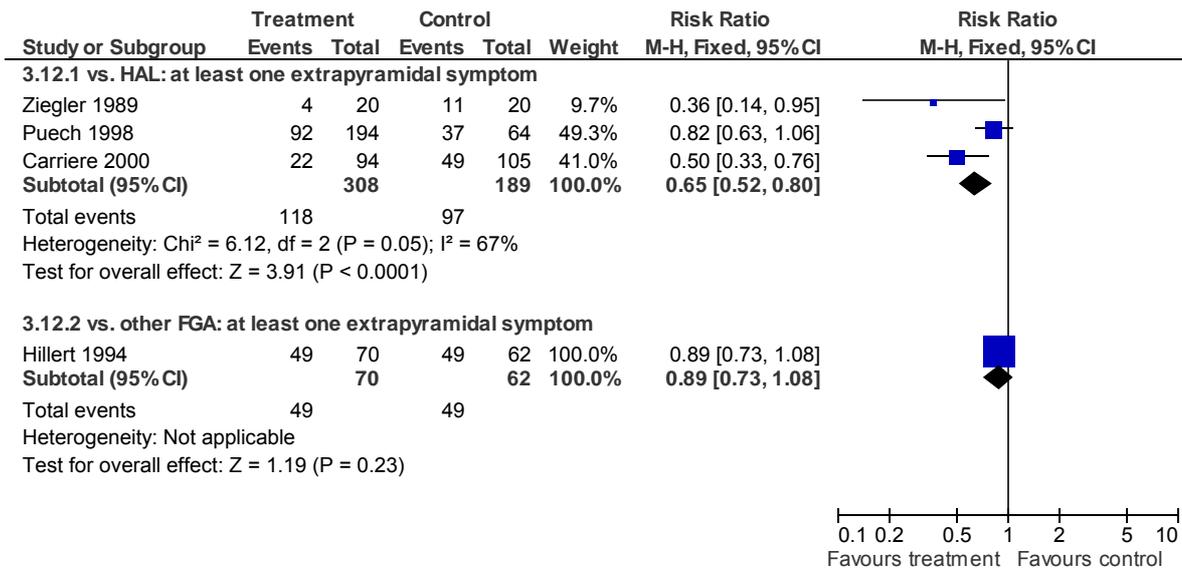


3.11 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)

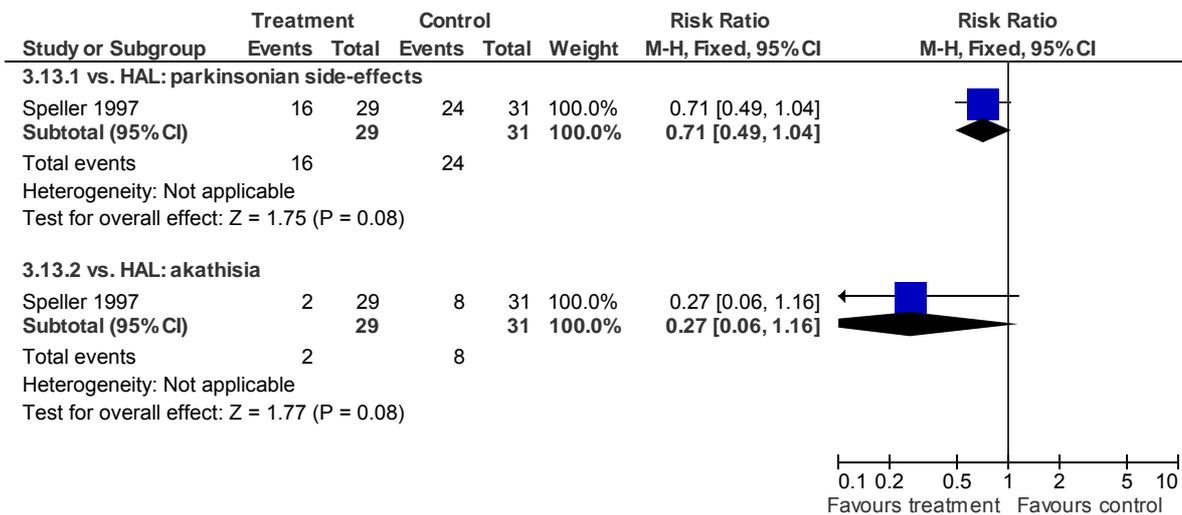


Pharmacological clinical evidence: Analysis of side effects

3.12 AE: 2. Neurologic SEs (treatment-emergent) (short-term)



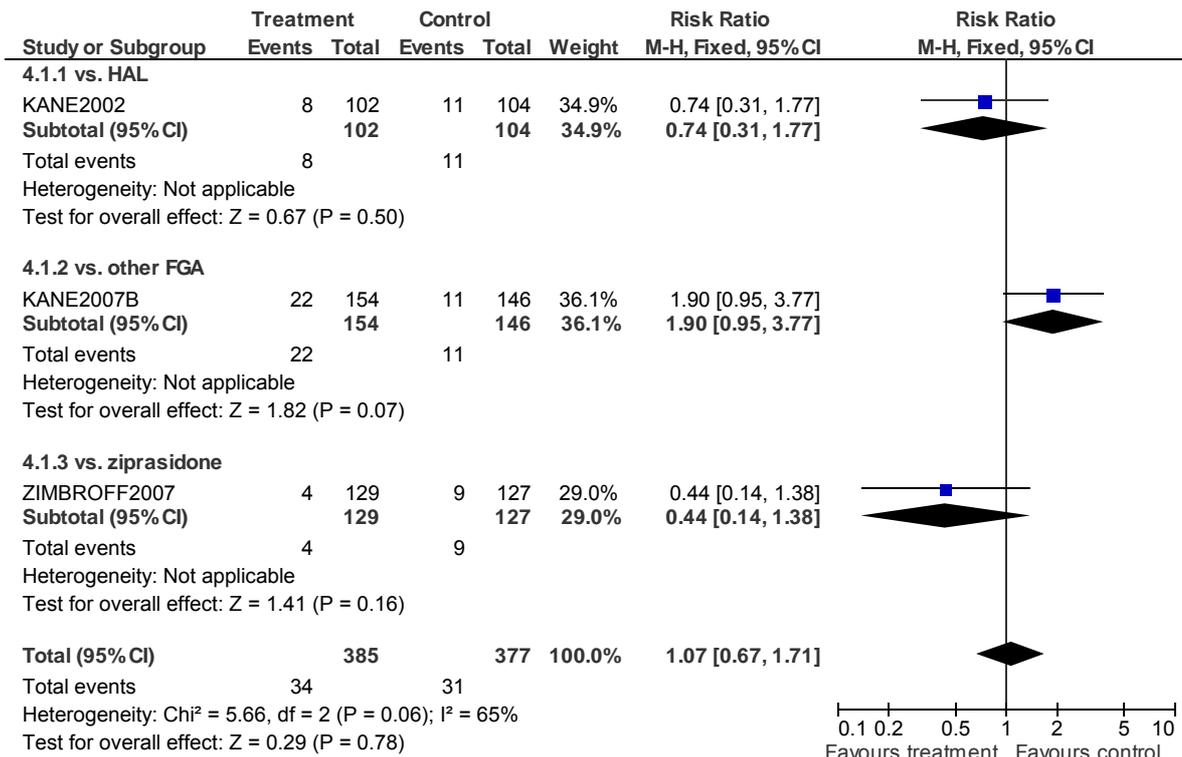
3.13 AE: 2. Neurologic SEs (treatment-emergent) (long-term)



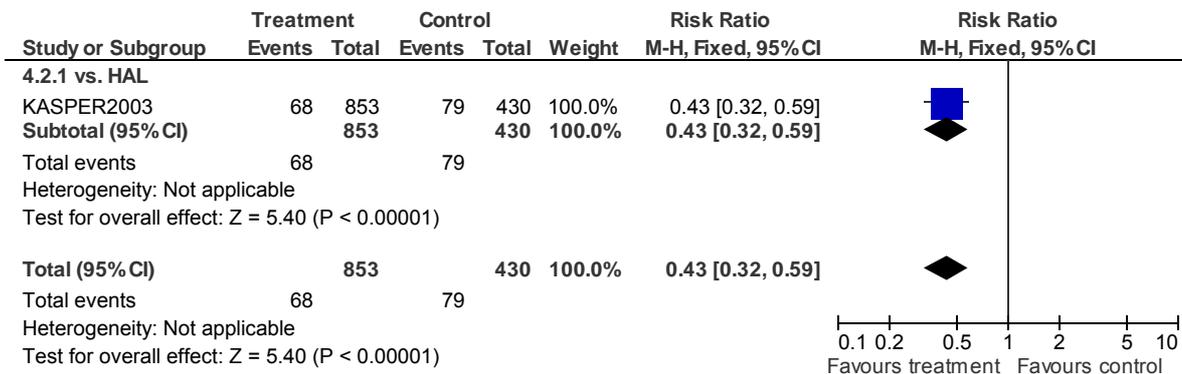
4 Aripiprazole versus another antipsychotic drug (overall SE analysis)

Pharmacological clinical evidence: Analysis of side effects

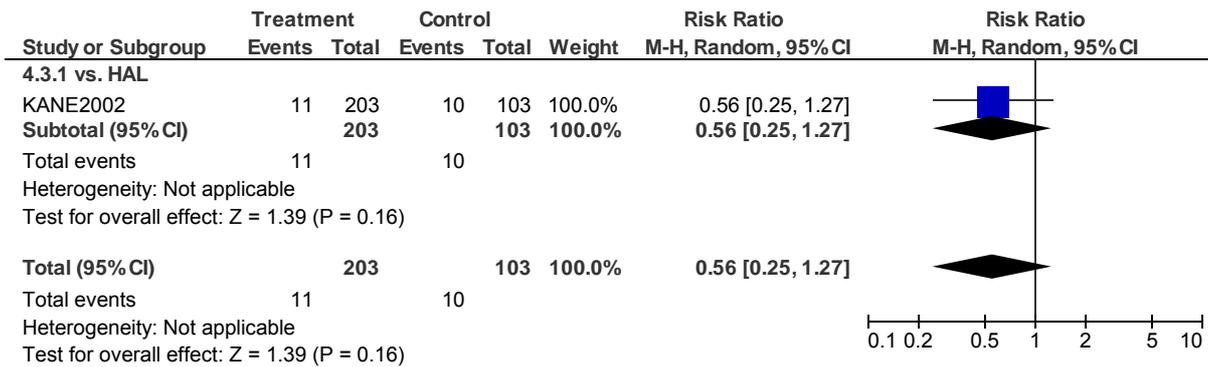
4.1 Leaving the study early: 3: Adverse event (short-term)



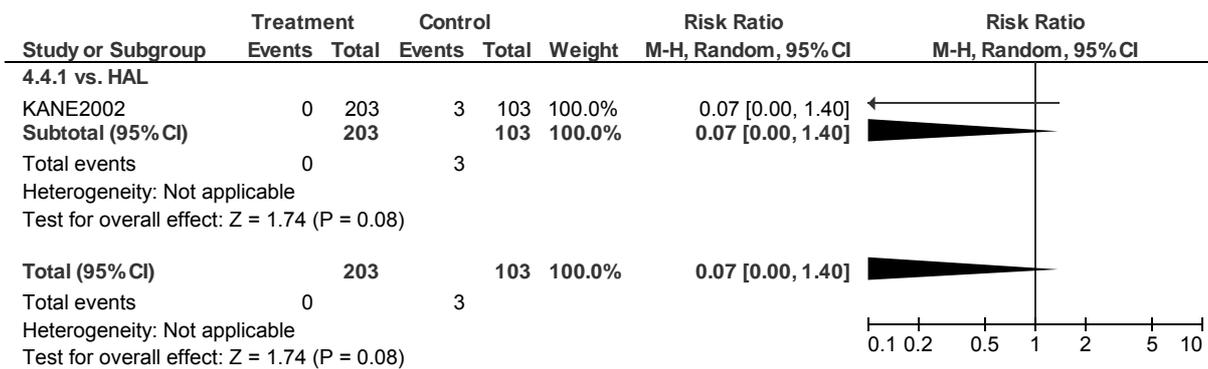
4.2 Leaving the study early: 3: Adverse event (long-term)



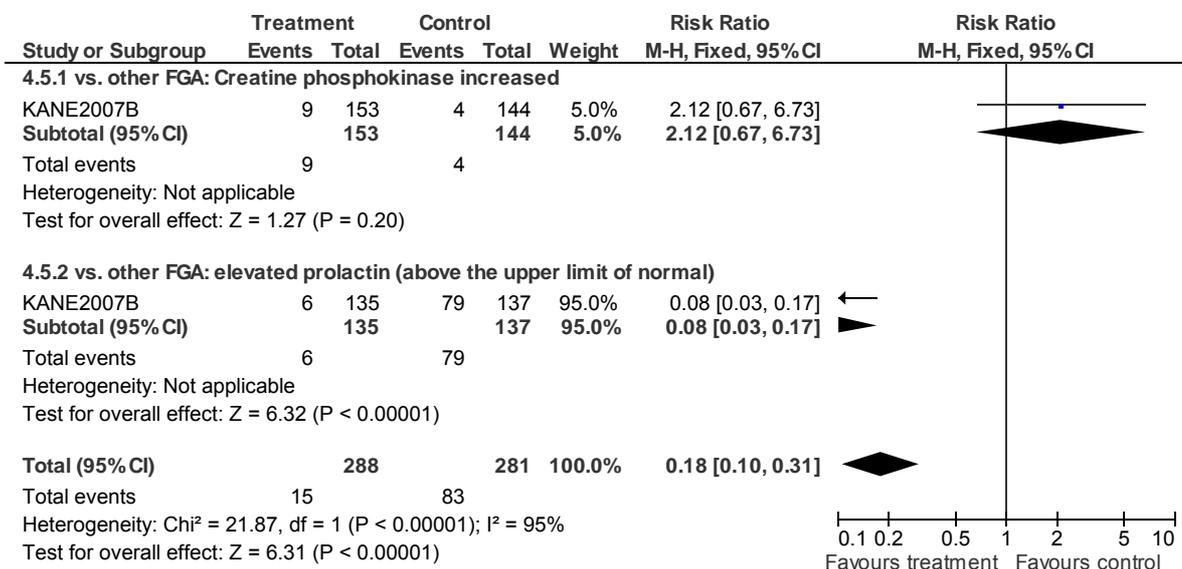
Pharmacological clinical evidence: Analysis of side effects

4.3 AE: 1. Metabolic SEs - Weight gain ($\geq 7\%$ increase from baseline) (short-term)

4.4 AE: 1. Metabolic SEs - Clinically sig. increase in QTc interval (short-term)

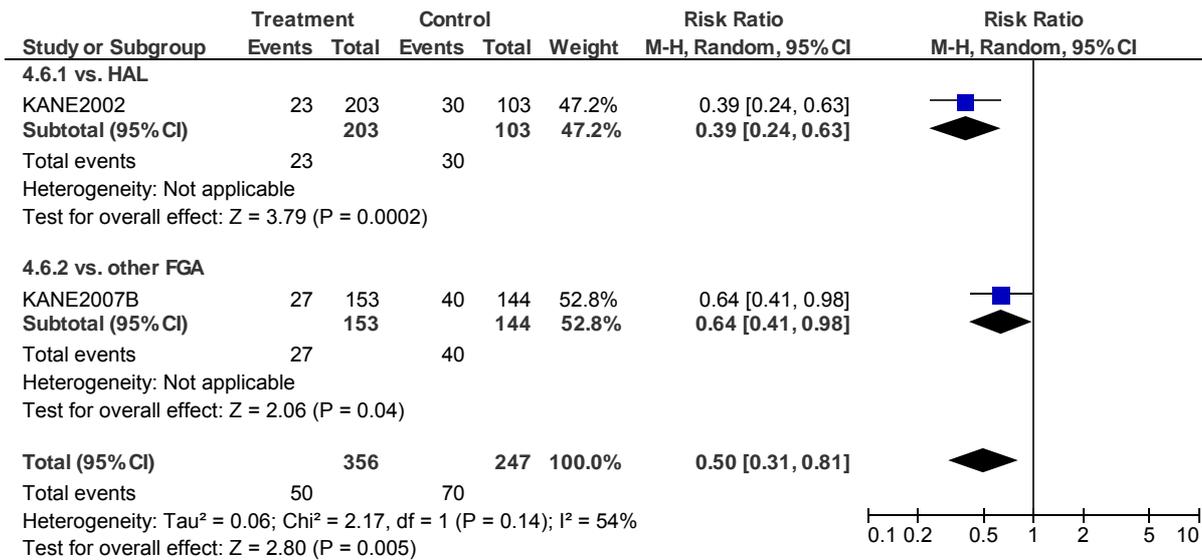


4.5 AE: 1. Metabolic SEs (treatment-emergent) (short-term)

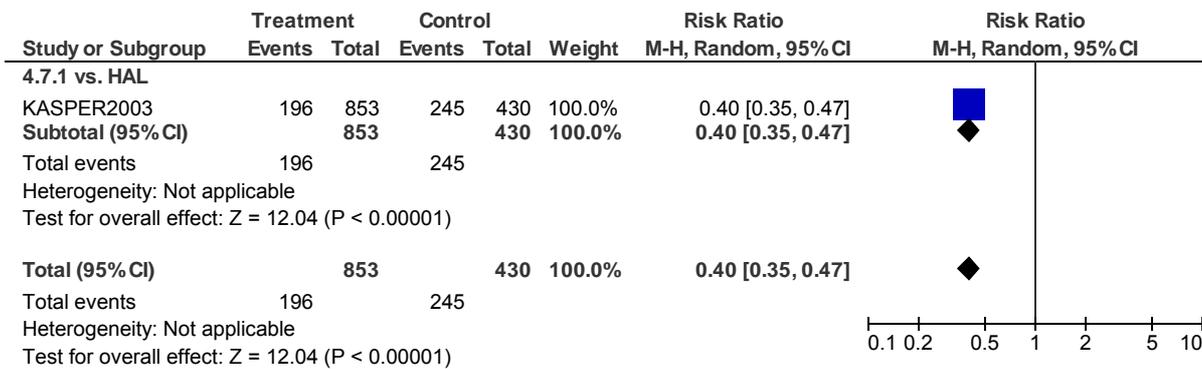


Pharmacological clinical evidence: Analysis of side effects

4.6 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)

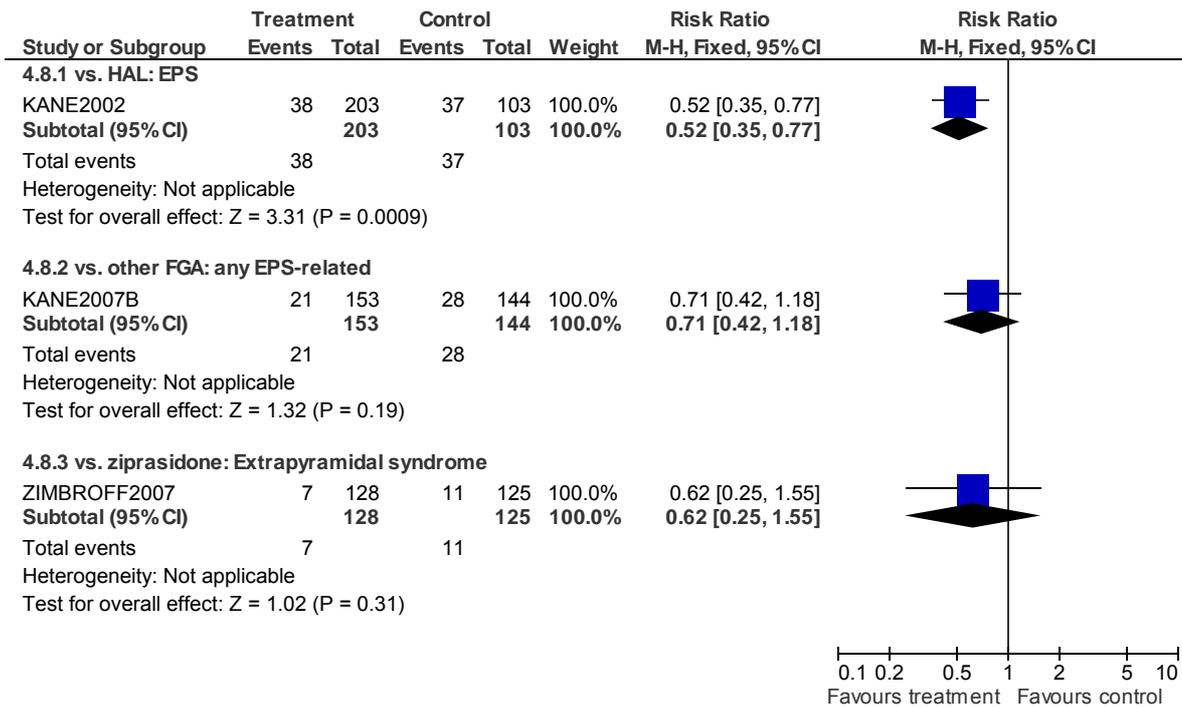


4.7 AE: 2. Neurologic SEs - Use of anticholinergic medication (long-term)

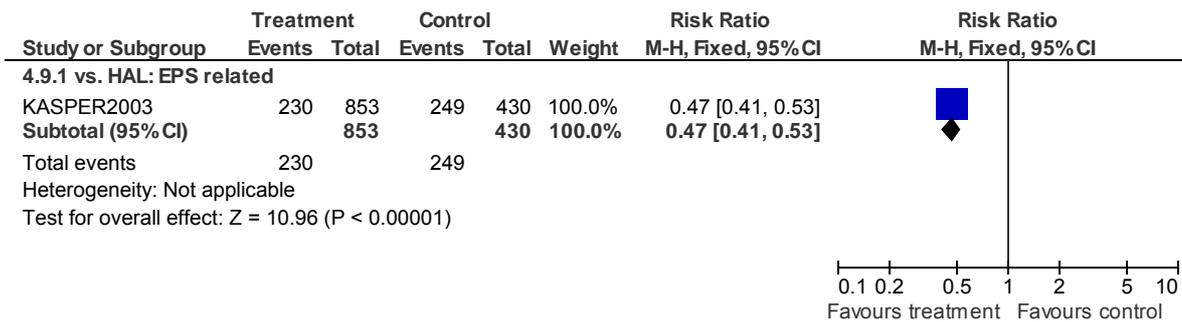


Pharmacological clinical evidence: Analysis of side effects

4.8 AE: 2. Neurologic SEs - EPS (treatment-emergent) (short-term)

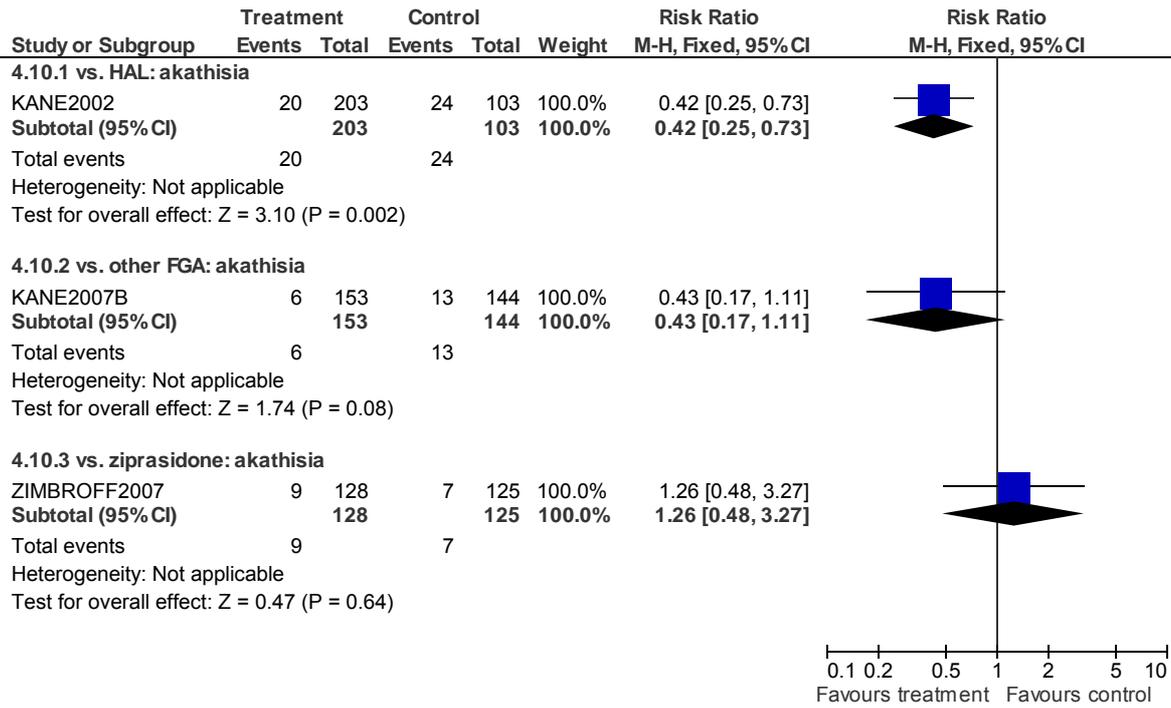


4.9 AE: 2. Neurologic SEs - EPS (treatment-emergent) (long-term)



Pharmacological clinical evidence: Analysis of side effects

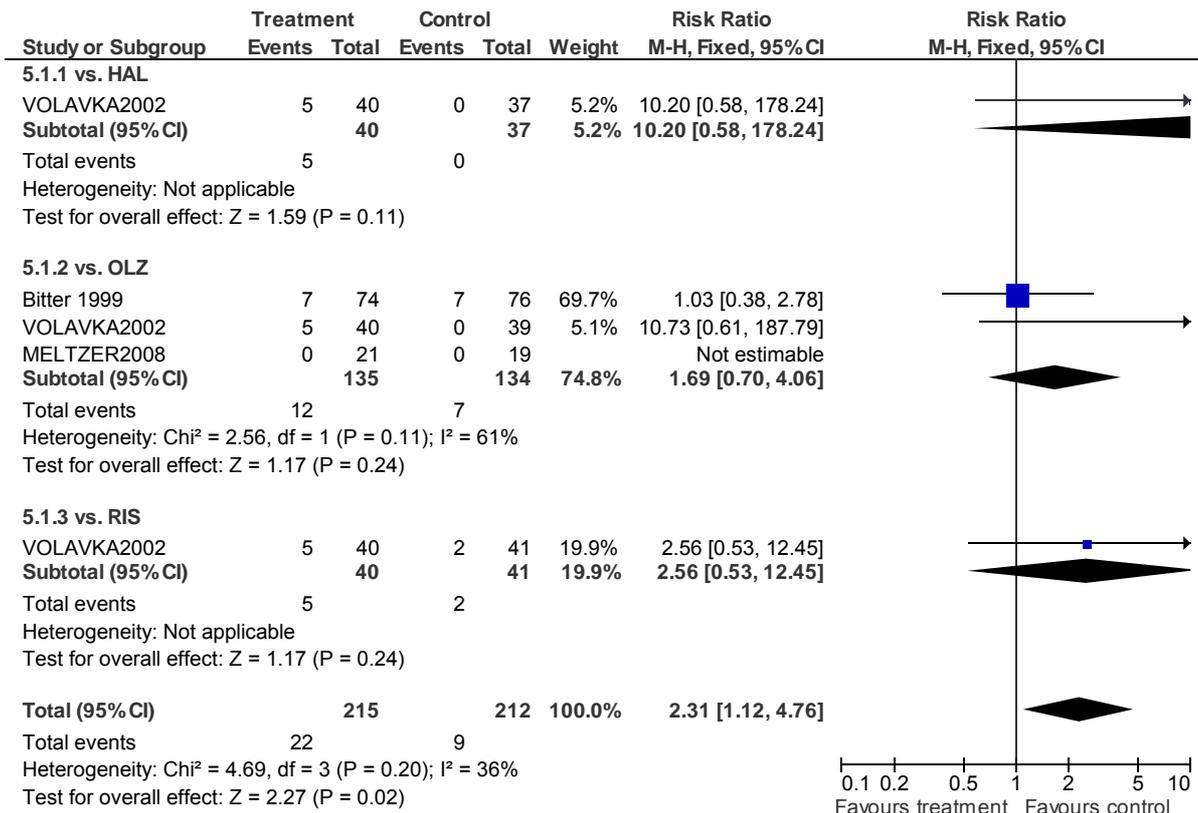
4.10 AE: 2. Neurologic SEs - Akathisia (treatment-emergent) (short-term)



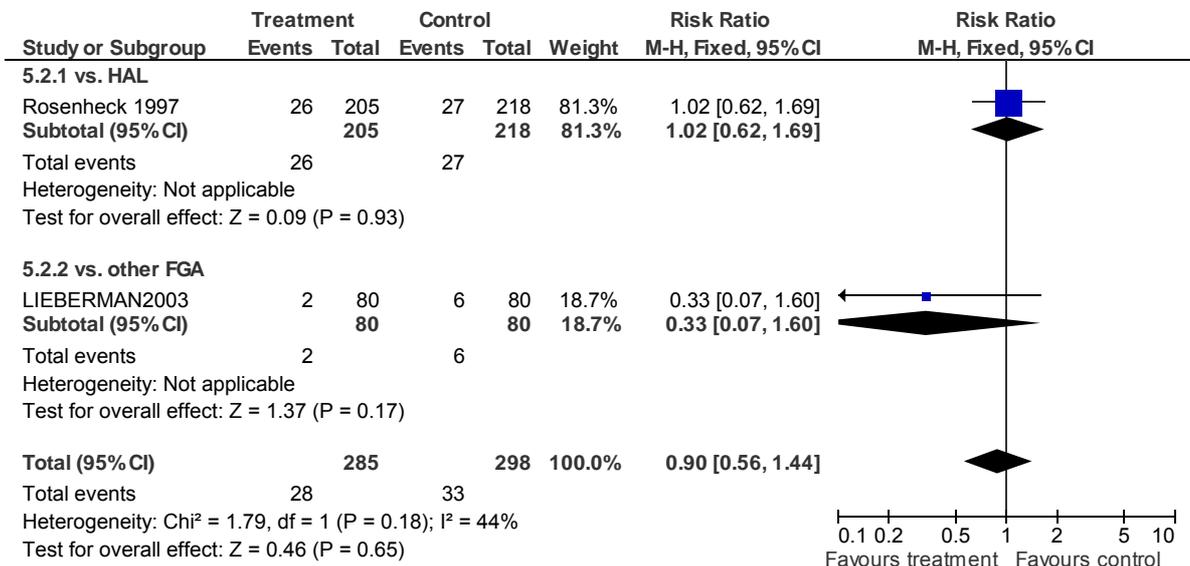
5 Clozapine versus another antipsychotic drug (overall SE analysis)

Pharmacological clinical evidence: Analysis of side effects

5.1 Leaving the study early: 3: Adverse event (medium-term)

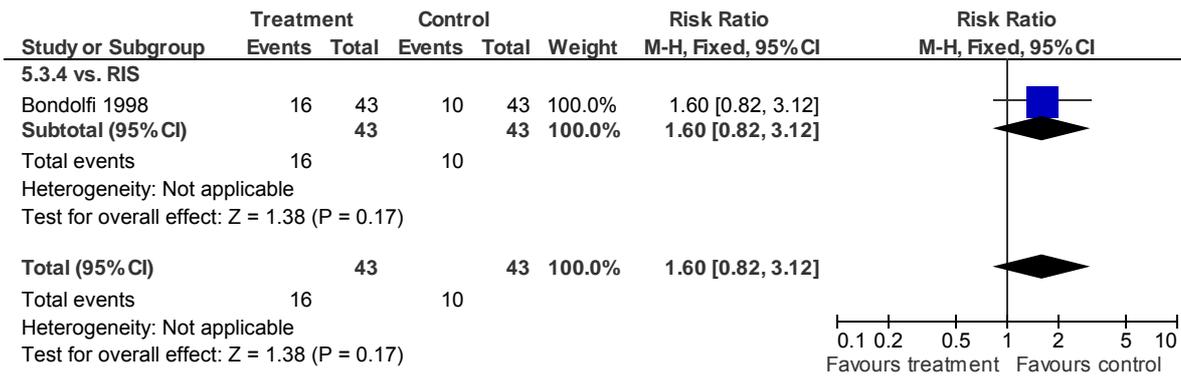


5.2 Leaving the study early: 3: Adverse event (long-term)

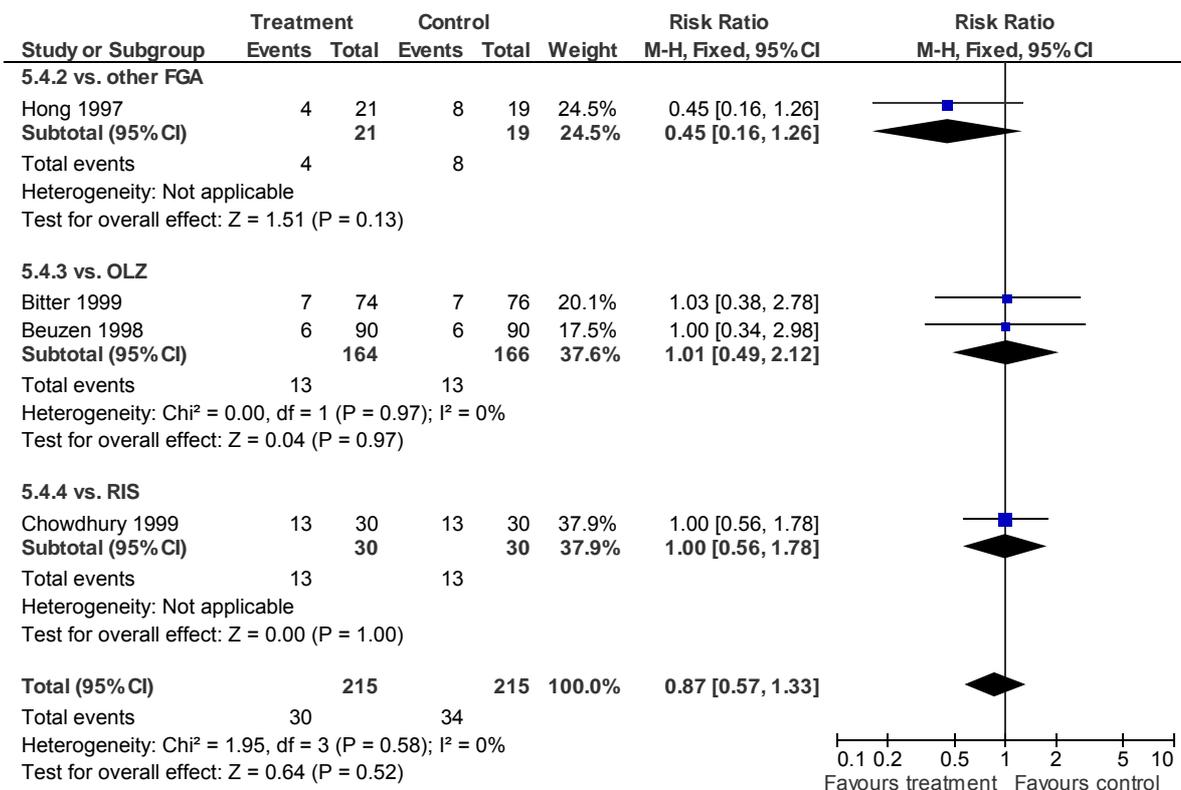


Pharmacological clinical evidence: Analysis of side effects

5.3 AE: 1. Metabolic SEs - Weight gain (short-term)

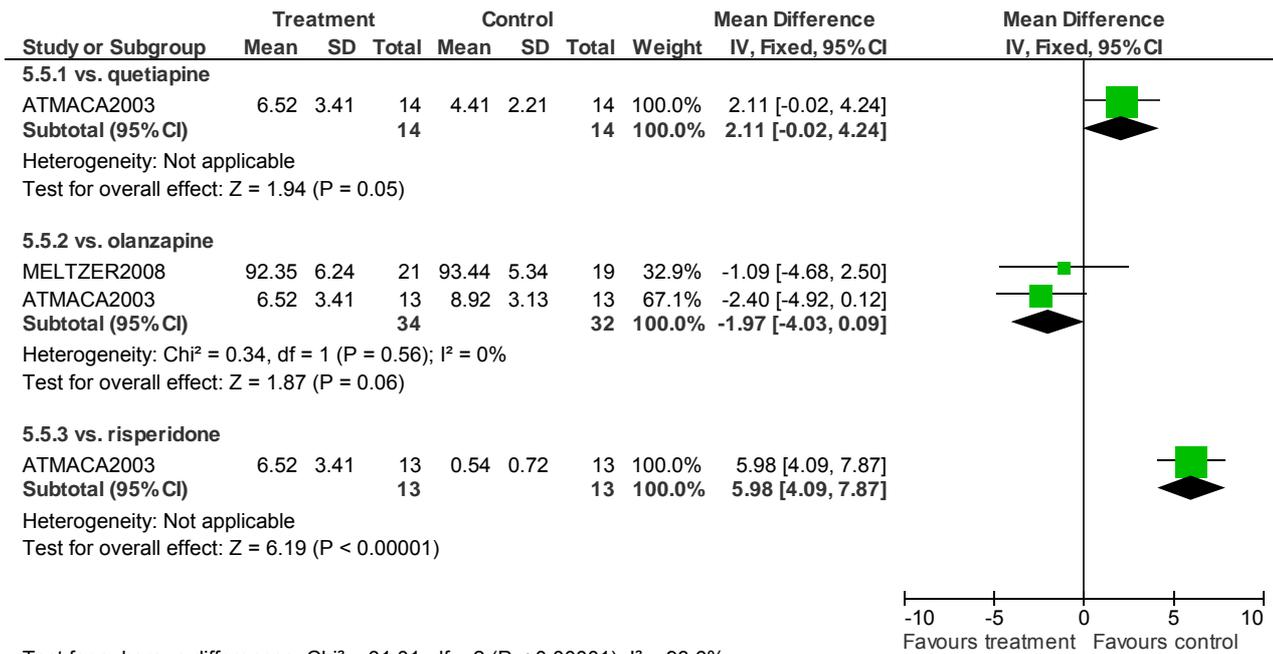


5.4 AE: 1. Metabolic SEs - Weight gain (medium-term)

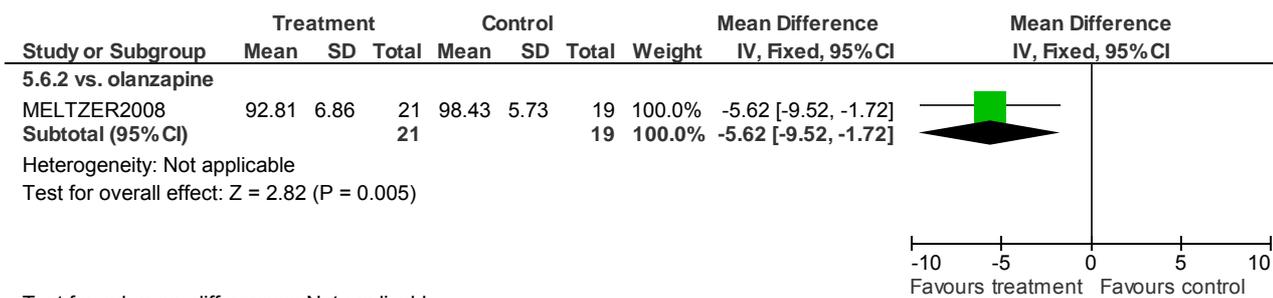


Pharmacological clinical evidence: Analysis of side effects

5.5 AE: 1. Metabolic SEs - Weight at endpoint (kg) (short-term)

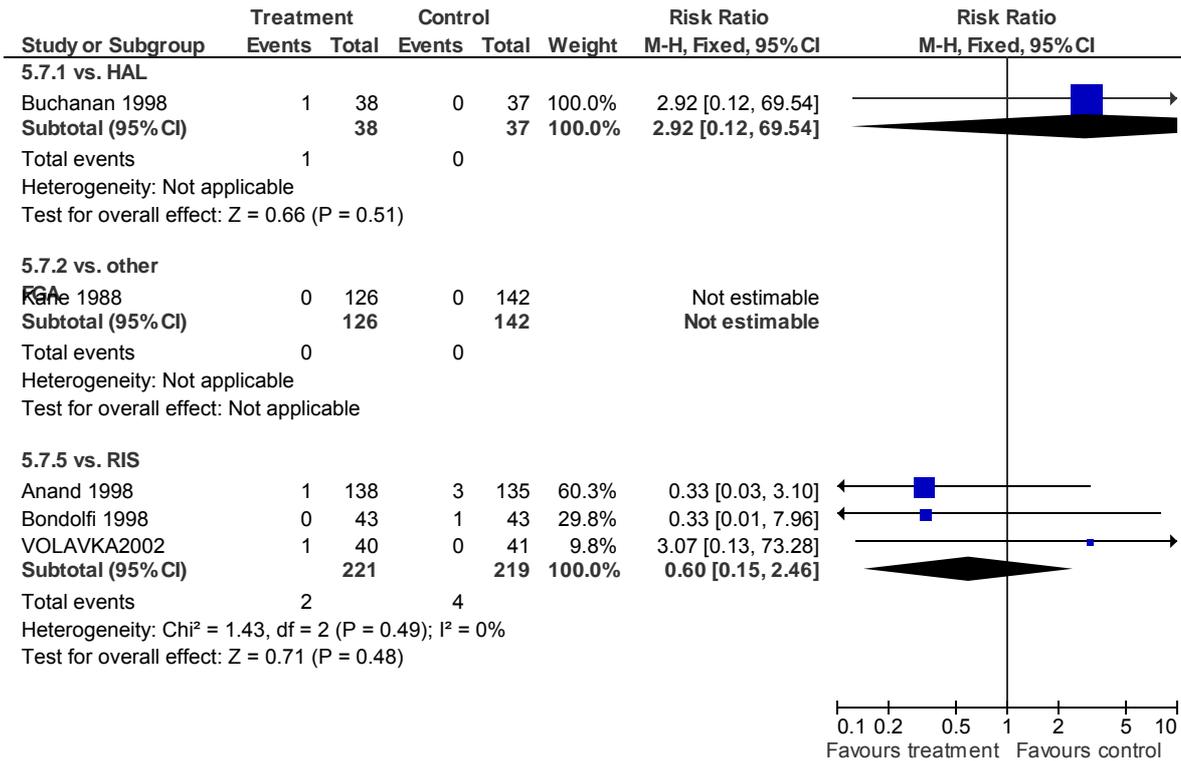


5.6 AE: 1. Metabolic SEs - Weight at endpoint (kg) (medium-term)



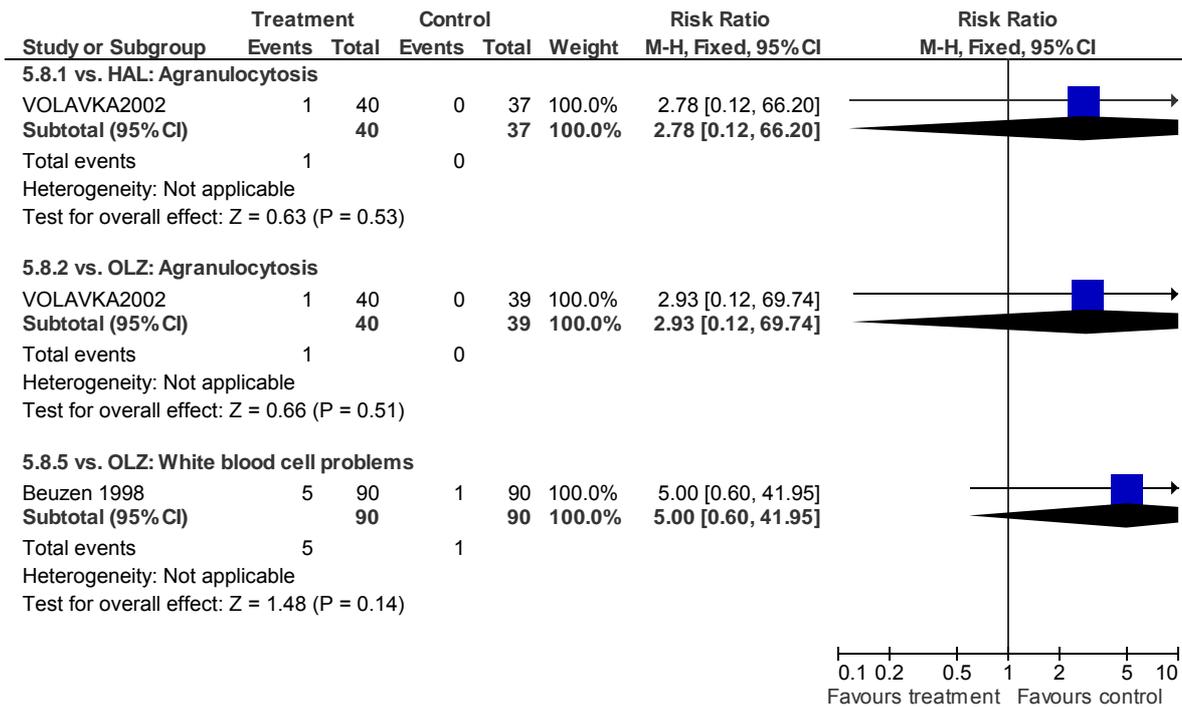
Pharmacological clinical evidence: Analysis of side effects

5.7 AE: 1. Metabolic SEs - Blood problems (treatment-emergent) (short-term)

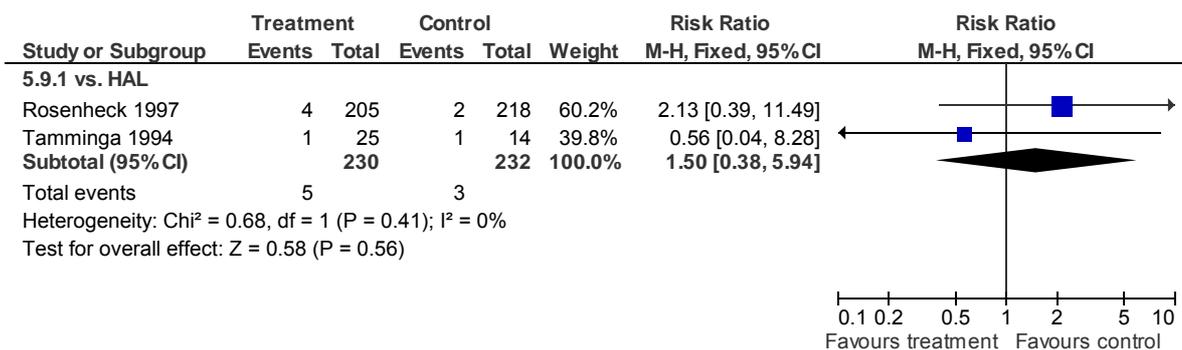


Pharmacological clinical evidence: Analysis of side effects

5.8 AE: 1. Metabolic SEs - Blood problems (treatment-emergent) (medium-term)

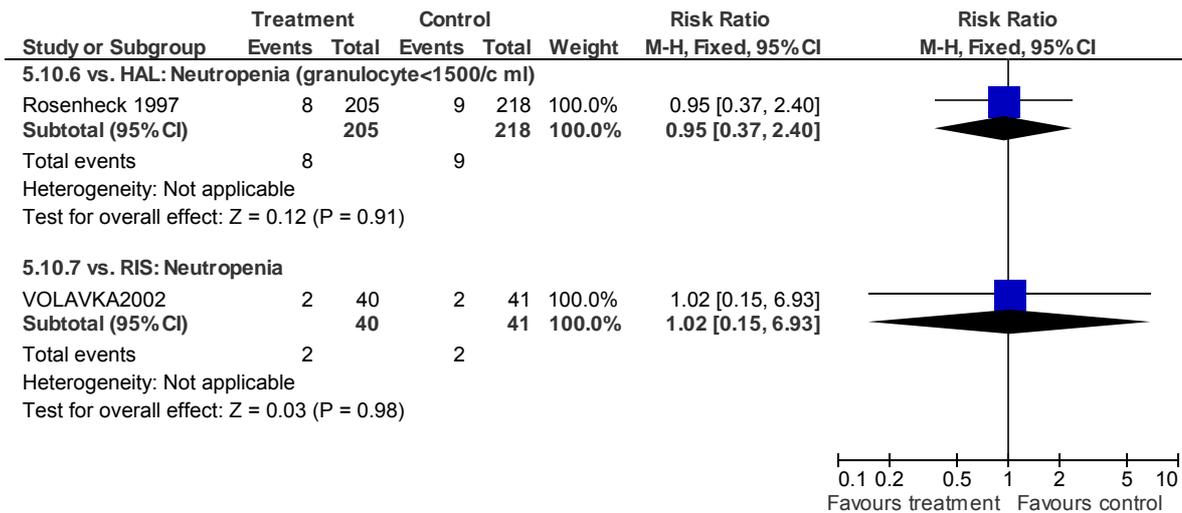


5.9 AE: 1. Metabolic SEs - Blood problems (treatment-emergent) (long-term)

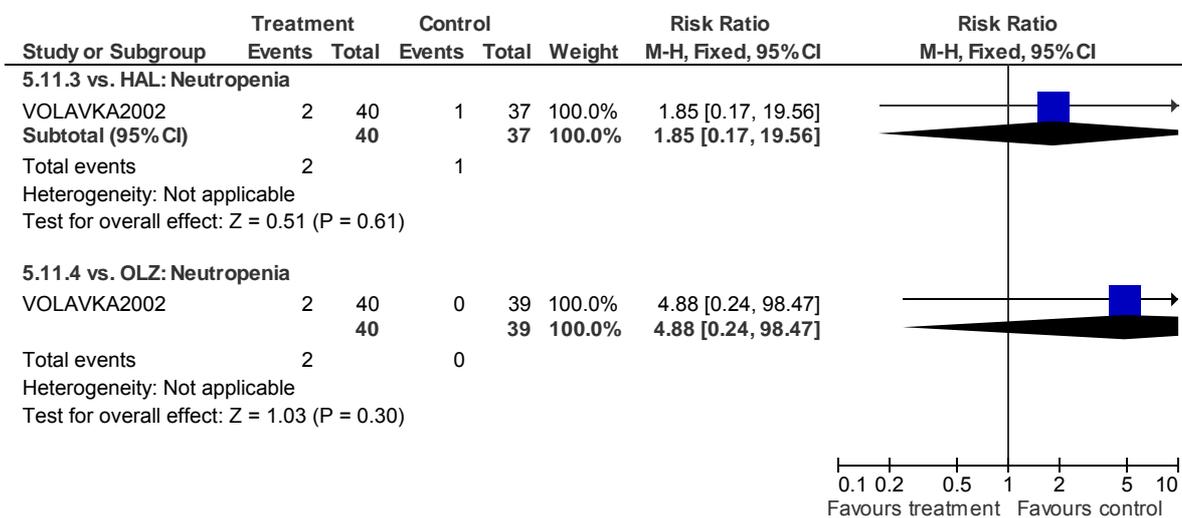


Pharmacological clinical evidence: Analysis of side effects

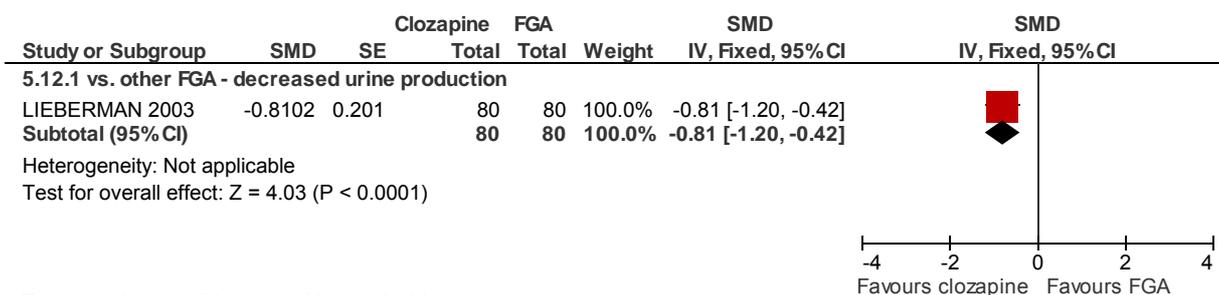
5.10 AE: 1. Metabolic SEs - Neutropenia (treatment-emergent) (short-term)



5.11 AE: 1. Metabolic SEs - Neutropenia (treatment-emergent) (medium-term)



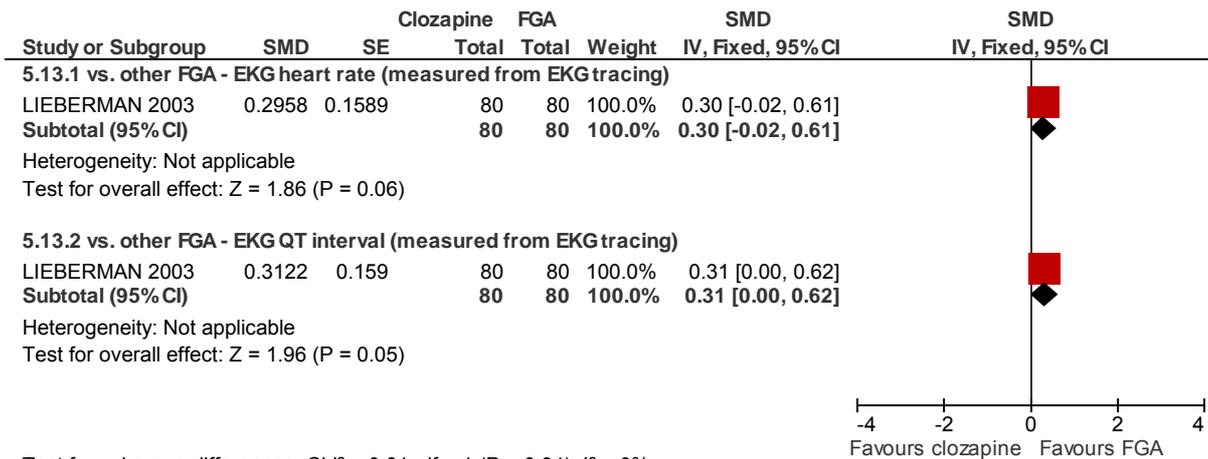
5.12 AE: 1. Metabolic SEs - Prolactin-related problems (long-term)



Test for subgroup differences: Not applicable

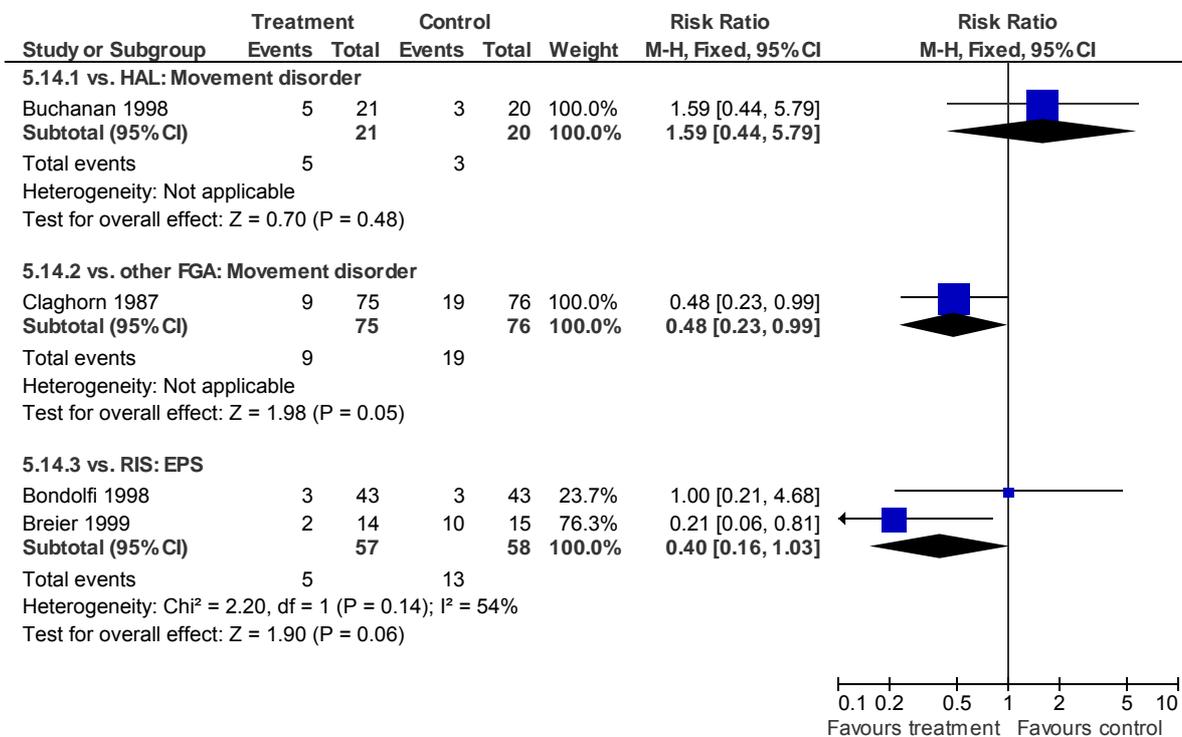
Pharmacological clinical evidence: Analysis of side effects

5.13 AE: 1. Metabolic SEs - Clinical parameters (long-term)



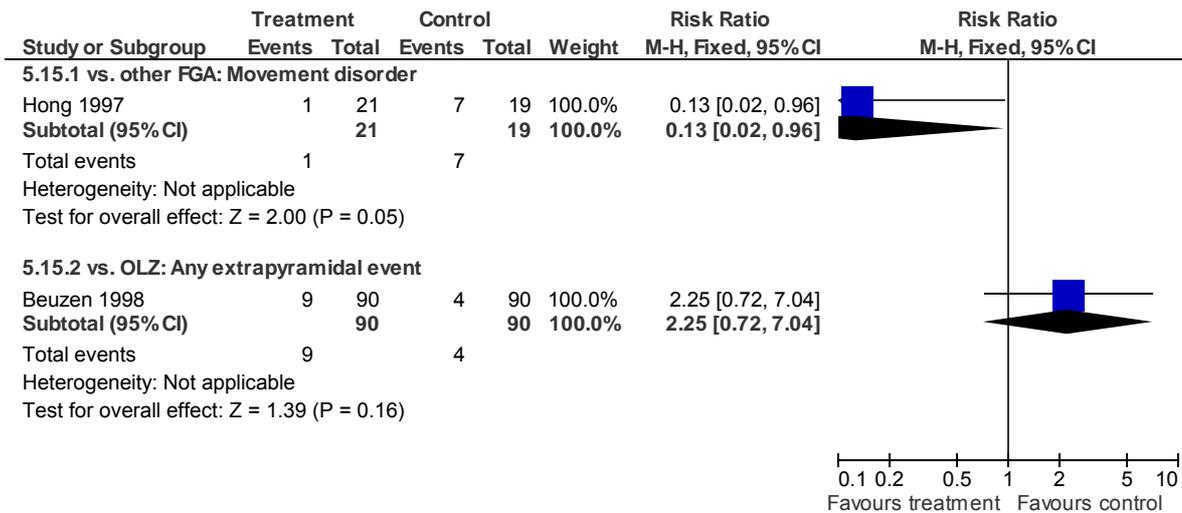
Test for subgroup differences: Chi² = 0.01, df = 1 (P = 0.94), I² = 0%

5.14 AE: 2. Neurologic SEs - Movement disorder (treatment-emergent) (short-term)

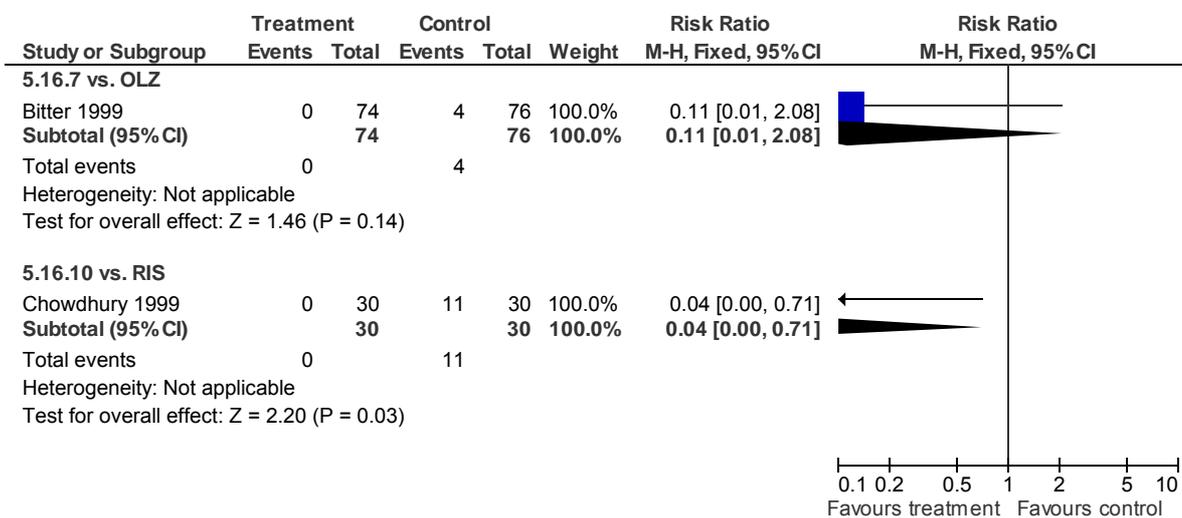


Pharmacological clinical evidence: Analysis of side effects

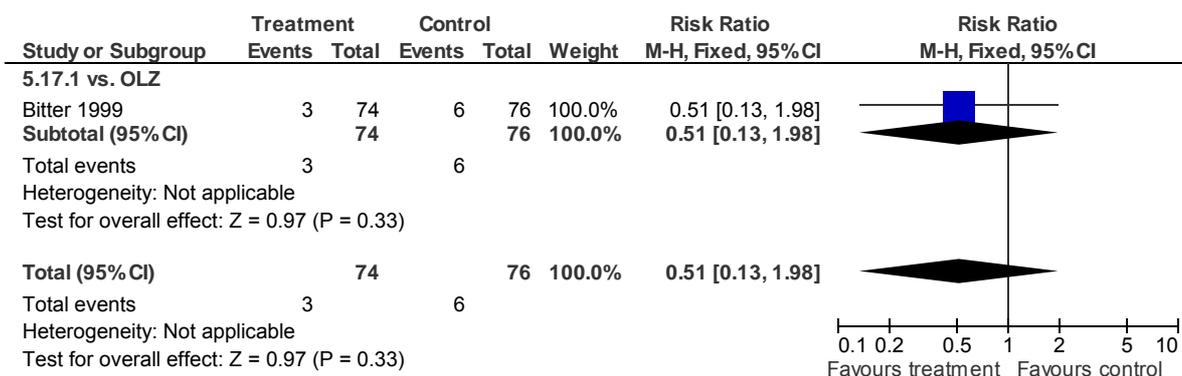
5.15 AE: 2. Neurologic SEs - Movement disorder (treatment-emergent) (medium-term)



5.16 AE: 2. Neurologic SEs - Akathisia (treatment-emergent) (medium-term)

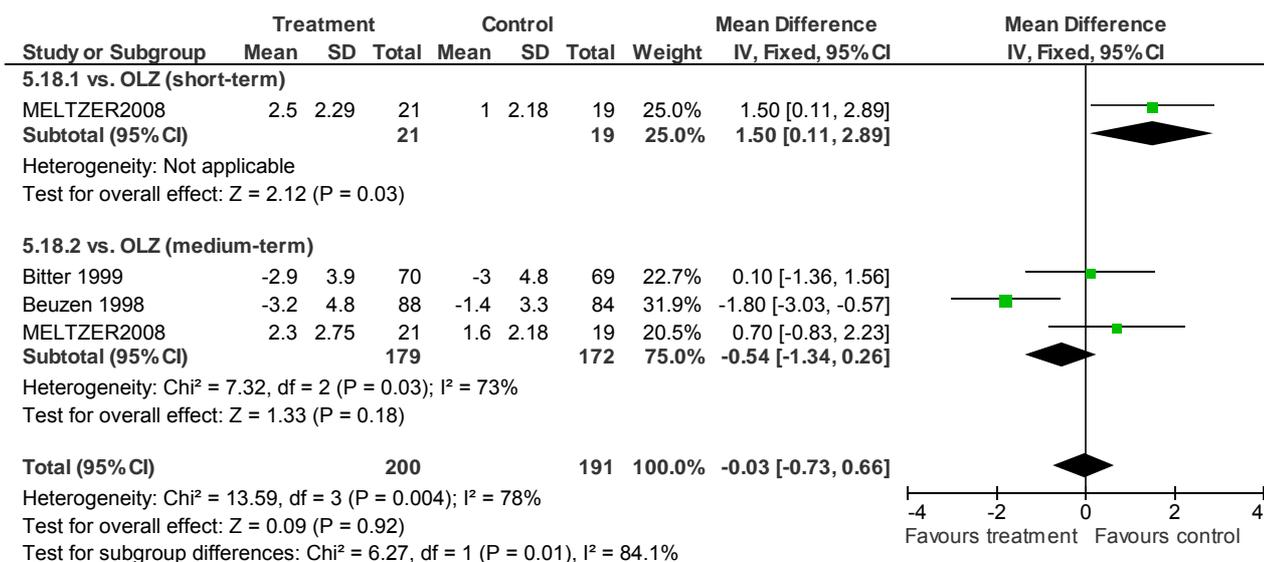


5.17 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (medium-term)

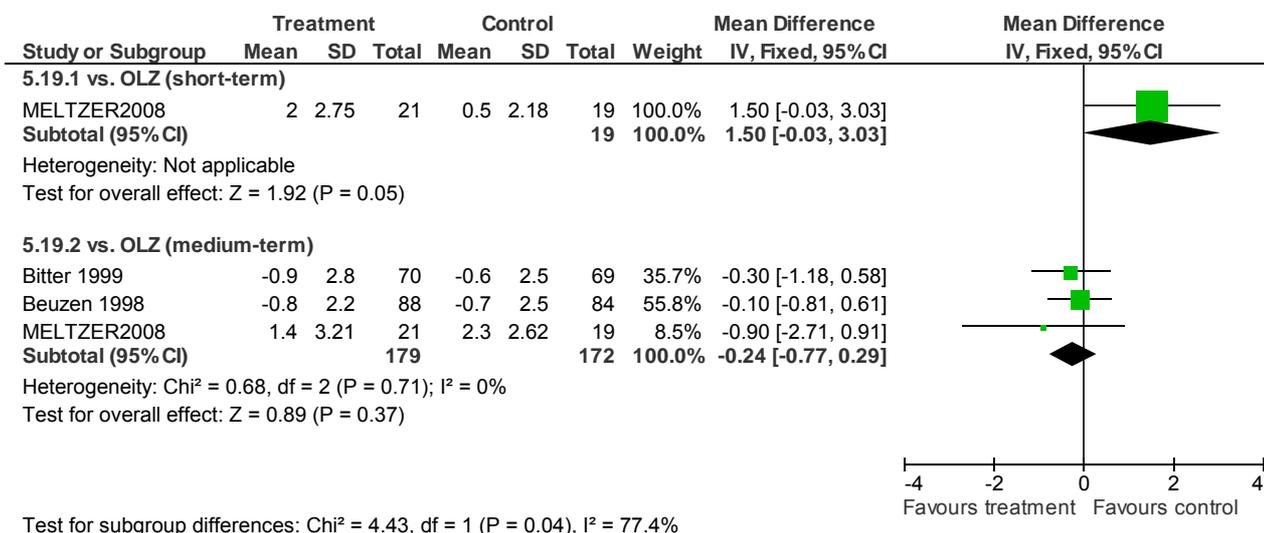


Pharmacological clinical evidence: Analysis of side effects

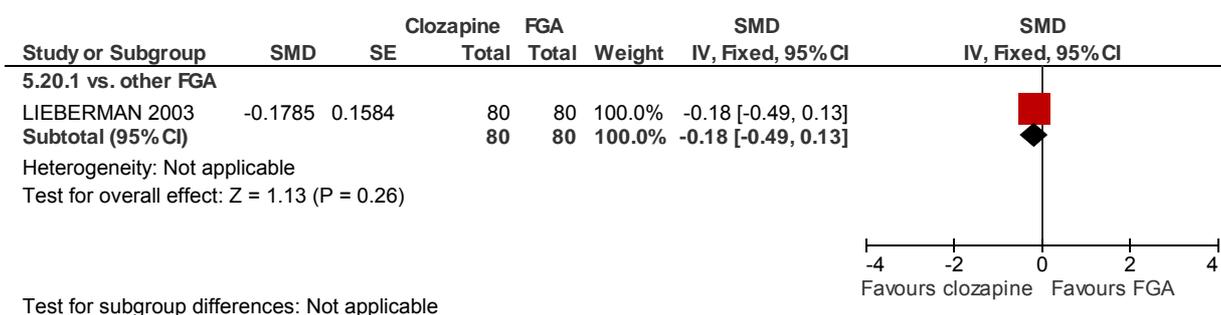
5.18 AE: 2. Neurologic SEs - Simpson-Angus Scale (SAS; change/endpoint) (short-to-medium-term)



5.19 AE: 2. Neurologic SEs - Abnormal Involuntary Movement Scale (AIMS; change/endpoint) (short-to-medium-term)

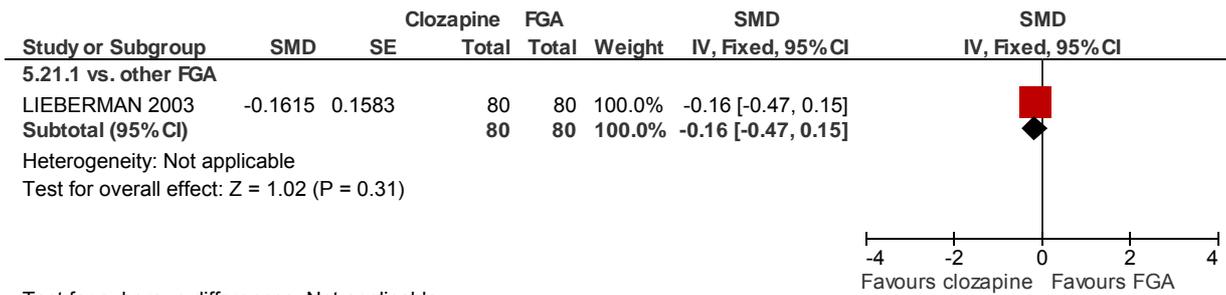


5.20 AE: 2. Neurologic SEs - Simpson-Angus extrapyramidal symptom scale (long-term)

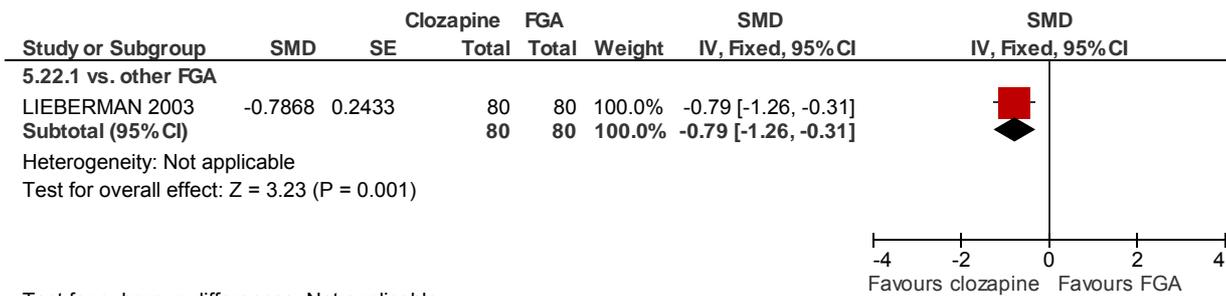


Pharmacological clinical evidence: Analysis of side effects

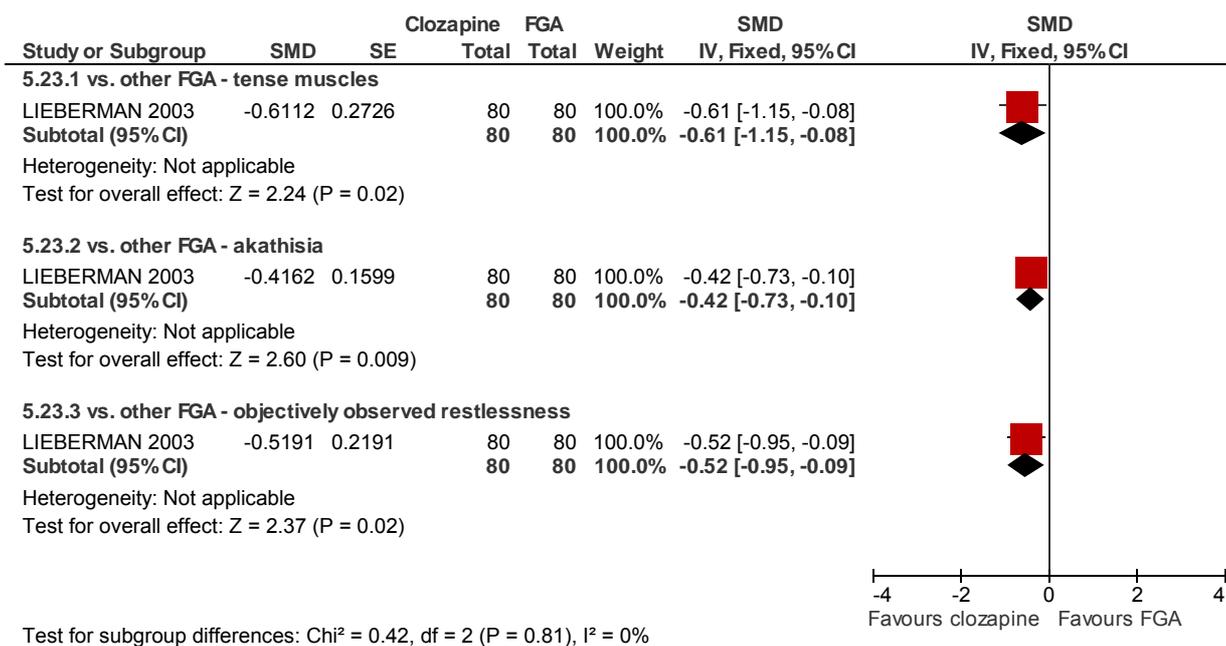
5.21 AE: 2. Neurologic SEs - Simpson-Angus Scale: Parkinsonian (long-term)



5.22 AE: 2. Neurologic SEs - Simpson-Angus Extrapyramidal Symptom Scale: dystonia



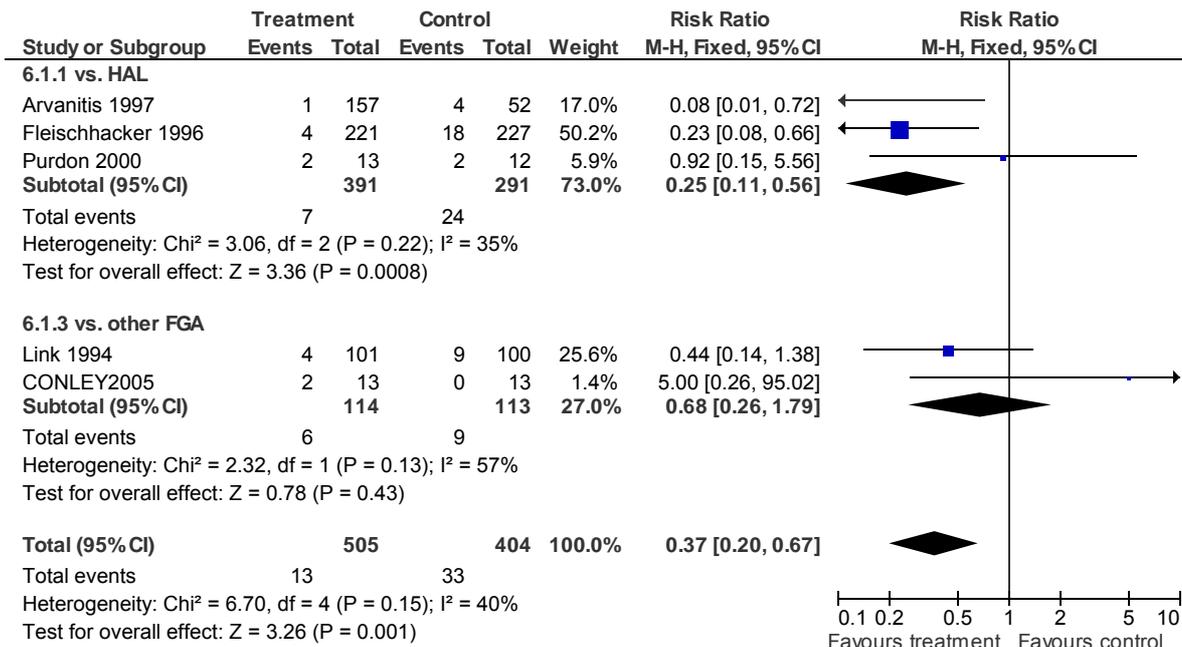
5.23 AE: 2. Neurologic SEs (only sig. diff presented)



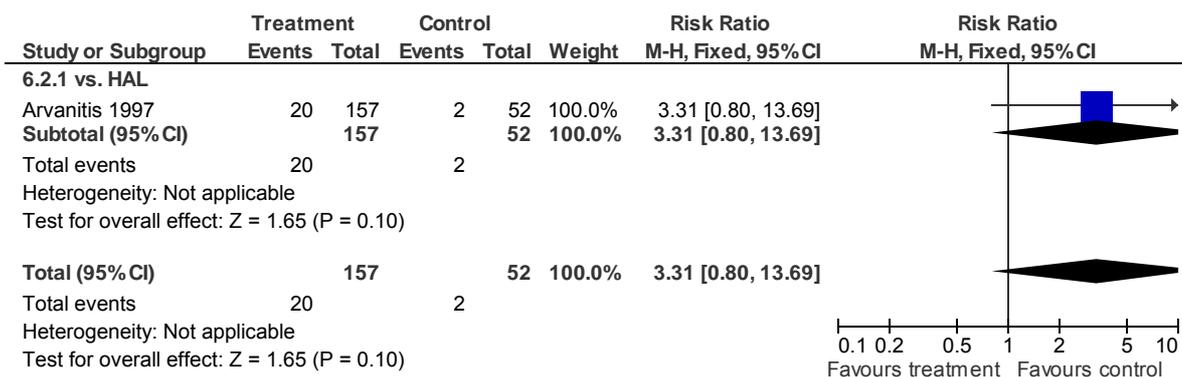
6 Quetiapine versus FGA (overall SE analysis)

Pharmacological clinical evidence: Analysis of side effects

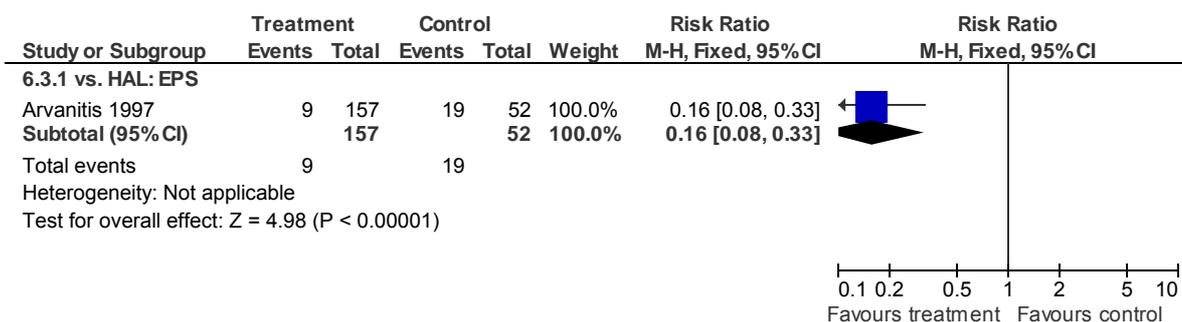
6.1 Leaving the study early: 3: Adverse event (short-to-medium-term)



6.2 AE: 1. Metabolic SEs - Weight gain (>=7% increase from baseline) (short-term)

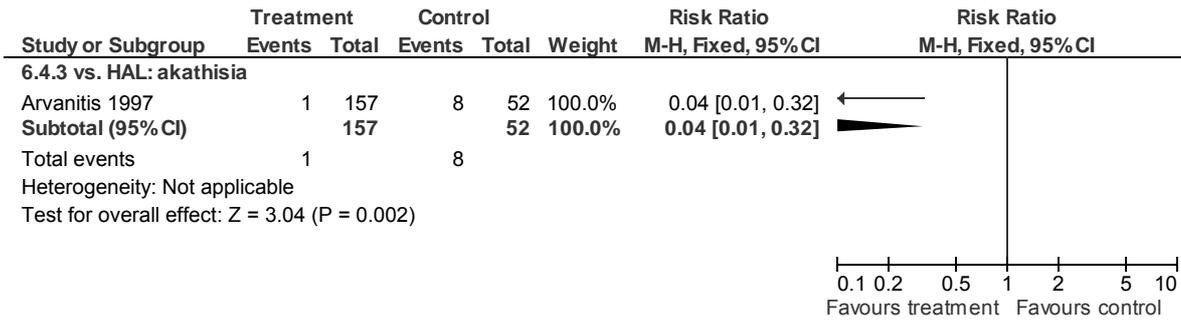


6.3 AE: 2. Neurologic SEs (treatment-emergent) - Any EPS (short-term)

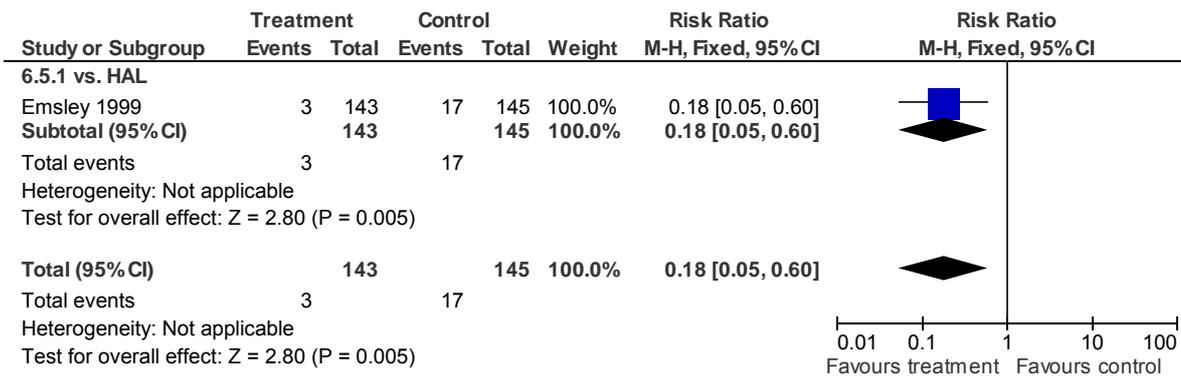


Pharmacological clinical evidence: Analysis of side effects

6.4 AE: 2. Neurologic SEs (treatment-emergent) - Akathisia (short-term)



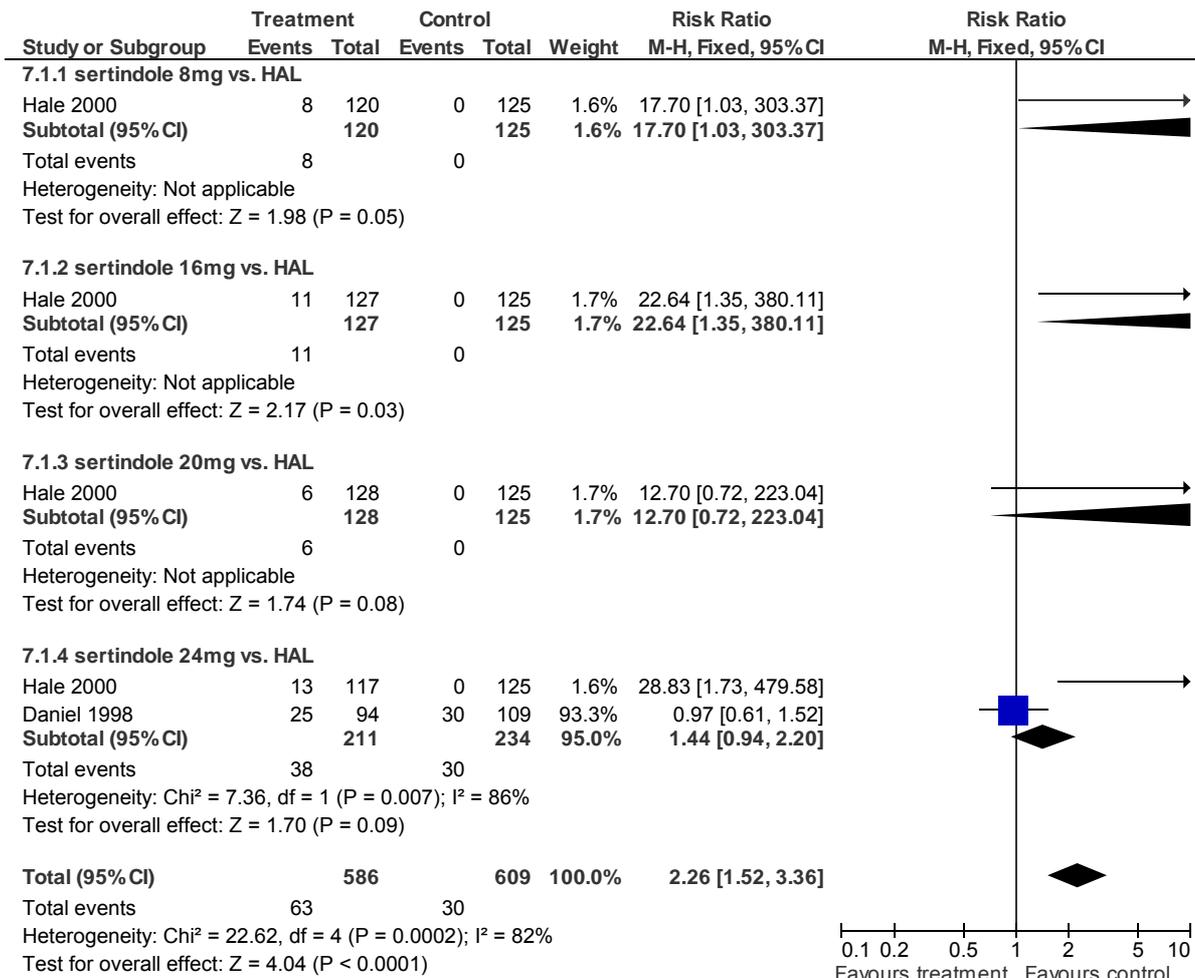
6.5 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



7 Sertindole versus FGA (overall SE analysis)

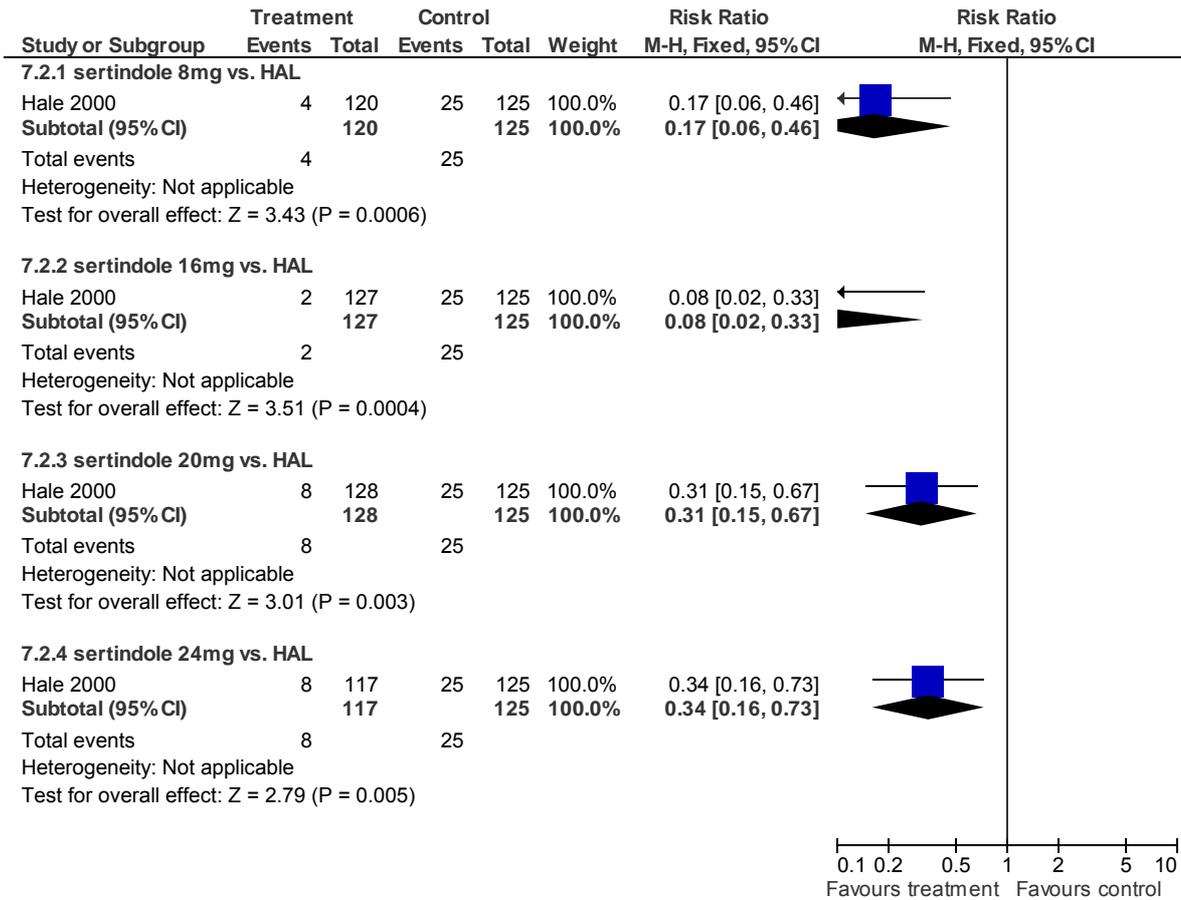
Pharmacological clinical evidence: Analysis of side effects

7.1 Leaving the study early: 3: Adverse event (short-term)



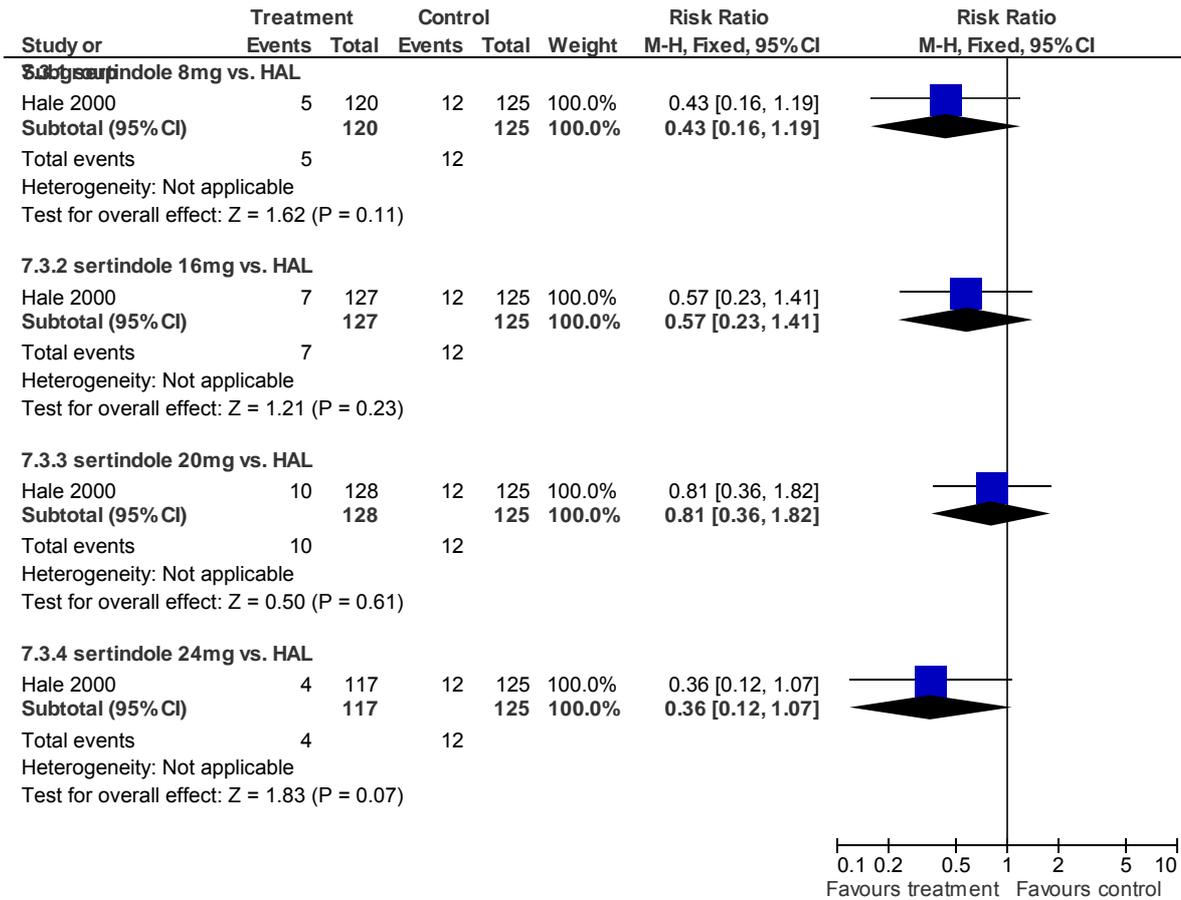
Pharmacological clinical evidence: Analysis of side effects

7.2 AE: 2. Neurologic SEs - Akathisia (short-term)



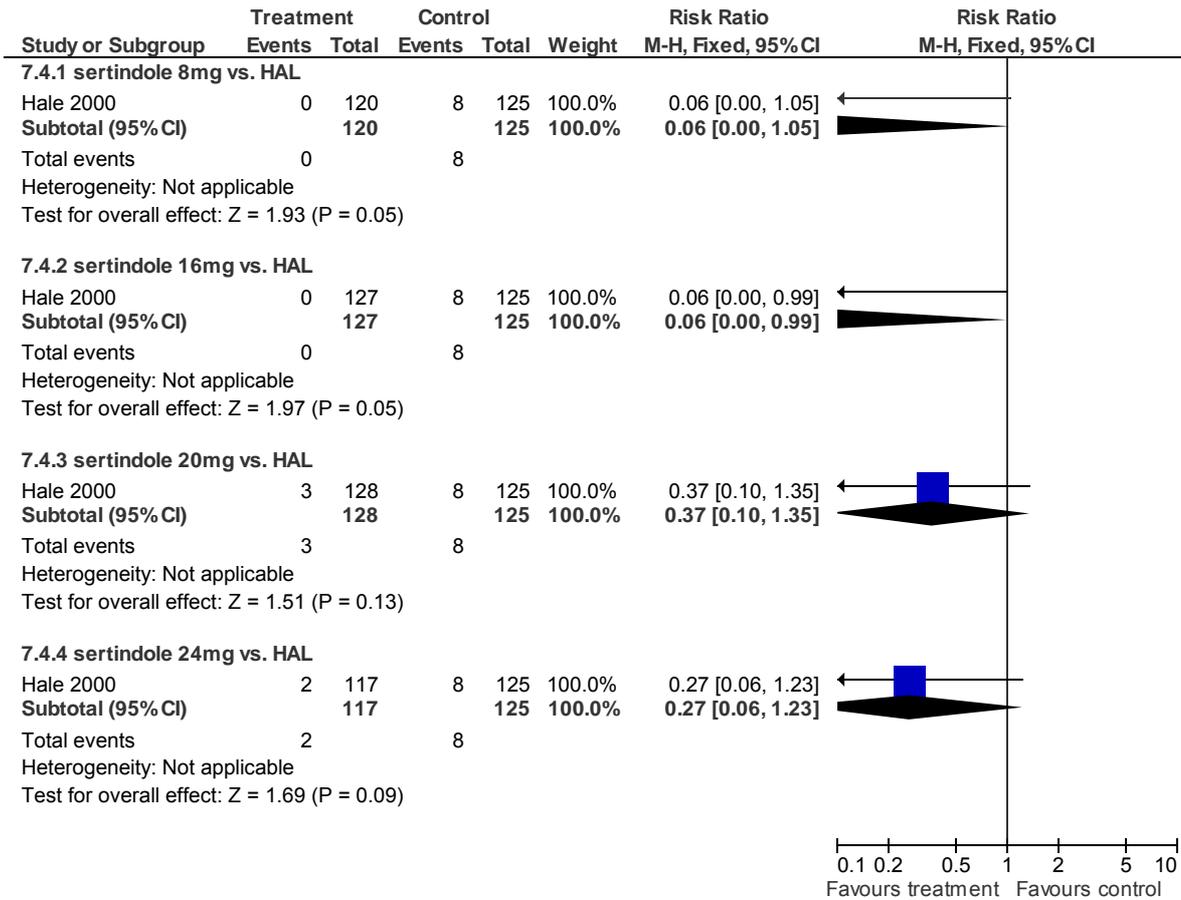
Pharmacological clinical evidence: Analysis of side effects

7.3 AE: 2. Neurologic SEs - Asthenia (short-term)



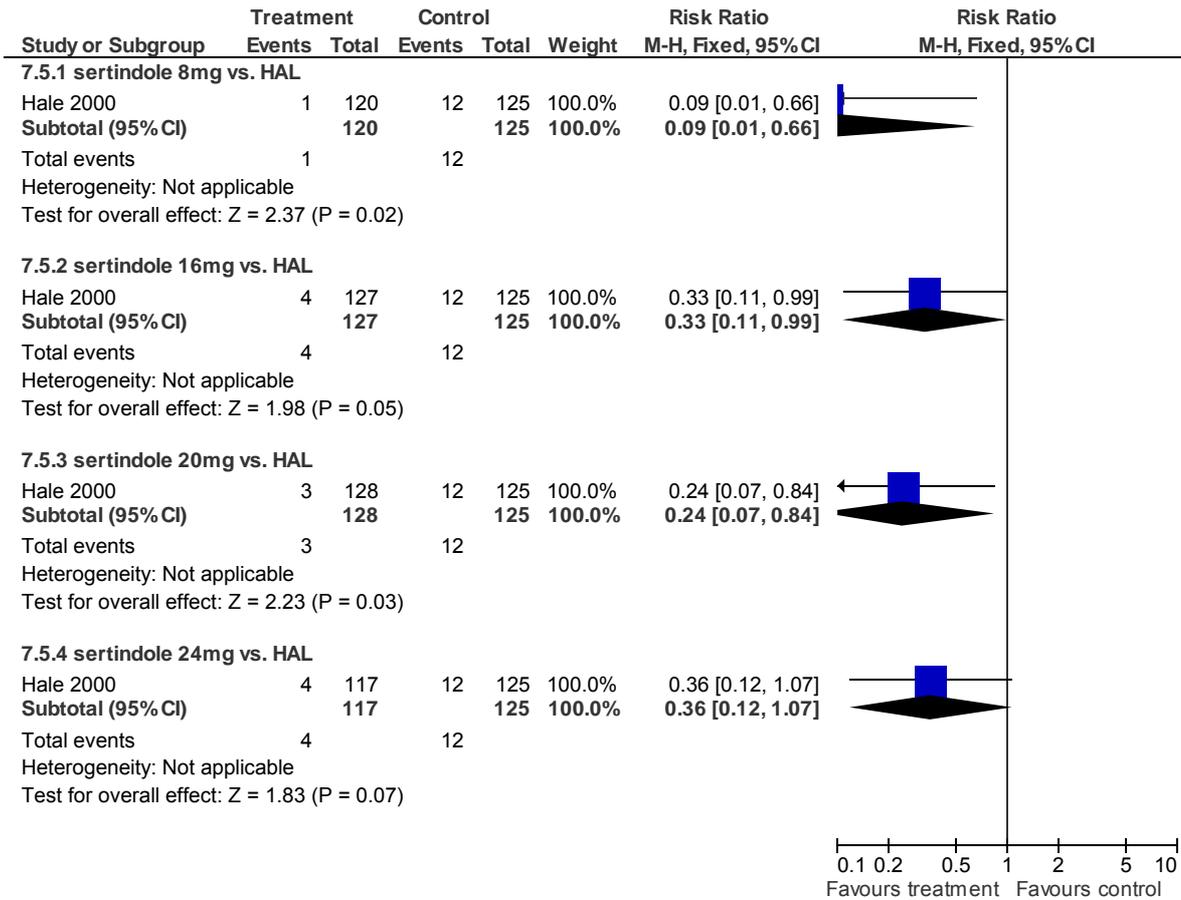
Pharmacological clinical evidence: Analysis of side effects

7.4 AE: 2. Neurologic SEs - Dystonia (short-term)



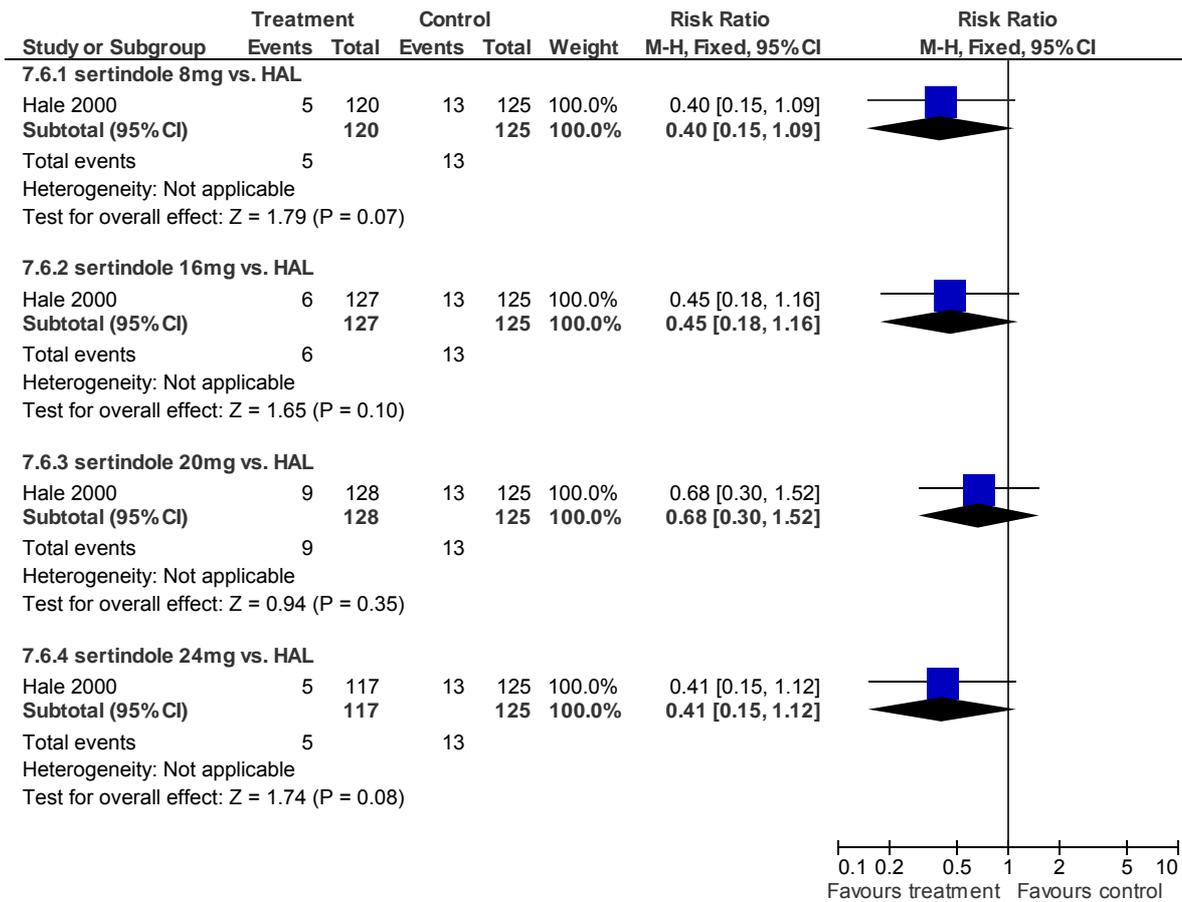
Pharmacological clinical evidence: Analysis of side effects

7.5 AE: 2. Neurologic SEs - Extrapyrimalidal syndrome (short-term)



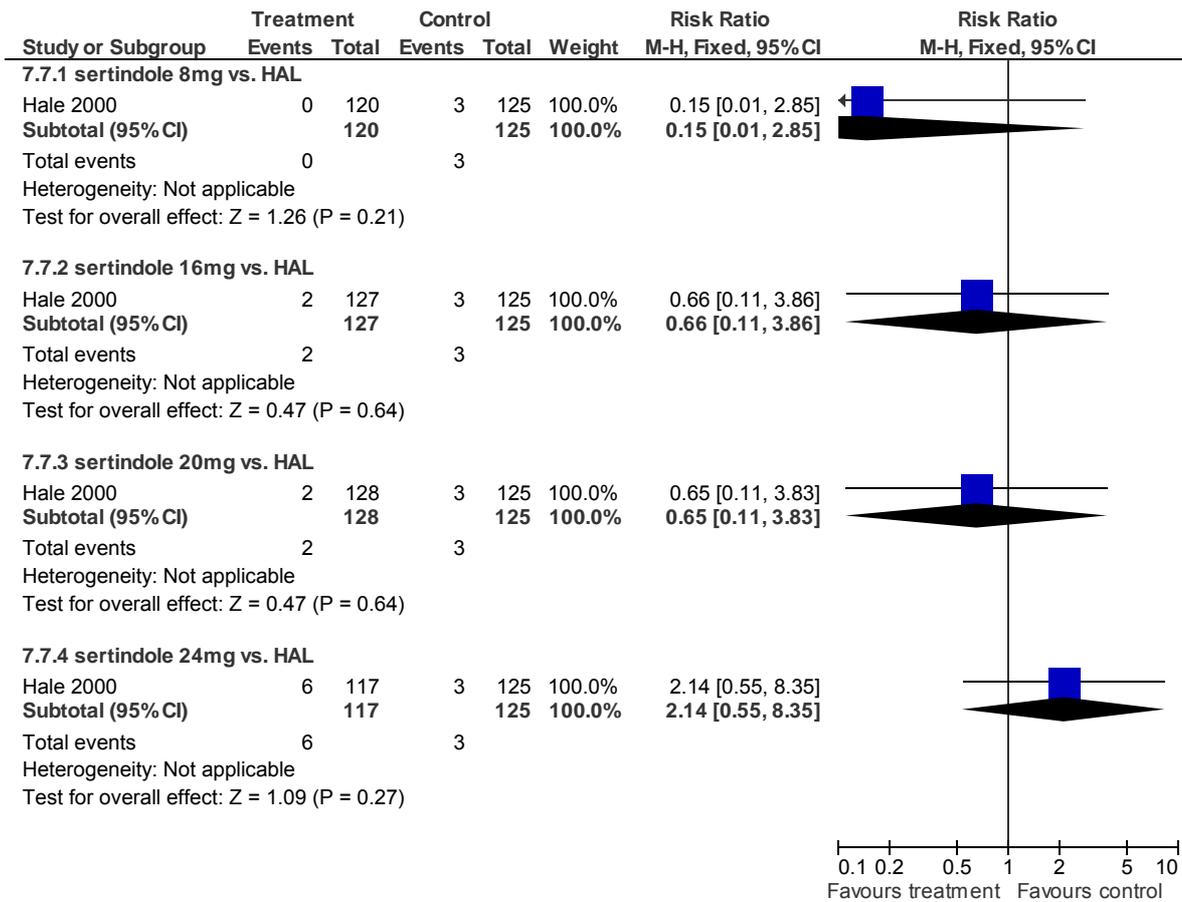
Pharmacological clinical evidence: Analysis of side effects

7.6 AE: 2. Neurologic SEs - Hypertonia (short-term)



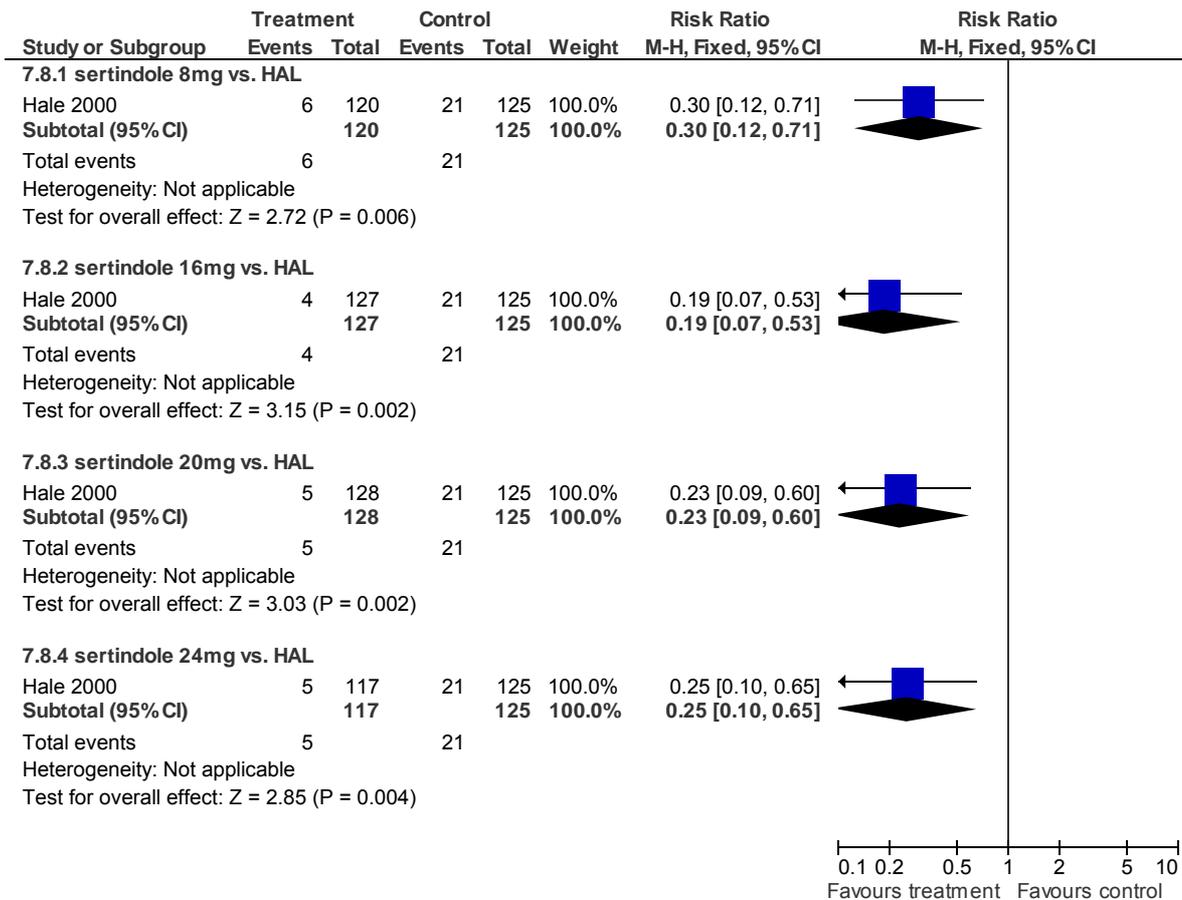
Pharmacological clinical evidence: Analysis of side effects

7.7 AE: 2. Neurologic SEs - Hypokinesia (short-term)



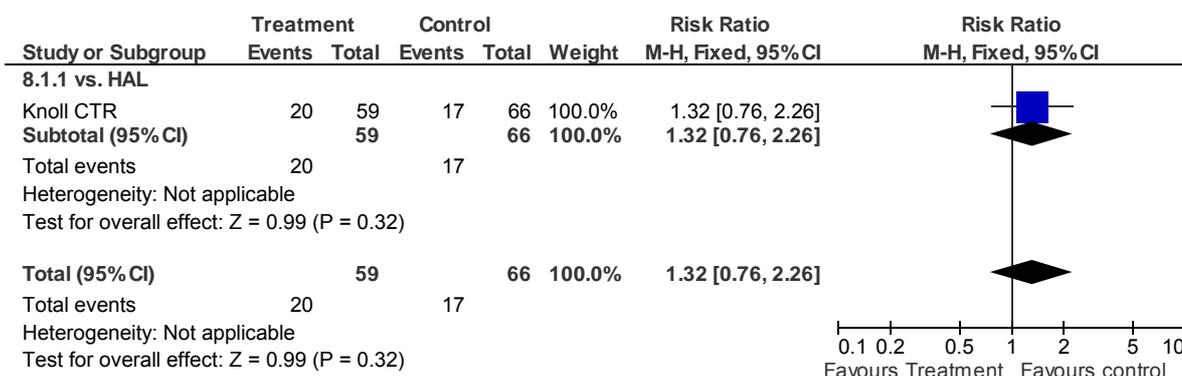
Pharmacological clinical evidence: Analysis of side effects

7.8 AE: 2. Neurologic SEs - Tremor (short-term)



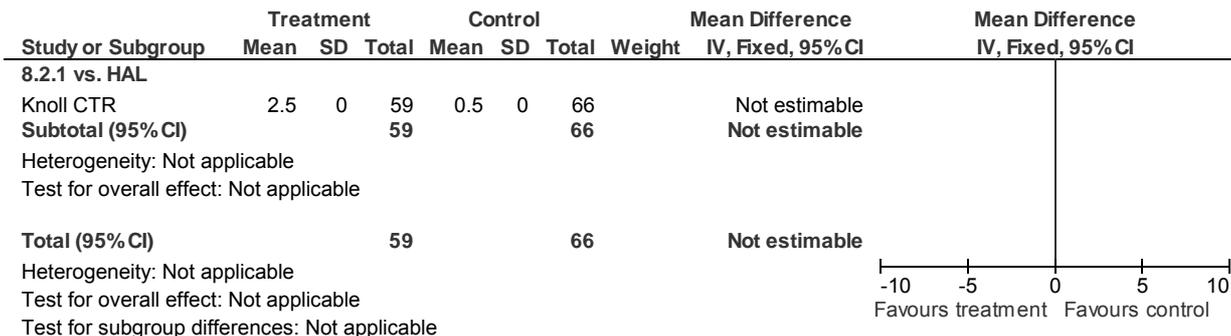
8 Zotepine versus FGA (overall SE analysis)

8.1 Leaving the study early: 3. Due to adverse event (medium-term)

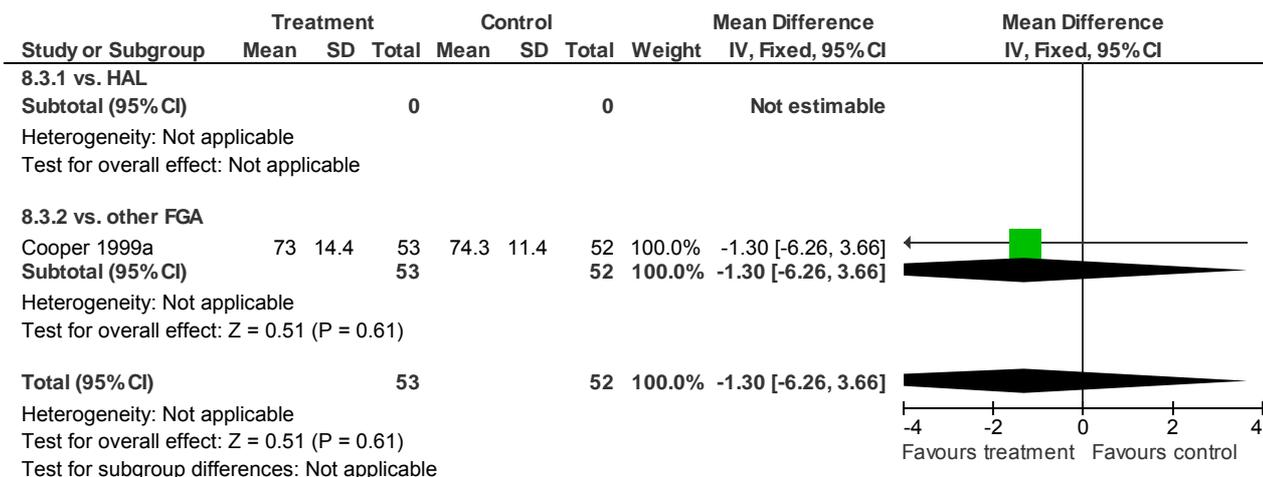


Pharmacological clinical evidence: Analysis of side effects

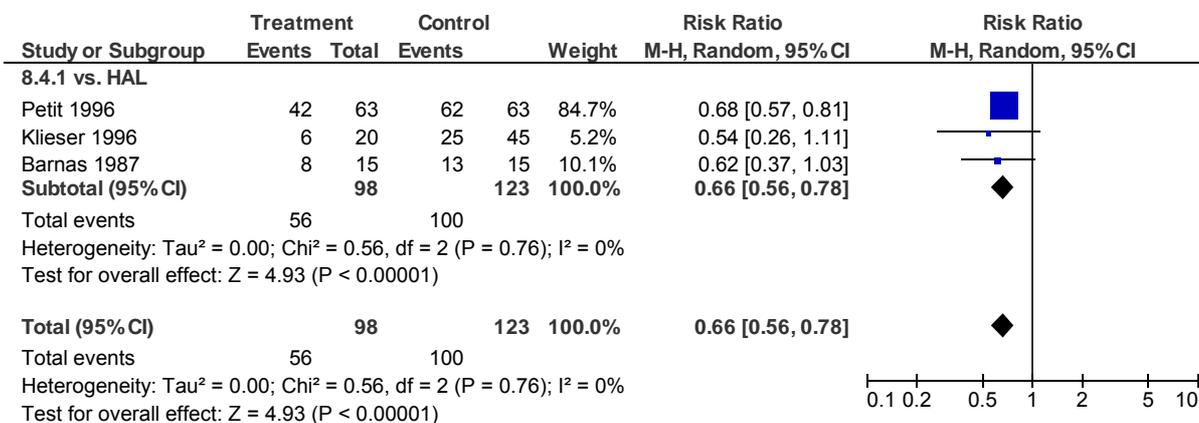
8.2 AE: 1. Metabolic SEs - Weight change from baseline (kg) (medium-term)



8.3 AE: 1. Metabolic SEs - Weight change (kg) (short-term)

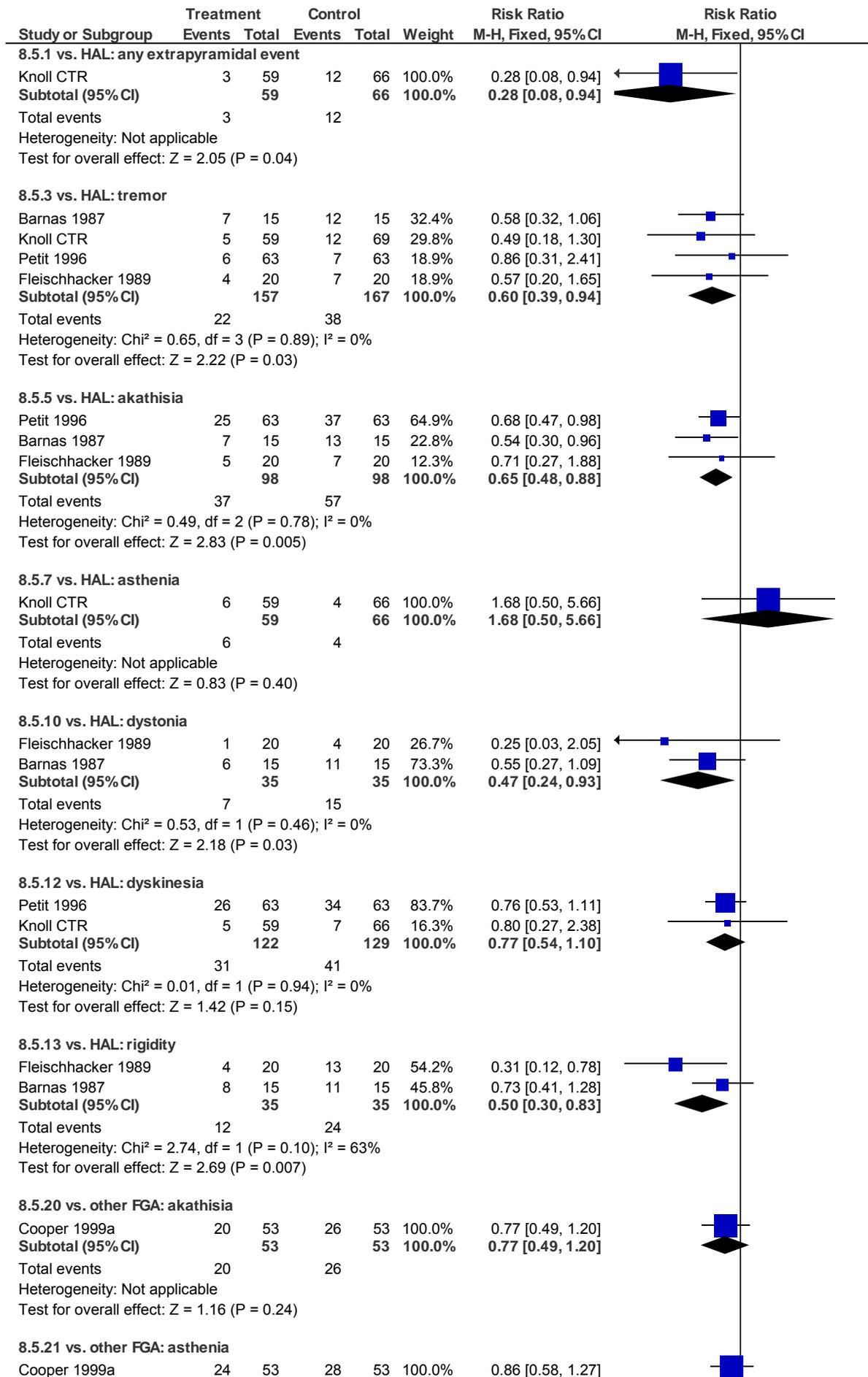


8.4 AE: 2. Neurologic SEs - Use of anticholinergic medication (short-term)



Pharmacological clinical evidence: Analysis of side effects

8.5 AE: 2. Neurologic SEs - Movement disorders (treatment-emergent) (short-term)



Pharmacological clinical evidence: Analysis of side effects

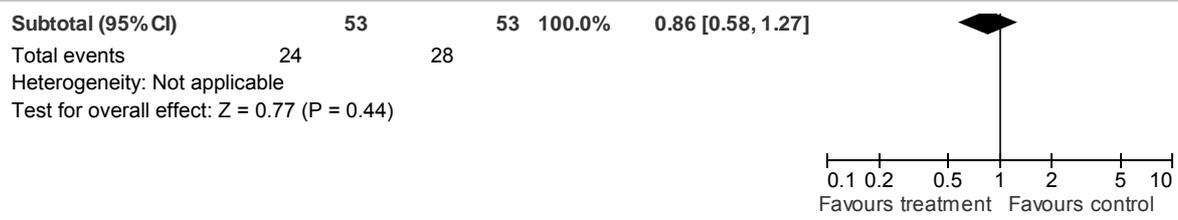


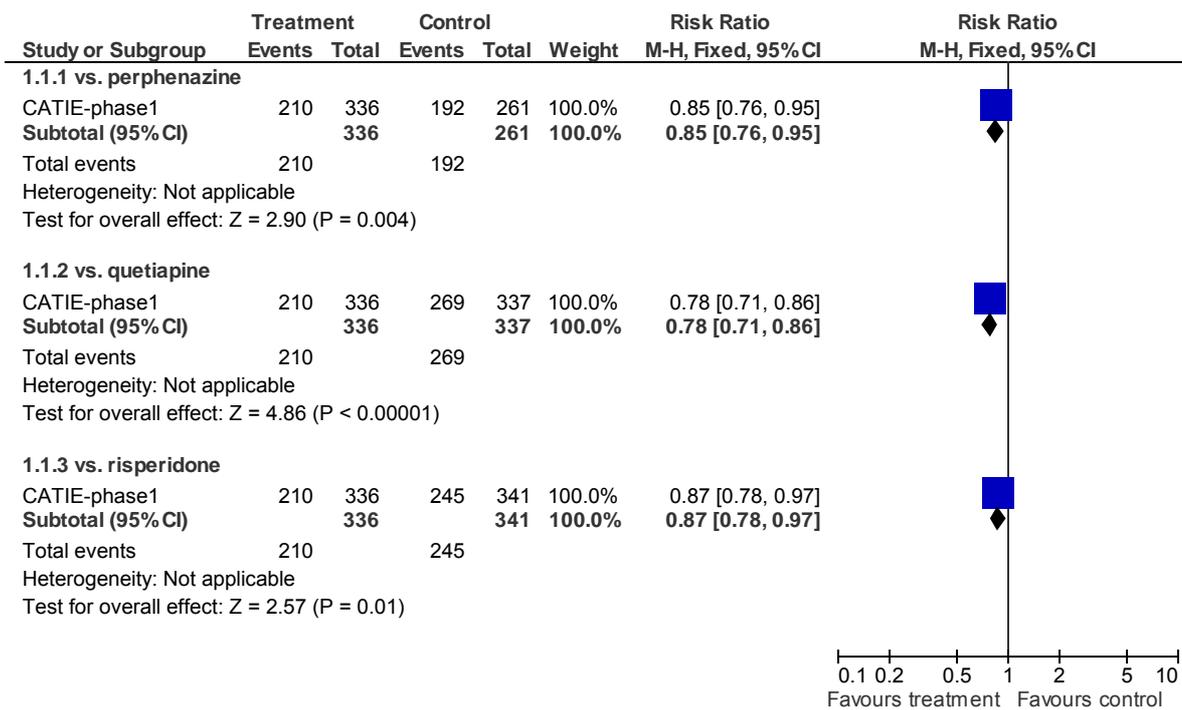
Table 10: Studies included in the review of the effectiveness of antipsychotic drugs

| Treatment | versus Comparator | | |
|------------|--------------------------|----------------------------|------------------|
| | versus haloperidol (FGA) | versus non-haloperidol FGA | versus SGA |
| SGA | | CATIE CUtLASS | CATIE CUtLASS |

Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

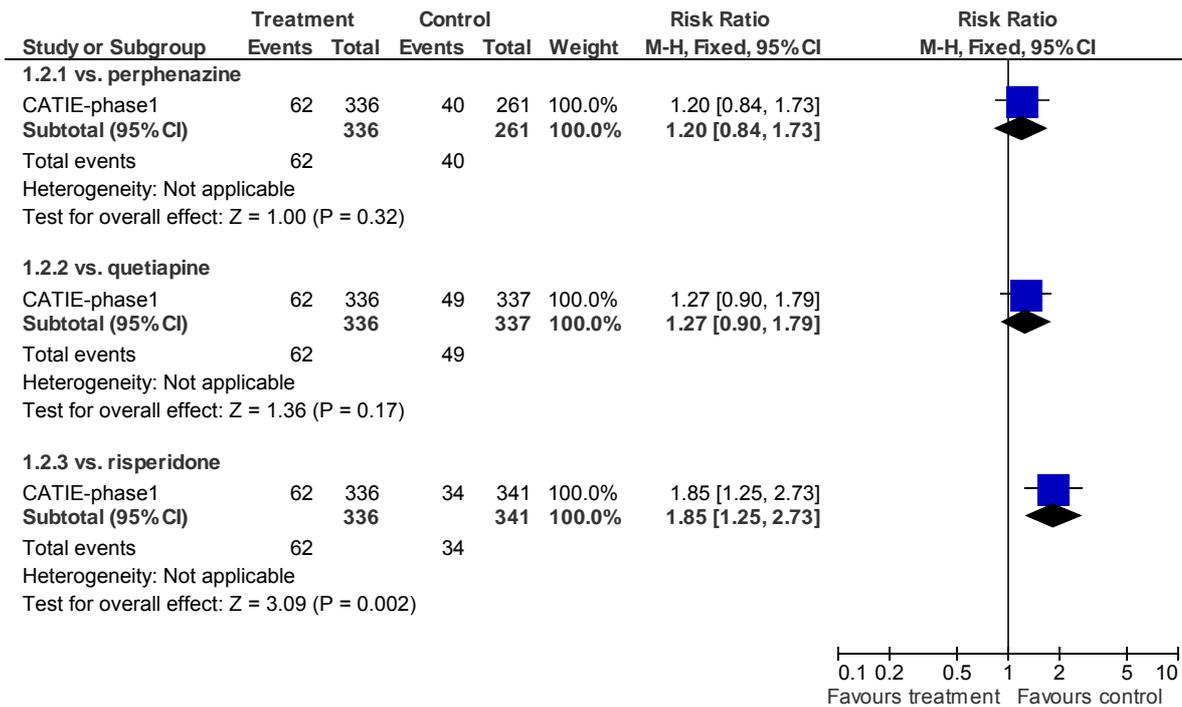
1 Olanzapine versus another antipsychotic drug

1.1 Discontinuation of treatment for any reason (by 18 months FU)



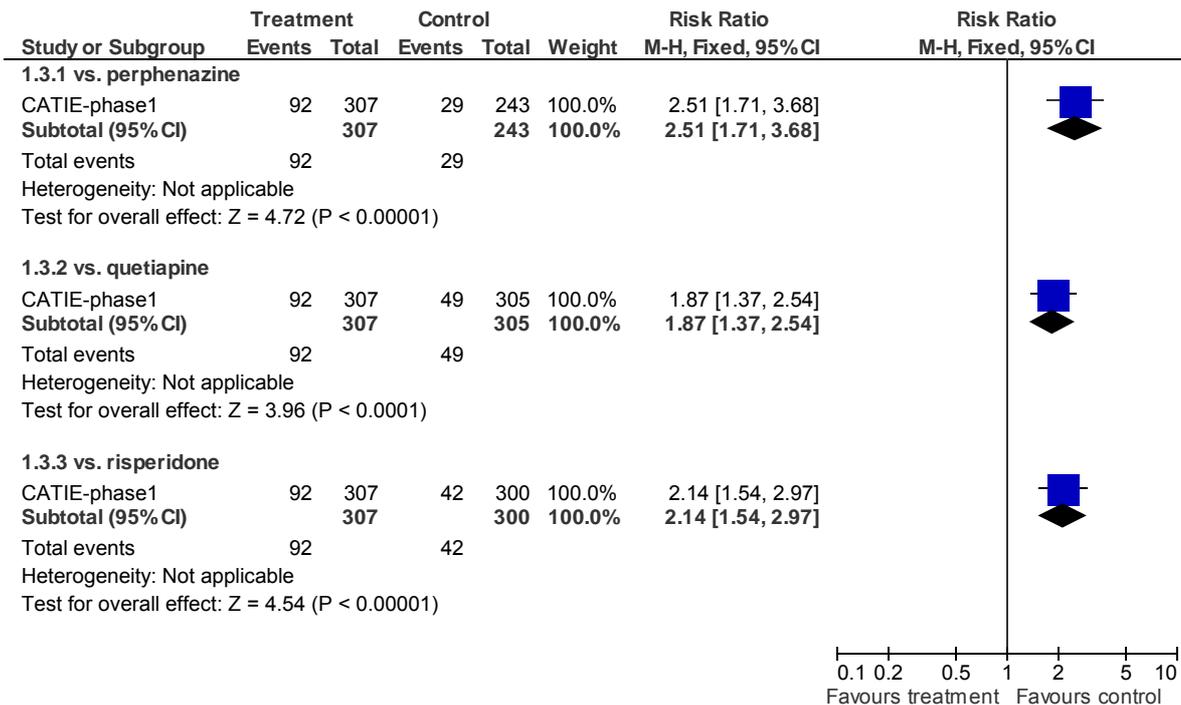
Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.2 Discontinuation of treatment owing to intolerability (by 18 months FU)

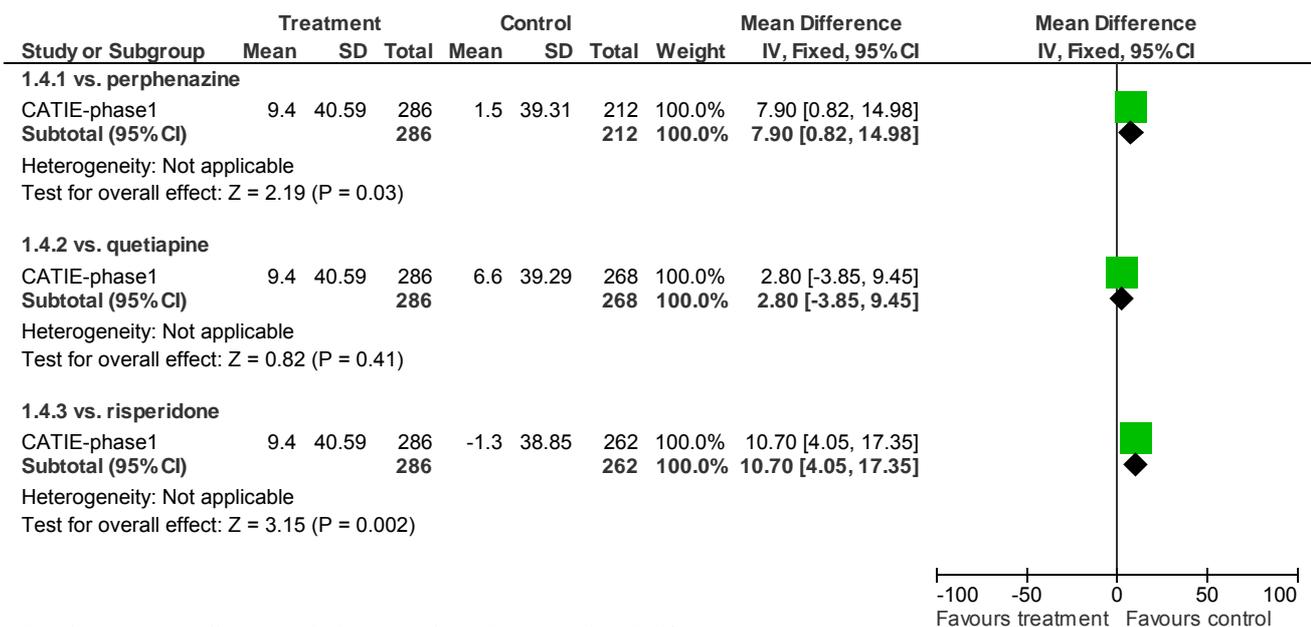


Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.3 AE: 1. Metabolic SEs - Weight gain (Increase of >7% body weight) (by 18 months FU)

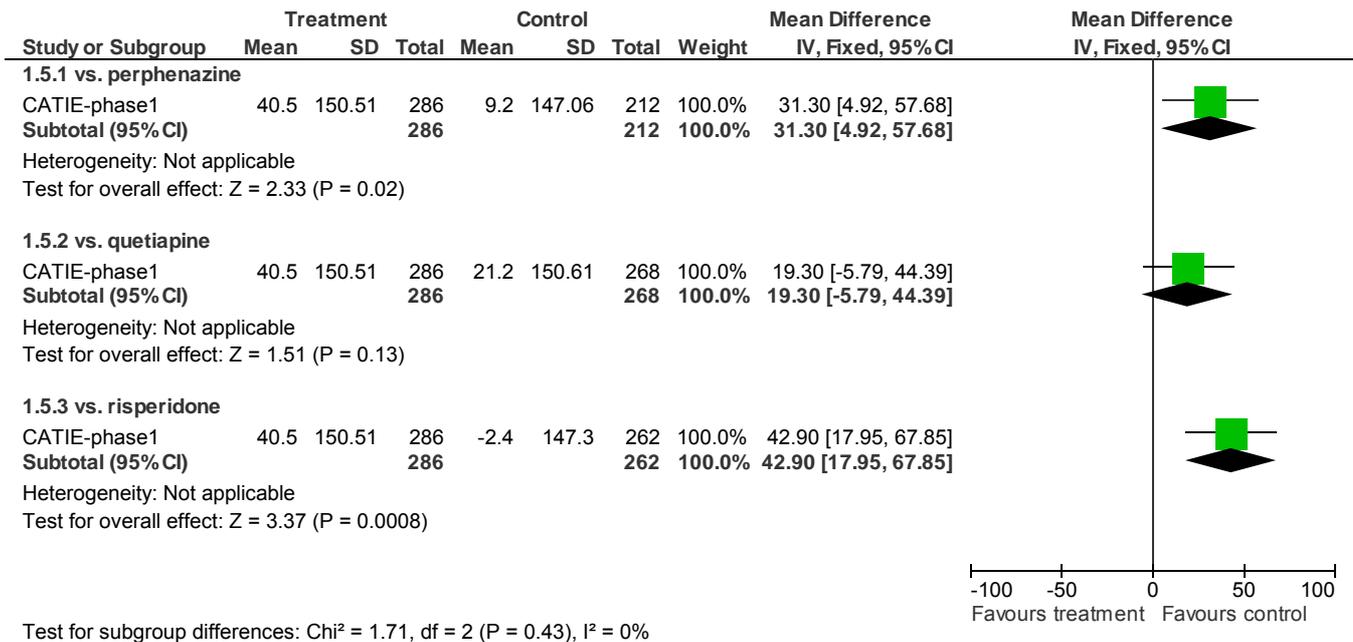


1.4 AE: 1. Metabolic SEs - Cholesterol (mg/dl) (by 18 months FU)

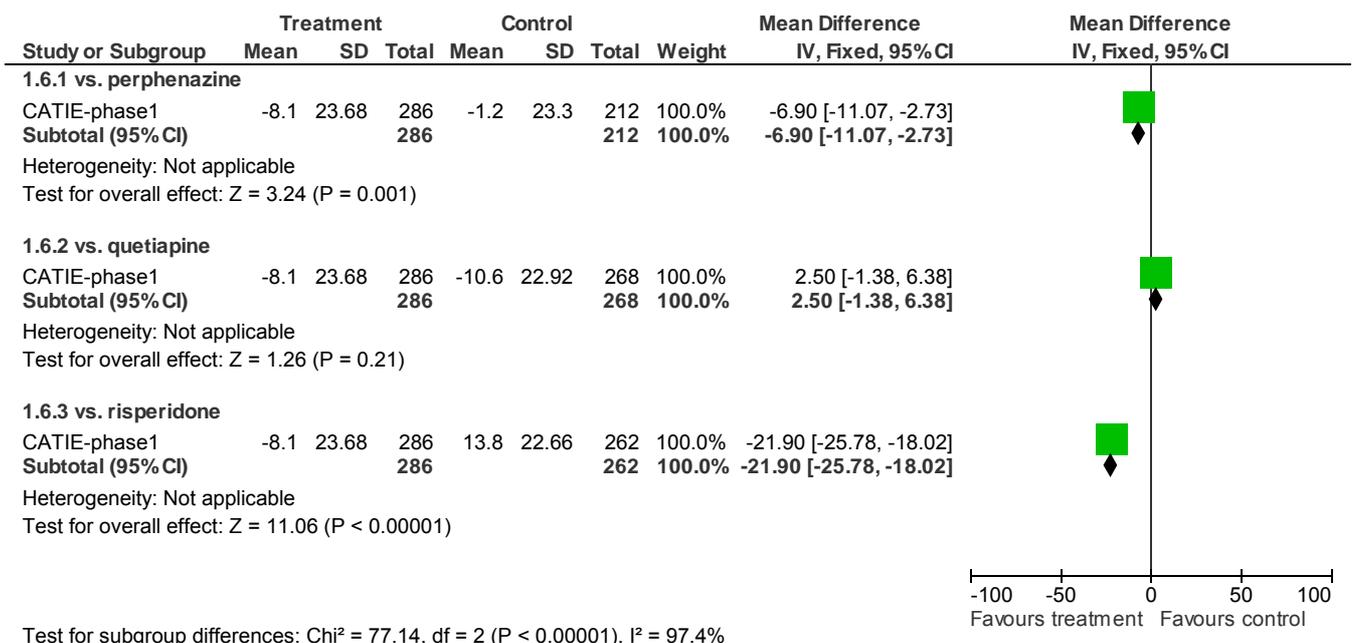
Test for subgroup differences: Chi² = 2.78, df = 2 (P = 0.25), I² = 28.0%

Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.5 AE: 1. Metabolic SEs - Triglycerides (mg/dl) (by 18 months FU)

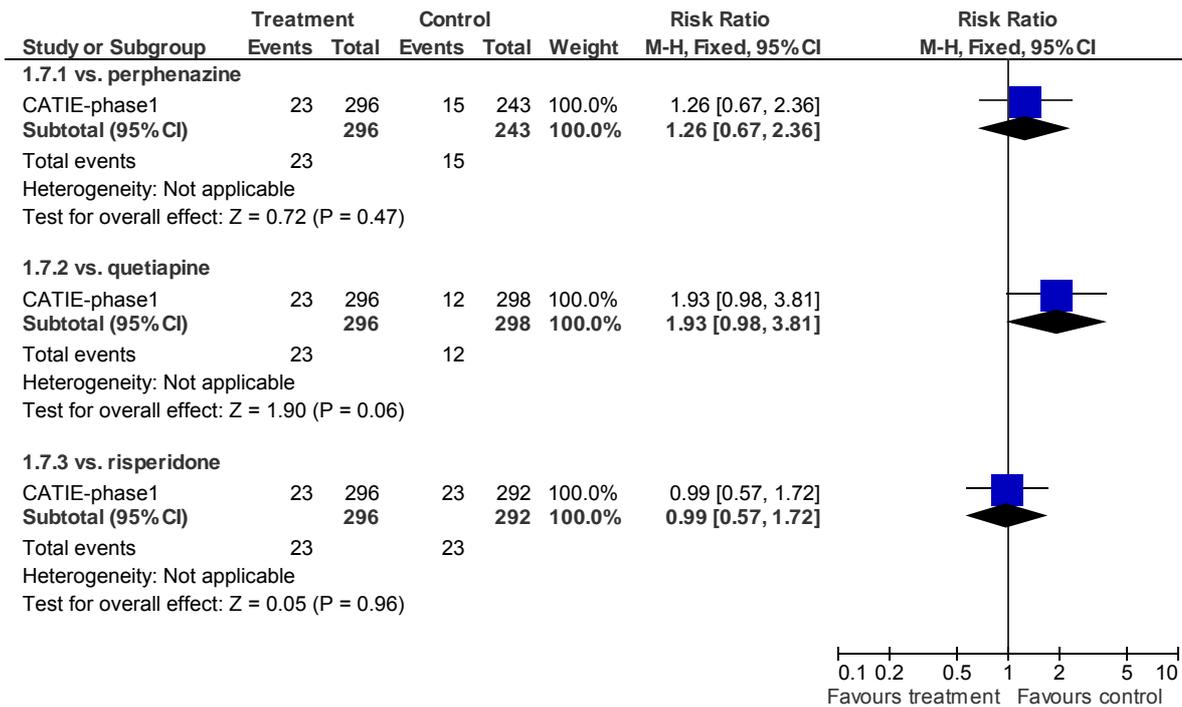


1.6 AE: 1. Metabolic SEs - Prolactin (ng/dl) (by 18 months FU)



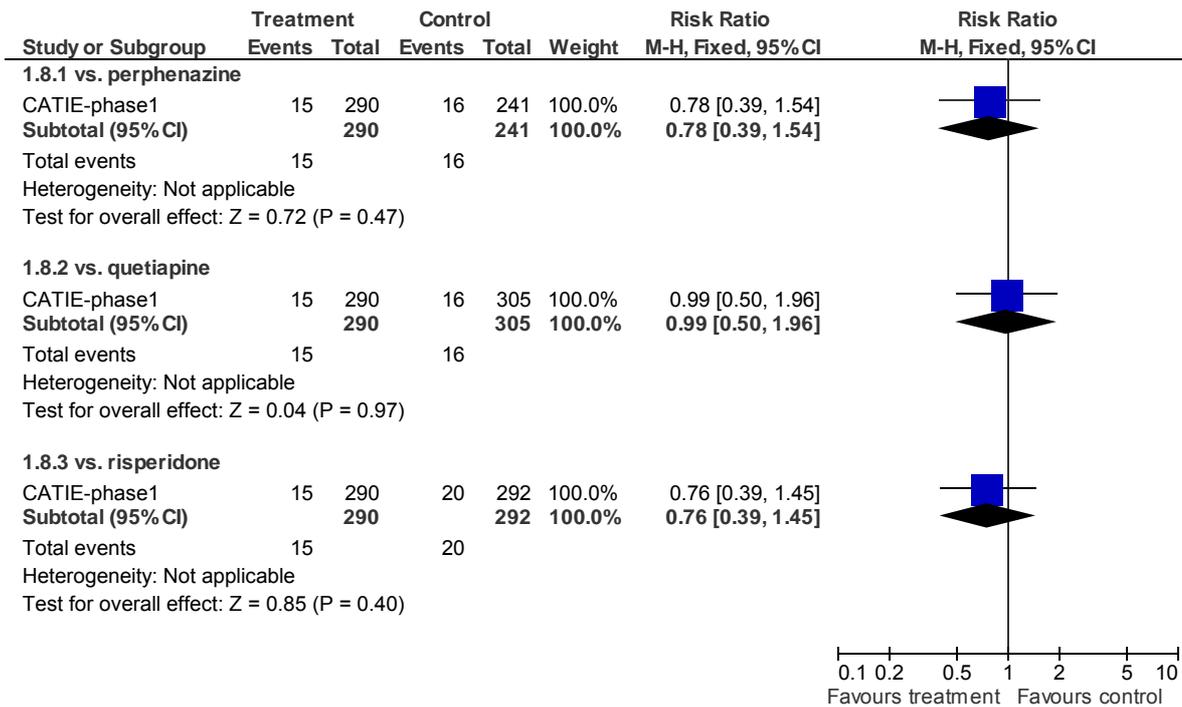
Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.7 AE: 2. Neurologic SEs - EPS (treatment-emergent) (by 18 months FU)



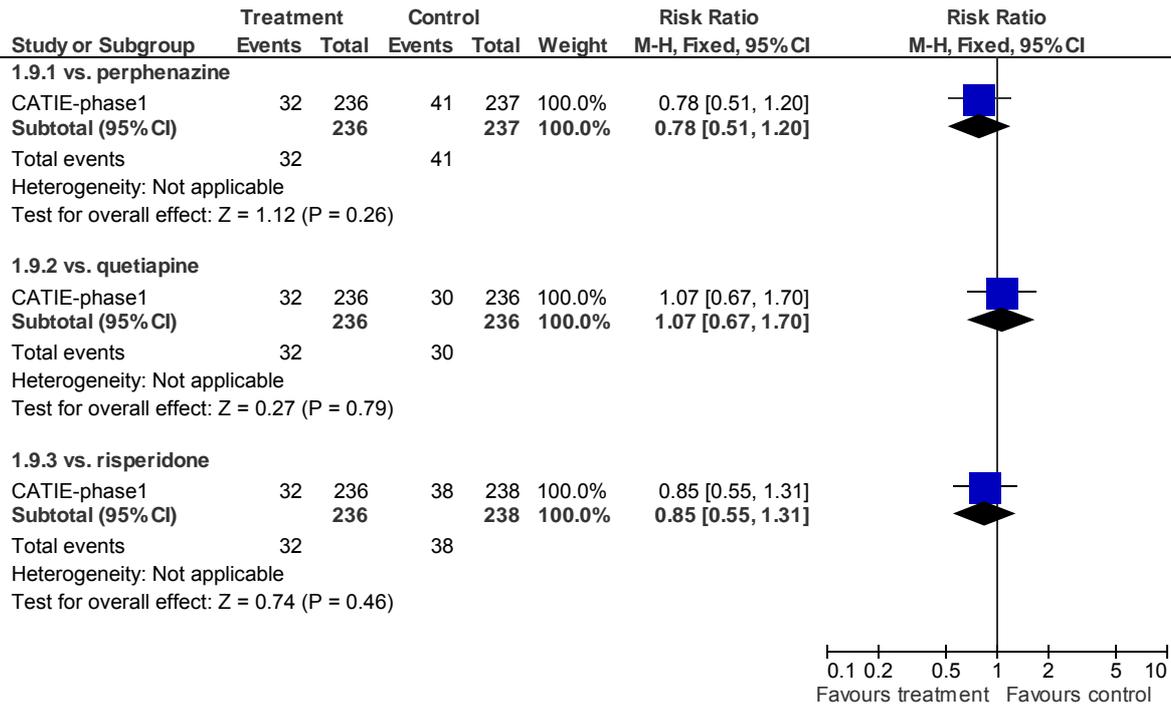
Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.8 AE: 2. Neurologic SEs - Akathisia (treatment-emergent) (by 18 months FU)



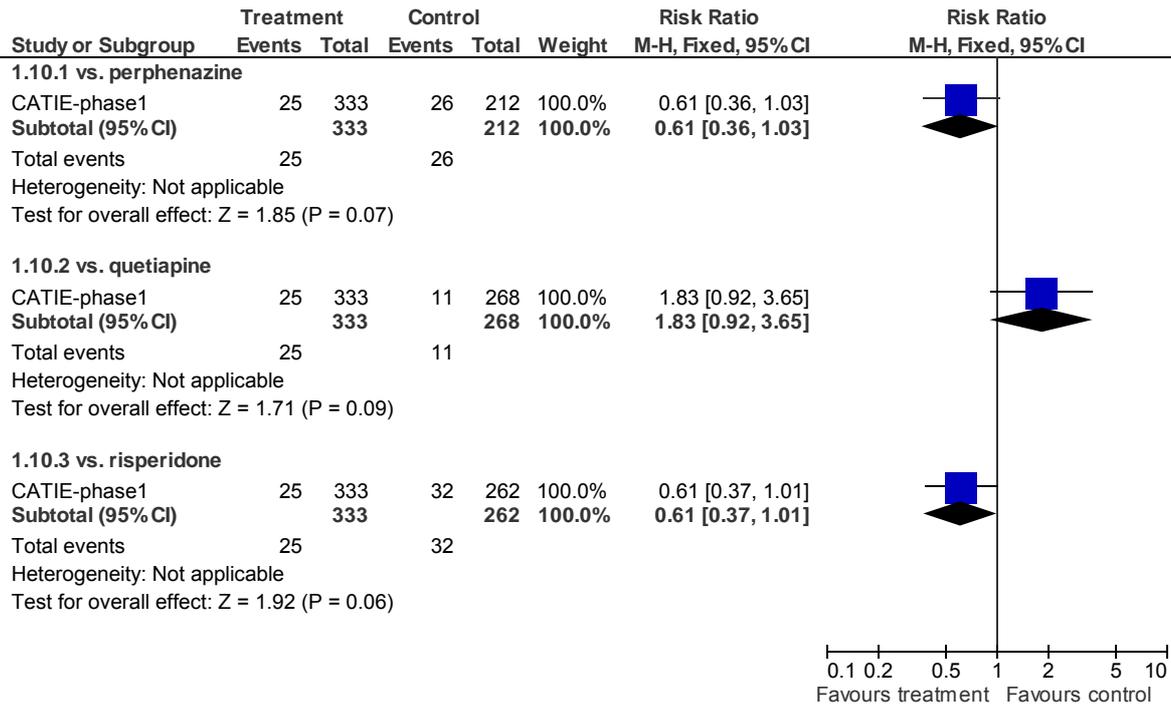
Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

1.9 AE: 2. Neurologic SEs - Parkinsonism (treatment-emergent) (by 18 months FU)



Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

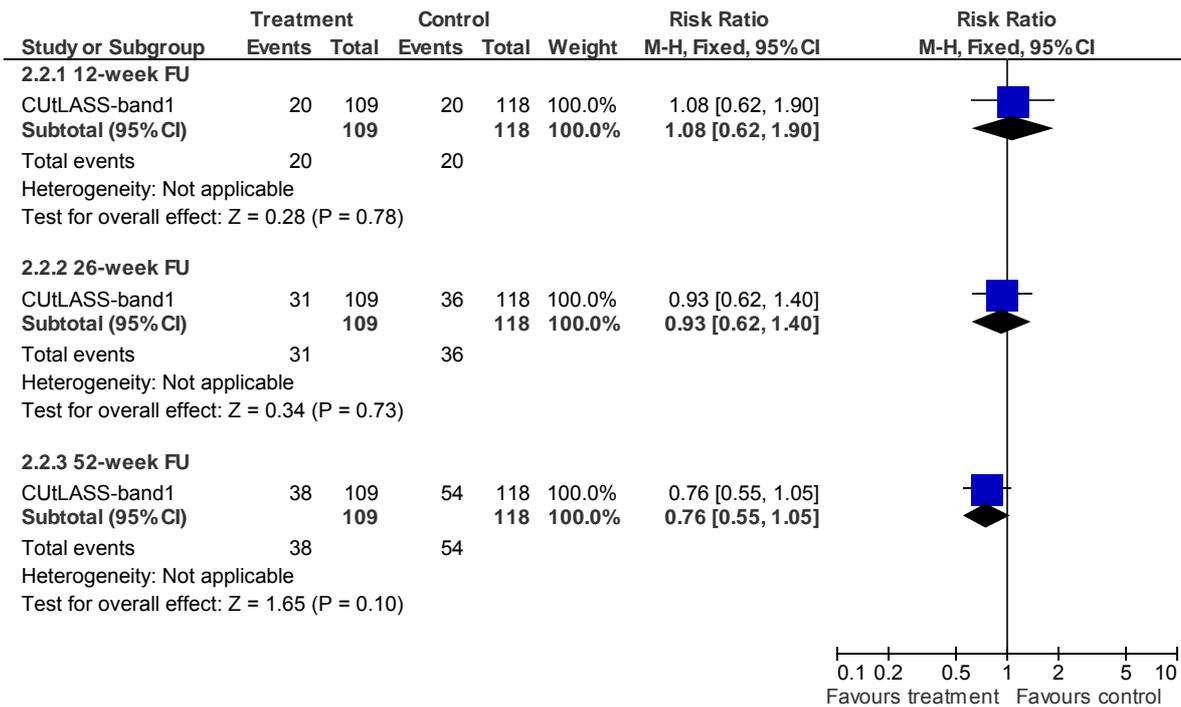
1.10 AE: 2. Neurologic SEs - Needing additional anticholinergic medication (by 18 months FU)



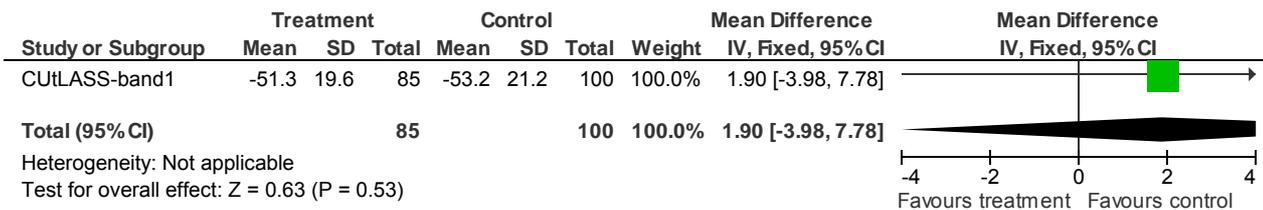
2 SGA versus FGA

Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

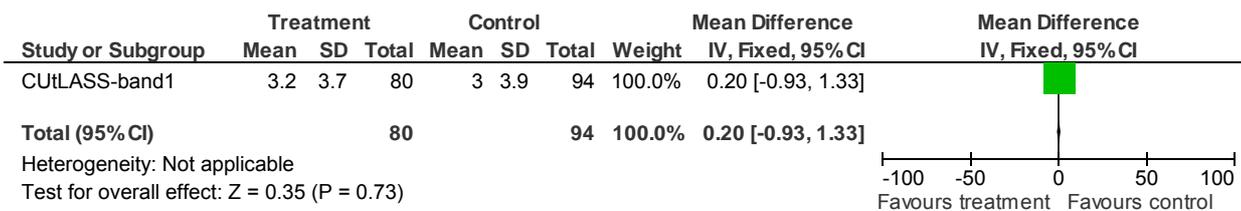
2.2 Leaving the study early: 1. Any reason (by 12 months FU)



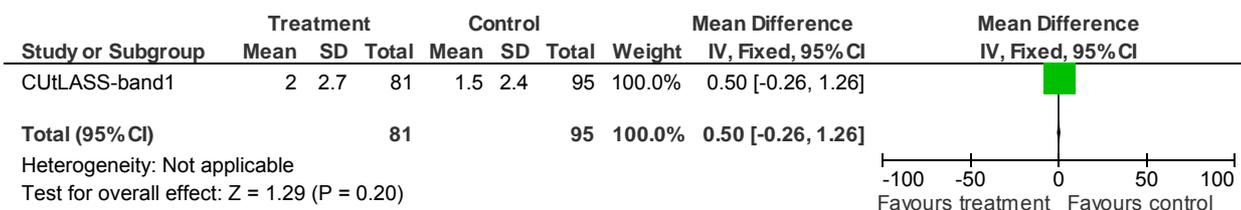
2.3 Quality of Life Scale (high scores = better; signs reversed) (by 12 months FU)



2.4 AE: 1. Neurologic SEs - Simpson-Angus Scale - EPS (by 12 months FU)



2.5 AE: 1. Neurologic SEs - BAS - Akathisia (by 12 months FU)



Pharmacological clinical evidence: Effectiveness of antipsychotic drugs

2.6 AE: 1. Neurologic SEs - AIMS (by 12 months FU)

