

NKR 16 Smerte PICO 12 SNRI

Review information

Authors

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Citation example: S. NKR 16 Smerte PICO 12 SNRI. Cochrane Database of Systematic Reviews [Year], Issue [Issue].

Contact person

[Empty name]

Characteristics of studies

Characteristics of included studies

Arnold 2004

Methods	
Participants	
Interventions	
Outcomes	
Notes	See Lunn et al "Duloxetine for treating painful neuropathy, chronic pain and fibromyalgia". Cochrane Library 2014

Risk of bias table

Bias	Authors' judgement	Support for judgement
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Arnold 2010

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Arnold 2012

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Chappell 2008

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Other bias	Unclear risk	See Lunn et al "Duloxetine for treating painful neuropathy, chronic pain and fibromyalgia". Cochrane Library 2014

Murakami 2015

Methods	Study design: Randomized controlled trial Study grouping: Parallel group
Participants	Baseline Characteristics Duloxetine <ul style="list-style-type: none"> ● Age, median (range): 47.8 (12.0) mean, SD ● No. of females (n): 157 ● BPI, average score mean (SD): 6.05 (1.29) Control <ul style="list-style-type: none"> ● Age, median (range): 49.5 (11.7) mean, SD ● No. of females (n): 164 ● BPI, average score mean (SD): 6.13 (1.35) Overall <ul style="list-style-type: none"> ● Age, median (range): ● No. of females (n):

	<ul style="list-style-type: none"> ● <i>BPI, average score mean (SD):</i> <p>Included criteria: The criteria used in a previous study of duloxetine [25] were adopted. Briefly, male and female outpatients aged between 20 and 75 years who met the ACR 1990 criteria for fibromyalgia [2] and had a Brief Pain Inventory (BPI) average pain score ≥ 4 [26, 27] at visits 1 and 2 were included.</p> <p>Excluded criteria: Exclusion criteria were as follows: past duloxetine treatment; serious or medically unstable disease, clinically significant abnormal laboratory values, or abnormal electrocardiogram (ECG) findings; pain caused by non-fibromyalgia diseases; poorly controlled thyroid dysfunction; rheumatoid, inflammatory, or infectious arthritis; autoimmune disorders other than thyroid dysfunction; psychiatric disorders other than major depressive disorder within the past year; and suicidal tendencies as assessed using the Columbia-Suicide Severity Rating Scale (C-SSRS).</p> <p>Pretreatment: Both groups were balanced in terms of baseline demographic characteristics</p>
<p>Interventions</p>	<p>Intervention Characteristics</p> <p>Duloxetine</p> <ul style="list-style-type: none"> ● <i>Dosage:</i> In the duloxetine group, patients received 20 mg for 1 week followed by 40 mg for 1 week and then 60 mg for 12 weeks during the treatment phase. ● <i>Longest follow-up after end of treatment:</i> ● <i>Length of treatment :</i> 14 weeks <p>Control</p> <ul style="list-style-type: none"> ● <i>Dosage:</i> In the placebo group, subjects received placebo for 14 weeks through-out the treatment phase. ● <i>Longest follow-up after end of treatment:</i> ● <i>Length of treatment :</i> 14 weeks
<p>Outcomes</p>	<p><i>Functioning. SF-36 (physical functioning), SEM, final</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Quality of life SF-36 (total score) final. SEM</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Functioning SF-36 (physical functioning) change. SE</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported ● Data value: Change from baseline <p><i>Pain. BPI (BOCF) Change, SE</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome ● Reporting: Fully reported ● Data value: Change from baseline <p><i>Pain BPI (pain on average). Final, SEM</i></p> <ul style="list-style-type: none"> ● Outcome type: Continuous Outcome <p><i>Drowsiness, %</i></p> <ul style="list-style-type: none"> ● Outcome type: Dichotomous Outcome ● Data value: Endpoint <p><i>Nausea, %</i></p> <ul style="list-style-type: none"> ● Outcome type: Dichotomous Outcome <p><i>Dry mouth, %</i></p> <ul style="list-style-type: none"> ● Outcome type: Dichotomous Outcome ● Reporting: Fully reported ● Data value: Endpoint <p><i>Constipation, %</i></p> <ul style="list-style-type: none"> ● Outcome type: Dichotomous Outcome ● Reporting: Fully reported

	<ul style="list-style-type: none"> ● Data value: Endpoint <p><i>Weight gain, %</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Fatigue/somnolence, %</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome ● Reporting: Fully reported ● Data value: Endpoint <p><i>Dizziness, %</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome ● Reporting: Fully reported ● Data value: Endpoint <p><i>Dropout pga bivirkninger</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome <p><i>Severe adverse events, n</i></p> <ul style="list-style-type: none"> ● Outcome type: DichotomousOutcome
Notes	

Risk of bias table

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Quote: "After the screening phase, patients were assigned randomly to receive duloxetine or placebo in a 1:1 ratio, using a web-based patient registration system (ACRONET Corp., Tokyo, Japan) with a stochastic minimization procedure. The following allocation factors were used: (1) BPI average pain score at visit 2 (<6 vs. ≥ 6) and (2) presence or absence of concomitant major depressive disorder diagnosed on the basis of the M.I.N.I. International Neuropsychiatric Interview–Japanese version 5.0.0 [29]. It was ensured that the maximum between-group difference in the number of subjects in each medical institution did not exceed two."
Allocation concealment (selection bias)	Low risk	Quote: "The drug allocation controller confirmed the study drugs were undiscernible in terms of appearance, packaging, and labeling, and mock titration of placebo pills was also performed to maintain blinding. Only the drug allocation controller was aware of the type of drugs being dispensed."
Blinding of participants and personnel (performance bias)	Low risk	Quote: "two. Blinding was maintained until the end of the study by the person responsible for the study drug assignment." Quote: "The drug allocation controller confirmed the study drugs were undiscernible in terms of appearance, packaging, and labeling, and mock titration of placebo pills was also performed to maintain blinding. Only the drug allocation controller was aware of the type of drugs being dispensed."
Incomplete outcome data (attrition bias)	High risk	Judgement Comment: 76% of the patients in the placebo completed and 85% in the duloxetine group completed.
Selective reporting (reporting bias)	High risk	Judgement Comment: Not all the primary outcome mentioned in the protocol are reported.
Other bias	Low risk	Judgement Comment: No other apparent sources of bias

Russell 2008

Methods	
Participants	
Interventions	
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Footnotes

Characteristics of excluded studies

Footnotes

Characteristics of studies awaiting classification

Footnotes

Characteristics of ongoing studies

Footnotes

References to studies

Included studies

Arnold 2004

[Empty]

Arnold 2005

[Empty]

Arnold 2010

[Empty]

Arnold 2012

[Empty]

Chappell 2008

[Empty]

Murakami 2015

Murakami, Masato; Osada, Kenichi; Mizuno, Hiromichi; Ochiai, Toshimitsu; Alev, Levent; Nishioka, Kusuki. A randomized, double-blind, placebo-controlled phase III trial of duloxetine in Japanese fibromyalgia patients.. Arthritis Research & Therapy 2015;17(Journal Article):224. [DOI: <https://dx.doi.org/10.1186/s13075-015-0718-y>]

Russell 2008

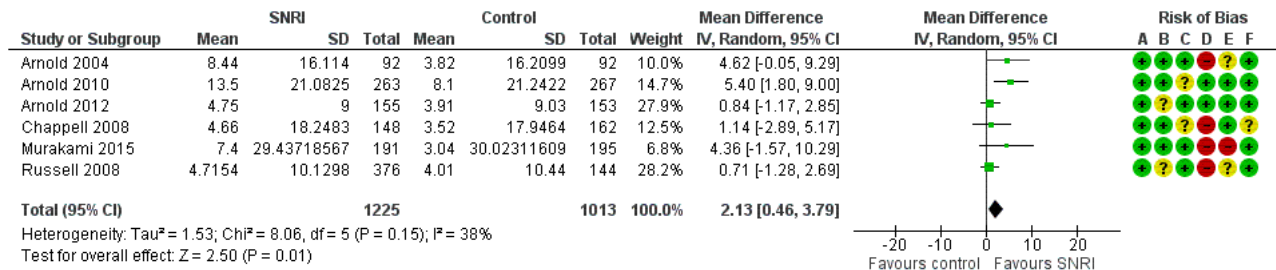
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Excluded studies**Data and analyses****3 Duloxetine versus placebo in the treatment of fibromyalgia**

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
3.1 Functionality (SF-36, physical functioning) Change	6	2238	Mean Difference (IV, Random, 95% CI)	2.13 [0.46, 3.79]
3.2 Pain (BPI, average pain+BOCF) Change	7	2474	Std. Mean Difference (IV, Random, 95% CI)	-0.28 [-0.38, -0.17]
3.3 Quality of life (BPI, enjoyment of life, QoL in depression scale) Change	2	513	Std. Mean Difference (IV, Random, 95% CI)	-0.40 [-0.58, -0.22]
3.6 Serious adverse event	6	2356	Risk Ratio (M-H, Random, 95% CI)	0.66 [0.28, 1.55]
3.6.6 End of treatment	6	2356	Risk Ratio (M-H, Random, 95% CI)	0.66 [0.28, 1.55]
3.7 Dropout due to adverse events	7	2639	Risk Ratio (M-H, Random, 95% CI)	1.61 [1.29, 2.01]
3.7.6 End of treatment	7	2639	Risk Ratio (M-H, Random, 95% CI)	1.61 [1.29, 2.01]
3.8 Tired/Somnolence	4	1548	Risk Ratio (M-H, Random, 95% CI)	2.76 [1.89, 4.02]
3.8.2 End of treatment	4	1548	Risk Ratio (M-H, Random, 95% CI)	2.76 [1.89, 4.02]
3.9 Dizziness	3		Risk Ratio (M-H, Random, 95% CI)	Subtotals only
3.9.3 End of treatment	3	1440	Risk Ratio (M-H, Random, 95% CI)	2.16 [1.16, 4.00]
3.10 Nausea	5	2078	Risk Ratio (M-H, Random, 95% CI)	3.12 [2.28, 4.27]
3.10.2 End of treatment	5	2078	Risk Ratio (M-H, Random, 95% CI)	3.12 [2.28, 4.27]
3.11 Constipation	4	1770	Risk Ratio (M-H, Random, 95% CI)	3.36 [2.32, 4.87]
3.12 Weight gain	1	520	Risk Ratio (M-H, Fixed, 95% CI)	6.51 [0.87, 48.48]
3.13 Dry mouth	4	1770	Risk Ratio (M-H, Random, 95% CI)	2.89 [2.00, 4.17]
3.15 EKG differences	0		Risk Ratio (M-H, Fixed, 95% CI)	Subtotals only
3.16 Confusion	0		Risk Ratio (M-H, Fixed, 95% CI)	Subtotals only
3.17 Hypotension	0		Risk Ratio (M-H, Fixed, 95% CI)	Subtotals only
3.18 Agitation	0		Risk Ratio (M-H, Fixed, 95% CI)	Subtotals only

Figures

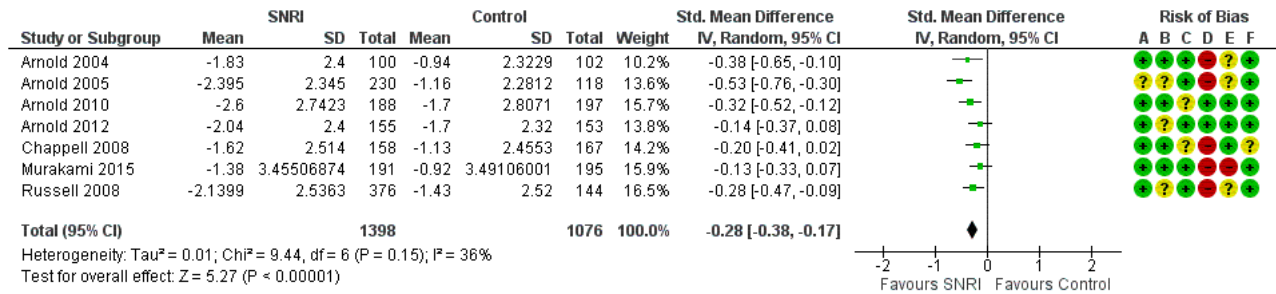
Figure 1 (Analysis 3.1)



Risk of bias legend
 (A) Random sequence generation (selection bias)
 (B) Allocation concealment (selection bias)
 (C) Blinding of participants and personnel (performance bias)
 (D) Incomplete outcome data (attrition bias)
 (E) Selective reporting (reporting bias)
 (F) Other bias

Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.1 Functionality (SF-36, physical functioning) Change.

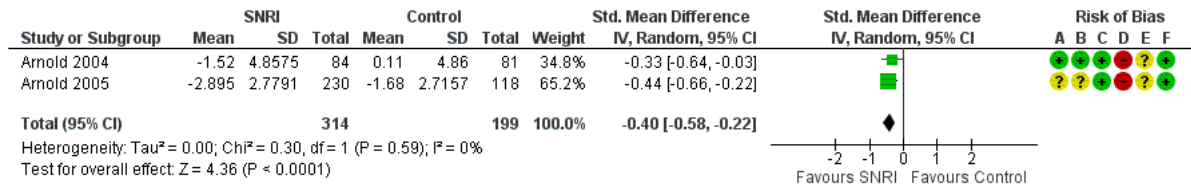
Figure 2 (Analysis 3.2)



Risk of bias legend
 (A) Random sequence generation (selection bias)
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Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.2 Pain (BPI, average pain+BOCF) Change.

Figure 3 (Analysis 3.3)

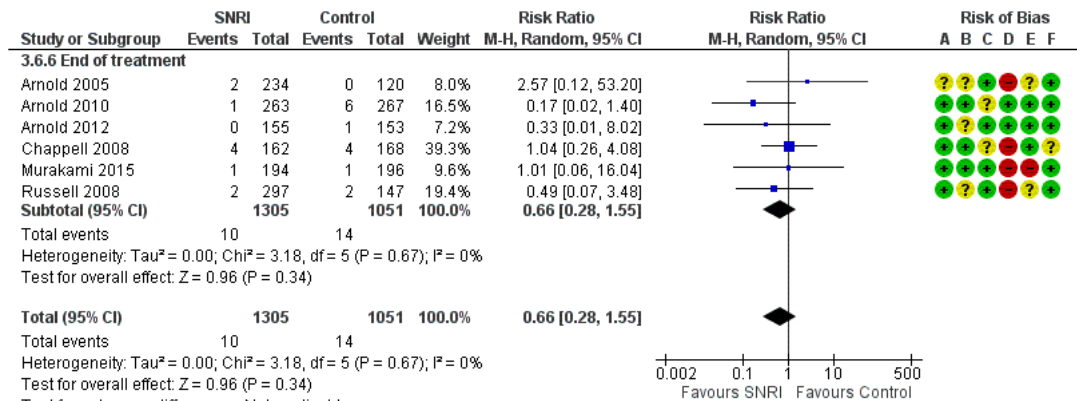


Risk of bias legend

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- (F) Other bias

Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.3 Quality of life (BPI, enjoyment of life, QoL in depression scale) Change.

Figure 5 (Analysis 3.6)

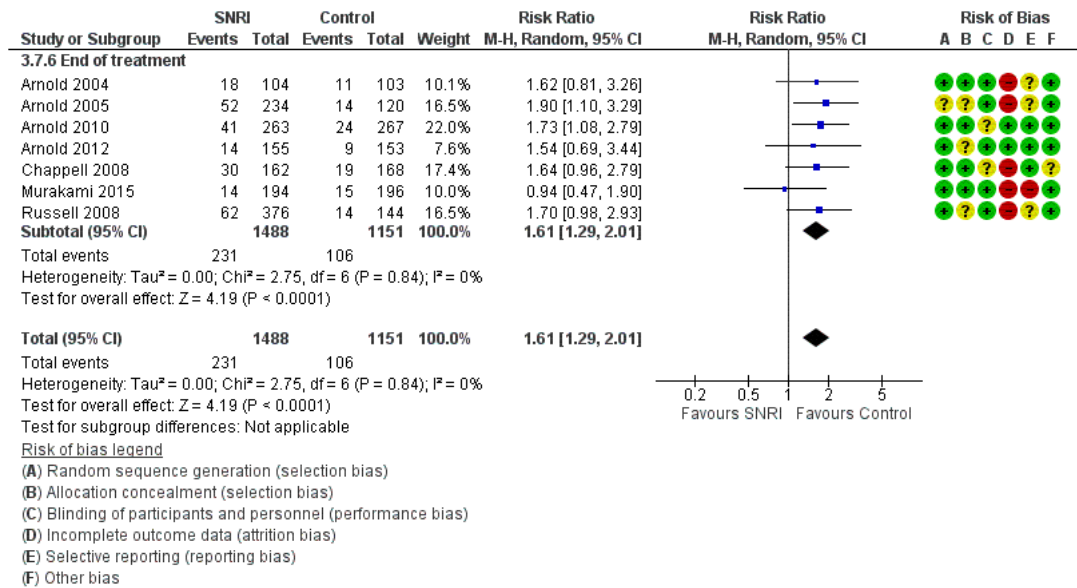


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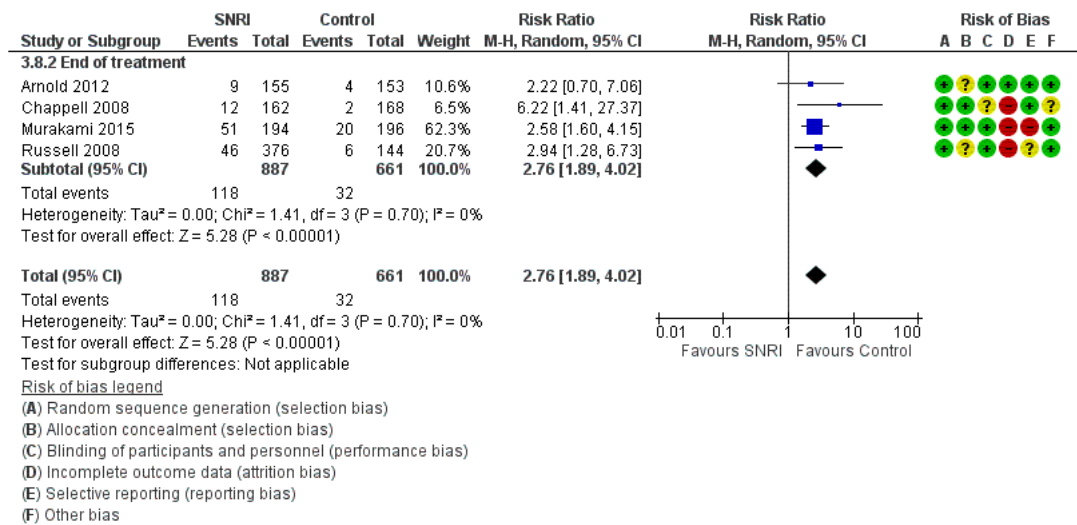
Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.6 Serious adverse event.

Figure 6 (Analysis 3.7)



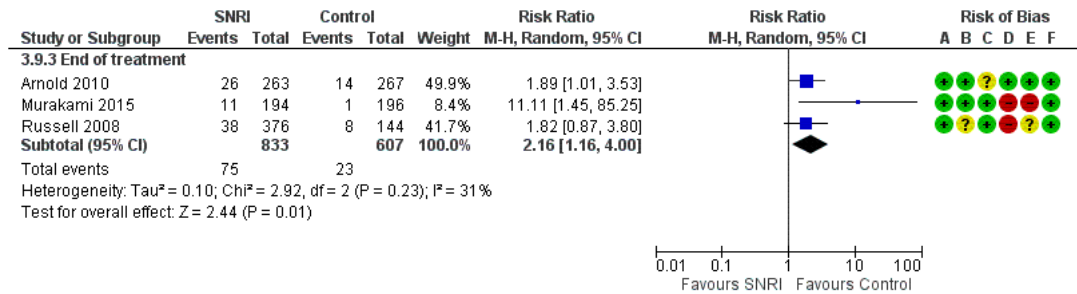
Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.7 Dropout due to adverse events.

Figure 7 (Analysis 3.8)



Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.8 Tired/Somnolence.

Figure 8 (Analysis 3.9)

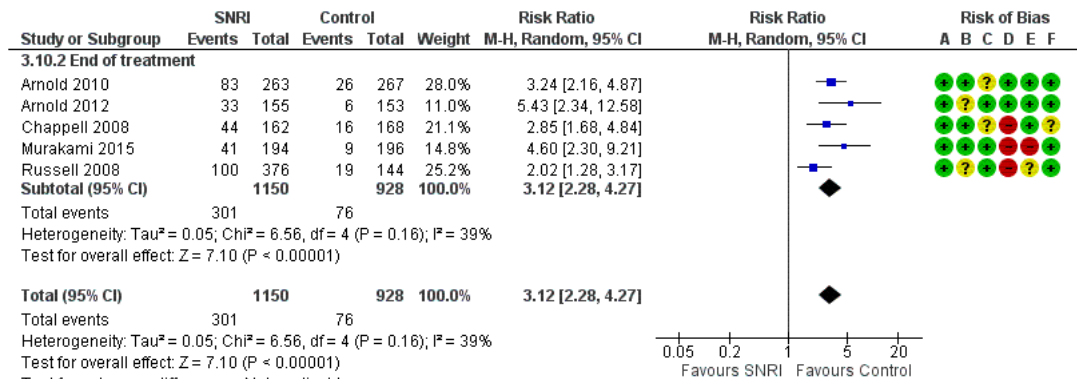


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Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.9 Dizziness.

Figure 9 (Analysis 3.10)

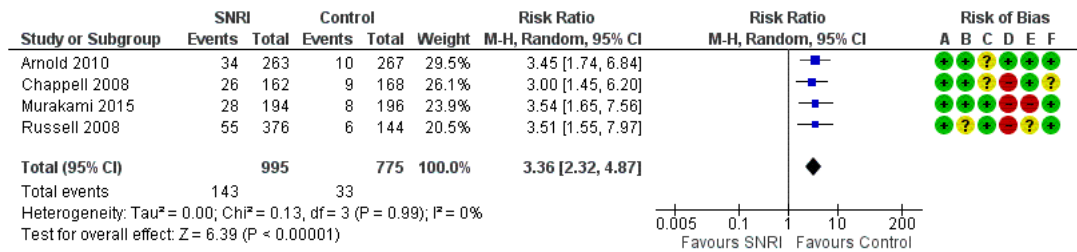


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- (F) Other bias

Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.10 Nausea.

Figure 10 (Analysis 3.11)

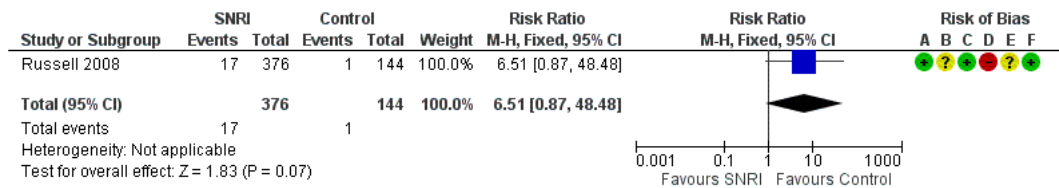


Risk of bias legend

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Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.11 Constipation.

Figure 11 (Analysis 3.12)

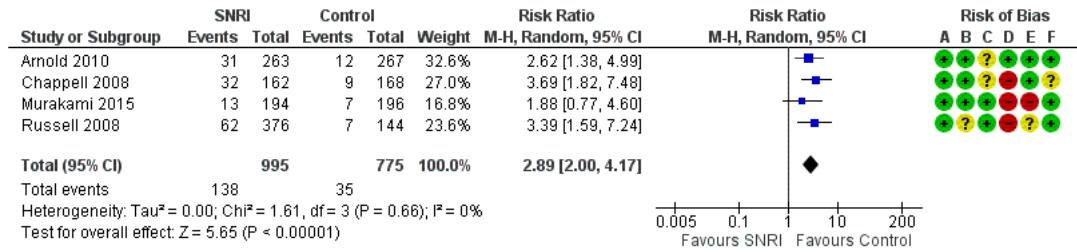


Risk of bias legend

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- (F) Other bias

Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.12 Weight gain.

Figure 12 (Analysis 3.13)



Risk of bias legend

- (A) Random sequence generation (selection bias)
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- (D) Incomplete outcome data (attrition bias)
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Forest plot of comparison: 3 Duloxetine versus placebo in the treatment of fibromyalgia, outcome: 3.13 Dry mouth.