



Bilag 7 – Metaanalyser og risk of bias vurderinger

NKA for brug af paracetamol, NSAID og opioider til behandling af akutte lænderygsmerter hos voksne

Indhold

PICO 1 Metaanalyser
PICO 1 Risk of bias

PICO 2 Metaanalyser
PICO 2 Risk of bias

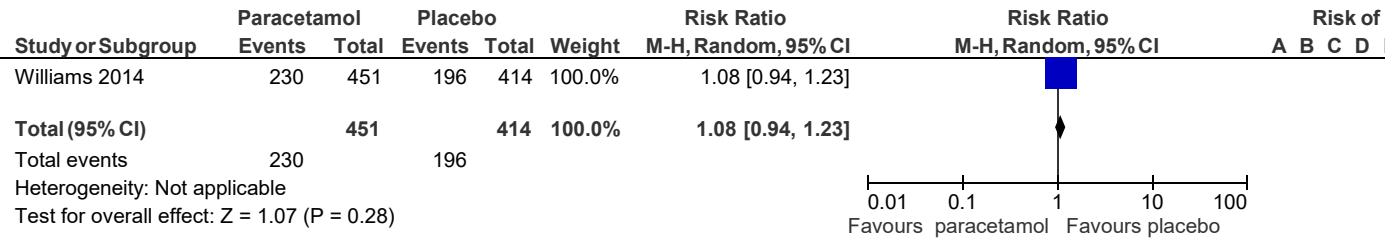
PICO 3 Metaanalyser
PICO 3 Risk of bias

PICO 4 Metaanalyser
PICO 4 Risk of bias

PICO 1 Metaanalyser

1 PICO 1 - Paracetamol vs placebo

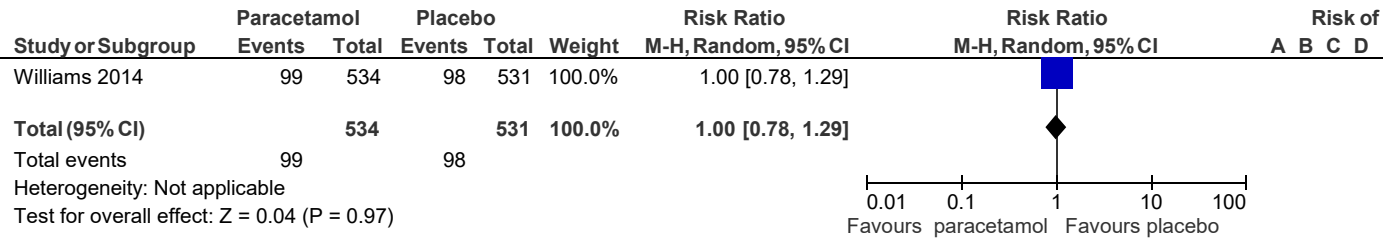
1.7 Adherence



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

1 PICO 1 - Paracetamol vs placebo

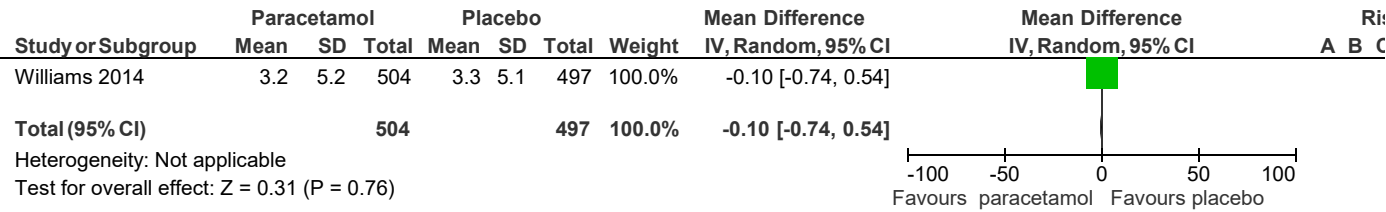
1.10 Adverse events



- Risk of bias legend
- (A) Random sequence generation (selection bias)
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 - (G) Other bias

1 PICO 1 - Paracetamol vs placebo

1.1 Disability



- Risk of bias legend
- (A) Random sequence generation (selection bias)
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 - (E) Incomplete outcome data (attrition bias)
 - (F) Selective reporting (reporting bias)
 - (G) Other bias

1 PICO 1 - Paracetamol vs placebo

1.2 Global improvement

Study or Subgroup	Paracetamol		Placebo		Total	Weight	Mean Difference IV, Random, 95% CI	Mean Difference IV, Random, 95% CI	Risk of Bias						
	Mean	SD	Mean	SD					A	B	C	D	E	F	G
Williams 2014	3.4	2.1	3.5	2.1	498	100.0%	-0.10 [-0.36, 0.16]								
Total (95% CI)					498	100.0%	-0.10 [-0.36, 0.16]								

Heterogeneity: Not applicable

Test for overall effect: Z = 0.75 (P = 0.45)

Risk of bias legend

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

1 PICO 1 - Paracetamol vs placebo

1.8 Mental status

Study or Subgroup	Paracetamol			Placebo			Weight	Mean Difference IV, Random, 95% CI	Mean Difference IV, Random, 95% CI	Risk of Bias						
	Mean	SD	Total	Mean	SD	Total				A	B	C	D	E	F	G
Williams 2014	43.7	6.2	381	44.4	6.1	377	100.0%	-0.70 [-1.58, 0.18]								
Total (95% CI)			381			377	100.0%	-0.70 [-1.58, 0.18]								

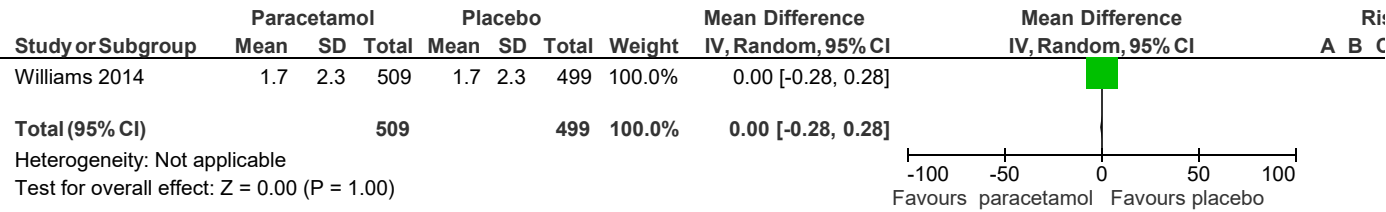
Heterogeneity: Not applicable
Test for overall effect: Z = 1.57 (P = 0.12)

Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
- (C) Blinding of participants and personnel (performance bias)
- (D) Blinding of outcome assessment (detection bias)
- (E) Incomplete outcome data (attrition bias)
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- (G) Other bias

1 PICO 1 - Paracetamol vs placebo

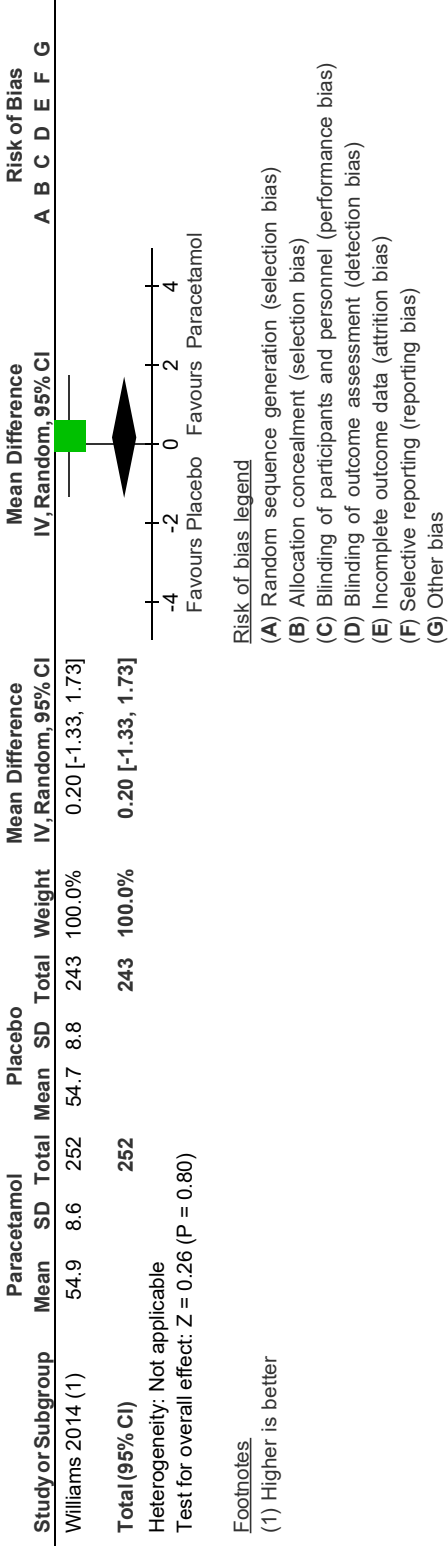
1.5 Pain intensity



- Risk of bias legend
- (A) Random sequence generation (selection bias)
 - (B) Allocation concealment (selection bias)
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 - (G) Other bias

1 PICO 1 - Paracetamol vs placebo

1.6 Quality of life



1 PICO 1 - Paracetamol vs placebo

1.4 Serious adverse events

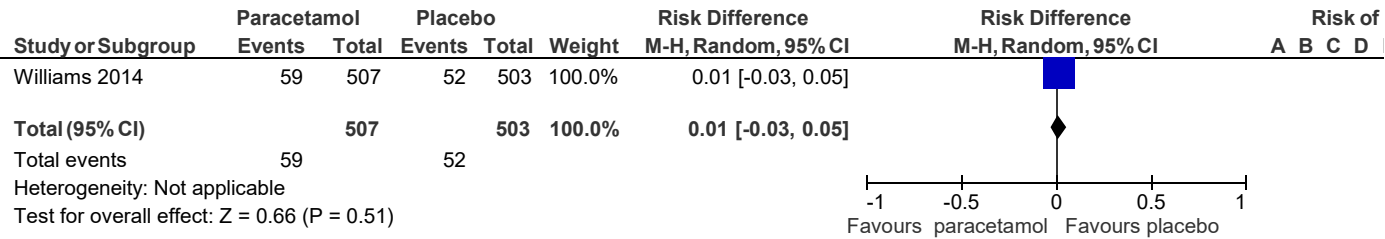


Risk of bias legend

- (A) Random sequence generation (selection bias)
- (B) Allocation concealment (selection bias)
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- (E) Incomplete outcome data (attrition bias)
- (F) Selective reporting (reporting bias)
- (G) Other bias

1 PICO 1 - Paracetamol vs placebo

1.9 Sleep quality



- Risk of bias legend
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 - (E) Incomplete outcome data (attrition bias)
 - (F) Selective reporting (reporting bias)
 - (G) Other bias

PICO 1 Risk of bias

		Risk of bias domains					
		D1	D2	D3	D4	D5	Overall
Study	Nadler 2002						
	Willams 2014						

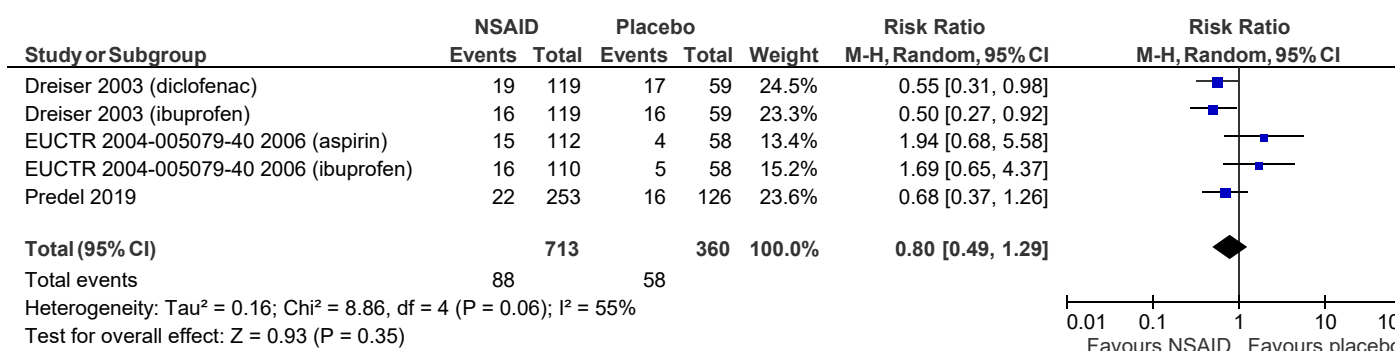
Domains:
D1: Bias arising from the randomization process.
D2: Bias due to deviations from intended intervention.
D3: Bias due to missing outcome data.
D4: Bias in measurement of the outcome.
D5: Bias in selection of the reported result.

Judgement
 High
 Some concerns
 Low

PICO 2 Metaanalyser

3 PICO 2 - NSAID vs placebo

3.7 Adherence

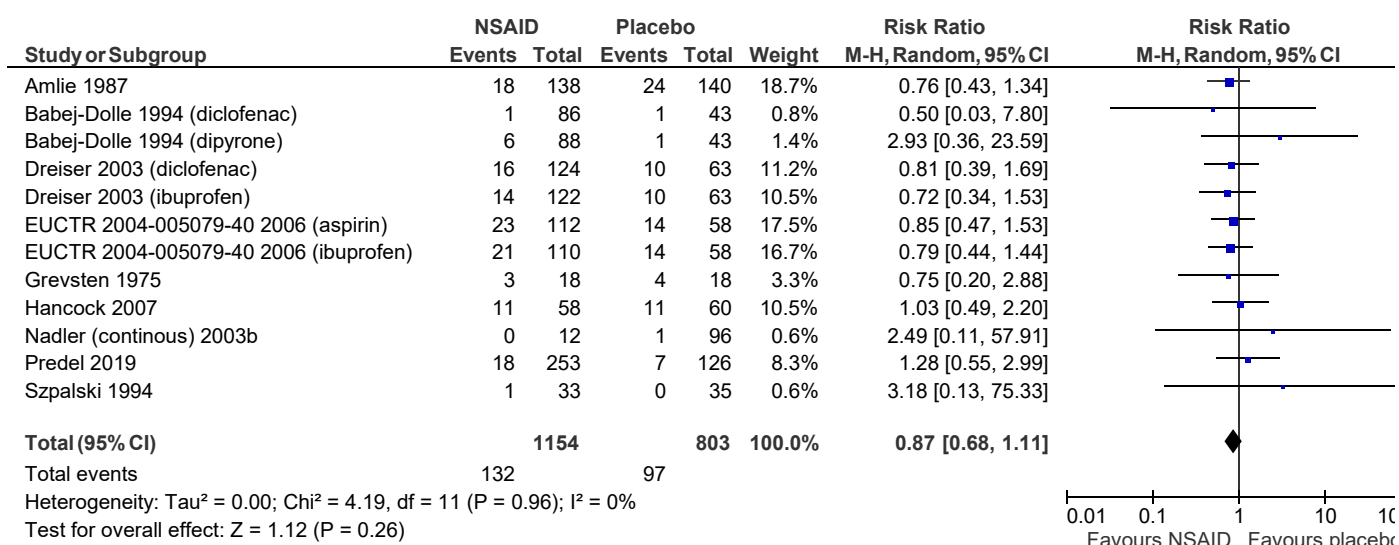


Risk of bias legend

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

3 PICO 2 - NSAID vs placebo

3.10 Adverse events

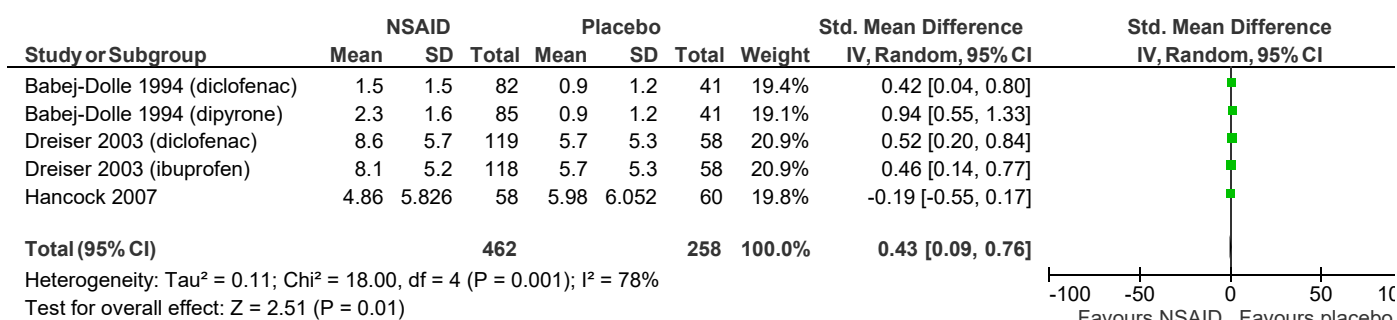


Risk of bias legend

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

3 PICO 2 - NSAID vs placebo

3.1 Disability

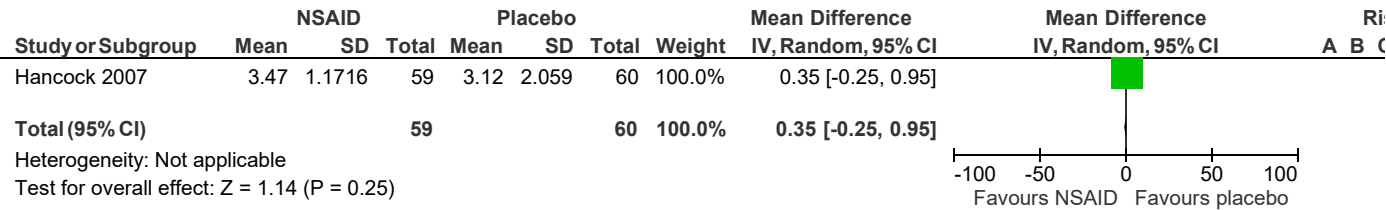


Risk of bias legend

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

3 PICO 2 - NSAID vs placebo

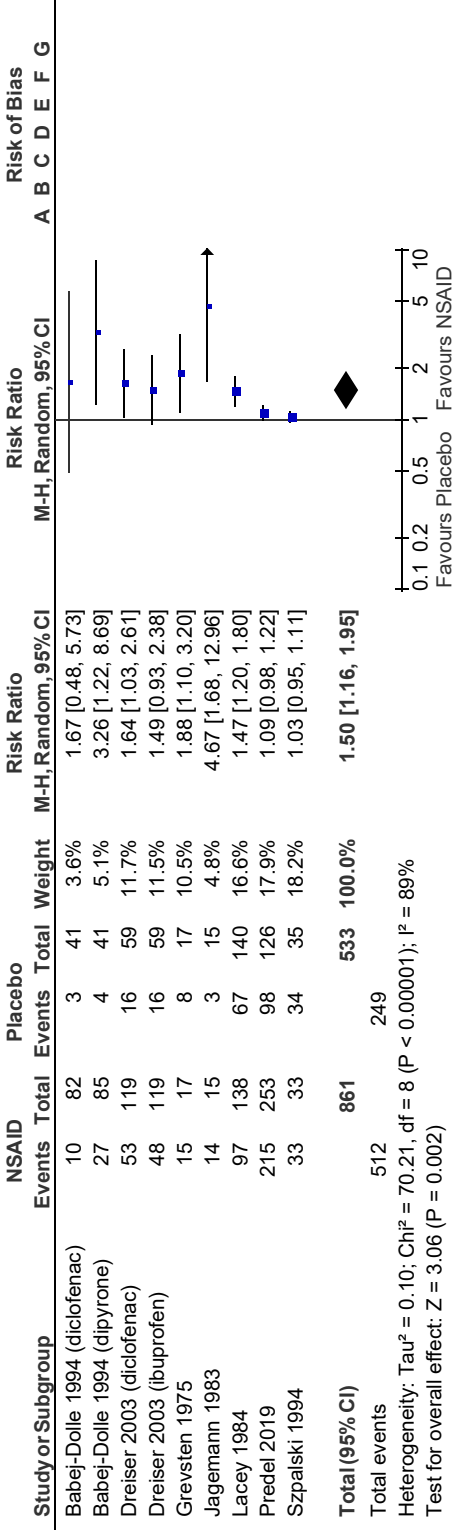
3.2 Global improvement



- Risk of bias legend
- (A) Random sequence generation (selection bias)
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 - (G) Other bias

2 PICO 2 - NSAID vs placebo

2.3 Global improvement

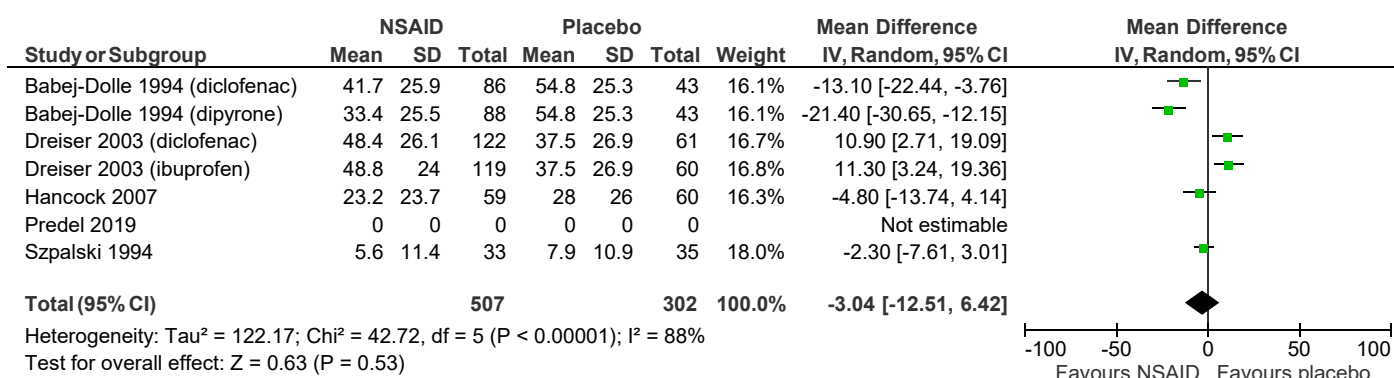


Risk of bias legend

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

3 PICO 2 - NSAID vs placebo

3.5 Pain intensity

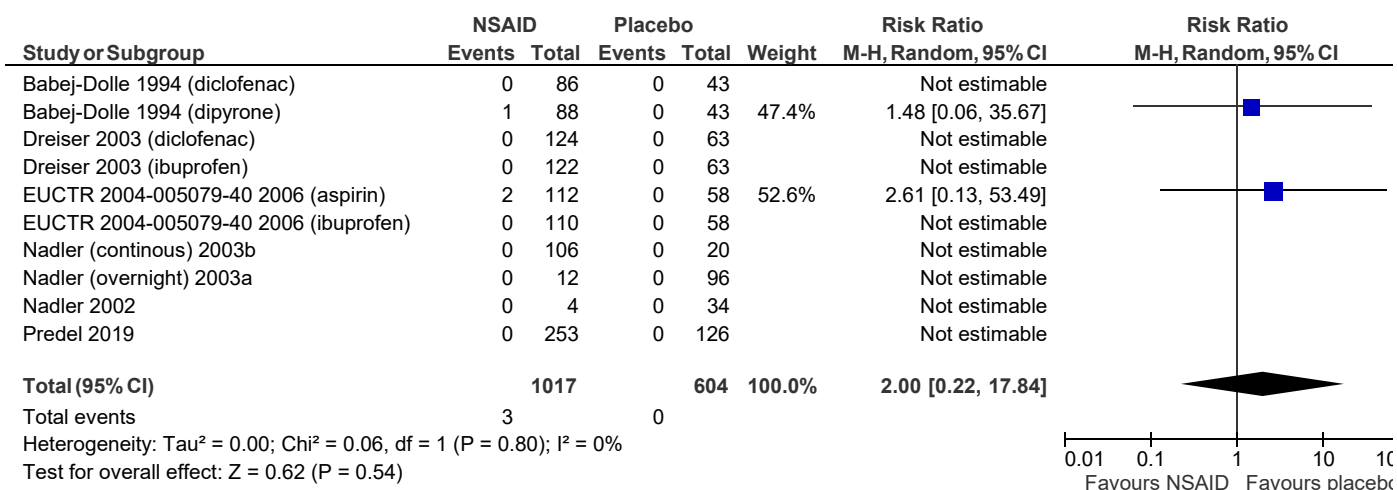


Risk of bias legend

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

3 PICO 2 - NSAID vs placebo

3.4 Serious adverse events



Risk of bias legend

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

PICO 2 Risk of bias

		Risk of bias domains					
		D1	D2	D3	D4	D5	Overall
Study	Amlie 1987 (pain)						
	Babej-Dolle 1994						
	Dreiser 2003 (pain)						
	EUCTR 2004-005079-40 2006 (safety)						
	Grevsten 1975 (safety)						
	Hancock 2007 (pain)						
	Jagemann 1983						
	Lacey 1984						
	Nadler 2002 (pain)						
	Nadler (overnight) 2003						
	Nadler (continous) 2003						
	Predel 2019 (pain)						
	Szpalski 1994 (pain)						
	von Heymann 2013						

Domains:

D1: Bias arising from the randomization process.
D2: Bias due to deviations from intended intervention.
D3: Bias due to missing outcome data.
D4: Bias in measurement of the outcome.
D5: Bias in selection of the reported result.

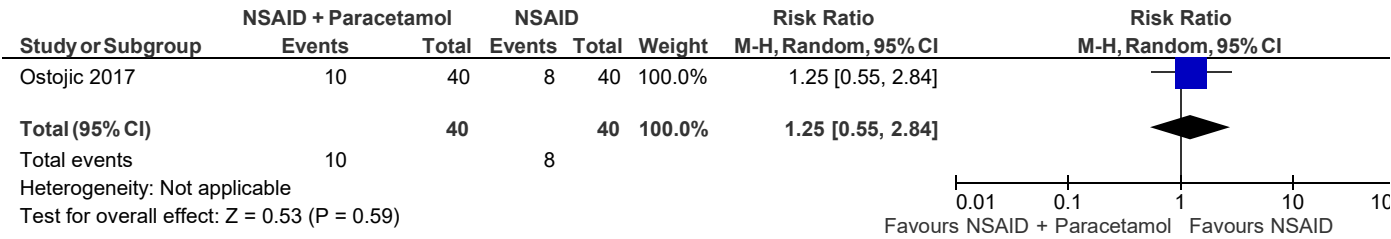
Judgement

High
 Some concerns
 Low

PICO 3 Metaanalyser

4 PICO 4 - NSAID + paracetamol vs NSAID

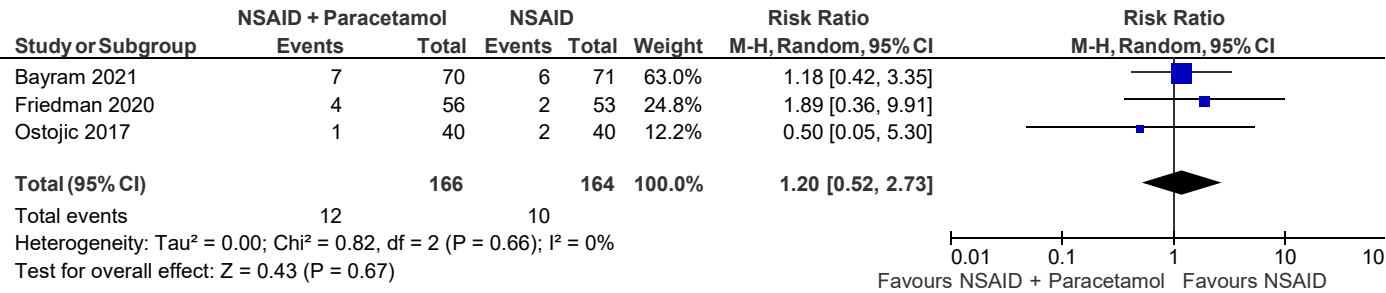
4.7 Adherence



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

4 PICO 4 - NSAID + paracetamol vs NSAID

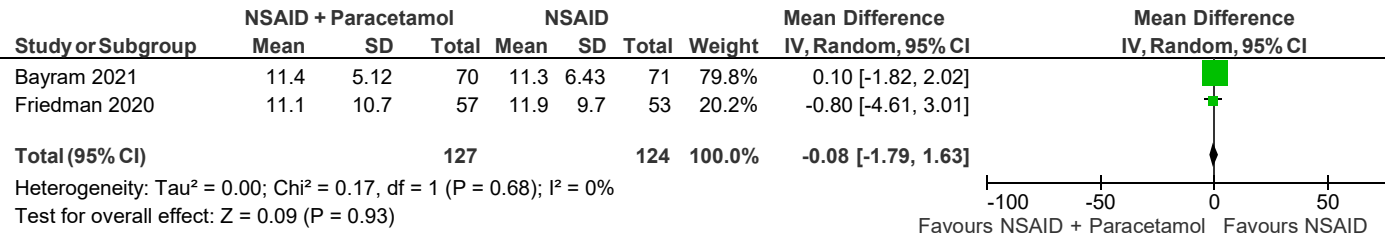
4.10 Adverse events



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

4 PICO 4 - NSAID + paracetamol vs NSAID

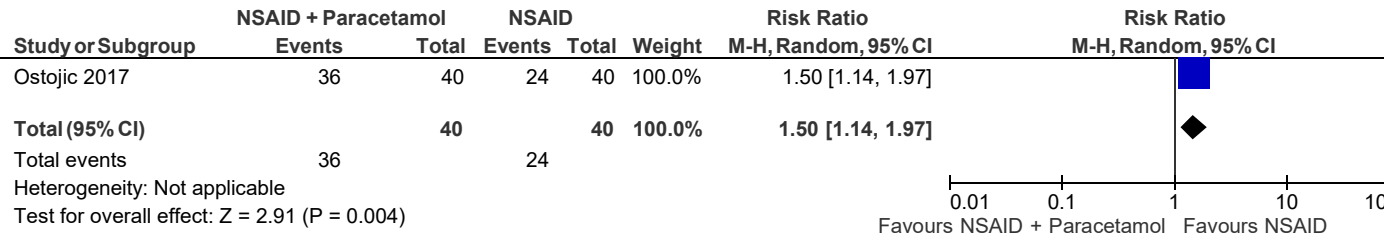
4.1 Disability



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

4 PICO 4 - NSAID + paracetamol vs NSAID

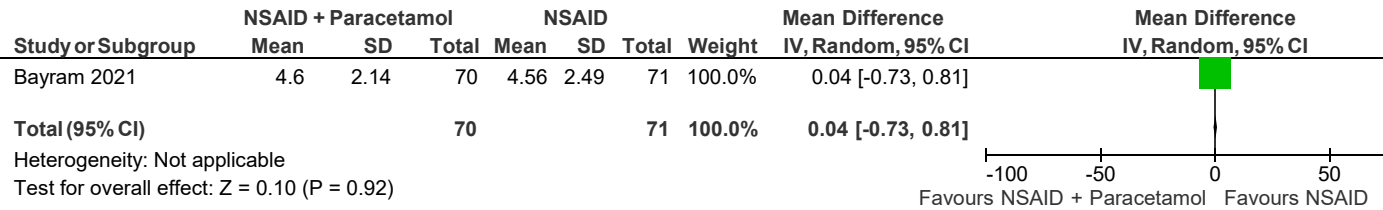
4.3 Global improvement



- Risk of bias legend
- (A) Random sequence generation (selection bias)
 - (B) Allocation concealment (selection bias)
 - (C) Blinding of participants and personnel (performance bias)
 - (D) Blinding of outcome assessment (detection bias)
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 - (G) Other bias

4 PICO 4 - NSAID + paracetamol vs NSAID

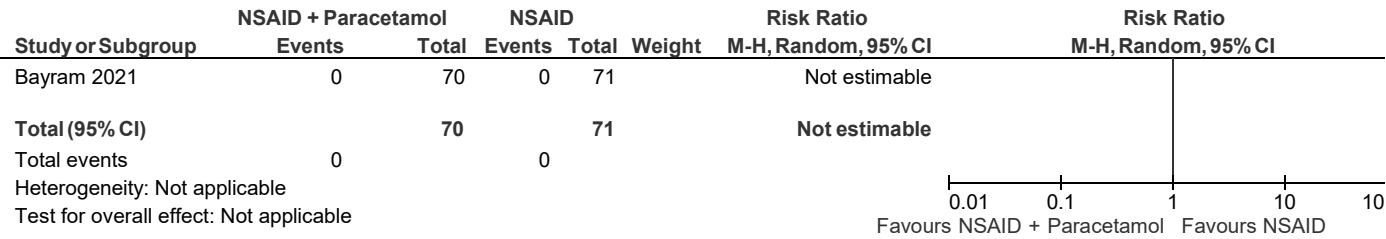
4.5 Pain intensity



- Risk of bias legend
- (A) Random sequence generation (selection bias)
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 - (G) Other bias

4 PICO 4 - NSAID + paracetamol vs NSAID

4.4 Serious adverse events



- Risk of bias legend
- (A) Random sequence generation (selection bias)
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 - (G) Other bias

PICO 3 Risk of bias

		Risk of bias domains					
		D1	D2	D3	D4	D5	Overall
Study	Bayram 2021						
	Friedman 2020						

Domains:

D1: Bias arising from the randomization process.

D2: Bias due to deviations from intended intervention.

D3: Bias due to missing outcome data.

D4: Bias in measurement of the outcome.

D5: Bias in selection of the reported result.

Judgement

 High

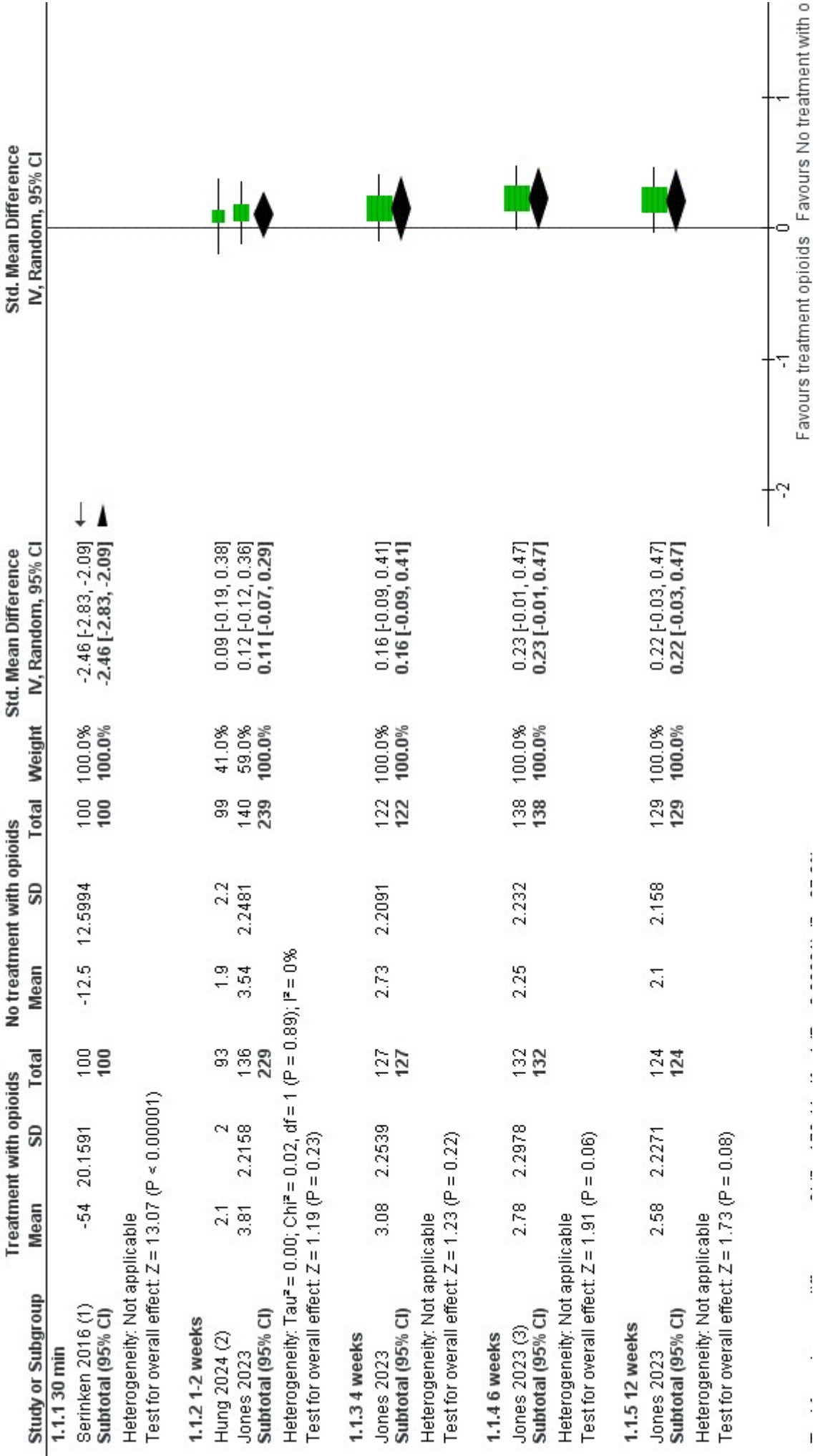
 Some concerns

 Low

PICO 4 Metaanalyser

Figures

Figure 1 (Analysis 1.1)



I test for subgroup differences: $\chi^2 = 119.41$, $df = 4$ ($P < 0.00001$), $I^2 = 97.8\%$

Footnotes

- (1) VAS (100 mm): change score, Median 95% (30 min)
- (2) Pain on a numerical rating scale (NRS) from 0 to 10, lower is better, day 7, final score
- (3) BPI-PS (10 points) at week 6, lower is better, final score

Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.1 Smerteniveau 0-12 uger, hvile.

Figure 2 (Analysis 1.3)

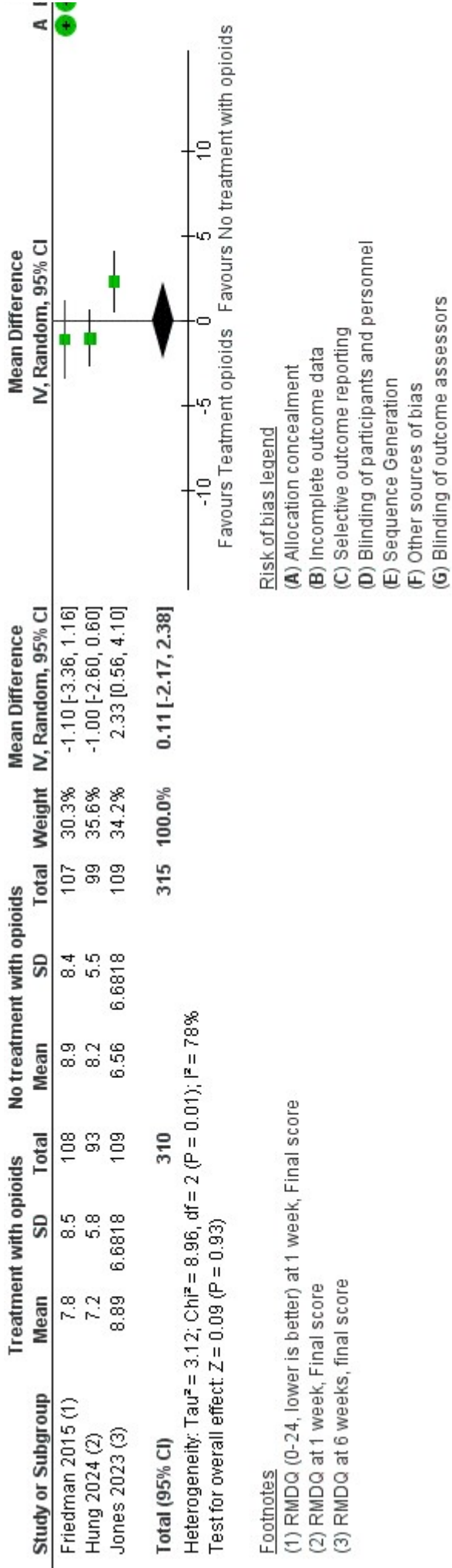


Footnotes

- (1) Pain on a numerical rating scale (NRS) from 0 to 10, lower is better, final score, day 7

Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.3 Smerteniveau 0-12 uger, aktivitet.

Figure 3 (Analysis 1.4)



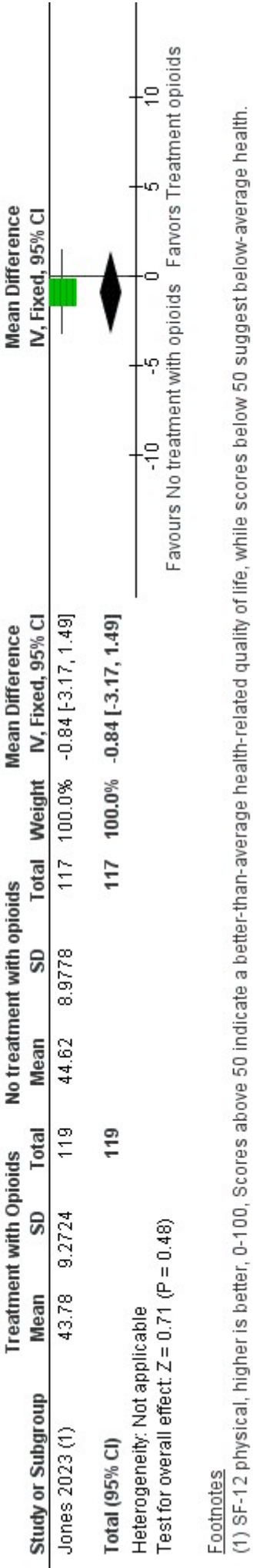
Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.4 Funktionsevne (Disability) 0-12 uger.

Figure 4 (Analysis 1.5)



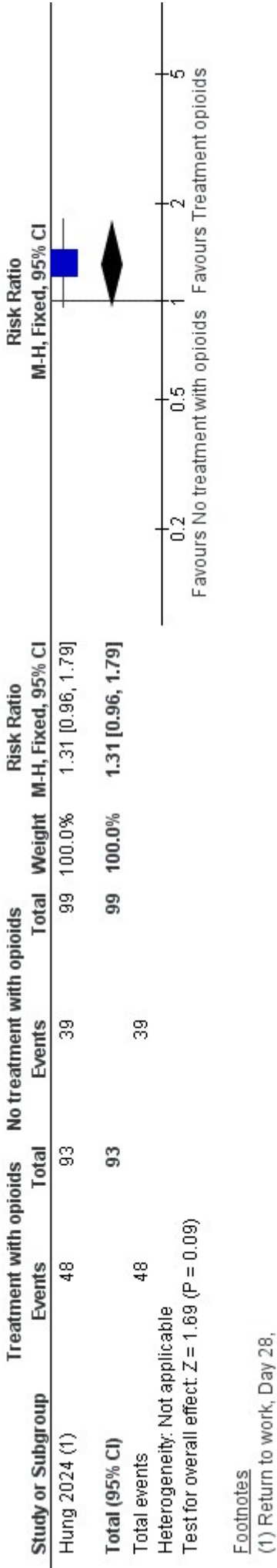
Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.5 Livskvalitet 6-18 måneder, mental.

Figure 5 (Analysis 1.6)



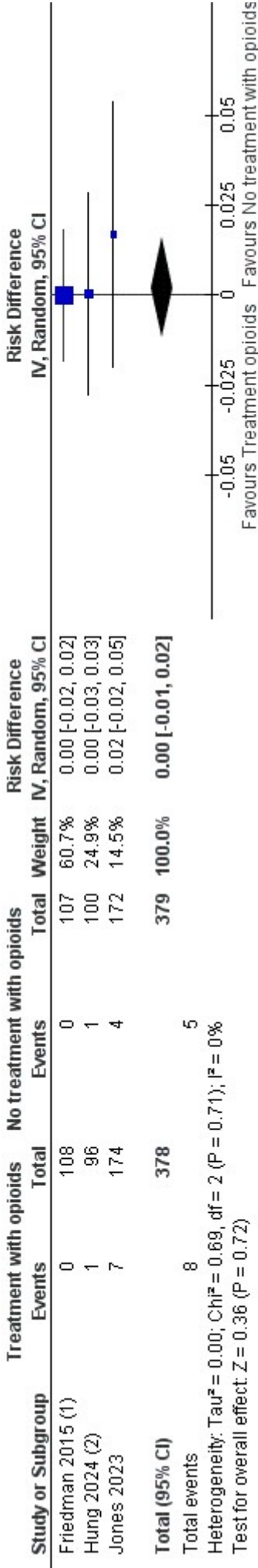
Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.6 Livskvalitet 6-18 måneder, physical.

Figure 6 (Analysis 1.9)



Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.9 Sygefravær Proportion i arbejde - 6-18 måneder.

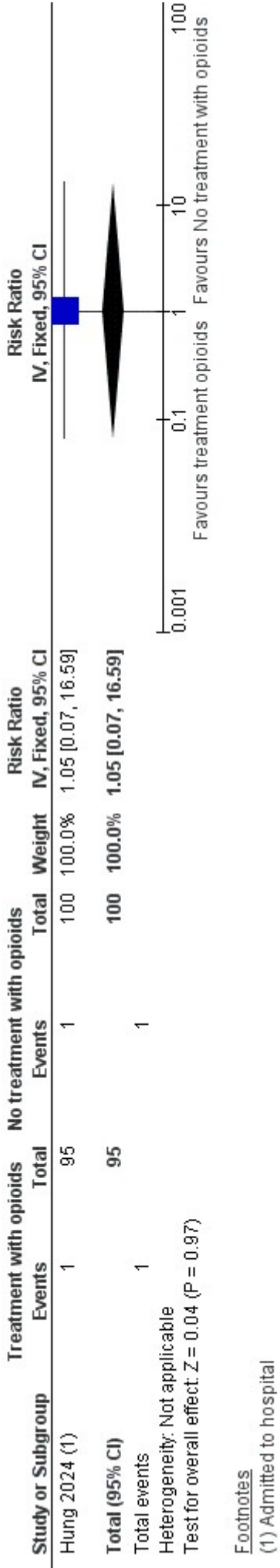
Figure 7 (Analysis 1.10)



Footnotes
(1) All Cause Mortality rapporteret i clinicaltrial: <https://clinicaltrials.gov/study/NCT01587274?tab=results>
(2) Admitted to hospital

Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.10 Alvorlige bivirkninger 0-12 uger_risk difference.

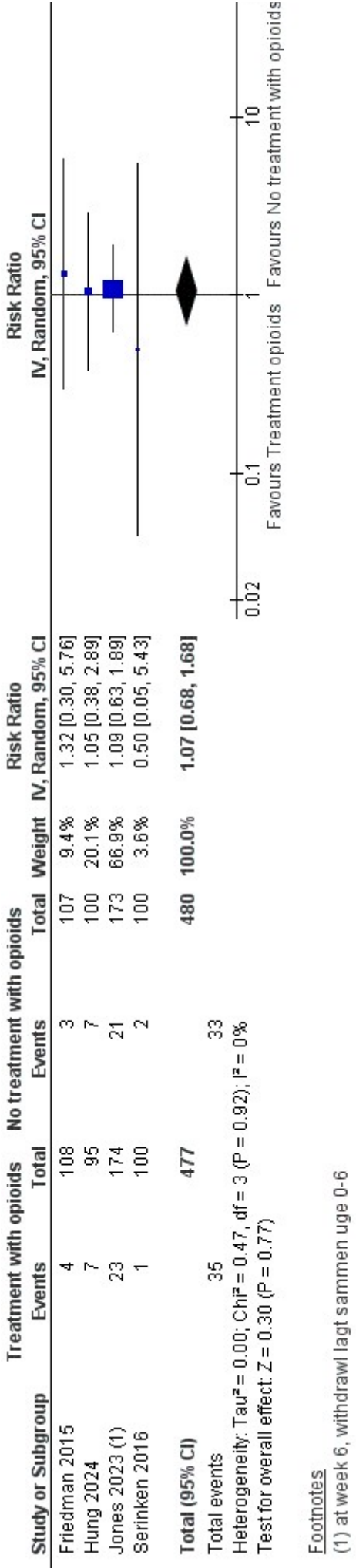
Figure 8 (Analysis 1.11)



Footnotes
(1) Admitted to hospital

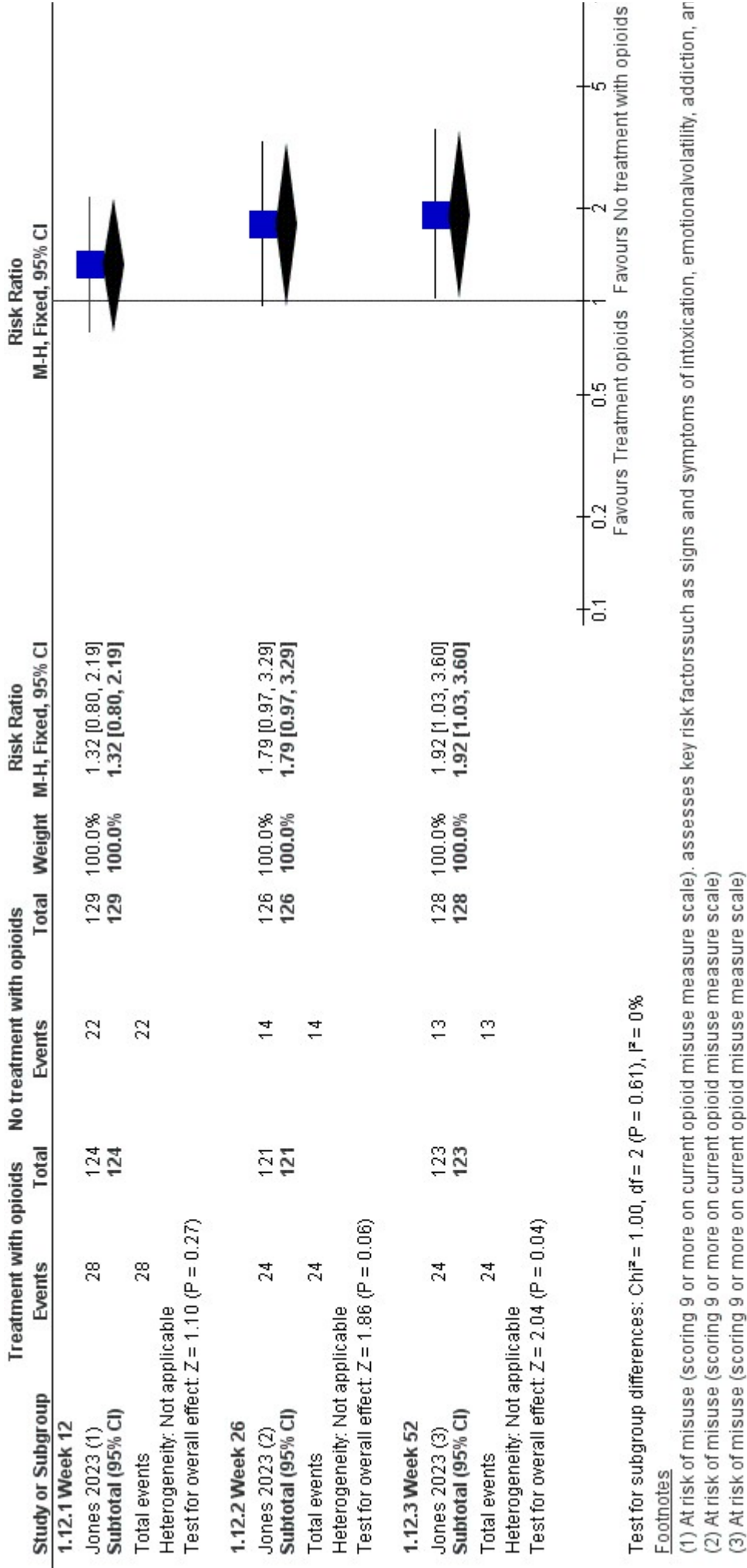
Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.11 Frafald bivirkninger - efter endt behandling.

Figure 9 (Analysis 1.13)



Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.13 Frafald generelt - efter endt behandling.

Figure 10 (Analysis 1.12)



Forest plot of comparison: 1 Opioid vs ingen behandling med opioid, outcome: 1.12 Afhængighed.

PICO 4 Risk of bias

