Appendix I GRADE profiles and results for 'central neuropathic pain'

| Outcome | Profile ID | Follow-up (days) | Number of RCTs | Interventions |
|--|------------|---------------------|----------------|---|
| Critical | | | • | |
| Patient-reported | 1a (pg2) | 28 +/- 7 | 1 | cannabis sativa extract |
| global improvement ¹ (at least moderate improvement) | 1b (pg3) | 56 +/- 7 | 1 | duloxetine |
| Sleep interference | 2a (pg4) | 28 +/- 7 | 1 | cannabis sativa extract |
| normalised 10- point scale² | 2b (pg5) | 84 +/- 14 | 1 | pregabalin |
| Withdrawal due to adverse effects | 3 (pg6) | All time points | 8 | cannabis sativa extract, lamotrigine, levetiracetam, pregabalin |
| Specific adverse effects ³ | 3a-t | All time points | See Apper | ndix J |
| Important | | | | |
| 30% pain relief | 4a (pg10) | 84 +/- 14 | 2 | lamotrigine, pregabalin |
| 50% pain relief | 5a (pg12) | 84 +/- 14 | 1 | pregabalin |
| Pain relief – normalised 10-point | 6a (pg13) | 28 +/- 7 | 4 | cannabis sativa extract, duloxetine, levetiracetam, pregabalin |
| scale | 6b (pg16) | 56 +/- 7 | 2 | duloxetine, levetiracetam |
| 1 | 6c (pg19) | 84 +/- 14 | 2 | levetiracetam, pregabalin |

¹ measured using the 7-point PGIC (patient-reported global impression of change) tool

(it was not possible to synthesise any results for the outcome 'use of rescue medication')

 $^{^2}$ this is the only synthesis possible for the outcome 'patient reported improvement in daily physical and emotional functioning including sleep'

³ completed for 'all neuropathic pain' only.

CRITICAL OUTCOMES (profiles 1 to 3)

Summary GRADE profile 1a: Patient-reported global improvement (at least moderate improvement) (28 +/-7 days) – cannabis sativa extract vs placebo

| Outcom e | Num ber of Studi es | Limitati ons | Inconsiste ncy | Indirectn ess | Imprecis ion | Effect/outc ome | Quali ty | Importa nce |
|---|-------------------------------|------------------------------|--------------------------------|-----------------------------|------------------------------|---|-------------|----------------|
| Patient- reported global improve ment – at least moderate improve ment (28 +/-7 days) | 1 RCT ^a n=66 | very serious ¹ | not applicable ² | not serious ³ | very serious ⁴ | OR: 2.52 (95% CI 0.69 to 9.20) | Very low | Critical |

¹ treatment groups were not comparable at baseline (more in the intervention group were using concomitant tricyclic anti-depressants and less were using NSAIDs than the placebo group); inadequate length of follow-up (no more than 5 weeks for included studies)

Abbreviations: CI, confidence interval; OR, odds ratio; PICO, patient intervention comparator outcome; RCT, randomised controlled trial.



Figure 1 Patient-reported global improvement (at least moderate improvement) - 28 +/-7 days - evidence diagram

Table 1 Patient-reported global improvement (at least moderate improvement) - 28 +/-7 days - notes

² only 1 trial so no possibility of inconsistency

³ all aspects of PICO conform to review protocol

⁴ wide confidence intervals for effect estimate compared to placebo; small study size below optimal information size

^a cannabis sativa extract vs placebo (n=66): Rog et al. (2005); concomitant drugs permitted

Summary GRADE profile 1b: Patient-reported global improvement (at least moderate improvement) (56 +/-7 days) – duloxetine vs placebo

| Outcom e | Num ber of Studi es | Limitati ons | Inconsiste ncy | Indirectn ess | Imprecis ion | Effect/outc ome | Quali ty | Importa nce |
|---|-------------------------------|-----------------------------|--------------------------------|-----------------------------|------------------------------|--|-------------|----------------|
| Patient- reported global improve ment – at least moderate improve ment (56 +/-7 days) | 1 RCT ^a n=48 | not serious ¹ | not applicable ² | not serious ³ | very serious ⁴ | OR: 2.55 (95% CI 0.51 to 12.82) | Low | Critical |

¹ no major concerns with risk of bias

Abbreviations: CI, confidence interval; OR, odds ratio; PICO, patient intervention comparator outcome; RCT, randomised controlled trial.

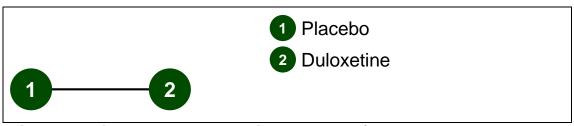


Figure 2 Patient-reported global improvement (at least moderate improvement) - 56 +/-7 days - evidence diagram

Table 2 Patient-reported global improvement (at least moderate improvement) - 56 +/-7 days - notes

² only 1 trial so no possibility of inconsistency

³ all aspects of PICO conform to review protocol

⁴ wide confidence intervals for effect estimate compared to placebo; small number of events; study size below optimal information size

^a Duloxetine vs placebo (n=48): Vranken et al. (2011); concomitant drugs permitted if stable except antidepressants

Summary GRADE profile 2a: Sleep interference on normalised 10-point scale (28 +/- 7d) – cannabis sativa extract vs placebo

| Outcom e | Numb er of Studi es | Limitati ons | Inconsiste ncy | Indirectn ess | Imprecis ion | Effect/outc ome | Quali ty | Importa nce |
|---|-------------------------------|------------------------------|--------------------------------|-----------------------------|----------------------|--|-------------|----------------|
| Sleep interfere nce on normalis ed 10- point scale (follow up 28 days) | 1 RCT ^a n=65 | very serious ¹ | not applicable ² | not serious ³ | serious ⁴ | MD: -1.74 (95% CI -2.99 to -0.49) | Low | Critical |

¹ treatment groups were not comparable at baseline (more in the intervention group were using concomitant tricyclic anti-depressants and less were using NSAIDs than the placebo group); inadequate length of follow-up (no more than 5 weeks for included studies)

Abbreviations: CI, confidence interval; MD, mean difference; PICO, patient intervention comparator outcome; RCT, randomised controlled trial.

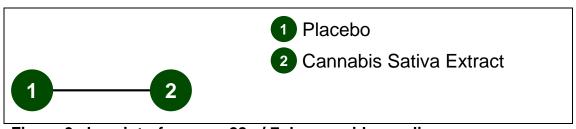


Figure 3 sleep interference - 28 +/-7 days - evidence diagram

Table 3 sleep interference - 28 +/-7 days - notes

² only 1 trial so no possibility of inconsistency

³ all aspects of PICO conform to review protocol

⁴ confidence intervals for effect estimate compared to placebo do not cross 'no effect'; small number of events; study size below optimal information size

^a Cannabis sativa extract vs placebo (n=65): Rog et al. (2005); concomitant amitriptyline permitted

Summary GRADE profile 2c: Sleep interference on normalised 10-point scale (84 +/- 14d) – pregabalin vs placebo

| Outcom e | Numb er of Studi es | Limitati ons | Inconsiste ncy | Indirectn ess | Imprecis ion | Effect/outc ome | Quali ty | Importa nce |
|---|--------------------------------|----------------------|--------------------------------|-----------------------------|----------------------|--|-------------|----------------|
| Sleep interfere nce on normalis ed 10- point scale (follow up 84 days) | 1 RCT ^a n=135 | serious ¹ | not applicable ² | not serious ³ | serious ⁴ | MD: -1.16 (95% CI -2.05 to -0.27) | Low | Critical |

¹ allocation concealment unclear; groups appear different at baseline in concomitant medication usage; more patients completed the trial in the placebo group

Abbreviations: CI, confidence interval; MD, mean difference; PICO, patient intervention comparator outcome; RCT, randomised controlled trial.

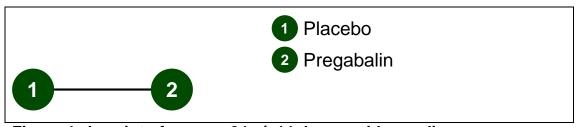


Figure 4 sleep interference - 84 +/- 14 days - evidence diagram

Table 4 sleep interference - 84 +/- 14 days - notes

² only 1 trial so no possibility of inconsistency

³ all aspects of PICO conform to review protocol

⁴ confidence intervals for direct effect estimates against placebo appear small enough (do not include appreciable benefit or harm); small number of events; study size below optimal information size

^a Pregabalin vs placebo (n=135): Siddall et al. (2006); concomitant medications permitted

Summary GRADE profile 3: Network meta-analysis for withdrawal due to adverse effects at any time point

| Outcome | Numbe r of Studie s | Limitation s | Inconsistenc y | Indirectnes s | Imprecisio n | Qualit y | Importanc e |
|--|---------------------------------|------------------------------|--------------------------|--------------------------|----------------------|-------------|----------------|
| Withdraw al due to adverse effects at any time | 8 RCTs ^a n=638 | very serious ² | not serious ³ | not serious ⁴ | serious ⁵ | very low | Critical |

¹ in 1 study, groups were not comparable at baseline and in 5 studies it was unclear if they were comparable at baseline; concomitant drugs permitted varies across the studies in the network; one study was single-blind

levetiracetam (n=80): Falah et al. (2012), Rossi et al. (2009); concomitant medication not permitted pregabalin (n=396): Kim et al. (2011), Siddall et al. (2006), Vranken et al. (2008); concomitant medication permitted in all but excluding gabapentin in one

[All compared to placebo]

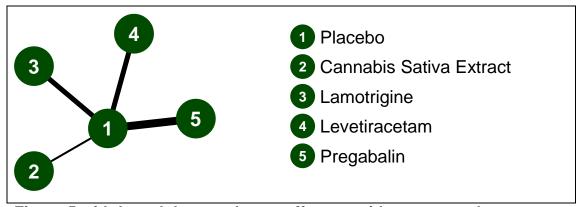


Figure 5 withdrawal due to adverse effects - evidence network

² it was not possible to assess heterogeneity for pairwise comparisons; there appeared to be consistency between direct and indirect estimates

³ all aspects of PICO conform to review protocol

⁴ no head-to-head trials; wide confidence intervals for hazard ratios

^a cannabis sativa extract (n=66): Rog et al. (2005); concomitant medication permitted lamotrigine (n=96): Breuer et al. (2007), Vestergaard et al. (2001); concomitant medication permitted in one (except anti-convulsants) but not the other

Table 5 withdrawal due to adverse effects - trials included in analysis

| | Placebo | Cannabis Sativa Extract | Lamotrigine | Levetiracetam |
|----------------------------|--|----------------------------|-------------|---------------|
| Cannabis Sativa Extract | 1 RCT ⁴ total n=66 | | | |
| Lamoungine | 2 RCTs ^{1,7} total n=96 | - | | |
| Leveliracetam | 2 RCTs ^{2,5} total n=80 | - | - | |
| Pregabalin | 3 RCTs ^{3,6,8} total n=396 | - | - | - |

⁽¹⁾ Breuer et al. (2007); (2) Falah et al. (2012); (3) Kim et al. (2011); (4) Rog et al. (2005); (5) Rossi et al. (2009); (6) Siddall et al. (2006); (7) Vestergaard et al. (2001); (8) Vranken et al. (2008)

Table 6 withdrawal due to adverse effects - relative effectiveness of all pairwise combinations

| | Placebo | Cannabis Sativa Extract | Lamotrigine | Levetiracetam | Pregabalin |
|----------------------------|-------------------------|----------------------------|-----------------------|----------------------|------------|
| Placebo | | N/A | N/A | N/A | N/A |
| Cannabis Sativa Extract | 5.40 (0.10, 5838.00) | | N/A | N/A | N/A |
| Lamotrigine | 9.26 (0.91, 464.30) | 1.74 (0.00, 488.70) | | N/A | N/A |
| II evetiracetam | 4.99 (0.62, 89.47) | 0.92 (0.00, 134.70) | 0.54 (0.01, 21.73) | | N/A |
| Pregabalin | 1.70 (0.46, 5.91) | 0.31 (0.00, 19.26) | 0.18 (0.00, 2.53) | 0.34 (0.01, 3.70) | |

Values given are hazard ratios.

The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the mean of the posterior distribution, and numbers in parentheses are 95% credible intervals. Because it is not easily possible to derive analogous estimates of hazard ratios from a frequentist analysis of direct data only, the segment above and to the right of the shaded cells is left blank.

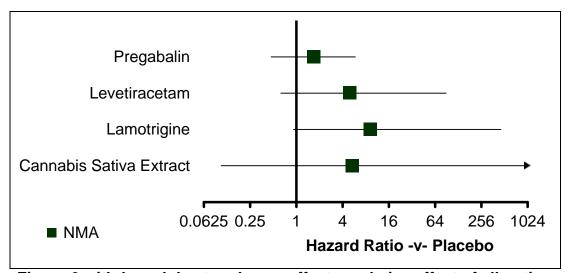


Figure 6 withdrawal due to adverse effects - relative effect of all options compared with placebo

(values less than 1 favour the treatment; values greater than 1 favour placebo; solid error bars are 95% credible intervals)

Table 7 withdrawal due to adverse effects - rankings for each comparator

| | Probability best | Median rank (95%CI) |
|-------------------------|------------------|---------------------|
| Placebo | 0.632 | 1 (1, 3) |
| Cannabis Sativa Extract | 0.193 | 4 (1, 5) |
| Lamotrigine | 0.021 | 4 (2, 5) |
| Levetiracetam | 0.047 | 4 (1, 5) |
| Pregabalin | 0.107 | 2 (1, 4) |

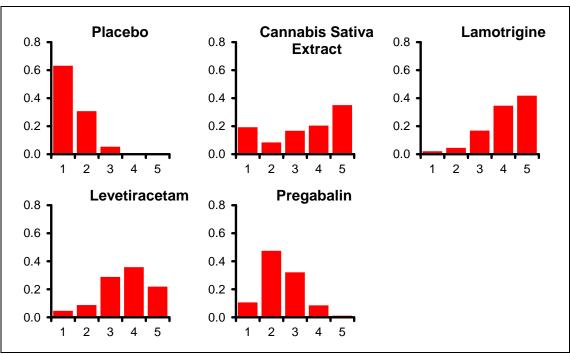


Figure 7 withdrawal due to adverse effects - rank probability histograms

Table 8 withdrawal due to adverse effects - model fit statistics

| Residual deviance | Dbar | Dhat | pD | DIC | tau-squared |
|------------------------------|--------|--------|--------|--------|-------------------------------|
| 14.52 | 57.003 | 11 700 | 12 215 | 60 210 | 0.000 (95%Crl: 0.001, 6.798) |
| (compared to 16 data-points) | 37.003 | 44.700 | 12.213 | 09.219 | 0.000 (93 %C11. 0.001, 0.798) |

Table 9 withdrawal due to adverse effects - notes

- Random-effects model was used, with 0.5 added to cells of trials with 1 or more zero cell-count.
- 10000 burn-ins and 50000 iterations.
- Model convergence: there was poor autocorrelation for cannabis sativa and lamotrigine because of small numbers of events in the studies for these interventions.
- Leijon and Bovie (1989) was not included in this network as it had zero events in all study arms.

IMPORTANT OUTCOMES (profiles 4 to 6)

Summary GRADE profile 4a: Network meta-analysis for at least 30% pain relief (84 days +/-14 days)

| Outcom e | Numbe r of Studie s | Limitation s | Inconsistenc y | Indirectnes s | Imprecisio n | Qualit y | Importanc e |
|--|---------------------------------|------------------------------|--------------------------|--------------------------|------------------------------|-------------|----------------|
| ≥ 30% pain relief on any scale (follow up 84 days) | 2 RCTs ^a n=173 | very serious ¹ | not serious ² | not serious ³ | very serious ⁴ | Very low | Important |

¹ 1 of 2 studies was a crossover study; groups were not comparable at baseline in one study and it was unclear if they were comparable in another study (including for concomitant medications); unclear about allocation concealment in both studies; concomitant drugs permitted varies across the studies in the network; attrition bias in both studies

pregabalin (n=137): Siddall et al. (2006); concomitant drugs permitted with the exception of gabapentin [all compared to placebo]

Abbreviations: PICO, patient intervention comparator outcome; RCT, randomised controlled trial.

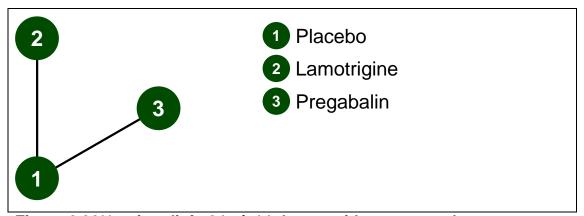


Figure 8 30% pain relief - 84 +/- 14 days - evidence network

Table 10 30% pain relief - 84 +/- 14 days - trials included in analysis

| | • | • |
|-------------|-----------------------------------|-------------|
| | Placebo | Lamotrigine |
| Lamotrigine | 1 RCT ¹ total n=36 | |
| Pregabalin | 1 RCT ² total n=137 | - |

⁽¹⁾ Breuer et al. (2007); (2) Siddall et al. (2006)

² only one trial per 'link' so no possibility of inconsistency for each pairwise comparison; no loops in networks so no possibility of inconsistency between direct and indirect estimates

³ all aspects of PICO conform to review protocol

⁴ there are no head-to-head trials; only 1 trial for each 'link' in the network; wide confidence intervals for effect estimate compared to placebo and for the overall ranking within the network

^a lamotrigine (n=36): Breuer et al. (2007); concomitant opioids, lidocaine patch, gabapentin permitted but use of another anti-convulsants not permitted

Table 11 30% pain relief - 84 +/- 14 days - relative effectiveness of all pairwise combinations

| | Placebo | Lamotrigine | Pregabalin |
|-------------|-----------------------|-----------------------|----------------------|
| Placebo | | 3.08 (0.51, 18.53) | 3.60 (1.61, 8.03) |
| Lamotrigine | 3.47 (0.59, 30.16) | | - |
| Pregabalin | 3.69 (1.68, 8.54) | 1.06 (0.11, 7.57) | |

Values given are odds ratios.

The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the mean of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

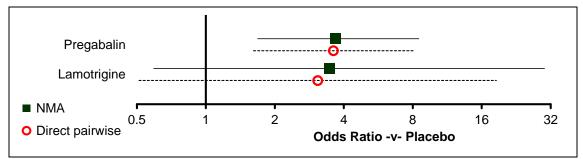


Figure 9 30% pain relief - 84 +/- 14 days - relative effect of all options compared with placebo

(values less than 1 favour placebo; values greater than 1 favour the treatment; solid error bars are 95% credible intervals while dashed error bars are 95% confidence intervals)

Table 12 30% pain relief - 84 +/- 14 days - rankings for each comparator

| | Probability best | Median rank (95%CI) |
|-------------|------------------|---------------------|
| Placebo | 0.000 | 3 (2, 3) |
| Lamotrigine | 0.477 | 2 (1, 3) |
| Pregabalin | 0.523 | 1 (1, 2) |

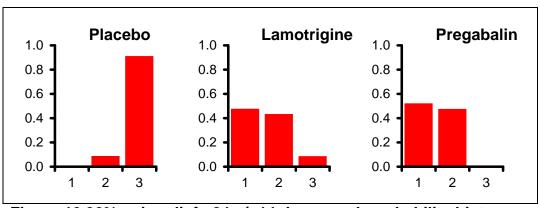


Figure 10 30% pain relief - 84 +/- 14 days - rank probability histograms

Table 13 30% pain relief - 84 +/- 14 days - model fit statistics

| Residual deviance | Dbar | Dhat | pD | DIC |
|-----------------------------|--------|--------|-------|--------|
| 4.118 | 19 522 | 14.525 | 2 009 | 22 522 |
| (compared to 4 data-points) | 10.525 | 14.525 | 3.990 | 22.322 |

Table 14 30% pain relief - 84 +/- 14 days - notes

- Fixed-effects model was used.
- 10000 burn-ins and 50000 iterations.

Summary GRADE profile 5a: At least 50% pain relief (84 days +/-14 days) – pregabalin vs placebo

| Outco me | Numb er of Studi es | Limitati ons | Inconsiste ncy | Indirectn ess | Imprecis ion | Effect/outc ome | Quali ty | Importa nce |
|--|--------------------------------|----------------------|-----------------------------|-----------------------------|------------------------------|---|-------------|----------------|
| ≥ 50% pain relief on any scale (follow up 84 days) | 1 RCT ^a n=168 | serious ¹ | not applicable ² | not serious ³ | very serious ⁴ | OR: 3.38 (95% CI 1.15 to 9.91) | Very low | Importan t |

¹ allocation concealment unclear; groups appear different at baseline with respect to concomitant medication usage; more patients completed the trial in the placebo group

Abbreviations: CI, confidence interval; OR, odds ratio; PICO, patient intervention comparator outcome; RCT, randomised controlled trial.

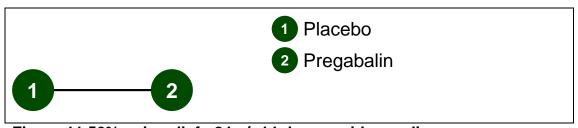


Figure 11 50% pain relief - 84 +/- 14 days - evidence diagram

Table 15 50% pain relief - 84 +/- 14 days - notes

² only 1 trial so no possibility of inconsistency

³ all aspects of PICO conform to review protocol

⁴ wide confidence intervals for effect estimate compared to placebo; small number of events; study size below optimal information size

^a pregabalin vs placebo (n=168): Siddall et al. (2006); concomitant drugs permitted with the exception of gabapentin

Summary GRADE profile 6a: Network meta-analysis for pain relief on normalised 10-point scale (28 +/- 7 days)

| Outcome | Numbe r of Studie s | Limitation s | Inconsistenc y | Indirectnes s | Imprecisio n | Qualit y | Importanc e |
|---|---------------------------------|----------------------|--------------------------|--------------------------|------------------------------|-------------|----------------|
| Pain relief on normalise d 10-point scale (follow up 28 days) | 4 RCTs ^a n=172 | serious ¹ | not serious ² | not serious ³ | very serious ⁴ | Very low | Important |

¹ unclear about allocation concealment in 3 studies; concomitant drugs permitted varies across the studies in the network; one study was single-blind

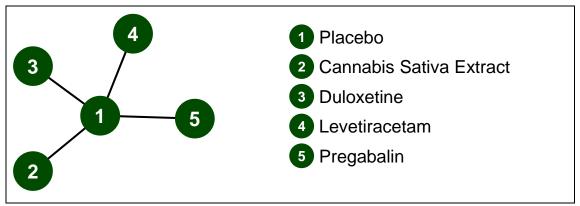


Figure 12 pain (continuous) - 28 +/-7 days - evidence network

² only one trial per 'link' so no possibility of inconsistency for each pairwise comparison; no loops in networks so no possibility of inconsistency between direct and indirect estimates

³ all aspects of PICO conform to review protocol

⁴ no head-to-head trials; only one trial for each 'link'; confidence intervals for the overall ranking in the network is large

^a cannabis sativa extract (n=65): Rog et al. (2005); concomitant drugs permitted duloxetine (n=48): Vranken et al. (2011); concomitant drugs permitted if stable except anti-depressants levetiracetam (n=19): Rossi et al. (2009); concomitant drugs not permitted pregabalin (n=40): Vranken et al. (2008); concomitant drugs permitted [all compared to placebo]

Table 16 pain (continuous) - 28 +/-7 days - trials included in analysis

| | Placebo | Cannabis Sativa Extract | Duloxetine | Levetiracetam |
|----------------------------|----------------------------------|----------------------------|------------|---------------|
| Cannabis Sativa Extract | 1 RCT ¹ total n=65 | | | |
| Duloxetine | 1 RCT⁴ total n=48 | - | | |
| Levetiracetam | 1 RCT ² total n=19 | - | - | |
| Pregabalin | 1 RCT ³ total n=40 | - | - | - |

⁽¹⁾ Rog et al. (2005); (2) Rossi et al. (2009); (3) Vranken et al. (2008); (4) Vranken et al. (2011)

Table 17 pain (continuous) - 28 +/-7 days - relative effectiveness of all pairwise combinations

| | Placebo | Cannabis Sativa Extract | Duloxetine | Levetiracetam | Pregabalin |
|----------------------------|-------------------------|----------------------------|-------------------------|------------------------|-------------------------|
| Placebo | | -1.32 (-2.28, -0.36) | -0.50 (-1.51, 0.51) | -1.51 (-3.30, 0.28) | -2.40 (-3.77, -1.03) |
| Cannabis Sativa Extract | -1.32 (-2.28, -0.36) | | - | - | - |
| Duloxetine | -0.50 (-1.51, 0.51) | 0.82 (-0.58, 2.22) | | - | - |
| Levetiracetam | -1.52 (-3.31, 0.28) | -0.20 (-2.24, 1.85) | -1.02 (-3.07, 1.04) | | - |
| Pregabalin | -2.40 (-3.78, -1.04) | -1.08 (-2.76, 0.59) | -1.90 (-3.61, -0.20) | -0.88 (-3.15, 1.36) | |

Values given are mean differences.

The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the mean of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

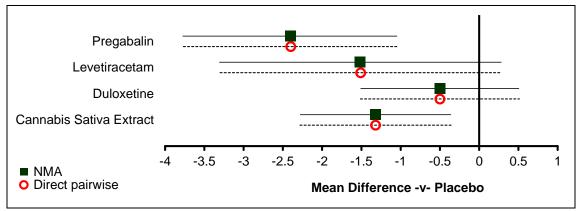


Figure 13 pain (continuous) - 28 +/-7 days - relative effect of all options compared with placebo

(values less than 0 favour the treatment; values greater than 0 favour placebo; solid error bars are 95% credible intervals while dashed error bars are 95% confidence intervals)

Table 18 pain (continuous) - 28 +/-7 days - rankings for each comparator

| | Probability best | Median rank (95%CI) |
|-------------------------|------------------|---------------------|
| Placebo | 0.000 | 5 (4, 5) |
| Cannabis Sativa Extract | 0.063 | 3 (1, 4) |
| Duloxetine | 0.003 | 4 (2, 5) |
| Levetiracetam | 0.205 | 2 (1, 5) |
| Pregabalin | 0.729 | 1 (1, 3) |

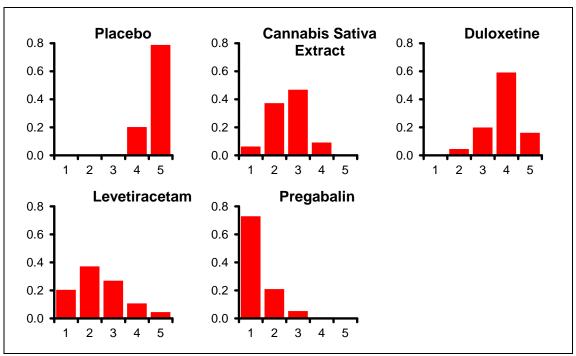


Figure 14 pain (continuous) - 28 +/-7 days - rank probability histograms

Table 19 pain (continuous) - 28 +/-7 days - model fit statistics

| Residual deviance | Dbar | Dhat | рD | DIC |
|-----------------------------|-------|-------|----|--------|
| 8 | 9 705 | 1.705 | 8 | 17.705 |
| (compared to 8 data-points) | 5.705 | 1.700 | | 17.703 |

Table 20 pain (continuous) - 28 +/-7 days - notes

- Fixed-effects model was used.
- 10000 burn-ins and 50000 iterations.

Summary GRADE profile 6b: Network meta-analysis for pain relief on normalised 10-point scale (56 +/- 7d)

| Outcome | Numbe r of Studie s | Limitation s | Inconsistenc y | Indirectnes s | Imprecisio n | Qualit y | Importanc e |
|---|--------------------------------|------------------------------|--------------------------|--------------------------|------------------------------|-------------|----------------|
| Pain relief on normalise d 10-point scale (follow up 56 days) | 2 RCTs ^a n=67 | very serious ¹ | not serious ² | not serious ³ | very serious ⁴ | Very low | Important |

¹ unclear about allocation concealment in one study; concomitant drugs permitted varies across the studies in the network; one study was single-blind

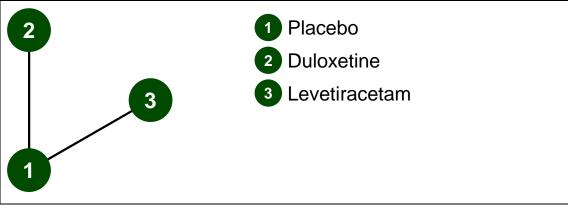


Figure 15 pain (continuous) - 56 +/-7 days - evidence network

² only 1 trial for each arm so no possibility of inconsistency between studies for a pairwise comparison; no loops in networks so no possibility of inconsistency between direct and indirect estimates

³ all aspects of PICO conform to review protocol

⁴ no head-to-head trials; only one trial for each 'link'; wide confidence intervals for overall ranking in the network

^a duloxetine (n=48): Vranken et al. (2011); concomitant drugs permitted if stable except anti-depressants levetiracetam (n=19): Rossi et al. (2009); concomitant drugs not permitted [all compared to placebo]

Table 21 pain (continuous) - 56 +/-7 days - trials included in analysis

| | Placebo | Duloxetine |
|---------------|----------------------------------|------------|
| Duloxetine | 1 RCT ² total n=48 | |
| Levetiracetam | 1 RCT ¹ total n=19 | - |

⁽¹⁾ Rossi et al. (2009); (2) Vranken et al. (2011)

Table 22 pain (continuous) - 56 +/-7 days - relative effectiveness of all pairwise combinations

| | Placebo | Duloxetine | Levetiracetam |
|---------------|-------------------------|-------------------------|-------------------------|
| Placebo | | -1.00 (-1.91, -0.09) | -2.71 (-4.45, -0.97) |
| Duloxetine | -1.00 (-1.91, -0.09) | | - |
| Levetiracetam | -2.71 (-4.45, -0.98) | -1.71 (-3.67, 0.25) | |

Values given are mean differences.

The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the mean of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

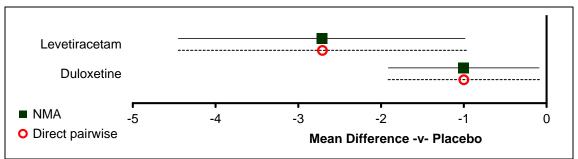


Figure 16 pain (continuous) - 56 +/-7 days - relative effect of all options compared with placebo

(values less than 0 favour the treatment; values greater than 0 favour placebo; solid error bars are 95% credible intervals while dashed error bars are 95% confidence intervals)

Table 23 pain (continuous) - 56 +/-7 days - rankings for each comparator

| | Probability best | Median rank (95%Cl | | |
|---------------|------------------|--------------------|--|--|
| Placebo | 0.000 | 3 (3, 3) | | |
| Duloxetine | 0.044 | 2 (1, 2) | | |
| Levetiracetam | 0.956 | 1 (1, 2) | | |

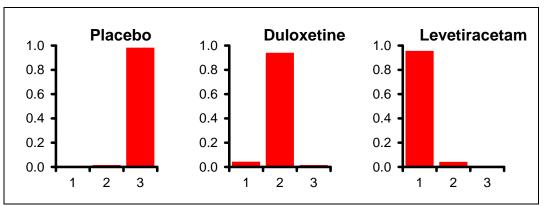


Figure 17 pain (continuous) - 56 +/-7 days - rank probability histograms

Table 24 pain (continuous) - 56 +/-7 days - model fit statistics

| Residual deviance | Dbar | Dhat | pD | DIC |
|-----------------------------|------|-------|-------|-------|
| 3.989 | 4.91 | 0.921 | 3 080 | 8 800 |
| (compared to 4 data-points) | 4.91 | 0.321 | 3.909 | 0.099 |

Table 25 pain (continuous) - 56 +/-7 days - notes

- Fixed-effects model was used.
- 10000 burn-ins and 50000 iterations.

Summary GRADE profile 6c: Network meta-analysis for pain relief on normalised 10-point scale (84 +/- 14days)

| Outcome | Numbe r of Studie s | Limitation s | Inconsistenc y | Indirectnes s | Imprecisio n | Qualit y | Importanc e |
|---|---------------------------------|------------------------------|--------------------------------|--------------------------|------------------------------|-------------|----------------|
| Pain relief on normalise d 10-point scale (follow up 84 days) | 2 RCTs ^a n=155 | very serious ¹ | not applicable ² | not serious ³ | very serious ⁴ | Very low | Important |

¹ unclear about allocation concealment in both studies; groups appear different at baseline for one study with respect to concomitant medication usage; more patients completed the trial in the placebo group in one study; concomitant drugs permitted varies across the studies in the network; one study was single-blind

² only 1 trial for each arm so no possibility of inconsistency between studies for a pairwise comparison; no loops in networks so no possibility of inconsistency between direct and indirect estimates

³ all aspects of PICO conform to review protocol

⁴ no head-to-head trials; only one trial for each 'link'; wide confidence intervals for overall ranking in the network

^a levetiracetam (n=19): Rossi et al. (2009); concomitant drugs not permitted pregabalin (n=136): Siddall et al. (2006); concomitant drugs permitted but gabapentin excluded [all compared to placebo]

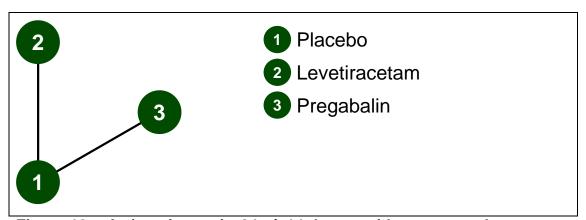


Figure 18 pain (continuous) - 84 +/- 14 days - evidence network

Table 26 pain (continuous) - 84 +/- 14 days - trials included in analysis

| | Placebo | Levetiracetam |
|---------------|-----------------------------------|---------------|
| Levetiracetam | 1 RCT ¹ total n=18 | |
| Pregabalin | 1 RCT ² total n=136 | - |

⁽¹⁾ Rossi et al. (2009); (2) Siddall et al. (2006)

Table 27 pain (continuous) - 84 +/- 14 days - relative effectiveness of all pairwise combinations

| | Placebo | Levetiracetam | Pregabalin |
|---------------|-------------------------|-----------------------|-------------------------|
| Placebo | | _ | -1.46 (-2.08, -0.84) |
| Levetiracetam | -2.81 (-4.54, -1.08) | | - |
| Pregabalin | -1.46 (-2.08, -0.85) | 1.35 (-0.50, 3.19) | |

Values given are mean differences.

The segment below and to the left of the shaded cells is derived from the network meta-analysis, reflecting direct and indirect evidence of treatment effects (row versus column). The point estimate reflects the mean of the posterior distribution, and numbers in parentheses are 95% credible intervals. The segment above and to the right of the shaded cells gives pooled direct evidence (random-effects pairwise meta-analysis), where available (column versus row). Numbers in parentheses are 95% confidence intervals.

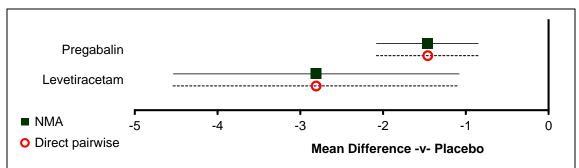


Figure 19 pain (continuous) - 84 +/- 14 days - relative effect of all options compared with placebo

(values less than 0 favour the treatment; values greater than 0 favour placebo; solid error bars are 95% credible intervals while dashed error bars are 95% confidence intervals)

Table 28 pain (continuous) - 84 +/- 14 days - rankings for each comparator

| | Probability best | Median rank (95%CI) |
|---------------|------------------|---------------------|
| Placebo | 0.000 | 3 (3, 3) |
| Levetiracetam | 0.924 | 1 (1, 2) |
| Pregabalin | 0.076 | 2 (1, 2) |

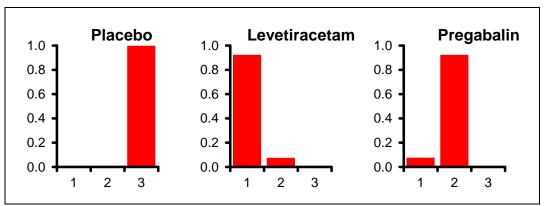


Figure 20 pain (continuous) - 84 +/- 14 days - rank probability histograms

Table 29 pain (continuous) - 84 +/- 14 days - model fit statistics

| Residual deviance | Dbar | Dhat | pD | DIC |
|-----------------------------|-------|--------|-------|-------|
| 3.995 | 3 /18 | -0.577 | 3 005 | 7 /12 |
| (compared to 4 data-points) | 3.410 | -0.577 | 3.993 | 7.412 |

Table 30 pain (continuous) - 84 +/- 14 days - notes

- Fixed-effects model was used.
- 10000 burn-ins and 50000 iterations.