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TABLE 2. NETWORK META-ANALYSIS AND QUALITY OF EVIDENCE FOR ABSTINENCE

| ntervention (reference: placebo) | N of arm N of Pts Odd ratios (95% confidence interval) |                 |                      |                        |             |                     |                        |                         |
|----------------------------------|--|-----------------|----------------------|------------------------|-------------|---------------------|------------------------|-------------------------|
| ntervention (reference: placebo) | (PLA, n = 42)  | (PLA, n = 4044) | Direct estimate      | Indirect estimate      | NMA fo      | rest plot           | NMA estimate           | Quality of evidence     |
| sychosocial interventions        |  |                 |                      |                        |             |                     |                        |                         |
| AU                               | 9  | 800             | -                    | 0.52 (0.29 to 0.94)    | <b>⊢•</b> − | 1                   | 0.52 (0.29 to 0.94)    | Low a b c d             |
| -CHESS                           | 1  | 170             | -                    | 0.88 (0.35 to 2.21)    | <u> </u>    |                     | 0.88 (0.35 to 2.21)    | Very low abcd           |
| ВТ                               | 2  | 306             | -                    | 0.53 (0.23 to 1.22)    | <u></u> ⊢•  | +                   | 0.53 (0.23 to 1.22)    | Low acd                 |
| hort-form CBT                    | 1  | 43              | -                    | 0.05 (0.00 to 1.16)    | •           | 1                   | 0.05 (0.00 to 1.16)    | Very low acd            |
| Contingency management           | 1  | 79              | -                    | 0.78 (0.17 to 3.61)    | <b>⊢</b>    | -                   | 0.78 (0.17 to 3.61)    | Low a b c               |
| CST                              | 1  | 40              | -                    | 0.35 (0.10 to 1.19)    | -           | 1                   | 0.35 (0.10 to 1.19)    | Very low a c d          |
| lome visit                       | 2  | 142             | -                    | 0.95 (0.32 to 2.85)    | <b>⊢</b>    |                     | 0.95 (0.32 to 2.85)    | Low acd                 |
| ИЕТ                              | 2  | 308             | -                    | 0.45 (0.19 to 1.11)    | <b>⊢</b>    | 4                   | 0.45 (0.19 to 1.11)    | Very low acd            |
| Pharmacological interventions    |  |                 |                      |                        |             |                     |                        |                         |
| camprosate                       | 18   | 2297            | 1.92 (1.52 to 2.42)  | 0.74 (0.21 to 2.53)    |             | Hel                 | 1.86 (1.49 to 2.33)    | Moderate <sup>d e</sup> |
| misulpride                       | 1  | 37              | 0.39 (0.09 to 1.64)  | -                      | -           | -                   | 0.39 (0.09 to 1.64)    | Low acd                 |
| ripiprazole                      | 1  | 29              | -                    | 1.49 (0.43 to 5.18)    | <u> </u>    | •                   | 1.49 (0.43 to 5.18)    | Low acd                 |
| tenolol                          | 1  | 50              | 0.85 (0.25 to 2.95)  | -                      | ——          |                     | 0.85 (0.25 to 2.95)    | Very low abcd           |
| aclofen                          | 1  | 28              | 4.63 (1.00 to 21.48) | -                      |             | •                   | 4.63 (1.00 to 21.48)   | Low <sup>a c d</sup>    |
| Carbamazepine                    | 1  | 13              | 0.55 (0.08 to 3.90)  | -                      | <u> </u>    | -                   | 0.55 (0.08 to 3.90)    | Very low abod           |
| Citalopram/Escitalopram          | 2  | 45              | -                    | 1.03 (0.33 to 3.16)    |             | <del></del>         | 1.03 (0.33 to 3.16)    | Low acd                 |
| isulfiram                        | 2  | 221             | 0.97 (0.46 to 2.01)  | 0.72 (0.13 to 4.05)    | Н           | -                   | 0.93 (0.48 to 1.79)    | Low a b c d             |
| luoxetine                        | 2  | 50              | 2.14 (0.48 to 9.52)  | 4.51 (0.83 to 24.39)   |             | -                   | 2.97 (0.97 to 9.05)    | Very low abod           |
| lupenthixol                      | 1  | 142             | 0.44 (0.20 to 0.95)  | -                      | <b>⊢</b>    | 1                   | 0.44 (0.20 to 0.95)    | Very low acd            |
| luvoxamine                       | 3  | 293             | 0.99 (0.49 to 2.01)  | 1.14 (0.34 to 3.89)    |             | •                   | 1.03 (0.57 to 1.88)    | Low acd                 |
| ialantamine                      | 1  | 74              | 0.31 (0.11 to 0.87)  | -                      | <b>⊢</b>    |                     | 0.31 (0.11 to 0.87)    | Low acd                 |
| iHB (sodium oxybate)             | 4  | 201             | 1.65 (0.85 to 3.24)  | 7.48 (2.05 to 27.28)   |             | <b>⊢</b> •−1        | 2.31 (1.22 to 4.36)    | Very low abde           |
| evetiracetam                     | 1  | 95              | 1.03 (0.46 to 2.34)  | -                      |             |                     | 1.03 (0.46 to 2.34)    | Low acd                 |
| isuride                          | 1  | 57              | 0.38 (0.13 to 1.12)  | -                      | <b>⊢</b>    | 1                   | 0.38 (0.13 to 1.12)    | Very low acd            |
| ithium                           | 1  | 28              | 1.43 (0.39 to 5.23)  | -                      |             | •                   | 1.43 (0.39 to 5.23)    | Low acd                 |
| /lodafinil                       | 1  | 41              | 2.48 (0.72 to 8.53)  | -                      | F           | •                   | 2.48 (0.72 to 8.53)    | Low acd                 |
| laltrexone                       | 17   | 878             | 1.29 (0.86 to 1.92)  | 1.59 (0.81 to 3.10)    |             | <b>→</b>            | 1.36 (0.97 to 1.91)    | Low acd                 |
| lefazodone                       | 1  | 50              | 0.57 (0.19 to 1.76)  | -                      | <b>⊢</b>    | -                   | 0.57 (0.19 to 1.76)    | Very low abod           |
| Oxcarbazepine                    | 2  | 72              | -                    | 2.46 (0.91 to 6.61)    |             | <del>  •  </del>    | 2.46 (0.91 to 6.61)    | Very low acd            |
| regabalin                        | 1  | 31              | -                    | 1.97 (0.58 to 6.74)    | H           | •                   | 1.97 (0.58 to 6.74)    | Low acd                 |
| Quetiapine                       | 1  | 29              | 6.75 (1.20 to 38.05) | -                      |             | -                   | 6.75 (1.20 to 38.05)   | Low acd                 |
| ianeptine                        | 1  | 170             | 1.22 (0.58 to 2.57)  | -                      | -           | •                   | 1.22 (0.58 to 2.57)    | Low a c d               |
| iapride                          | 2  | 187             | 0.56 (0.30 to 1.05)  | -                      | H-          | -                   | 0.56 (0.30 to 1.05)    | Moderate <sup>c d</sup> |
| opiramate                        | 3  | 194             | 2.26 (0.83 to 6.13)  | 1.72 (0.84 to 3.52)    |             | <b>⊢</b> ● <b>⊣</b> | 1.88 (1.06 to 3.34)    | Very low abcde          |
| razodone                         | 1  | 88              | 0.61 (0.20 to 1.84)  | -                      |             |                     | 0.61 (0.20 to 1.84)    | Very low abod           |
| Combined interventions           | _  |                 | ,                    |                        |             |                     | ( .== := :,            | ,                       |
| Placebo + CBT                    | 1  | 50              | 0.83 (0.28 to 2.42)  | -                      | <u> </u>    |                     | 0.83 (0.28 to 2.42)    | Very low abod           |
| lefazodone + CBT                 | 1  | 53              | 0.77 (0.26 to 2.23)  | -                      | <u> </u>    |                     | 0.77 (0.26 to 2.23)    | Very low abod           |
| camprosate + Nurse visit         | 1  | 50              | -                    | 4.59 (1.47 to 14.36)   |             | -                   | 4.59 (1.47 to 14.36)   | Very low acd            |
| .camprosate + Naltrexone         | 1  | 40              | 5.57 (1.82 to 16.96) | 1.63 (0.33 to 7.95)    |             |                     | 3.68 (1.50 to 9.02)    | Low acde                |
| GHB + EST                        | 1  | 12              | -                    | 5.13 (0.53 to 49.92)   |             | -                   | 5.13 (0.53 to 49.92)   | Low acd                 |
| GHB + NTX                        | 1  | 18              |                      | 12.64 (2.77 to 57.78)  | · ·         | -                   | 12.64 (2.77 to 57.78)  | Very low abod           |
| ITX + EST                        | 1  | 12              |                      | 2.57 (0.25 to 25.85)   |             | -                   | 2.57 (0.25 to 25.85)   | Low acd                 |
| ITX + GHB + EST                  | 1  | 12              |                      | 25.65 (2.13 to 309.46) | · '         | ,                   | 25.65 (2.13 to 309.46) | Low acd                 |

incoherence; see criteria on Supplement 4.

Favour PLA

Favour Intervention

TABLE 3. NETWORK META-ANALYSIS AND QUALITY OF EVIDENCE FOR ALL-CAUSE DROPOUTS

| ntervention (reference: placebo)                       | N of arm N of Pts Odd ratio (95% confidence interval) |                 |                        |   |   |   |                     |
|--|---|-----------------|------------------------|---|---|---|---------------------|
| itervention (reference: placebo)                       | (PLA, n = 41)   | (PLA, n = 4012) | Direct estimate        | Indirect estimate                           | NMA Forest plot                                 | NMA estimate                                | Quality of evidence |
| sychosocial interventions                              |   |                 |                        |   |   |   |                     |
| AU   | 9   | 800             | -                      | 1.14 (0.65 to 1.99)                         | <b></b>   | 1.14 (0.65 to 1.99)                         | Low a b c d         |
| -CHESS   | 1   | 170             | -                      | 1.14 (0.50 to 2.60)                         | <del>                                    </del> | 1.14 (0.50 to 2.60)                         | Very low abcd       |
| ВТ   | 2   | 306             | -                      | 1.16 (0.45 to 3.04)                         | <del>                                    </del> | 1.16 (0.45 to 3.04)                         | Low a c d           |
| hort-form CBT  | 1   | 43              | -                      | 0.06 (0.01 to 0.33)                         |   | 0.06 (0.01 to 0.33)                         | Very low acd        |
| Contingency management                                 | 1   | 79              | -                      | 0.32 (0.02 to 6.55)                         |   | 0.32 (0.02 to 6.55)                         | Low abc             |
| ST   | 1   | 40              | -                      | 1.98 (0.55 to 7.17)                         | <u> </u>  | 1.98 (0.55 to 7.17)                         | Low acd             |
| lome visit   | 2   | 142             | -                      | 0.32 (0.11 to 0.95)                         |   | 0.32 (0.11 to 0.95)                         | Low acd             |
| MET  | 2   | 308             | -                      | 1.30 (0.46 to 3.64)                         | <u> </u>  | 1.30 (0.46 to 3.64)                         | Low acd             |
| Pharmacological interventions                          |   |                 |                        |   |   |   |                     |
| camprosate   | 17  | 2268            | 0.71 (0.58 to 0.87)    | 1.17 (0.31 to 4.34)                         | Heri  | 0.73 (0.62 to 0.86)                         | Moderate c e        |
| misulpride   | 1   | 37              | 1.89 (0.66 to 5.43)    | -   |   | 1.89 (0.66 to 5.43)                         | Low acd             |
| ripiprazole  | 1   | 29              | -                      | 0.67 (0.18 to 2.45)                         | <del>                                   </del>  | 0.67 (0.18 to 2.45)                         | Low acd             |
| tenolol  | 1   | 50              | 1.09 (0.46 to 2.57)    | -   | <del>                                    </del> | 1.09 (0.46 to 2.57)                         | Low a b c d         |
| aclofen  | 1   | 28              | 0.87 (0.29 to 2.62)    | -   | <del>   </del>                                  | 0.87 (0.29 to 2.62)                         | Low acd             |
| Carbamazepine  | 1   | 13              | 12.00 (1.22 to 118.42) | _   |   | 12.00 (1.22 to 118.42)                      | Very low abcd       |
| italopram/Escitalopram                                 | 2   | 45              | -                      | 3.24 (0.73 to 14.40)                        |   | 3.24 (0.73 to 14.40)                        | Low acd             |
| Disulfiram   | 2   | 221             | 0.79 (0.29 to 2.12)    | 2.34 (0.50 to 10.94)                        |   | 1.05 (0.49 to 2.28)                         | Low a b c d         |
| luoxetine  | 1   | 25              | 1.07 (0.33 to 3.46)    | -   |   | 1.07 (0.33 to 3.46)                         | Very low abcd       |
| lupenthixol  | 1   | 142             | 2.37 (1.27 to 4.40)    | _   |   | 2.37 (1.27 to 4.40)                         | Low a d             |
| luvoxamine   | 2   | 268             | 2.07 (1.09 to 3.93)    | 9.15 (0.40 to 209.33)                       | <del>                                    </del> | 2.15 (1.30 to 3.55)                         | Low ade             |
| Galantamine  | 1   | 74              | 1.15 (0.50 to 2.64)    | -   |   | 1.15 (0.50 to 2.64)                         | Very low acd        |
| GHB (sodium oxybate)                                   | 4   | 201             | 0.70 (0.34 to 1.42)    | 0.42 (0.11 to 1.57)                         | <u>⊢</u>  | 0.63 (0.36 to 1.10)                         | Low abc             |
| evetiracetam   | 1   | 95              | 0.44 (0.19 to 1.02)    | -   |   | 0.44 (0.19 to 1.02)                         | Very low acd        |
| isuride  | 1   | 57              | 1.70 (0.57 to 5.10)    | _   |   | 1.70 (0.57 to 5.10)                         | Very low acd        |
| ithium   | 1   | 28              | 1.08 (0.35 to 3.36)    | _   |   | 1.08 (0.35 to 3.36)                         | Very low acd        |
| Aodafinil  | 1   | 41              | 1.28 (0.49 to 3.30)    | _   |   | 1.28 (0.49 to 3.30)                         | Very low acd        |
| Valtrexone   | 17  | 878             | 0.77 (0.49 to 1.20)    | 0.57 (0.27 to 1.17)                         |   | 0.70 (0.50 to 0.98)                         | Moderate a c        |
| Vefazodone   | 1   | 50              | 1.63 (0.63 to 4.23)    | -   |   | 1.63 (0.63 to 4.23)                         | Very low a b c d    |
| Oxcarbazepine  | 2   | 72              | -                      | 0.54 (0.20 to 1.45)                         | <u> </u>  | 0.54 (0.20 to 1.45)                         | Low acd             |
| Pregabalin   | 1   | 31              | _                      | 0.31 (0.07 to 1.31)                         |   | 0.31 (0.07 to 1.31)                         | Low acd             |
| Quetiapine   | 1   | 29              | 0.78 (0.22 to 2.74)    | 0.51 (0.07 to 1.51)                         |   | 0.78 (0.22 to 2.74)                         | Low acd             |
| ianeptine ianeptine                                    | 1   | 170             | 1.60 (0.92 to 2.80)    | -   | '   | 1.60 (0.92 to 2.80)                         | Low acd             |
| ïapride  | 2   | 187             | 0.76 (0.43 to 1.33)    | _   |   | 0.76 (0.43 to 1.33)                         | Moderate c          |
| opiramate  | 3   | 194             | 0.42 (0.16 to 1.10)    | 0.47 (0.19 to 1.21)                         |   | 0.45 (0.24 to 0.83)                         | l ow a b c d        |
| razodone   | 1   | 88              | 0.96 (0.41 to 2.22)    | -   | , <u> </u>                                      | 0.45 (0.24 to 0.85)<br>0.96 (0.41 to 2.22)  | Very low abcd       |
| Tazouone<br>Combined interventions                     | 1   | 00              | 0.50 (0.71 (0 2.22)    | _   | <del>' 7</del> '                                | 0.50 (0.41 to 2.22)                         | v ci y low          |
| lacebo + CBT   | 1   | 50              | 1.00 (0.40 to 2.49)    | _   |   | 1.00 (0.40 to 2.49)                         | Very low abcd       |
| lefazodone + CBT                                       | 1   | 53              | 1.09 (0.44 to 2.70)    | _   | <u> </u>  | 1.09 (0.44 to 2.70)                         | Very low abod       |
| .camprosate + Nurse visit                              | 1   | 50              | 1.05 (0.44 to 2.70)    | 0.21 (0.07 to 0.57)                         |   | 0.21 (0.07 to 0.57)                         | Low acd             |
| camprosate + Naltrexone                                | 1   | 40              | 0.18 (0.06 to 0.53)    | 0.21 (0.07 to 0.57)<br>0.81 (0.17 to 3.80)  |   | 0.21 (0.07 to 0.57)<br>0.30 (0.13 to 0.67)  | Moderate a d e      |
| GHB + EST  | 1   | 12              | 0.10 (0.00 t0 0.33)    | 0.81 (0.17 to 3.80)<br>0.99 (0.03 to 37.75) | <u> </u>  |   | Very low acd        |
| 9HB + NTX  | 1   | 18              | -                      | 0.99 (0.03 to 37.75)<br>0.64 (0.13 to 3.13) |   | 0.99 (0.03 to 37.75)<br>0.64 (0.13 to 3.13) | Very low abcd       |
| ITX + EST  | 1   | 18              | -                      | 0.64 (0.13 to 3.13)<br>0.99 (0.03 to 37.75) |   | 0.99 (0.03 to 37.75)                        | Very low acd        |
|  | 1   | 12              | <u>-</u>               | ,   |   | ` '   |                     |
| NTX + GHB + EST<br>Reasons for downgrading: a due to w |   |                 | <u> </u>               | 0.99 (0.03 to 37.75)                        | <del>_</del>                                    | 0.99 (0.03 to 37.75)                        | Very low acd        |

Reasons for downgrading: <sup>a</sup> due to within-study bias; <sup>b</sup> due to indirectness; <sup>c</sup> due to imprecision; <sup>d</sup> due to heterogeneity; <sup>e</sup> due to incoherence; see criteria on Supplement 4.

0.0 0.1 1.0 10.0 100.0 Favour Intervention Favour PLA

#### SUPPLEMENT 1. PRISMA NMA CHECKLIST

| Section/Topic             | Item<br># | Checklist Item  | Reported on<br>Page # |
|---------------------------|-----------|---|-----------------------|
| TITLE                     |           |   |                       |
| Title                     | 1         | Identify the report as a systematic review <i>incorporating a network meta-analysis</i> (or related form of meta-analysis).   | 1                     |
| ABSTRACT                  |           |   |                       |
| Structured summary        | 2         | Provide a structured summary including, as applicable:  Background: main objectives  Methods: data sources; study eligibility criteria, participants, and interventions; study appraisal; and synthesis methods, such as network meta-analysis.  Results: number of studies and participants identified; summary estimates with corresponding confidence/credible intervals; treatment rankings may also be discussed. Authors may choose to summarize pairwise comparisons against a chosen treatment included in their analyses for brevity.  Discussion/Conclusions: limitations; conclusions and implications of findings.  Other: primary source of funding; systematic review registration number with registry name. | 2                     |
| INTRODUCTION              |           |   |                       |
| Rationale                 | 3         | Describe the rationale for the review in the context of what is already known, <i>including mention of why a network meta-analysis has been conducted</i> .   | 4                     |
| Objectives                | 4         | Provide an explicit statement of questions being addressed, with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).   | 4                     |
| METHODS                   |           |   |                       |
| Protocol and registration | 5         | Indicate whether a review protocol exists and if and where it can be accessed (e.g., Web address); and, if available, provide registration information, including registration number.  | 4                     |
| Eligibility criteria      | 6         | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale. <i>Clearly describe eligible treatments included in the treatment network, and note whether any have been clustered or merged into the same node (with justification)</i> .  | 4-5                   |

| Information sources                    | 7  | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.   | 5            |
|--|----|--|--------------|
| Search                                 | 8  | Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.  | 5 and Supp 2 |
| Study selection                        | 9  | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).  | 5            |
| Data collection process                | 10 | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.   | 6            |
| Data items                             | 11 | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.  | 6            |
| Geometry of the network                | S1 | Describe methods used to explore the geometry of the treatment network under study and potential biases related to it. This should include how the evidence base has been graphically summarized for presentation, and what characteristics were compiled and used to describe the evidence base to readers.               | 7            |
| Risk of bias within individual studies | 12 | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.   | 6            |
| Summary measures                       | 13 | State the principal summary measures (e.g., risk ratio, difference in means). Also describe the use of additional summary measures assessed, such as treatment rankings and surface under the cumulative ranking curve (SUCRA) values, as well as modified approaches used to present summary findings from meta-analyses. | 7            |
| Planned methods of analysis            | 14 | Describe the methods of handling data and combining results of studies for each network meta-analysis.  This should include, but not be limited to:  • Handling of multi-arm trials;  • Selection of variance structure;  • Selection of prior distributions in Bayesian analyses; and  • Assessment of model fit.         | 7            |
| Assessment of Inconsistency            | S2 | Describe the statistical methods used to evaluate the agreement of direct and indirect evidence in the treatment network(s) studied. Describe efforts taken to address its presence when found.  | 7            |
| Risk of bias across studies            | 15 | Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).   | 6            |
| Additional analyses                    | 16 | Describe methods of additional analyses if done, indicating which were pre-specified. This may include, but not be limited to, the following:  • Sensitivity or subgroup analyses;  • Meta-regression analyses;  • Alternative formulations of the treatment network; and  | 8            |

• Use of alternative prior distributions for Bayesian analyses (if applicable).

## **RESULTS**†

| Study selection                   | 17        | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.  | 8 and Fig 1             |
|-----------------------------------|-----------|--|-------------------------|
| Presentation of network structure | S3        | Provide a network graph of the included studies to enable visualization of the geometry of the treatment network.  | Fig 2                   |
| Summary of network geometry       | <b>S4</b> | Provide a brief overview of characteristics of the treatment network. This may include commentary on the abundance of trials and randomized patients for the different interventions and pairwise comparisons in the network, gaps of evidence in the treatment network, and potential biases reflected by the network structure.  | Supp 5                  |
| Study characteristics             | 18        | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.   | Tab 1 and<br>Supp 5     |
| Risk of bias within studies       | 19        | Present data on risk of bias of each study and, if available, any outcome level assessment.  | Supp 6                  |
| Results of individual studies     | 20        | For all outcomes considered (benefits or harms), present, for each study: 1) simple summary data for each intervention group, and 2) effect estimates and confidence intervals. <i>Modified approaches may be needed to deal with information from larger networks</i> .   | 10-11                   |
| Synthesis of results              | 21        | Present results of each meta-analysis done, including confidence/credible intervals. <i>In larger networks, authors may focus on comparisons versus a particular comparator (e.g. placebo or standard care), with full findings presented in an appendix. League tables and forest plots may be considered to summarize pairwise comparisons.</i> If additional summary measures were explored (such as treatment rankings), these should also be presented. | Tables 2 and 3          |
| Exploration for inconsistency     | <b>S5</b> | Describe results from investigations of inconsistency. This may include such information as measures of model fit to compare consistency and inconsistency models, <i>P</i> values from statistical tests, or summary of inconsistency estimates from different parts of the treatment network.  | Tables 2 & 3 and Supp 7 |
| Risk of bias across studies       | 22        | Present results of any assessment of risk of bias across studies for the evidence base being studied.  | 10-11                   |
| Results of additional analyses    | 23        | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression analyses, <i>alternative network geometries studied, alternative choice of prior distributions for Bayesian analyses</i> , and so forth).  | 11                      |

| DISCUSSION          |    |  |       |
|---------------------|----|--|-------|
| Summary of evidence | 24 | Summarize the main findings, including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy-makers).  | 11-12 |
| Limitations         | 25 | Discuss limitations at study and outcome level (e.g., risk of bias), and at review level (e.g., incomplete retrieval of identified research, reporting bias). Comment on the validity of the assumptions, such as transitivity and consistency. Comment on any concerns regarding network geometry (e.g., avoidance of certain comparisons).   | 12    |
| Conclusions         | 26 | Provide a general interpretation of the results in the context of other evidence, and implications for future research.  | 13    |
| FUNDING             |    |  |       |
| Funding             | 27 | Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review. This should also include information regarding whether funding has been received from manufacturers of treatments in the network and/or whether some of the authors are content experts with professional conflicts of interest that could affect use of treatments in the network. | 17-18 |

PICOS = population, intervention, comparators, outcomes, study design.

\* Text in italics indicateS wording specific to reporting of network meta-analyses that has been added to guidance from the PRISMA statement.

† Authors may wish to plan for use of appendices to present all relevant information in full detail for items in this section.

#### **SUPPLEMENT 2. SEARCH STRATGIES**

#### **Central Database of Controlled Trials (CENTRAL)**

- \*ti,ab,kw in Trials (Word variations have been searched)
- #2 SR-ADDICTN or HS-ADDICTN
- #3 #1 and #2
- #4 alcohol\*
- #5 #3 and #4
- #6 MeSH descriptor: [Alcoholism] this term only
- #7 MeSH descriptor: [Alcohol-Related Disorders] this term only
- #8 MeSH descriptor: [Alcohol Abstinence] this term only
- #9 MeSH descriptor: [Alcoholic Intoxication] this term only
- #10 #6 or #7 or #8 or #9
- #11 (alcohol\* near/3 (abuse\* or addict\* or dependen\* or disorder\* or abstinen\*)):ti,ab,kw (Word variations have been searched)
- #12 (problem\* near/3 (drink\* or alcohol\* use\*)):ti,ab,kw (Word variations have been searched)
- #13 (problem\* next alcohol\*):ti,ab,kw (Word variations have been searched)
- #14 #11 or #12 or #13
- #15 #10 or #14 or #5

# Ovid MEDLINE Databases [Epub Ahead of Print, In-Process & Other Non-Indexed Citations, Ovid MEDLINE(R) Daily and Ovid MEDLINE(R) 1946 to Present]

- 1. alcohol related disorders/
- 2. alcoholism/
- 3. alcohol abstinence/
- 4. alcoholic intoxication/
- 5. (alcohol\* adj3 (abuse\* or addict\* or dependen\* or disorder\* or abstinen\*)).ti,ab,kf.
- 6. alcoholism.ti.kf.
- 7. (problem\* adj2 (drink\* or alcohol\* use\*)).ti,ab,kf.
- 8. or 1-7
- 9. exp Narcotic Antagonists/
- 10. ((Opiate or opioid) and (antagonist\* or inhibitor\*)).ti,ab,kf,rn.
- 11. Naltrexone/ or Naloxone/
- 12. (nalmefene or Revia or Vivitrol or naltrexon or naloxone).ti,ab,kf,rn.
- 13. exp Dopamine antagonists/
- 14. exp Antipsychotic Agents/
- 15. (Dopamine antagonists or (antidopaminergic and (agent\* or drug\* or intervention\* or treatment\* or pharmacotherap\*))).ti,ab,kf.
- 16. exp Phenothiazines/
- 17. (Olanzapine or Zyprexa or asenapine or quetiapine or Seroquel or risperidone or Risperidal or Risperdal or ziprazidone or ziprazidone or aripiprazole or Abilify or Thorazine or Aminazine or haldol or Largactil or Chlordelazine or Chlorpromazine or Contomin or Fenactil or Propaphenin or Chlorazine or Thioridazine\* or Thiozine or Tiapride or Rideril or Sonapax or Meleril or Melleril or Melleryl or Mellaril or Melleretten or Melzine or Aldazine or Zuclopenthixol or alpha Clopenthixol or Cisordinol or Flufenazin\* or Fluphenazine or Lyogen or Prolixin or ecopipam or Geodon or Seroquel or Haloperidol or quinolinone or Sch39166\*).mp.
- 18. exp Anticonvulsants/
- 19. ((antiepileptic\* or anti epileptic\* or antiseizure\* or anti seizure\* or anticonvulsant\* or anticonvulsive or anti convulsive\*) and (agent\* or drug\* or intervention\* or treatment\* or pharmacotherap\*)).ti,ab,kf.

- 20. (ACTH or (carbamazepine or Tegretol) or clorazepate or clobazam or clonazepam or chlordiazepoxide or divalproex or sodium divalproex or sodium valproate or (valproate or Depakote) or ethosuximide or ethosuccimide or ethotoin or felbamate or fosphenytoin or (gabapentin or Neurontin) or lignocaine or lamotrigine or Levetiracetam or lidocaine or hydantoins or levetiracetam or mephobarbital or methsuximide or oxcarbazepine or paraldehyde or phenacemide or phenytoin or pregabalin or primidone or succinimide or tiagabine or (topiramate or Topamax) or (valproate or Depacon) or vigabatrin or zonisamide).mp.
- 21. exp Valproic Acid/
- 22. exp "Serotonin and Noradrenaline Reuptake Inhibitors"/
- 23. exp Serotonin Uptake Inhibitors/
- 24. exp Antidepressive Agents/
- 25. exp Neurotransmitter Uptake Inhibitors/
- 26. (antidepress\* or anti depress\* or MAOI\* or monoamine oxidase inhibit\* or ((serotonin or serotonergic or norepinephrine or noradrenaline or nor epinephrine or nor adrenaline or neurotransmitt\* or dopamine\*) and (uptake or reuptake or reuptake)) or noradrenerg\* or antiadrenergic or anti adrenergic or SSRI\* or SNRI\* or TCA\* or tricyclic\* or tetracyclic\* or heterocyclic\* or psychotropic\*).mp.
- 27. (Agomelatine or Alaproclate or Amoxapine or Amineptine or Amitriptylin\* or Amitriptylinoxide or Atomoxetine or Befloxatone or Benactyzine or Binospirone or Brofaromine or (Buproprion or Amfebutamone) or Butriptyline or Caroxazone or Cianopramine or Cilobamine or Cimoxatone or Citalopram or (Chlorimipramin\* or Clomipramin\* or Chlomipramin\* or Clomipramine) or Clonidine or Clorgyline or Clovoxamine or (CX157 or Tyrima) or Demexiptiline or Deprenyl or (Desipramine\* or Pertofrane) or Desvenlafaxine or Dibenzepin or Diclofensine or Dimetacrin\* or Dosulepin or Dothiepin or Doxepin or Duloxetine or Desvenlafaxine or DVS233 or Escitalopram or Etoperidone or Femoxetine or Fluotracen or Fluoxetine or Fluoxamine or (Hyperforin or Hypericum or St John\*) or Imipramin\* or Iprindole or Iproniazid\* or Ipsapirone or Isocarboxazid\* or Levomilnacipran or Lofepramine\* or (Lu AA21004 or Vortioxetine) or Lu AA24530 or (LY2216684 or Edivoxetine) or Maprotiline or Melitracen or Metapramine or Mianserin or Milnacipran or Minaprine or Mirtazapine or Moclobemide or Nefazodone or Nialamide or Nitroxazepine or Nomifensine or Norfenfluramine or Nortriptylin\* or Noxiptilin\* or Opipramol or Oxaflozane or Paroxetine or Prazosin or Promazine or Phenelzine or Pheniprazine or Pipofezine or Pirlindole or Pivagabine or Pizotyline or Propizepine or Protriptylin\* or Quinupramine or Reboxetine or Rolipram or Scopolamine or Selegiline or Sertraline or Setiptiline or Teciptiline or Thozalinone or Tianeptin\* or Toloxatone or Tranylcypromin\* or Trazodone or Trimipramine or Venlafaxine or Viloxazine or Vilazodone or Viqualine or Vortioxetine or Zalospirone).mp.
- 28. exp Alcohol Deterrents/
- 29. (Metadoxine or Tetrahydrocannabinol or Zofran or Pioglitazone or Aprepitant or Mecamylamine or Dutasteride or Ghrelin or Ivermectin or Isoflavone or Kudzu or Disulfiram or Metronidazole or Acamprosate or Propranolol or Doxazosin or Ketamine or Psilocybin or Agomelatine or Ondansetron or Varenicline or PUFAs or omega\* or Oxytocin or Memantine or Citicoline or Diphenhydramine or Methylphenidate or Pexacerfont or Exenatide or Carisbamate or Perampanel or Flumazenil or Progesterone).mp.
- 30. exp Benzodiazepines/
- 31. exp benzodiazepinones/
- 32. (Benzodiazepin\* or Adinazolam or Alprazolam or Bentazepam or Bretazenil or Bromazepam or Brotizolam or Camazepam or Chlordiazepoxide or Cinolazepam or Clobazam or Clonazepam or Clorazepate or Clotiazepam or Cloxazolam or Delorazepam or Devazepide or Diazepam or Estazolam or Etizolam or Fludiazepam or Flumitrazepam or Flumazenil or Flurazepam or Flutoprazepam or Halazepam or Haloxazolam or Ketazolam or Loflazepate or Loprazolam or Lorazepam or Lormetazepam or Medazepam or Metaclazepam or Mexazolam or Midazolam or Nimetazepam or Nitrazepam or Nordazepam or Oxazepam or Oxazolam or Phenazepam or Pinazepam or Prazepam or Premazepam or Propazepam or Quazepam or Ripazepam or Serazepine or Temazepam or Tetrazepam or Tofisopam or Triazolam or Zolazepam or Zaleplon or Zolpidem or Zopiclone).mp.
- 33. exp gamma-Aminobutyric Acid/
- 34. GABA agonist\*.ti,ab,kf.

- 35. exp GABA agonists/
- 36. exp GABA Uptake Inhibitors/
- 37. (Baclofen or GHB or gamma Hydroxybutyric acid or gamma aminobutyric acid or sodium oxybate).mp.
- 38. exp Glutamatergic Agents/
- 39. (amantadin\* or atomoxetin\* or dcycloserin\* or dextromethorphan or GLYX 13 or "MK 0657" or (ketamin\* or Ketalar or Ketalect or Ketanest) or (lanicemin\* or AZD6765) or memantin\* or quinolin\* or rellidep or riluzol\* or (tramadol\* or ETS6103 or viotra) or ampa or cerc 301 or d serin\* or glun2b or glutamate or glutamin\* or glutamatergic or glutathione\* or glycin\* or mglu\* or N acetyl cysteine\* or N methyl D aspartate or nmda or nrx 1074 or kainite or nr2b or sarcosin\* or NAC).mp.
- 40. Calcium Channel Blockers/
- 41. (calcium adj3 (antagonist\* or blocker\* or inhibit\*)).mp.
- 42. (amlodipine or amrinone or azelnidipine or bencyclan\* or bepridil or AT877 or cilnidipine or cinnarizine or conotoxin\* or daropidine or diltiazem or efonidipine or felodipine or fendiline or flunarizine or gallopamil or isradipine or lacidopine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or verapamil or magnesium sulph\*).mp.
- 43. (therapy or drug therapy or rehabilitation).fs.
- 44. exp Drug Therapy/
- 45. or/9-44
- 46. randomized controlled trial.pt.
- 47. (randomi#ed or randomi#ation).ab,ti,kf.
- 48. RCT.ab.
- 49. (random\* adj3 (administ\* or allocat\* or assign\* or class\* or control\* or determine\* or divide\* or distribut\* or expose\* or fashion\* or number\* or place\* or recruit\* or subsitut\* or treat\*)).ab,kf.
- 50. placebo.ab,ti,kf.
- 51. trial.ab,ti,kf.
- 52. ((singl\* or doubl\* or tripl\* or trebl\*) adj3 (blind\* or mask\* or dumm\*)).mp.
- 53. clinical trial, phase ii/ or clinical trial, phase iii/ or clinical trial, phase iv/ or randomized controlled trial/ or pragmatic clinical trial/
- 54. ((waitlist\* or wait\* list\* or treatment as usual or TAU) adj3 (control or group\*)).ab.
- 55. (((standard or routine or usual) adj2 (care or treatment or medication or therapy)) and (control\* or group\*)).ab.
- 56. or/46-55
- 57. psychotherap\$.ti,ab,kf.
- 58. (psychotherap\$ or psychoeducat\* or psycho educat\*).ti,ab,kf.
- 59. (behav\* adj2 (activation or therap\* or treat\* or intervention or modification or train\*)).ti,ab,kf.
- 60. (CBT or (cognitive adj2 (therap\* or treat\* or intervention or modification or train\*))).ti,ab,kf.
- 61. (motivational adj2 (enhancement or interview or support or skills)).ti,ab,kf.
- 62. mindfulness.ti,ab,kf.
- 63. (famil\* adj2 therap\*).ti,ab,kf.
- 64. ((couple\* or spouse\* or partner\* or marital or marriage or conjoint or interpersonal) adj2 (therap\* or counsel\* or treat\* or intervention\*)).ti,ab,kf.
- 65. (psycholog\* adj2 (therap\* or treat\* or intervention or modification or train\*)).ti,ab,kf.
- 66. exp Psychotherapy/
- 67. exp Self help Groups/
- 68. ((self adj2 help) and group\*).ti,ab,kf.
- 69. (twelve adj2 step).ti,ab,kf.
- 70. exp Rehabilitation/
- 71. (group adj2 (activit\* or discussion\* or therap\* or treat\* or intervention\* or support or train\*)).ti,ab,kf.
- 72. problem solving.mp.
- 73. (psychosoci\* or psycho soci\* or social support).ti,ab,kf.
- 74. (volunteering or activity scheduling).ti,ab,kf.

- 75. (community adj2 (activit\* or discussion\* or therap\* or treat\* or intervention\* or support or train\*)).ti,ab,kf.
- 76. (contingency management or incentive\* or reward or rewards or voucher\* or money or monetary).ti,ab,kf.
- 77. ((alcohol\* or addict\*) adj2 (therap\* or treat\* or intervention or management or modification or support or train\*)).ti,ab,kf.
- 78. or/57-77
- 79. 8 and (45 or 78) and 56
- 80. (random\$ adj sampl\$ adj7 ("cross section\$" or questionnaire\$1 or survey\$ or database\$1)).ti,ab. not (comparative study/ or controlled study/ or randomi?ed controlled.ti,ab. or randomly assigned.ti,ab.)
- 81. Cross-sectional study/ not (randomized controlled trial/ or controlled clinical study/ or controlled study/ or randomi?ed controlled.ti,ab. or control group\$1.ti,ab.)
- 82. (((case adj control\$) and random\$) not randomi?ed controlled).ti,ab.
- 83. (Systematic review not (trial or study)).ti.
- 84. (nonrandom\$ not random\$).ti,ab.
- 85. "Random field\$".ti,ab.
- 86. (random cluster adj3 sampl\$).ti,ab.
- 87. (review.ab. and review.pt.) not trial.ti.
- 88. "we searched".ab. and (review.ti. or review.pt.)
- 89. (databases adj4 searched).ab.
- 90. (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset\$1).ti. and animal experiment/
- 91. Animal experiment/ not (human experiment/ or human/)
- 92. exp animals/ not humans.sh.
- 93. or/80-92
- 94. 79 not 93

#### Ovid Embase (1974 to present)

- 1. alcohol abuse/ or "alcohol use disorder"/
- 2. alcoholism/
- 3. alcohol abstinence/
- 4. alcohol withdrawal/
- 5. detoxification/ and alcohol\*.ti.
- 6. (alcohol\* adj3 (abuse\* or addict\* or dependen\* or disorder\* or abstinen\*)).ti,ab,kw.
- 7. alcoholism.ti,kw.
- 8. (problem\* adj2 (drink\* or alcohol\* use\*)).ti,ab,kw.
- 9. or/1-8
- 10. exp Narcotic Antagonist/
- 11. ((Opiate or opioid) and (antagonist\* or inhibitor\*)).ti,ab,kw,rn.
- 12. Naltrexone/ or Naloxone/
- 13. (nalmefene or Revia or Vivitrol or naltrexon or naloxone).ti,ab,kw,rn.
- 14. exp Dopamine Receptor Blocking Agent/ or exp Dopamine Receptor Affecting Agent/ or exp Dopamine Uptake Inhibitor/
- 15. exp Neuroleptic Agent/
- 16. (Dopamine antagonist\* or (antidopaminergic and (agent\* or drug\* or intervention\* or treatment\* or pharmacotherap\*))).ti,ab,kw.
- 17. exp Phenothiazine/ or (methotrimeprazine or levomepromazine).mp.
- 18. (Olanzapine or Zyprexa or asenapine or quetiapine or Seroquel or risperidone or Risperidal or Risperdal or ziprazidone or ziprasidone or aripiprazole or Abilify or Thorazine or Aminazine or haldol or Largactil or Chlordelazine or Chlorpromazine or Contomin or Fenactil or Propaphenin or Chlorazine or Thioridazine\* or Thiozine or Tiapride or Rideril or Sonapax or Meleril or Melleril or

Melleryl or Mellaril or Melleretten or Melzine or Aldazine or Zuclopenthixol or alpha Clopenthixol or Cisordinol or Flufenazin\* or Fluphenazine or Lyogen or Prolixin or ecopipam or Geodon or Seroquel or Haloperidol or quinolinone or Sch39166\* or amisulpride).mp.

- 19. exp Anticonvulsive Agent/
- 20. ((antiepileptic\* or anti epileptic\* or antiseizure\* or anti seizure\* or anticonvulsant\* or anticonvulsant\* or anticonvulsive or anti convulsive\*) and (agent\* or drug\* or intervention\* or treatment\* or pharmacotherap\*)).ti,ab,kw.
- 21. (ACTH or (carbamazepine or Tegretol) or clorazepate or clobazam or clonazepam or chlordiazepoxide or divalproex or sodium divalproex or sodium valproate or (valproate or Depakote) or ethosuximide or ethosuccimide or ethotoin or felbamate or fosphenytoin or (gabapentin or Neurontin) or lignocaine or lamotrigine or Levetiracetam or lidocaine or hydantoins or levetiracetam or mephobarbital or methsuximide or oxcarbazepine or paraldehyde or phenacemide or phenytoin or pregabalin or primidone or succinimide or tiagabine or (topiramate or Topamax) or (valproate or Depacon) or vigabatrin or zonisamide).mp.
- 22. exp Serotonin Receptor Affecting Agent/ or exp Serotonin Noradrenalin Reuptake Inhibitor/ or exp Triple Reuptake inhibitor/
- 23. exp Adrenergic Receptor Affecting Agent/
- 24. exp Antidepressant Agent/
- 25. exp Neurotransmitter Uptake Inhibitors/
- 26. (antidepress\* or anti depress\* or MAOI\* or monoamine oxidase inhibit\* or ((serotonin or serotonergic or norepinephrine or noradrenaline or nor epinephrine or nor adrenaline or neurotransmitt\* or dopamine\*) and (uptake or reuptake or reuptake)) or noradrenerg\* or antiadrenergic or anti adrenergic or SSRI\* or SNRI\* or TCA\* or tricyclic\* or tetracyclic\* or heterocyclic\* or psychotropic\*).mp.
- 27. (Agomelatine or Alaproclate or Amoxapine or Amineptine or Amitriptylin\* or Amitriptylinoxide or Atomoxetine or Befloxatone or Benactyzine or Binospirone or Brofaromine or (Buproprion or Amfebutamone) or Butriptyline or Caroxazone or Cianopramine or Cilobamine or Cimoxatone or Citalopram or (Chlorimipramin\* or Clomipramin\* or Chlomipramin\* or Clomipramine) or Clonidine or Clorgyline or Clovoxamine or (CX157 or Tyrima) or Demexiptiline or Deprenyl or (Desipramine\* or Pertofrane) or Desvenlafaxine or Dibenzepin or Diclofensine or Dimetacrin\* or Dosulepin or Dothiepin or Doxepin or Duloxetine or Desvenlafaxine or DVS233 or Escitalopram or Etoperidone or Femoxetine or Fluotracen or Fluoxetine or Fluoxamine or (Hyperforin or Hypericum or St John\*) or Imipramin\* or Iprindole or Iproniazid\* or Ipsapirone or Isocarboxazid\* or Levomilnacipran or Lofepramine\* or (Lu AA21004 or Vortioxetine) or Lu AA24530 or (LY2216684 or Edivoxetine) or Maprotiline or Melitracen or Metapramine or Minaserin or Milnacipran or Minaprine or Mirtazapine or Moclobemide or Nefazodone or Nialamide or Nitroxazepine or Nomifensine or Norfenfluramine or Nortriptylin\* or Noxiptilin\* or Opipramol or Oxaflozane or Paroxetine or Prazosin or Promazine or Phenelzine or Pheniprazine or Pipofezine or Pirlindole or Pivagabine or Pizotyline or Propizepine or Protriptylin\* or Quinupramine or Reboxetine or Rolipram or Scopolamine or Selegiline or Sertraline or Setiptiline or Teciptiline or Thozalinone or Tianeptin\* or Toloxatone or Tranyleypromin\* or Trazodone or Trimipramine or Venlafaxine or Viloxazine or Vilazodone or Viqualine or Vortioxetine or Zalospirone).mp.
- 28. exp "drugs used in the treatment of addiction"/
- 29. (Metadoxine or Tetrahydrocannabinol or Zofran or Pioglitazone or Aprepitant or Mecamylamine or Dutasteride or Ghrelin or Ivermectin or Isoflavone or Kudzu or Disulfiram or Metronidazole or Acamprosate or Propranolol or Doxazosin or Ketamine or Psilocybin or Agomelatine or Ondansetron or Varenicline or PUFAs or omega\* or Oxytocin or Memantine or Citicoline or Diphenhydramine or Methylphenidate or Pexacerfont or Exenatide or Carisbamate or Perampanel or Flumazenil or Progesterone).mp.
- 30. exp Anxiolytic Agent/
- 31. exp Benzodiazepine/
- 32. exp Benzodiazepine Derivative/
- 33. exp Sedative Agent/ or exp Hypnotic Sedative Agent/
- 34. (Benzodiazepin\* or Adinazolam or Alprazolam or Bentazepam or Bretazenil or Bromazepam or Brotizolam or Camazepam or Chlordiazepoxide or Cinolazepam or Clobazam or Clonazepam or

Clorazepate or Clotiazepam or Cloxazolam or Delorazepam or Devazepide or Diazepam or Estazolam or Etizolam or Fludiazepam or Flunitrazepam or Flumazenil or Flurazepam or Flutoprazepam or Halazepam or Haloxazolam or Ketazolam or Loflazepate or Loprazolam or Lorazepam or Lormetazepam or Medazepam or Metaclazepam or Mexazolam or Midazolam or Nimetazepam or Nitrazepam or Oxazepam or Oxazepam or Phenazepam or Pinazepam or Prazepam or Premazepam or Propazepam or Quazepam or Ripazepam or Serazepine or Temazepam or Tetrazepam or Tofisopam or Triazolam or Zolazepam or Zaleplon or Zolpidem or Zopiclone or Meprobamate).mp.

- 35. exp 4 aminobutyric acid receptor stimulating agent/
- 36. GABA agonist\*.ti,ab,kw.
- 37. (Baclofen or GHB or gamma Hydroxybutyric acid or gamma aminobutyric acid or sodium oxybate).mp.
- 38. (amantadin\* or atomoxetin\* or dcycloserin\* or dextromethorphan or GLYX 13 or "MK 0657" or (ketamin\* or Ketalar or Ketalect or Ketanest) or (lanicemin\* or AZD6765) or memantin\* or quinolin\* or rellidep or riluzol\* or (tramadol\* or ETS6103 or viotra) or ampa or cerc 301 or d serin\* or glun2b or glutamate or glutamin\* or glutamatergic or glutathione\* or glycin\* or mglu\* or N acetyl cysteine\* or N methyl D aspartate or nmda or nrx 1074 or Org 25935 or kainite or nr2b or sarcosin\* or NAC).mp.
- 39. exp Calcium Channel Blockers/
- 40. (calcium adj3 (antagonist\* or blocker\* or inhibit\*)).mp.
- 41. (amlodipine or amrinone or azelnidipine or bencyclan\* or bepridil or AT877 or caroverine cilnidipine or cinnarizine or conotoxin\* or daropidine or diltiazem or efonidipine or felodipine or fendiline or flunarizine or gallopamil or isradipine or lacidopine or lidoflazine or mibefradil or nicardipine or nifedipine or nimodipine or nisoldipine or nitrendipine or perhexiline or prenylamine or verapamil or magnesium sulph\* or magnesium sulf\*).mp.
- 42. \*Drug Therapy/
- 43. Psychopharmacology/ or Psychopharmacotherapy/ or Psychotropic Agent/
- 44. or/10-43
- 45. randomized controlled trial/
- 46. (randomi#ed or randomi#ation).ab.ti.kw.
- 47. RCT.ab.
- 48. (random\* adj3 (administ\* or allocat\* or assign\* or class\* or control\* or determine\* or divide\* or distribut\* or expose\* or fashion\* or number\* or place\* or recruit\* or subsitut\* or treat\*)).ab,kw.
- 49. placebo.ab,ti,kw.
- 50. trial.ab,ti,kw.
- 51. ((singl\* or doubl\* or tripl\* or trebl\*) adj3 (blind\* or mask\* or dumm\*)).mp.
- 52. phase 1 clinical trial/ or phase 2 clinical trial/ or phase 3 clinical trial/ or phase 4 clinical trial/
- 53. or/45-52
- 54. \*Therapy/
- 55. exp Psychiatric Treatment/
- 56. exp Counseling/
- 57. (psychotherap\$ or psychoeducat\* or psycho educat\*).ti,ab,kw.
- 58. (behav\* adj2 (activation or therap\* or treat\* or intervention or modification or train\*)).ti,ab,kw.
- 59. (CBT or (cognitive adj2 (therap\* or treat\* or intervention or modification or train\*))).ti,ab,kw.
- 60. (motivational adj2 (enhancement or interview or support or skills)).ti,ab,kw.
- 61. mindfulness.ti,ab,kw.
- 62. (famil\* adj2 therap\*).ti,ab,kw.
- 63. ((couple\* or spouse\* or partner\* or marital or marriage or conjoint or interpersonal) adj2 (therap\* or counsel\* or treat\* or intervention\*)).ti,ab,kw.
- 64. (psycholog\* adj2 (therap\* or treat\* or intervention or modification or train\*)).ti,ab,kw.
- 65. exp Self Help/
- 66. ((self adj2 help) and group\*).ti,ab,kw.
- 67. (twelve adj2 step).ti,ab,kw.
- 68. exp Rehabilitation/

- 69. (group adj2 (activit\* or discussion\* or therap\* or treat\* or intervention\* or support or train\*)).ti,ab,kw.
- 70. problem solving.mp.
- 71. exp Social Care/ or Psychosocial Care/
- 72. (psychosoci\* or psycho soci\* or social support).ti,ab,kw.
- 73. (volunteering or activity scheduling).ti,ab,kw.
- 74. (community adj2 (activit\* or discussion\* or therap\* or treat\* or intervention\* or support or train\*)).ti,ab,kw.
- 75. (contingency management or incentive\* or reward or rewards or voucher\* or money or monetary).ti,ab,kw.
- 76. ((alcohol\* or addict\*) adj2 (therap\* or treat\* or intervention or management or modification or support or train\*)).ti,ab,kw.
- 77. or/54-76
- 78. (random\$ adj sampl\$ adj7 ("cross section\$" or questionnaire\$1 or survey\$ or database\$1)).ti,ab. not (comparative study/ or controlled study/ or randomi?ed controlled.ti,ab. or randomly assigned.ti,ab.)
- 79. Cross-sectional study/ not (randomized controlled trial/ or controlled clinical study/ or controlled study/ or randomi?ed controlled.ti,ab. or control group\$1.ti,ab.)
- 80. (((case adj control\$) and random\$) not randomi?ed controlled).ti,ab.
- 81. (Systematic review not (trial or study)).ti.
- 82. (nonrandom\$ not random\$).ti,ab.
- 83. "Random field\$".ti,ab.
- 84. (random cluster adj3 sampl\$).ti,ab.
- 85. (review.ab. and review.pt.) not trial.ti.
- 86. "we searched".ab. and (review.ti. or review.pt.)
- 87. "update review".ab.
- 88. (databases adj4 searched).ab.
- 89. (rat or rats or mouse or mice or swine or porcine or murine or sheep or lambs or pigs or piglets or rabbit or rabbits or cat or cats or dog or dogs or cattle or bovine or monkey or monkeys or trout or marmoset\$1).ti. and animal experiment/
- 90. Animal experiment/ not (human experiment/ or human/)
- 91. or/78-90
- 92. 9 and (44 or 77) and 53
- 93. 92 not 91

#### **Ovid PsycINFO**

- 1. alcohol abuse/
- 2. Alcoholism/
- 3. exp Alcohol Intoxication/
- 4. alcohol withdrawal/
- 5. alcohol\*.ti,id. and ("substance abuse and addiction measures"/ or detoxification/)
- 6. (alcohol\* adj3 (abuse\* or addict\* or dependen\* or disorder\* or abstinen\*)).ti,ab,id.
- 7. (problem\* adj2 (drink\* or alcohol\* use\*)).ti,ab,id.
- 8. or 1-7
- 9. (treatment-as-usual or (treatment\* adj2 usual) or (standard adj2 care) or (standard adj2 treatment) or (routine adj2 care) or (usual adj2 medication\*) or (usual adj2 care) or TAU).ti,ab,id.
- 10. (waitlist\* or wait-list\* or waiting-list\* or wait\* list\* or (waiting adj (condition or control)) or WLC).ti,ab,id.
- 11. (((delay\* adj3 (start or treatment\*)) or no intervention or no treatment\* or no-treatment or non treatment\* or non-treatment or minim\* treatment\* or untreated group\* or untreated control\* or without any treatment) and (control\* or group\*)).ti,ab,id.
- 12. ((no intervention\* or non intervention\* or non-intervention\* or without any intervention\*) and (control\* or group\*)).ti,ab,id.

- 13. (receiv\* nothing or "did not receive" or standard control or control group).ti,ab,id.
- 14. (("no therap\*" or "no psychotherap\*\*" or "non therap\*" or nontherap\* or nonpsychotherap\* or "non psychotherap\*" or "minim\* therap\*" or "minim\* psychotherap\*" or "no contact" or pseudotherap\* or "pseudo therap\*" or "pseudo psychotherap\*" or "therap\* as usual" or "usual therap\*") and (control\* or group\*)).ti,ab,id.
- 15. (reference group or observation group or control group).ti,ab,id.
- 16. ((convention\* treatment or conventional therap\* or standard treatment\* or standard therap\*) and (control\* or group\*)).ti,ab,id.
- 17. treatment effectiveness evaluation.sh.
- 18. mental health program evaluation.sh.
- 19. placebo.sh.
- 20. randomi#ed.ti,ab.
- 21. ((singl\* or doubl\* or trebl\* or tripl\*) adj3 (blind\* or mask\* or dummy)).mp.
- 22. (random\* adj3 (administ\* or class\* or control\* or determine\* or divide\* or distribut\* or expose\* or fashion or number\* or place\* or recruit\* or substitut\* or treat\*)).ab.
- 23. trial.ti,ab.
- 24. or/9-23
- 25. 8 and 24

#### ClinicalTrials.gov

Advanced search: Interventional studies AND

- 1. Condition= alcoholism n=40
- 2. Condition= (addiction AND alcohol) n=11
- 3. Condition= "alcohol dependence" OR "alcohol dependency" OR "alcohol use disorder" OR "alcohol use disorders" OR "alcohol related disorders" n=107
- 4. alcohol:ti and keywords: (abstinence OR abstinent OR abstain) n=21
- 5. alcohol:ti and keywords: (detox OR detoxification OR detoxified) n=5

#### WHO International Clinical Trials Registry Platform (ICTRP)

alcohol use disorder OR chronic alcoholic intoxication OR alcohol dependence OR alcohol dependency OR alcohol use disorders

# **Supplement 3. List of excluded interventions**

| ID            | <b>AUTHOR/YEAR</b>               | INTERVENTION  | REASONS  |
|---------------|----------------------------------|---|--|
| 11778         | Ashrafioun 2009 <sup>1</sup>     | <ol> <li>Usual care</li> <li>Usual care + motivational interview</li> <li>Usual care + twelve step facilitation message</li> </ol>  | Intervention started while hospitalisation.                |
| 520           | Bejczy 2014 <sup>2</sup>         | <ol> <li>glycine transporter-1 Org 25935</li> <li>Placebo</li> </ol>  | Not marketed in the world                                  |
| 14425         | Blake 1967 <sup>3</sup>          | <ol> <li>Electrical aversion therapy</li> <li>Relaxation aversion</li> </ol>  | Aversion therapy   |
| 17369         | Buchholz 2020 <sup>4</sup>       | <ol> <li>Intervention group: MATE-interview, followed by level of care (LOC)-recommendation with multidisciplinary team</li> <li>Control group: MATE-interview without LOC-recommendation (normal follow-up)</li> </ol>   | Interventions were conducted during the inpatient settings |
| 14707         | Cannon 1981 <sup>5</sup>         | <ol> <li>Emetic aversion conditioning group</li> <li>Shock aversion conditioning group</li> <li>control</li> </ol>  | Aversion therapy   |
| 14495         | Driessen 2001 <sup>6</sup>       | 1. 3-week in-patient motivational treatment programme   | Inpatient setting.   |
| 14380         | Fleiger 1973 <sup>7</sup>        | <ol> <li>Covert sensitization – convert or imagined stimuli for both the conditioned stimulus and the unconditioned stimulus</li> <li>Control</li> </ol>  | Aversion therapy. Inpatient setting.                       |
| 3497          | Klauss 2014 <sup>8</sup>         | <ol> <li>Transcranial direct current stimulation (tDCS)</li> <li>Sham-tDCS group</li> </ol>   | Medical device   |
| 14452         | Madill 1966 <sup>9</sup>         | <ol> <li>Aversion therapy by succinylcholine-induced paralysis (alcohol or bottle was given during paralysis)</li> <li>Pseudo-conditioning group (with succinylcholine given but without alcohol or bottle given during paralysis)</li> <li>Placebo</li> </ol>  | Aversion therapy by succinylcholine-induced paralysis      |
| 4328,<br>4322 | Martinotti 2010 <sup>10</sup> 11 | <ol> <li>Acetyl-L-Carnitine (ALC) at a dosage of 3 g/day by slow IV infusion (500 ml of solution infused in 3-4 h) for 10 days and then 3 g three times a day orally for the remainder of the study</li> <li>ALC 1 g/day by slow IV infusion for 10 days and then 3 g three times a day orally for the remainder of the study</li> <li>Placebo</li> </ol> | Require infusion and frequent follow-ups                   |

| 14460         | O'Connell 1988 <sup>12</sup>   | <ol> <li>Relapse Prevention (rehabilitation programme)</li> <li>Social skill training (rehabilitation programme)</li> <li>Cognitive reframing (rehabilitation programme)</li> <li>Meditation training (rehabilitation programme)</li> <li>Control</li> </ol>  | Not intervention of interests. Inpatient setting.                 |
|---------------|--------------------------------|---|---|
| 14464         | Regester 1971 <sup>13</sup>    | 1. Aversion therapy by giving electric shock  | Aversion therapy  |
| 6430          | Soyka 2008 <sup>14</sup>       | <ol> <li>Cannabinoid receptor 1 blocker rimonabant (SR 141716)</li> <li>Placebo</li> </ol>  | Not marketed in the world   |
| 14785         | Steffen 1975 <sup>15</sup>     | <ol> <li>Feedback-assisted Relaxation training, which took place in the Rutgers<br/>Alcohol Behavior Research Laboratory, was accomplished by the Bio-<br/>Electric Information Feedback System (see Steffen, Nathan, &amp; Taylor,<br/>1974, for a further description of setting and apparatus)</li> <li>Attention placebo</li> </ol> | Laboratory setting using electromyographically induced relaxation |
| 14472         | Vogler 1975 <sup>16</sup>      | <ol> <li>Aversion therapy with electrical shock</li> <li>Control</li> </ol>   | Aversion therapy with electrical shock                            |
| 14474         | West 1979 <sup>17</sup>        | <ol> <li>Rehabilitation program</li> <li>Waiting list</li> </ol>  | Rehabilitation program  |
| 14476         | WHO 1992 <sup>18</sup>         | <ol> <li>Control</li> <li>Simple advice</li> <li>Brief counselling</li> </ol>   | Brief intervention for hazardous alcohol use.                     |
| 7227,<br>7226 | Wiesbeck 1999 <sup>19 20</sup> | <ol> <li>Ritanserin</li> <li>Placebo</li> </ol>   | Ritanserin is not marketed for clinical use                       |

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#### SUPPLEMENT 4. CRITERIA OF GRADE ASSESSMENT BY CINEMA

| Judgement         | Criteria   | Instruction for downgrading  |
|-------------------|--|--|
| Within-study bias | Within-study bias was evaluated by majority of risk of bias assessment results within each comparison (refer to S6).  We increased the concern one level for comparisons with single study only.   | <ul> <li>Major concerns: downgrade the evidence one level</li> <li>Some concerns: downgrade the evidence one level with 2 or more some concerns in other judgements</li> </ul> |
| Reporting bias    | Reporting bias was evaluated by non-statistical consideration of likelihood of non-publication of evidence.  | We selected "suspected" among all comparisons but did not downgrade the confidence by this judgement.  |
| Indirectness      | As outcome (continuous abstinence) has consistent, clear definition, indirectness was only evaluated by majority of populations within each comparison.  Populations among studies were assessed by distributions of age, gender and comorbidities (refer to S4)   | <ul> <li>Major concerns: downgrade the evidence one level</li> <li>Some concerns: downgrade the evidence one level with 2 or more some concerns in other judgements</li> </ul> |
| Imprecision       | Imprecision was focused on width of confidence interval (CI) based on a clinically important odds ratio of 1.2 for abstinence and 0.8 for dropouts.  We increased the concern one level if the width of CI is between 4 times and 10 times of lower limit. The concern level was increase two levels if the width of CI is above 10 times of lower limit.                                      | <ul> <li>Major concerns: downgrade the evidence one level</li> <li>Some concerns: downgrade the evidence one level with 2 or more some concerns in other judgements</li> </ul> |
| Heterogeneity     | Heterogeneity was evaluated according to the CINeMA documentation by variability of effects in relation to the clinically important size of effect and between-study variance for the network meta-analysis.  We increased the concern one level if there is no information regarding between-study heterogeneity for each direct comparison or I <sup>2</sup> > 60% in the direct comparison. | <ul> <li>Major concerns: downgrade the evidence one level</li> <li>Some concerns: downgrade the evidence one level with 2 or more some concerns in other judgements</li> </ul> |
| Incoherence       | Incoherence was evaluated by the design-by-treatment intervention model globally and side-splitting approach locally.  | <ul> <li>Major concerns: downgrade the evidence one level</li> <li>Some concerns: downgrade the evidence one level with 2 or more some concerns in other judgements</li> </ul> |

Quality of the evidence (GRADE):

**High quality:** Further research is very unlikely to change our confidence in the estimate of effect.

**Moderate quality:** Further research is likely to have an important impact on our confidence in the estimate of effect and may change the estimate.

**Low quality**: Further research is very likely to have an important impact on our confidence in the estimate of effect and is likely to change the estimate.

**Very low quality:** We are very uncertain about the estimate.

### SUPPLEMENT 5. CHARACTERISTICS OF THE INCLUDED STUDIES

| Trial; Country   | Design  | Alcohol dependence diagnostic criteria   | Intervention groups  | Supportive treatment (all groups)   | Severity of alcohol dependence; Baseline   | Comorbidities;<br>Substance use                                  | Socioeconomic<br>status  | Main results:<br>Abstinence  |
|--|---|--|--|---|--|--|--|--|
| Funding;<br>Reference;   | Recruitment   | Detoxification method  | Treatment duration/follow-up timepoints  |   | consumption; Previous<br>treatment   |  |  | (n/N)  |
| Enrolment date;<br>Registry  | N of patients; Mean age (year); %Female   | Detoxilication method  | umeponius  |   | treatment  |  |  | Dropouts<br>(n/N)  |
| Angelone 1998 <sup>1</sup><br>Italy  | RCT, single-blind  Alcohol Related Disorders Unit  N = 73; 48.8 (SD 10.1); 32%                    | DSM-IV  In-patient detoxification via chlordesmethyldiazepam IV and supplied with glutathione, 5-adenosylmethionine, thiamine, and electrolytes (Mean: 10days) | No pharmacological treatment (TAU) (N = 23)     Fluvoxamine: 150 mg/day Oral (N = 25)     Citalopram: 20 mg/day Oral (N = 33)  16 weeks  | Cognitive-behavioural group<br>therapy, daily for 8 weeks after<br>detoxification, then weekly  | MAST: 33.0 (SD 9.6)  History of withdrawal: 50.7%  Duration of AD (month): 129.1 (SD 95.0)   | NR   | NR   | TAU: 7/23<br>FLX: 14/25<br>CIT: 17/33<br>TAU: 0/23<br>FLX: 3/25<br>CIT: 5/33     |
| BACLAD <sup>2</sup><br>Germany<br>Supported by German<br>Research Foundation             | RCT, double-blind  The outpatient unit of UniversitätsmedizinBerlin  N = 56; 46.5 (SD 7.0); 30.3% | DSM-IV-TR&ICD-10 detoxification  | Placebo (N = 28)     Baclofen: 15 mg/day initially, increased to 270 mg/day, and then tapering down (N = 28)     weeks/28 weeks  | Medical Management as described by Pettinati et al 2004), which focuses on psychoeducation and enhancement of motivation and adherence. | Years of hazardous alcohol consumption: 12.7 (SD 8.8)  Alcohol consumption (g/day) before inclusion: 198.9 (SD 93.9)  ADS: 16.2 (5.6)  N of previous detoxifications: One: 32.1% 2-5: 50.0%  More than 5: 17.9%  | Smoker: 62.5%  | Married: 28.6% (PLA: 11% vs GHB: 5%) Employed: 57.1% Education (above secondary): 84.6% Family history of alcoholism: 60.7%  | PLA: 3/28<br>BAC: 10/28<br>BAC: 12/28<br>PLA: 13/28                              |
| Baltieri 2003 <sup>3 4</sup> Brazil Dec 2001 to Feb 2002                                 | RCT, double-blind  Clinical Hospital of the University of São Paulo  N = 75; 44.2 (SD 8.3); 0%    | ICD-10  1-week detoxification  | 1. Placebo (N = 35)<br>2. Acamprosate: 1998 mg/day Oral (N = 40)<br>12 weeks/24 weeks  | Usual procedures of GREA<br>(behavioural orientation, clinical<br>assessment and incentive to the<br>participation in the group of AA)  | Alcohol intake (g/day): 360.0 (SD 150.0)   | NR   | NR   | PLA: 7/35<br>ACP: 17/40<br>PLA: 7/35<br>ACP: 10/40                               |
| <b>Baltieri 2008</b> <sup>5 6</sup> Brazil 2005 to 2007                                  | RCT, double-blind Clinical Hospital of the University of São Paulo N = 155; 44.3 (SD 8.4); 0%     | ICD-10  1-week outpatient detoxification via lorazepam and Vitamin B1  | Placebo (N = 54)     Naltrexone: 50 mg/day Oral (N = 49)     Topiramate: 25 mg/day initially, increased to 300mg/day Oral (N = 52)     weeks   | Relapse prevention counselling  AA (encouraged)   | SADD: 29.0 (SD 8.5) OCDS: 49.8 (SD 13.2)  Quantity of alcohol used (g/day): 301 (SD 174) Time since alcohol-related problems occurred (year): 9.7 (SD 10.0)  | Cigarettes per day:<br>16.6 (SD 12.2)<br>HAM-D: 10.3 (SD<br>6.9) | Married: 51%<br>Non-White: 29%<br>High school graduate and<br>above: 47.8%<br>Family history of<br>alcoholism: 81.3%   | PLA: 15/54<br>NTX: 14/49<br>TPM: 24/52<br>PLA: 31/54<br>NTX: 20/49<br>TPM: 19/52 |
| <b>Barrias 1997</b> <sup>7</sup><br>Portugal   | RCT, double-blind 9 Centres N = 302; 40.4; 7.9%   | DSM-III  Detoxification and at least 5-day abstinence  | 1. Placebo (N = 152) 2. Acamprosate: BW≥ 60 kgs: 1998 mg/day; BW < 60 kgs: 1332 mg/day Oral (N = 150) 12 months/18 months  | NR  | MAST: 32.0<br>Impulse (craving): 65.6<br>Quantity of alcohol:<br>< 5 drinks/day: 4%<br>6-10 drinks/day: 31.1%<br>> 10 drinks/day: 64.9%<br>Frequency:<br>1-2 d/week: 2%<br>3-6 d/week: 9.6%<br>Dally: 88.4%      | Depression (HDS):<br>19.4  | NR   | PLA: 31/152<br>ACP: 52/150<br>PLA: 69/152<br>ACP: 64/150                         |
| Bender 2007 <sup>8</sup><br>Germany<br>Supported by Sanofi-<br>Aventis (Berlin, Germany) | RCT, double-blind  Multicentre  N = 299; 42.0 (SD 8.6); 26.8%                                     | ICD-10  Detoxification and abstinence for at least 7 days  | Placebo (N = 150)     Tiapride: up to 600 mg/day depending on post-withdrawal symptoms in the first month, then reduced to 300 mg/day for the rest 5 months Oral (N = 149)     Weeks | Usual psychosocial alcohol treatment programme depending on the centre  | N of previous alcohol-specific treatments: 3 (SD 6.5)  Duration of regular alcohol consumption (year): 17.5 (SD 9.5)  Amount of daily alcohol consumption during last drinking period (mL/day): 258.5 (SD 163.7) | NR   | Permanent relationship<br>(married): 75%<br>Employed: 54.5%<br>High school graduate and<br>above*: 83%<br>*Sum of completion of<br>apprenticeship, vocational<br>school and university | PLA: 54/150<br>TPD: 37/149<br>PLA: 35/150<br>TPD: 31/149                         |

| Besson 1998 <sup>9</sup> Switzerland  Supported in part by state funds and by a grant from Lipha, Inc.       | Randomised, double-blind Three psychiatric clinics N = 110; 42.5; 20%   | DSM-III (chronic or episodic<br>alcohol dependence)  Acute withdrawal treatment and<br>a minimum of 5 days of<br>abstinence | Placebo (N = 55)     Acamprosate: 1332mg-1998 mg/day, adjusted by weight. BW ≥ 60kg, 1998 mg/day; BW < 60 kg, 1332 mg/day. Oral (N = 55)  Twenty-two patients (40%) in the placebo group and 24 patients (43.6%) in the acamprosate group received concomitant disulfiram.  360 days/720 days  | Short sessions (15 to 20 min) of psychosocial assessment and support approximately twice a month.  Social service (when necessary) | MAST: 31.6<br>VAS: 39.9<br>Duration of illness (year): 15.0<br>Previous use of disulfiram: 50%<br>Previous detoxification: 61%<br>Previous AA: 22%<br>Previous psychotherapy: 50%  | Thioridazine<br>(anxiolytic): 30%<br>HAM-A: 28.7<br>Dibenzepin<br>(antidepressants):<br>11.8%<br>HAM-D: 42.2 | Family history: 53.6%   | PLA: 3/55<br>ACP: 14/55<br>PLA: 36/55<br>ACP: 36/55                                 |
|--|---|---|--|--|--|--|---|---|
| Burtscheidt 2001 <sup>10-12</sup> Germany Supported by the German Federal Ministry of Education and Research | RCT, open-label  Department of Psychiatry at the Heinrich-Heine-University Duesseldorf  N = 120; 42.4 (SD 7.4); 30% | DSM III-R/ICD 10 In-patient detoxification treatment  | Standard therapy (TAU): facilitating the contact to self-help groups and extramural treatment facilities, organizing weekly meetings of former patients and offering counselling and crisis intervention on demand over 26 sessions and 6 months (N = 40) 2. CBT: weekly behavioural group therapy (max of six patients) lasted 100 minutes over 26 sessions and 6 months as described by Beck et al. (N = 40)     3. CST: weekly behavioural group therapy (max of six patients) lasted 100 minutes over 26 sessions and 6 months modified from Monti et al. (N = 40) | NR   | Age of regular alcohol consumption (year): 26.3 (SD 8) Previous inpatient detoxification in the last 5 years: 46.7%  | NR   | Married: 36%<br>High school graduate and<br>above: 45%<br>Employed: 38%       | TAU: 11/40<br>CBT: 11/40<br>CST: 8/40<br>TAU: 4/40<br>CBT: 6/40<br>CST: 8/40        |
| Caputo 2003 <sup>13</sup> Italy Supported by internal funds  | RCT, open-label NR N = 35; 48.8 (SD 9.1); 51.4%   | DSM-IV<br>Detoxification  | 6 months/12, 18, 24 and 30 months  1. GHB: 50 mg/kg TID Oral (N = 18)  2. Naltrexone: 50 mg/day Oral (N = 17)  3 months  | Weekly counselling sessions  AA and social services  | Duration of alcohol addiction (year): 14.6 (SD 9.4) Alcohol craving scale: 9.0 (SD 2.2)  Degree of alcohol dependence according to DSM-IV criteria (%): Mild (2-3 items of criteria): 11.5% Moderate (4-5 items of criteria): 28.6% Severe (6 or more items of criteria): 60.0%  | NR   | Married: 51.5%<br>High school graduate and<br>above: 37.2%<br>Employed: 65.7% | GHB: 12/18<br>NTX: 6/17<br>GHB: 4/18<br>NTX: 4/17                                   |
| Caputo 2007 <sup>14</sup> Italy Supported by internal funds  | RCT, open-label  Multicentre in Italy  N = 55; 48.0 (SD 10.5); 0%   | DSM-IV-TR<br>Detoxification   | GHB: 50 mg/kg TID Oral (N = 20)     Naltrexone: 50 mg/day Oral (N = 17)     Combined: GHB 50mg/kg TID + NTX 50 mg/day Oral (N = 18)     months   | AA and social services   | Duration of alcohol addiction (year): 15.5 (SD 10.7)  Degree of alcohol dependence according to DSM-IV-TR criteria (%): Mild (2-3 items of criteria): 2.0% Moderate (4-5 items of criteria): 17.2%  Severe (6 or more items of criteria): 79.8%  | NR   | Married: 34.1%<br>High school graduate and<br>above: 38.4%<br>Employed: 49.9% | GHB: 8/20<br>NTX: 1/17<br>GHB+NTX: 13/18<br>GHB: 2/20<br>NTX: 4/17<br>GHB+NTX: 3/18 |
| Chick 2000 <sup>15</sup> UK<br>1991-1993<br>Funded by Lipha<br>Pharmaceuticals                               | RCT, open-label  20 centres across the UK  N = 581; 43.3; 16.5%   | DSM-III  In-or out-patient detoxification by chlordizepoxide or no drugs (defined as at least 5 days of abstinence)         | 1. Placebo (N = 292)<br>2. Acamprosate: 1998 mg/day Oral (N = 289)<br>24 weeks/28 weeks  | Usual psychosocial out-patient treatment programme   | MAST: 37.5<br>SADQ: 33.5<br>CAGE (a score of 4): 75%<br>Craving at baseline: 23.0 mm<br>Alcohol consumption (units/week): 178.1  | NR   | Unmarried: 44.0%<br>Unemployed: 48.5%   | PLA: 32/292<br>ACP: 35/289<br>PLA: 189/292<br>ACP: 189/289                          |
| Chick 2004 <sup>16-19</sup> United Kingdom, Eire, Austria and Switzerland Funded by Solvay–Duphar            | RCT, double-blind  Multicentre across Europe  N = 521; 42.0 (SD 9.8); 25.1%   | DSM-III-R  Detoxification and abstinent for 10–30 days  | 1. Placebo (N = 249*) 2. Fluvoxamine: 100-300 mg/day Oral (N = 243*)  1 year  *ITT sample used in the trial  | Outpatient psychosocial, varied between centres  AA (advised)  | SADQ: 32.1 (SD 13.6) Age at start of regular drinking (year): 21.7 (SD 7.9) Age at start of problem drinking (year): 31.4 (SD 10.3) Typical week's recent heavy drinking (unit): 178.0 (SD 117.5) N of days drank in typical week: 6.2 (SD 1.5)  DSM-III-R (severity of dependence, %): Mild: 5% Moderate: 30.5% Severe: 65.0% | NR   | NR  | PLA: 72/249<br>FLX: 70/243<br>PLA: 133/249<br>FLX: 171/243                          |

| Cornelius 1997 <sup>20-22</sup> USA Supported by NIAAA and MHCRC   | RCT, double-blind  The Western Psychiatric Institute and Clinic of the University of Pittsburgh  N = 51; 34.8 (SD 10.2); 49.0%  | DSM-III-R  2-3 days of detoxification with minor tranquilizers   | 1. Placebo (N = 26) 2. Fluoxetine: 20 mg/day. Max 40 mg/day Oral (N = 25)  12 weeks/1 year  | Weekly supportive<br>psychotherapy sessions and<br>weekly meetings with an<br>psychiatrist<br>AA   | N of DSM-III-R criteria, AD: 5.7 (1.7) N of DSM-III-R criteria, Major depression: 6.8 (1.1) N of days drinking in past 90 days: 49.8 (SD 29.1) N of days drinking to drunkenness in past 90 days: 36.0 (SD 27.1)   | Marijuana use: 22  HAM-D-24 before detox: 33.1  HAM-D-24 after detox: 18.6 (SD 8.1)  BDI before detox: 27.3 (SD 12.5)  BDI after detox: 15.9 (SD 11.3) | Married: 11.7%<br>Non-white: 52.9%<br>Employed: 31.4%   | PLA: 4/26<br>FLT: 7/25<br>PLA: 10/26<br>FLT: 10/25        |
|--|---|--|---|--|--|--|---|---|
| Coriale 2019 <sup>23</sup> Italy Supported by the Italian Health Ministry-National Fund to fighting drugs, 4116 (ex1686) | RCT  "Latium Region Alcohol Referral Center" of Policlinico Umberto I, Sapienza University Hospital  N = 90; 47.1 (SD 9.8); 30% | DSM-V<br>6-10 days detoxification with<br>diazepam   | Short-form CBT: 5-session intervention, each session lasted 60mins (N = 43)     MET: 3-session of client-centred intervention, each session lasted 60 mins (N = 47)     months/365 days | Medical follow up every month;<br>psychological follow up at third,<br>sixth and twelfth months  Patients received Naltrexone<br>(31.4%), Nalmefene (21.2%)<br>and Acamprosate (47.43%) for<br>alcohol treatment | Drinks per day: 13.7 (10.3)  Age of onset: 29.9 (11.3)  Year of consumption: 15.6 (10.1)   | Smoking (cigs/day): 17.8  MMSE: 16.0 (SD 1.36) SCL-90 (Depression): 0.64 (SD 0.44) SCL-90 (Anxiety): 0.53 (SD 0.38) SCL-90 (GSI): 0.52 (SD 0.29)       | Educational level (1 Low 4 Top): 2.73 (0.25)  | sCBT: 0/43<br>MET: 4/47<br>sCBT: 15/43<br>MET: 43/47      |
| <b>Croissant 2006</b> <sup>24</sup> Germany  | RCT, open-label  NR  N = 30; 45.7 (SD 7.3); 26.7%   | ICD-10 and DSM-IV  In- or out-patient detoxification and 1-week abstinence   | Acamprosate: 1998 mg/day Oral (N = 15)     Oxcarbazepine: 150 mg/day initially, increased to 1200 mg/day Oral (N = 15)     months/6 months  | NR   | N of ICD 10 criteria: 4.7 (SD 1.5)<br>DSM-IV criteria: 5.6 (SD 1.8)<br>Duration of AD: 11.6 (8.4)<br>ADS: 15.2 (SD 8.0)<br>Ethanol consumption (drinks/day):<br>12.2 (SD 10.2)<br>Drinks per drinking day: 17.7 (SD 13.7)<br>N of alcoholism inpatient<br>treatments: 3.1 (SD 2.5)<br>History of anticraving medication:<br>1.5 (SD 10.4)<br>OCDS-G: 16.2 (SD 7.2) | Nicotine<br>dependence (%):<br>63.3%<br>FTND: 3.9 (SD 3.4)<br>STAI: 44.9 (SD<br>11.5)<br>BDI: 11.2 (7.4)   | Married: 50%<br>High school graduate and<br>above: 53.3% (≥ 10 years)<br>Employed: 50%                                  | ACP: 2/15<br>OCB: 4/15<br>ACP: 10/15<br>OCB: 10/15        |
| De Fuente 1989 <sup>25</sup><br>Mexico<br>Supported in part by<br>CONACYT-Mexico   | RCT, double-blind  Alcoholism and Drug Dependence Unit, Instituto Mexicano de Psiquiatria, Mexico  N = 53; 44 (SD 12); 26.4%    | National Council on Alcoholism<br>major diagnostic criteria<br>In-paitent 4-week detoxification<br>by chlordiazepoxide and<br>psychosocial therapy | 1. Placebo (N = 25)<br>2. Lithium: 0.6-1.2 mEq/L (N = 28)<br>6 months   | NR   | NR   | Probable depression: 47%   | NR  | PLA: 7/25<br>LIT: 10/28<br>PLA: 12/25<br>LIT: 14/28       |
| Favre 1997 <sup>26</sup> <sup>27</sup> France Aug 1990 to Jun 1994   | RCT, double-blind  Multicentre  N = 342; 42.1 (SD 7.6); 14.5%   | DSM III-R<br>In-or out-patient detoxification  | 1. Placebo (N = 172) 2. Tianeptine: 12.5 mg TID Oral (N = 170) 9 months   | NR   | Duration of the dependence (year): 6.5 (5.8)  Severity of dependence (DSM III-R): Mild: 5.5% Moderate: 43.5% Severe: 51%  Short-MAST: 8.5 (2.3) Previous alcohol withdrawals: 2.2 (1.9)  | MADRS: 7.8 (SD<br>5.2)<br>HSCL: 30.2 (SD<br>23.8)  | NR  | PLA: 42/172<br>TIP: 48/170<br>PLA: 94/172<br>TIP: 112/170 |
| Florez 2008 <sup>28</sup><br>Spain<br>Jan 2005 to Feb 2006   | RCT, open-label Outpatient alcohol clinic N = 102; 46.8 (SD 8.6); 14.7% 6 months  | ICD-10<br>Detoxification via clorazepate<br>(<14 days)   | Naltrexone: 50 mg/day (N = 51)     Topiramate: 50 mg/day, increased to 200 mg/day. Max 400 mg/day (N = 51)     months   | 45 to 60-minute Individualized<br>psychological therapy based on<br>the Relapse Prevention Model<br>(Carroll, 1996; Irvin et al., 1999;<br>Jaffe et al., 1996)   | OCDS total: 17.2 (SD 7.2) Alcohol intake (> 700 g/week): 73.5%   | Fagerstrom: 3.54<br>(SD 3.65)<br>Personality<br>disorders: 27.5%   | Married: 69.6%<br>Employed: 24.5%<br>High school graduate and<br>above: 17.6%<br>Family history of<br>alcoholism: 51.0% | NTX: 23/51<br>TPM: 24/51<br>NTX: 6/51<br>TPM: 4/51        |
| Florez 2011 <sup>29</sup><br>Spain   | 6 months  RCT, open-label  Outpatient addiction treatment clinic  N = 182; 47.8 (SD 9.2); 14.8%                                 | ICD-10 Detoxification by clorazepate   | Naltrexone: 50 mg/day Oral (N = 91)     Topiramate: 50mg/day initially, increased to 200 mg/day Oral (N = 91)     months  | BRENDA weekly  | OCDS total: 18.1 (SD 7.6)<br>Alcohol intake (> 700 g/week):<br>74.2%   | Fagerstrom: 3.59<br>(SD 3.69)<br>Personality<br>disorders: 23.1%   | alconolism: 51.0%  Married: 62.1%  Employed: 46.7%  Elementary school only: 87.9%  Family history of alcoholism: 72.0%  | NTX: 38/91<br>TPM: 43/91<br>NTX: 11/91<br>TPM: 6/91       |

| Friedmann 2008 <sup>30</sup> USA Jun 2002 to Jan 2006 Supported by NIAAA                     | RCT, double-blind Two centres in the USA N = 173; 41 (SD 7.2); 8.7%                                 | DSM-IV  In-patient 5-day detoxification with chlordiazepoxide  | 1. Placebo (N = 85) 2. Trazodone: 50 mg before bedtime. Max 150 mg. (N = 88)  12 weeks  | NR   | Drinks per drinking day in past 3 months: 21.9 (SD 12.7) Mean proportion of days abstinent in past 3 months: 0.21 (0.27) Mean proportion of heavy drinking days: 75.0%  | All experienced sleep disturbance during previous periods of abstinence or a global score of 5 or greater on the Pittsburgh Sleep Quality Index (PSQI)  Sleep quality: 11.9 (3.5) % Depressed: 30.1% | Homeless: 20.8%<br>Unemployed: 34.4%<br>Caucasian: 86.2%<br>12+ years of school: 74.1%          | PLA: 12/85<br>TZD: 8/88<br>PLA: 16/85<br>TZD: 16/88        |
|--|---|--|---|--|---|--|---|--|
| Fuller 1986 <sup>31 32</sup><br>USA<br>Jul 1979 to Jul 1983                                  | Nine Veterans Administration<br>medical centres<br>N = 605; 41.7 (SD 10.3); 0%                      | National Council on Alcoholism  In-patient detoxification  | 1. Placebo (riboflavin 50mg) (N = 199) 2. Disulfiram: 1 mg (N = 204) 3. Disulfiram: 250 mg (N = 202)  1 year  Group 1 and 2 results were combined for meta-analysis | Counselling or psychotherapy<br>once a week for 6 months and<br>then biweekly for the next 6<br>months | Duration of ethanol abuse (year):<br>11.7 (SD 9.9)<br>Days drank in month prior to study:<br>20.4 (SD 9.9)  | NR   | Non-white: 46%<br>Married: 70.0%<br>Employed: 53.7%<br>High school graduate and<br>above: 74.4% | PLA: 78/403<br>DSF: 38/202<br>PLA: 20/403<br>DSF: 8/202    |
| GATE 2 <sup>33-35</sup> Austria, Germany, Italy and Poland                                   | RCT, double-blind  Multicentre  N = 314; NR; NR   | DSM-IV<br>Detoxification   | 1. Placebo (N = 160)<br>2. GHB: 3.06 g/day for BW < 65kg and<br>3.5g/day for BW > 65 kg (N = 154)<br>6 months/12 months   | NR   | NR  | NR   | NR  | PLA: 48/160<br>GHB: 63/154<br>PLA: 129/160<br>GHB: 114/154 |
| <b>Geerlings 1997</b> <sup>36</sup> Beligum, Luxembourg, Netherlands Funded by Lipha Belgium | RCT, double-blind  22 treatment centres  N = 262; 41.0 (SD 8.7); 24.1%                              | DSM-III  Detoxification  | 1. Placebo (N = 134) 2. Acamprosate: 1332-1998 mg/day, depending on weight. BW ≥ 60 kg: 1998 mg/day; BW < 60 kg: 1332 mg/day Oral (N = 128) 6 months/12 months      | Out-patient psychosocial intervention  | Duration of alcohol problems (year): 11.1 (SD 8.0) N of previous weaning cures: 2.5 (SD 4.2)  Daily consumption: <5 std drinks/day: 3.5% 5-10 std drinks/day: 23.0% > 10 std drinks/day: 73.4%  Frequency: <2 times/week: 6.5% 2-6 times/week: 28.0% Daily: 65.6% | NR   | NR  | PLA: 7/134<br>ACP: 14/128<br>PLA: 111/134<br>ACP: 98/128   |
| Gottlieb 1994 <sup>37</sup> USA Supported in part by Stuart Pharmaceuticals/ICI              | RCT, double-blind  Acute Care and Evaluation Unit of St. Mary's Hospital  N = 100; 19 (SD 13.4); NR | SADQ<br>Supervised alcohol withdrawal  | Near In Placebo (N = 50)     Atenolol: 0-100 mg/day, depending on heart rate Oral (N = 50)     year   | Customary behavioural relapse prevention therapy   | Craving for alcohol: 28.5<br>SADQ (0-60) (median): (P: 25; A: 27)   | NR   | High school graduate: 64%   | PLA: 8/50<br>ATL: 7/50<br>PLA: 28/50<br>ATL: 29/50         |
| Pharma  Gual 2001 <sup>38</sup> Spain  Funded by Merck Lipha,  Spain                         | RCT, double-blind  11 centres  N = 296; 41.0 (SD 9.2); 20.4%  | DSM-III-R  In- or out-patient detoxification by tetrabamate or chlomethiazole during the first 14-day period | 1. Placebo (N = 147*) 2. Acamprosate: 1998mg/day Oral (N = 141*) 180 days *ITT sample used in the trial   | NR   | DSM-III-R total index: 7.77 (SD 1.3) MAST: 27.8 (SD 8.5) Dependence duration (year): 12.8 (SD 7.9) Frequency of alcohol consumption: 2 times: 2.1% > 2 times: 13.9% Daily: 84%  Alcohol quantity (day per drinking day): < 5: 3.8% 5-10: 29.9% > 10: 66.3%        | Antabuse<br>(disulfiram<br>prescription):<br>52.4%   | NR  | PLA: 26/147<br>ACP: 35/141<br>PLA: 57/147<br>ACP: 45/141   |
| <b>Gual 2002</b> <sup>39</sup><br>Spain  | RCT Four Spanish hospitals N = 81; 39.6 (SD 8.5); 14.9%   | DSM-III-R<br>Detoxification  | 1. Placebo (N = 43)<br>2. Tiapride: 100mg every 8 hours Oral (N= 38)<br>180 days  | NR   | Age of beginning drinking (< 15 years): 67.9%   | NR   | Married: 77.3%  Education (primary): 47%  Family history of alcoholism: 49.7%                   | PLA: 19/43<br>TPD: 11/38<br>PLA: 13/43<br>TPD: 7/38        |

| Gustafson 2014 <sup>40 41</sup> USA Feb 2010 to Jun 2012 NCT101003119  | RCT, open-label  Three residential programs  N = 349; 38.4 (SD 10.4); 39.2%      | DSM-IV  Detoxified from residential programs  | 1. Control (TAU) (N = 179) 2. Addiction-Comprehensive Health Enhancement Support System (A-CHESS; smartphone-based application) (N = 170)  12 months   | Varied depending on the centre, containing CBT, counselling, motivational interviewing and psychoeducationetc.  AA | NR NR   | Use or abuse drugs<br>besides<br>alcohol:62.5%<br>Have other mental<br>health<br>problems/issues:<br>47.0%<br>Continues to be<br>affected by history<br>of emotional or<br>physical trauma:<br>53.3% | White: 80.2%<br>Unemployed: 78.5%<br>High school graduate and<br>above: 79.9%                    | TAU: 63/179<br>A-CHESS: 81/170<br>TAU: 40/179<br>A-CHESS: 38/170   |
|--|--|---|--|--|---|--|--|--|
| Huang 2002 <sup>42</sup>   | RCT, single-blind  | DSM-IV and CCMD-2-R   | 1. Placebo (N = 23)  | NR   | Year of drinking heavily (year):  | NR   | NR   | PLA: 6/22  |
| China  Dec 1995 to Dec 1999  | Guangzhou Psychiatric<br>Hospital<br>N = 45; 45 (SD 8); 0%                       | Inpatient detoxification  | 2. Naltrexone: 30 mg/day Oral (N = 20)  12 weeks   |  | 18.3 (SD 5.5) N of inpatient detoxification: 2.2 (SD 1.7) Amount of drinking (g/day): 319.8 (SD 82.3) Craving: 2.92 (SD 0.88)   |  |  | NTX: 16/23<br>PLA: 2/22<br>NTX: 1/23   |
| Huang 2005 <sup>43</sup><br>Taiwan   | RCT, double-blind  A psychiatric hospital  N = 40; 40.5 (SD 8.0); 0%             | DSM-III-R<br>In-patient 2-week detoxification   | 1. Placebo (N = 20)<br>2. Naltrexone: 50 mg/day (N = 20)<br>14 weeks   | Weekly 30-minute individual supportive psychotherapy sessions  | Age of habitual drinking (year): 26.9 (6.8) Baseline alcohol craving score (VAS): 6.3 (2.5)   | NR   | Married: 70% ≥ 9 years of education: 40% SES I-III: 12.5% SES IV-V: 87.5%                        | PLA: 13/20<br>NTX: 11/20<br>PLA: 7/20<br>NTX: 9/20   |
| <b>Janiri 1997 <sup>44</sup></b><br>Italy  | RCT, open  NR  N = 50; 43.7 (SD 11.6); 20%                                       | DSM-IV<br>Detoxification  | 1. Fluvoxamine: 100 mg/day (N = 25)<br>2. Fluoxetine: 20 mg/day (N = 25)<br>90 days  | NR   | NR  | NR   | NR   | FLT: 9/25<br>FLX: 3/25   |
| Jirapramukpitak 2020<br>45<br>Thailand<br>Jul 2015 to Apr 2016<br>TCTR20160215004<br>Supported by Thai Health<br>Promotion Foundation<br>(58-07-007) | RCT A university hospital N = 161; 50.1 (SD 11.5); 24.8%                         | DSM-IV  Detoxified with benzodiazepaines, folic acid, vitamin B (1, 6 and 12) along with brief advice and psychoeducation for 2-4 weeks | 1. Home-visit: 40 visits during the 12-week (N = 80) 2. Contingency management Low (CM-L): in addition to the Home-visit, 30 baht every time when patients had a negative for alcohol (N = 42)* 3. CM High (CM-H) High: in addition to the Home-visit, 60 baht every time when patients had a negative for alcohol (N = 37)*  12 weeks  *Groups 2 & 3 were combined in the NMA | NR   | NR NR   | Smoking: 60.3%  Combined psychiatric illness: 3.7%   | Education (Primary school<br>or lower): 61.5%  | HOV: 12/80<br>CM: 10/79<br>HOV: 1/80<br>CM: 1/79   |
| Joos 2013 <sup>46</sup> Belgium  NTR1736 Oct 2009 to Jul 2011  | RCT, double-blind  Two addiction treatment centers  N = 83; 41.8 (SD 9.4); 14.5% | DSM-IV<br>Detoxification  | 1. Placebo (N = 42) 2. Modafinil: 100 mg/day initially, increased to 300 mg/day (N = 41) 10 weeks/8.5 months   | Behaviourally orientated treatment program within a residential and/or a day care setting.                         | Age of onset of heavy drinking (year): 28.9 (SD 11.0)  Years of heavy drinking: 10.7 (SD 7.8)  %heavy drinking days in 30 days before admission: 52.4% (SD 36.3) %days abstinent in 30 days before admission: 43.7% (SD 36.9)                                       | Non-smokers, %:<br>13.2<br>Cannabis: 18.4%;<br>Other<br>substance/poly:<br>13.6%   | Married: 25.3%   | PLA: 6/42<br>MDF: 12/41<br>PLA: 15/42<br>MDF: 17/41  |
| Kampman 2007 <sup>47 48</sup><br>USA<br>Funded by<br>AstraZeneca<br>Pharmaceuticals  | RCT, double-blind<br>NR<br>N = 61; 47 (SD 8.8); 33%                              | DSM-IV  Detoxification (unknown)  | Placebo (N = 32)     Quetiapine: 50 mg/day, increased to 400 mg/day (N = 29)     Weeks   | Weekly BRENDA (20-30 minutes per session)  | %drinking days in the 90 days prior<br>to detoxification: 77%<br>%heavy drinking days in the 90<br>days prior to detoxification: 72%<br>Drinks per drinking day: 15.5 (SD<br>10.3)<br>ASI: 0.633 (SD 0.196)   | HAM-D: 7.0 (SD<br>6.2)<br>HAM-A: 5.0 (SD<br>5.0)   | White: 54%<br>Married: 31.2%<br>Employed: 90.1%<br>Education (year): 13.8 (SD 2.6)               | PLA: 2/32<br>QTP: 9/29<br>PLA: 8/32<br>QTP: 6/29   |
| Kiefer 2003 <sup>49-53</sup> Germany  Nov 1998 to Nov 2000 Supported by Unviersity of Hamburg, DuPont (medication), and Merck (medication)           | RCT, double-blind Two Hospitals N = 160; 46.2 (SD 9.3); 26.3%                    | DSM-IV (at least 5 criteria) In-patient detoxification  | 1. Placebo (N = 40) 2. Acamprosate: 1998 mg, divided as TID Oral (N = 40) 3. Naltrexone: 50 mg/day Oral (N = 40) 4. Combined: ACP 1998 mg/day + NTX 50 mg/day (N = 40)  Patients started with the intake of medication 5 +/- 1 days before discharge from inpatient treatment.   | Weekly group therapy (coping skills and relapse prevention)  | Years since first alcohol-related problems occurred: 10.14 (SD 8.4) Years since first signs of withdrawal occurred: 7.42 (SD 8.09) N of inpatient detoxification: 2.69 (SD 4.03) Alcohol intake (g/day): 254.9 (SD 129.4)  OCDS: 17.6 (SD 12.0) VAS: 21.2 (SD 27.3) | No. of cigarettes<br>per day: 22.7<br>(15.4)<br>SCL-90 (N = 143):<br>61.3 (51.8)<br>Somatic distress (N = 143): 7.5 (6.7)<br>Depression<br>(N=143): 12.7<br>(8.8)<br>Anxiety (N=143):<br>7.3 (6.4)   | Married: 28% Partnership: 51% High school: 22% Unemployed: 39% Family history of alcoholism: 45% | PLA: 10/40<br>ACP: 17/40<br>NTX: 22/40<br>ACP+NTX: 26/40<br>PLA: 30/40<br>ACP: 23/40<br>NTX: 18/40<br>ACP+NTX: 14/40 |

| Ladewig 1993 <sup>54</sup><br>Switzerland<br>Landabaso 1999 <sup>55</sup><br>Spain                             | RCT, double-blind  Three centres in Switzerland  N = 62; 46.8 (SD 10.2); NR  RCT  NR  N = 30; 30.6 (SD 6.2);                                    | DSM-III  Five-day detoxification  DSM-IV  Detoxification (unknown)                      | 1. Placebo (N = 32) 2. Acamprosate: 1332-1998 mg/day depending on weight. BW < 60kg: 1332 mg/day; BW ≥ 60kg: 1998 mg/day (N = 29)  180 days/360 days 1. TAU (N = 15) 2. Naltrexone: 25 mg/day Oral (N = 15) 6 months/18 months   | Usual treatment (supportive psychotherapy) with an aversion agent | MAST: 38.0 (SD 39.1)  NR   | NR<br>NR   | Married: 53.4%<br>Employed: 76.7%  | ACP: 8/29<br>PLA: 4/32<br>TAU: 3/15<br>NTX: 11/15<br>TAU: 7/15<br>NTX: 2/15 |
|--|---|---|--|---|--|--|--|---|
| Mann 2006 <sup>56</sup> Germany  1997 to 2001 Supported by J. Moormann, M.D. (HF-Arzneimittel, Werne, Germany) | 26.7%  RCT, double-blind  Seven German psychiatric hospitals  N = 151; 43.4 (SD 8.7); 30.2%   | ICD-10 and DSM-IV  In-patient or out-patient detoxification and abstinent for 3–25 days | 1. Placebo (N = 75)<br>2. Galantamine: 25 mg Transdermal (N = 74)<br>12 weeks/24 weeks   | Low-intensity psychosocial standard therapy                       | OCDS-G: 10.6 (SD 6.9) Age at onset of regular alcohol consumption (year): 25.0 (SD 8.6) Age at onset of alcohol dependence (year): 34.9 (SD 8.3)   | Smokers n (%):<br>76.5%  | NR NR  | PLA: 23/75<br>GAL: 9/74<br>PLA: 42/75<br>GAL: 44/74                         |
| Marra 2002 <sup>57</sup><br>France<br>Funded by Sanofi-<br>Synthelabo  | RCT, double-blind  Two hospitals of Assistance Publique-Hôpitaux de Paris  N = 72; 45.2 (SD 7.6); 31.0%   | DSM-IV<br>Inpatient 10-18 days<br>detoxification  | 1. Placebo (N = 34*) 2. Amisulpride: 50 mg/d (N = 37*) 6 months  *One patient excluded in the ITT sample but uncertain in which group  | Individual counselling  | OCDS-O (0-24): 9.8 (4.0) OCDS-C (0-32): 13.0 (3.1) Number of previous participation in inpatient detoxification programmes: 1.3 (SD 2.0) N of days of abstinence 6 months before detoxification: 26.1 (SD 30.3) Age of onset of alcohol dependence: 35.4 (SD 8.9)  Alcohol consumption (g/week): 1295.2 (SD 663.6) | Antidepressant use:<br>12.7%<br>Generalized anxiety<br>disorder: 14.1%   | Employed: 59.2%<br>Living alone: 35.2%<br>Education (>7 years):<br>70.4% | PLA: 8/34<br>AMS: 4/37<br>PLA: 20/34<br>AMS: 27/37                          |
| Martinotti 2007 <sup>58</sup><br>Italy<br>Sep 2005 to Aug 2006   | RCT, open-label  Day-Hospital of Psychiatry and Drug Dependence of the University General Hospital 'A. Gemelli'  N = 84; 46.3 (SD 11.9); 19%    | DSM-IV  3-5 days detoxification by benzodiazepines                                      | Naltrexone: 10 mg/day for one week, then increased to 50 mg/day (N = 27)     Coxcarbazepine (High-dose): 600 mg/day for one week, then increased to 1500-1800 mg/day (N = 29)     Oxcarbazepine (Low-dose): 300 mg/day for one week, then increased to 600-900 mg/day (N = 28)  90 days  Group 2 and 3 were combined for the metanalysis | Supportive self-help group (2 days/week)                          | Duration of alcohol misuse (year):<br>16.1 (SD 7.9)<br>OCDS: 20.0 (SD 12.1)<br>VAS: 3.5 (3.6)  | Multiple substance<br>abuse: 32.1%<br>Dual diagnosis (axis<br>1): 41.7%<br>SCL-90-R (GSI): 1.1<br>(SD 0.7)   | Married: 32.1%<br>High school and above:<br>57.1%                        | NTX: 11/27<br>OCB: 29/57<br>NTX: 6/27<br>OCB: 9/57                          |
| Martinotti 2009 <sup>59</sup><br>Italy<br>Aug 2006 to Nov 2006   | RCT, double-blind  Day-Hospital of Psychiatry and Drug Dependence of the University General Hospital  'A. Gemelli'  N = 57; 40.3 (SD 11.8); 20% | DSM-IV 5-10 days detoxification by benzodiazepines                                      | Naltrexone: 10 mg/day for one week, then increased to 50 mg/day Oral (N = 28)     Aripiprazole: 5 mg/day for one week, then increased to 5-15 mg/day Oral (N = 29)     Meeks   | Supportive self-help group (2 days/week)                          | Daily drinks: 8.5 (SD 3.5)<br>Years of addiction (year): 14.8 (SD<br>6.7)  | Axis I diagnosis:<br>49.1%<br>Axis II diagnosis:<br>29.8%<br>Cannabis abuse:<br>15.8%<br>Cocaine abuse:<br>10.5%<br>BZD abuse: 1.8%<br>MDMA abuse: 1.8%<br>Tobacco smoking:<br>61.4% | NR   | NTX: 11/28<br>ARI: 12/29<br>NTX: 7/28<br>ARI: 7/29                          |
| Martinotti 2010 <sup>60 61</sup><br>Italy  | RCT, double-blind  Day-Hospital of Psychiatry and Drug Dependence of the University General Hospital  N = 59; 40.2 (SD 11.8); 20%               | DSM-IV 5-10 days detoxification by diazepam   | Naltrexone: 10 mg/day for one week, then increased to 50 mg/day (N = 28)     Pregabalin: 50 mg/day for one week, then increased to 150-450 mg/day (N = 31)     16 weeks  | Supportive self-help group (2 days/week)                          | Mean daily drinks: 8.5 (SD 3.5)* Years of addiction: 14.8 (SD 6.7)* *N = 71 from recruitment stage   | Axis I diagnoses: 34.0% Axis II diagnoses: 34% Cannabis abuse: 13.4% Cocaine abuse: 8.5% BZD abuse: 1.7% Tobacco smoking: 59.3%  | NR   | NTX: 11/28<br>PGB: 15/31<br>NTX: 7/28<br>PGB: 4/31                          |

| MATCH project <sup>62-66</sup><br>USA  | RCT   | DSM-III-R   | TSF (TAU): 12 sessions over 12 weeks as described by Nowinski et al. Aimed to help   | NR   | N of DSM-III-R criteria: 6.8 (SD 1.9)   | Lifetime Axis<br>diagnosis: 59.1%   | Married: 32%<br>Six months' continuous  | TAU: 72/247<br>CBT: 79/266                                 |
|--|---|---|--|--|---|---|---|--|
| Supported by NIAAA   | Only participants recruited from five aftercare sites were included in this review  N = 774; 41.9 (SD 11.1); 20%  | At least 7 days of inpatient or intense day hospital treatment                      | individual become an active participant in AA meetings (N = 247) 2. CBT: 12 sessions over 12 weeks as described by Kadden et al. (N = 266) 3. MET: 4 sessions over 12 weeks with the last two sessions conducted at Weeks 6 and 12 as described by Miller et al. (N = 261) |  | Problem drinking (year): 14.8 (SD 10.0) % any alcohol treatment: 61.8% Average drinking per drinking day: 20.5 (SD 12.1)  | Current illicit drug<br>use: 31.9%  | employment: 48%  [Ethnicity] Non-white: 20%   | TAU: 11/247<br>CBT: 10/266<br>MET: 12/261                  |
| Moncini 2000 <sup>67 68</sup><br>Italy   | RCT, double-blind  Toxicological Unit of the Department of Pharmacology, Florence University  N = 17; 46.4; 23.5%   | DSM-IV  30-day in-patient detoxification  | 12 weeks/9 and 15 months  1. Placebo (N = 8)  2. GHB: 50 mg/kg/day (N = 9)  6 months   | NR   | NR NR   | NR  | NR  | PLA: 4/8<br>GHB: 6/9<br>PLA: 2/8<br>GHB: 2/9               |
| Moraes 2010 <sup>69 70</sup><br>Brazil<br>2004 to 2005<br>Supported by the Sao<br>Paulo State Research<br>Foundation-FAPESP  | RCT, open-label  Alcohol and Drugs Research Unit (UNIAD), an outpatient clinic of the Department of Psychiatry, Universidade Federal de Sao Paulo (UNIFESP), Brazil  N = 120; 43 (range 21-59); 10% | DSM-IV Detoxification   | Conventional treatment (CT; TAU): 20 psychotherapy group sessions in 10-week (N= 58)     Home visit (CT + Home visit): 4 visits by a psychologist and a social worker with strategies of the motivational interview (N = 62)   | NR   | Severe AD: 85%  Consumption in the month: Mild (< 4 shots/d): 3 days Moderate (5-9 shots/day): 4.7days Heavy (≥10 shots/d): 4.1 days  | Anxiety or<br>depression (SRQ-<br>20): 25.8%<br>Cognitive<br>impairment (scale<br>FAB): 63.3%   | Married: 41.7%<br>White: 76.7%<br>Elementary education and<br>above: 67.5%<br>Independent workers:<br>34.2% | TAU: 25/58<br>HOV: 36/62<br>TAU: 22/58<br>HOV: 9/62        |
| Mueller 1997 <sup>71</sup><br>USA<br>Mar to Aug 1993<br>Medications were<br>provided by Ciba-Geig                            | RCT, double-blind  Butler Hospital, USA  N = 29; 38.7 (SD 8.5); 37.9%   | DSM-III-R  Detoxification by chlordiazepoxide                                       | 1. Placebo (N = 16) 2. Carbamazepine: 100 mg TID in the first day, then 200 mg TID (N = 13) 12 months  | NR   | Age drinking became a problem (year): 24.1 (SD 9.5) SADD: 25.5 (SD 10.2) %Drinking days: 76.8 (SD 25.4) Drinks per drinking day: 16.1 (SD 8.9)  | Beck Depression Inventory score: 17.3 (SD 9.9) Global Assessment of Function: 52.8 (SD 5.2) California Personality Inventory Socialization: 25.2 (SD 4.0) [Speilberger Anxiety] State: 52.3 (SD 11.8) Trait: 51.9 (SD 12.9) | Married: 51.7%<br>Level of education (yr):<br>13.0 (SD 2.7)<br>%Caucasian: 89.7%                            | PLA: 4/16<br>CBZ: 2/13<br>PLA: 8/16<br>CBZ: 12/13          |
| Oslin 2005 <sup>72</sup> USA  Supported by NIMH, Pfizer Pharmaceuticals (medication) and DuPont Pharmaceuticals (medication) | RCT, single-blind<br>Philadelphia VA Medical<br>Centre<br>N = 74; 63.4 (SD 6.3);<br>20.3%   | DSM-IV  Detoxification from alcohol (a minimum of 3 consecutive days of abstinence) | Placebo (N = 37)     Naltrexone: 50 mg/day Oral (N = 37)  Both groups received sertraline 50 mg/day for one week, then increased to 100 mg/day     weeks   | Compliance-enhancement<br>therapy (BRENDA) | Years of alcohol use: 39.6 (SD 10.8) Years of drinking-to-intoxication: 17.3 (SD 9.9) %days drinking: 79.0% (SD 26.9) Drinks per drinking day: 8.4 (SD 5.4) %heavy drinking day 90 days before detoxification: 67.5% (SD 33.3) Previous alcohol dependence treatment: 48.6% ASI Alcohol Score: 0.66 (SD 0.17) | HAM-D: 21.8 (SD 5.6) PCS (SF-36): 45.0 (SD 9.4) MCS (SF-36): 35.7 (SD 10.8) Primary depression (%): 67.2% Independent major depression: 31.1%   | Married: 44%<br>Caucasian: 66.3%  | PLA: 20/37<br>NTX: 16/37<br>PLA: 4/37<br>NTX: 7/37         |
| Paille 1995 <sup>73</sup><br>France<br>Apr 1989 to Nov 1992  | RCT, double-blind 31 specialist alcohol centres N = 538; 43.2 (SD 8.6); 20%   | DSM-III-R  In- or out-patient detoxification and 7-28 days of abstinence            | Placebo (N = 177)     Acamprosate: 1.3 g/day Oral (N = 188)     Acamprosate: 2 g/day Oral (N = 173)     Group 2 and 3 combined for the meta-analysis     12 months/18 months   | Supportive psychotherapy                   | Duration of consumption (year): 9.5 (SD 7.2)  [Number of previous detoxifications]: None; 50.3% (270/537) More than one: 49.7% (267/537)  | Covi anxiety scale<br>score before<br>withdrawal: 5.6 (SD<br>2.7)<br>Raskin depression<br>scale score before<br>withdrawal: 4.4 (SD<br>2.9)   | Living alone: 13.9%<br>Employed: 47.0%  | PLA: 20/177<br>ACP: 67/361<br>PLA: 115/177<br>ACP: 186/361 |

| Pelc 1992 <sup>74</sup><br>NR  | RCT, double-blind  Multicentre  N = 102; NR; NR  | DSM-III-R<br>Detoxification                                      | Necebo (N = 47)     Calcium acetyl homotaurinaæ (acamprosate) 1998 mg Oral (N = 55)     180 days  | NR  | NR  | NR  | NR NR   | PLA: 2/47<br>ACP: 14/55<br>PLA: 38/47<br>ACP: 31/55                                 |
|--|--|--|---|---|---|---|---|---|
| Pelc 1996 <sup>75</sup><br>Belgium and France<br>Funded by Lipha<br>Belgium                                      | RCT, double-blind  11 centres  N = 188; NR; NR   | DSM-III-R<br>14-day in-patient detoxification<br>programme       | 1. Placebo (N = 62) 2. Acamprosate: 1332 mg/day Oral (N = 63) 3. Acamprosate: 1998 mg/day Oral (N = 63)  Group 2 and 3 were combined for metaanalysis  90 days  | Supportive counselling and social support when needed   | NR  | NR  | NR  | PLA: 16/62<br>ACP: 60/126<br>PLA: 30/62<br>ACP: 39/126                              |
| Pelc 2005 <sup>76</sup><br>Beligum<br>Apr 1997 to Mar 1998<br>Funded by Merck                                    | RCT, open-label  An addiction clinic in the Psychiatry Department of the Brugmann University Hospital  N = 100; 43.3 (SD 8.0); 22% | DSM-IV  3-week acute detoxification programme; 1-week abstinence | 1. Acamprosate + Standard care: ACP 1332-<br>1998 mg/day, adjusted by weight. BW≥ 60<br>kgs: 1998 mg/day; BW < 60 kgs: 1332<br>mg/day Oral (N = 50)<br>2. Acamprosate + Nurse follow-up: ACP<br>regimen + telephone (weekly) and home visit<br>by community nurses (N = 50) | NR  | DSM IV score: 6.2 (0.9)<br>N of drinks/day: 19.1 (SD 11.1)<br>Years of alcohol dependence: 14.1<br>(9.7)<br>N of previous withdrawals: 0.4<br>(0.6)   | Regular smoker:<br>82%  | Married: 18%<br>Above secondary: 68%<br>Family history: 63%                                 | ACP: 8/50<br>ACP+NUS: 16/50<br>ACP: 42/50<br>ACP+NUS: 30/50                         |
| Poldrugo 1997 <sup>77</sup><br>Italy<br>Nov 1989 to Jun 1992   | RCT, double-blind  Multicentre, five alcoholism treatment units in the Northeastern region of Italy  N = 246; 43.9 (SD 9.7); 27.2% | DSM-III Inpatient detoxification                                 | 1. Placebo (N = 124) 2. Acamprosate: 1332-1998 mg, adjusted by weight. BW≥ 60 kgs: 1998 mg/day; BW < 60 kgs: 1332 mg/day Oral (N = 122) 6 months/12 months  | Psychological support, including group sessions, family therapy, education on alcoholism, community meetings and physical and recreational activities. ("Club of Treated Alcoholics") | MAST total: 27.6 (SD 10.4) Psychotherapy use: 28.9% Previous participation to exalcoholics: 27.2% Previous disulfiram use: 20.3%  Quantity on a drinking day: < 5 drinks: 5.3% 5-10 drinks: 19.5% >10 drinks: 75.2%  Frequency on a drinking week: < 3 days: 1.2% 3-6 days: 1.3% Daily: 85.8% | Disulfiram at<br>inclusion (yes):<br>20.7%<br>Other drugs at<br>inclusion (yes):<br>13.4%<br>HAM-DI: 23.3 (3.3)<br>HAM-A: 3.8 (5.7) | Family history of alcoholism: 50.8%   | PLA: 37/124<br>ACP: 53/122<br>PLA: 83/124<br>ACP: 62/122                            |
| Ponce 2005 <sup>78</sup><br>Spain  | RCT, single-blind  Addictive behavior unit of the hospital October 12 Madrid  N = 100; 36.8 (SD 10.1); 100%                        | DSM-IV Inpatient detoxification                                  | No Naltrexone (TAU) (N = 50)     Naltrexone: 50 mg/day Oral (N = 50)     weeks  | Meeting with psychiatrist every 7 days in the first month and then after 15 days.   | Age of first contacting alcohol (year): 16.0 (SD 6.2) Age of habit alcohol consumption (year): 23.3 (SD 11.0) Age of consumption being abuse (year): 29.3 (SD 13.2) Age of alcohol dependence (year): 35.0 (SD 15.3) Consumption diary: 79.4%   | NR  | Family history of psychiatric<br>disorders: 32.8%<br>Family history of<br>alcoholism: 63.6% | TAU: 21/50<br>NTX: 38/50<br>TAU: 19/50<br>NTX: 8/50                                 |
| PREDICT <sup>79-82</sup><br>Germany<br>Nov 2002 to Sep 2006<br>NCT00317031                                       | RCT, double-blind  Multicentre in Germany  N = 426; 45.3 (8.7); 23%  | DSM-IV Inpatient detoxification                                  | 1. Placebo (N = 85) 2. Acamprosate: 1998 mg/day Oral (N = 172) 3. Naltrexone: 50 mg/day Oral (N = 169)  12 weeks/12 months  | Medical management (Pettinati et al 2004)   | N of DSM-IV symptoms: 6.1 (SD 1.1) ADS: 15.0 (SD 6.7) OCDS: 13.6 (SD 6.1)   | NR  | Married: 39%<br>Employed: 48%   | PLA: 41/86<br>ACP: 76/172<br>NTX: 73/169<br>PLA: 8/86<br>ACP: 22/172<br>NTX: 18/169 |
| Richter 2012 <sup>83</sup><br>Germany<br>NCT00758277<br>Jan 2005 to Jul 2009<br>Funded partially by<br>UCBPharma | RCT, double-blind  Multiple centre (10 hospitals)  N = 201; 47.7 (SD 9.5); 28.4%   | DSM-IV or ICD-10<br>inpatient detoxification                     | Placebo (N = 106)     Levetiracetam: 1000mg/day in the first week, then increased to 2000 mg/day, then tapered down to 500 mg/day last week Oral (N = 95)   | NR  | Mean duration of alcohol consumption in years: 17.0 (10.6)  | Smokers: 70.6%  | NR  | PLA: 36/106<br>LEV: 33/95<br>PLA: 26/106<br>LEV: 12/95                              |

| Rubio 2005 <sup>84</sup><br>Spain  | RCT, open-label  Addictive Behaviour Unit of the 'Doce de Octubre' hospital (Madrid).  N = 336; 41.6 (SD 8.6); 0%  | DSM-IV 5–10 days detoxification by diazepam and abstinence (mean of 14.5 days (SD 7.2))  | 1. Non-naltrexone (TAU) (N = 168) 2. Naltrexone: 50 mg/day (N = 168)  Patients with depression or anxiety disorder, sertraline (100-200 mg/day) was added.  3 months   | Supportive group therapy weekly   | Alcohol consumption (g/occasion): 219.33 Amount of alcohol per day: 218.5 (SD 57.9) Heavy drinking days per 28days: 25.1 (SD 9.2) Age of onset of habitual consumption (year): 16.5 Beginning of alcohol problems (year): 22.8                                  | Other substance use disorders (excluded nicotine): 21.7% Use of disulfiram: 24.7% Use of sertraline: 24.4% Antecedents of depressive/anxiety disorders: 15.5% FHA+: 61.9% Family history of other psychiatric disorders: 23.2% | NR   | TAU: 95/168<br>NTX: 111/168<br>TAU: 58/168<br>NTX: 47/168   |
|--|--|--|--|---|---|--|--|---|
| Sass 1996 <sup>85-87</sup><br>Germany<br>Funded by the Lipha<br>Company                            | RCT, double-blind  12 centres; all centres were psychiatric outpatient clinics; most of these clinics had specialized alcohol treatment facilities.  N = 272; 41.2 (SD 8.5); 22.4% | DSM-III-R and Munich Alcoholism Test Patients had to be completely abstinent from any alcohol consumption for a minimum of 14 days and a maximum of 28 days and free of withdrawal symptoms before they could be admitted into the study. This period corresponded with the inpatient detoxification therapy period that included pharmacotherapy (mainly clomethiazole or benzodiazepines). | 1. Placebo (N = 136) 2. Acamprosate: 1332-1998 mg/day, divided as TID Oral (N = 136) 48 weeks/48 weeks   | Counselling or psychotherapy  | N of DSM-III-R symptoms: 7.9 (SD 1.2) Craving (VAS): 86.8 (SD 48.8) Duration of alcoholism (year): 10.4 (6.2)  N of previous detoxifying treatment: None: 30.1% 1-2: 43.8% 3-4: 13.6% ≥ 5: 12.5%  | NR   | Married: 46.5%<br>Living alone: 38%<br>Unemployed: 26.5%   | PLA: 34/136<br>ACP: 61/136<br>PLA: 81/136<br>ACP: 57/136  |
| Schmidt 2002 <sup>88 89</sup><br>Germany<br>Supported by<br>Deutsche<br>Forschungsgemeinsch<br>aft | RCT, double-blind  Department of Psychiatry of the Free University of Berlin  N = 136; 45.3 (SD 8.1); 34.5%  | ICD-10 Hospital detoxification   | 1. Placebo (N = 63*) 2. Lisuride: 1.0 mg/day (low-dose) and 1.8 mg/day (high-dose) with assignment ratio of 2:1 (N = 57*)  6 months/12 months *ITT sample numbers used in the trial  | Individual counselling and group therapy (one to two times every week)                                | N of fulfilled ICD-10 criteria of<br>alcohol dependence before<br>detoxification: 6.4 (1.4)<br>Age of onset of alcoholism (year):<br>34.2 (SD 9.5)<br>N of patients with previous<br>detoxification: 66%  | NR   | Family history of<br>alcoholism:<br>Living alone: 54.2%<br>Basic school level<br>only:45.8%<br>Unemployed: 26.7% | PLA: 19/63<br>LUD: 8/57<br>PLA: 7/63<br>LUD: 10/57  |
| Stella 2008 <sup>90</sup><br>Italy   | RCT, open-label  NR  N = 47*; 41.8 (SD 12.0); 29.8%  *N = 48 enrolled  | DSM-IV<br>Detoxification; metadoxine<br>(900mg/day iv, divided into 3<br>administrations for 5 days) and<br>diazepam (30–45 mg/day iv)   | 1. Escitalopram: 20 mg/day Oral (N = 12*) 2. Escitalopram 20 mg/day + NTX 50 mg/day Oral (N = 12) 3. Escitalopram 20 mg/day + GHB 75 mg/kg/day, divided into five doses Oral (N = 12) 4. Escitalopram 20 mg/day + GHB 75 mg/kg/day + NTX 50 mg/day Oral (N = 12) 6 months  *one dropped out after detoxification | Counselling and supportive behavioural therapy  | Duration of alcohol dependence<br>(year): 12.4 (5.8)  | NR   | Married: 59.6%<br>Employed: 74.3%<br>Secondary school and<br>above: 29.8%  | EST: 2/12<br>EST+NTX: 4/12<br>EST+GHB: 6/12<br>EST+GHB+ NTX: 10/12<br>EST: 1/12<br>EST: 1/12<br>EST+GHB: 0/12<br>EST+GHB+ NTX: 0/12 |
| Tempesta 2000 <sup>91-93</sup><br>Italy<br>Funded by Lipha s.a.,<br>France                         | RCT, double-blind  18 out-patient centres in Italy  N = 330; 45.9 (SD 11.2);  17.3%  | DSM-III-R<br>Alcohol weaning therapy   | 1. Placebo (N = 166) 2. Acamprosate: 1998 mg/day divided as TID Oral (N = 164) 6 months/9 months   | Individual behaviour-oriented<br>supportive counselling (1–2<br>sessions/week, 1 h per session)<br>AA | Drinking history (year): 10.7 (SD 9.0) MAST score: 22.7 (SD 10.6) Previous treatment for alcoholism: 10%  Alcohol amount ≤ 5 drinks/day: 4.5% 5-10 drinks/day: 42.4% > 10 drinks/day: 53%  Alcohol frequency ≤ 2days/week: 1.8% 3-6 days/week: 13% Daily: 85.2% | NR   | Married: 68.2%   | PLA: 48/166<br>ACP: 62/164<br>PLA: 44/166<br>ACP: 40/164  |

| Ulrichsen 2010 <sup>94</sup> Denmark  Supported by Trygfonden, Aase og Ejnar Danielsens Fond and The A.P. Møller Foundation                | RCT, open-label Psychiatric Center Gentofte N = 39; 52.0 (SD 10.1); 30.8%   | ICD-10 Detoxification by phenobarbital 200 mg (hourly) or diazepam 20 mg if not tolerated     | 1. Control (TAU) (N = 20) 2. Disulfiram: 800 mg twice a week Oral (N = 19) 6 months   | Cognitive behavioural therapy<br>(CBT) programme  | Age of first alcohol intake (year): 15.2 (SD 1.9) Age of realizing to have an alcohol problem (years): 37.0 (SD 9.1) Age of debut of withdrawal symptoms (years): 43.2 (SD 10.8)  Previous treatment for alcoholism: GP: 56.4% Minnesota treatment centre: 33.3% AA meetings: 46.2% Disulfiram: 76.9% Acamprosate: 10.2% Naltrexone: 10.2% Never been treated: 15.4% | Previous treatment for depression: 43.6% Current antidepressive drugs: 35.9% Current benzodiazepines: 7.7% Current nicotine intake: 67.7% Ever tried to take illegal drugs: 69.2% Ever had abused illegal drugs: 15.4%  Affective disorders: 17.9% Anxiety disorders: 28.2% Personality disorders: 2.6% Hyperkinetic disorders: 2.6% | Married: 38.5%<br>Employed: 43.6%<br>High school and above:<br>82.1%   | TAU: 4/20<br>DSF: 5/19<br>TAU: 10/20<br>DSF: 12/19  |
|--|---|---|---|---|--|--|--|---|
| Volpicelli 1997 <sup>95</sup><br>USA<br>Supported by NIAAA   | RCT, single-blind  University of Pennsylvania/Veterans Affairs Treatment Research Centre  N = 97; 38.4 (SD 8.7); 22.7%  | DSM-III-R  Detoxification for alcohol withdrawal  | 1. Placebo (N = 49)<br>2. Naltrexone: 50 mg/day Oral (N = 48)<br>12 weeks   | Counselling consisted of individual psychotherapy modified after Gorski and Miller's relapse prevention program | Years of regular drinking: 15.4 (SD 9.1) Baseline drinking days: 14.1 (SD 8.9)   | NR   | Non-white: 62.6%<br>Employed: 67.7%<br>Married: 44.5%  | PLA: 17/49<br>NTX: 21/48<br>PLA: 13/49<br>NTX: 13/48  |
| Wetzel 2004 <sup>96</sup> Germany  Supported by a grant from Bundesministerium für Bildung und Forschung (BMBF) and Bristol- Myers Squibb. | RCT, double-blind  3 university sites in Germany (Departments of Psychiatry at the Universities of Mainz, Rostock, and Homburg/Saar)  N = 242; 42.8 (8.4); 0% | DSM-IV and ICD-10 In-patient detoxification   | 1. Nefazodone + CBT: 200 mg/day initially, increased to 600 mg/day (N = 53) 2. Nefazodone + Group counselling (GC): 200 mg/day initially, increased to 600 mg/day (N = 50) 3. Placebo + CBT (N = 50) 4. Placebo + GC (N = 47)  CBT: 24 group therapy sessions, with 6 sessions within the first 2 weeks, followed by 10 sessions during week 3 and week 4 and weekly sessions thereafter until week 12. GC: 24 sessions of a nonspecific group intervention to facilitate insight, self-help potentials, and support. The theoretical background was nondirective and clientoriented, with the therapist acting as moderator of the group discussion.  12 weeks/12 months | NR  | N of DSM-IV criteria: 6.1 (SD 0.9)  Drinking days in previous 90 day (%): 70.8 (31.1)  N of drinks per drinking day in previous 90 days: 14.7 (SD 8.9)  Age when started getting intoxicated regularly (year): 19.0 (SD 5.8)  Age when first had difficulty stopping before intoxication (year): 26.3 (SD 9.9)   | Smoker: 82.3%  Lifetime DSM-IV diagnosis (%): Major depression: 18.9% Social phobia: 8.1% Generalized anxiety disorder: 0.5% Substance use disorder: 4.9% Antisocial personality disorder: 7.7%  | Married: 58.9% Education (year): 9.8 (SD 1.5) History of paternal alcoholism: 31.0% History of alcoholism in first-degree relatives: 48.5% | PLA: 13/47<br>PLA+CBT: 12/50<br>NZD: 9/50<br>NZD+CBT: 12/53<br>PLA: 31/47<br>PLA+CBT: 33/50<br>NZD: 38/50<br>NZD+CBT: 36/53 |
| Whitworth 1996 <sup>97</sup><br>Austria<br>1989 to 1993<br>Funded by Groupe<br>LIPHA   | RCT, double-blind<br>multicentre, Hospital<br>N = 455; 42.0 (SD 8.5);<br>21.2%  | DSM-III  Alcohol-withdrawal treatment and minimal 5-day abstinence                            | Placebo (N = 224*)     Acamprosate: 1332-1998 mg, adjusted by weight. BW >60 kgs: 1998 mg/day; BW ≤ 60 kgs: 1332 mg/day (N = 224*)     360 days/720 days  *ITT sample numbers used in the trial   | NR  | MAST: 32.6 (SD 8.7) Daily alcohol consumption (g) ≤59: 6% 60-120: 31.3% ≥121: 62.7%  | NR   | NR   | PLA: 16/224 ACP:<br>41/224<br>PLA: 139/224<br>ACP: 129/224  |
| Wiesbeck 2001 <sup>98 99</sup><br>Germany and Austria<br>Jun 1994 to Mar 1998<br>Funded by the Bayer                                       | RCT, double-blind<br>multi-centre<br>N = 281; 41.7 (SD 7.8);<br>27.4%   | DSM-II-R and Munich Alcoholism<br>Test (MALT)  Detoxification and 14-42 days of<br>abstinence | 1. Placebo (N = 139) 2. Flupenthixol: 10 mg every two weeks IM (N = 142) 6 months/12 months   | Supportive psychotherapy<br>self-help support groups (AA)   | DSM-III-R criteria for dependence:<br>8.1 (SD 1.0)<br>Munich Alcoholism Test (MALT):<br>33.5 (SD 5.8)<br>Goettinger Dependence Scale,<br>GABS (German SADQ): 58.0 (SD<br>17.8)<br>VAS: 13.7 (SD 21.8)<br>Alcohol intake before detoxification:<br>260.0 (SD 152)   | Social functioning<br>(SFQ): 14.8 (SD<br>3.9)  | NR   | PLA: 58/139<br>FLP: 34/142<br>PLA: 81/139<br>FLP: 109/142   |

Abbreviations: AA: Alcoholics Anonymous, ACP: Acamprosate, AD: Alcohol Dependence, ADS: Alcohol Dependence Scale, AMS: Amisulpride, ARI: Aripiprazole, ATL: Atenolol, BAC: Baclofen, BZD: Benzodiazepines, CBZ: Carbamazepine, CIT: Citalopram, CST: Cognitive Stimulation Therapy, DSF: Disulfiram, EST: Escitalopram, FLP: Fluoretine, FLX: Fluoriamine, GAL: Galantamine, GHB (sodium oxybate), GSI: General Symptom Index, HAM-A: Hamilton Anxiety Rating Scale, HAW-D: Hamilton Depression Rating Scale, HOV: Home visit, IM: Intramuscular, LEV: Levetiracetam, LIT: Lithium, LUD: Lisuride, MAST: Michigan Alcoholism Screening Test, MCS: Mental component scores, MDF: Modafinil, MDMA: Methylenedioxymethamphetamine, MET: Motivational Enhancement Therapy, NTX: Naltrexone, NZD: Nefazodone, OCB: Oxcarbazepine, OCDS: Obsessive Compulsive Drinking Scale, OCDS-G: Obsessive Compulsive Drinkin

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## SUPPLEMENT 6. RESULTS OF RISK OF BIAS ASSESSMENT

| Trial                | Outcome                 | R | De       | Mi | Me | S | 0   |
|----------------------|-------------------------|---|----------|----|----|---|-----|
| Angelone 1998        | Abstinence (16 weeks)   | ! | !        | •  | •  | • | (!) |
| BACLAD study         | Abstinence (24 weeks)   | • | •        | •  | •  | • | •   |
| Baltieri 2004        | Abstinence (24 weeks)   | 1 | •        | •  | •  | • | 1   |
| Baltieri 2008        | Abstinence (12 weeks)   | • | <b>+</b> |    | •  | • |     |
| Barrias 1997         | Abstinence (360 days)   | 1 | •        | •  | •  | • | 1   |
| Bender 2007          | Abstinence (24 weeks)   | • | •        | •  | •  | • | !   |
| Besson 1998          | Abstinence (360 days)   | 1 | •        | •  | •  | • | 1   |
| Burtscheidt 2002     | Abstinence (12 months)  | 1 | !        | •  | •  | • | 1   |
| Caputo 2003          | Abstinence (3 months)   | 1 | •        | •  | •  | • | 1   |
| Caputo 2007          | Abstinence (3 months)   | 1 | 1        | +  | •  | • | 1   |
| Chick 2000           | Abstinence (6 months)   | • | +        | +  | •  | • | +   |
| Chick 2004           | Abstinence (52 weeks)   | • | +        |    | •  | • |     |
| Cornelius 1997       | Abstinence (12 weeks)   | 1 | +        | +  | •  | • |     |
| Coriale 2019         | Abstinence (365 days)   | ! | +        |    | !  | ! |     |
| Croissant 2006       | Abstinence (24 weeks)   | 1 | 1        | 1  | •  | • | 1   |
| Favre 1997           | Abstinence (9 months)   | ! | +        | •  | •  | • |     |
| Florez 2008          | Abstinence (6 months)   | ! |          | +  | •  | • |     |
| Florez 2010          | Abstinence (6 months)   | 1 | 1        | +  |    | + |     |
| Friedmann 2008       | Abstinence (6 months)   | 1 | +        | •  | •  | + | 1   |
| Fuente 1989          | Abstinence (6 months)   | 1 | +        | +  | •  | • | !   |
| Fuller 1986          | Abstinence (12 months)  | • | +        | 1  | •  | • | 1   |
| GATE 2 study         | Abstinence (12 months)  | 1 | +        |    | •  | ! |     |
| Geerlings 1997       | Abstinence (1 year)     | • | •        | •  | •  | • | 1   |
| Gottlieb 1994        | Abstinence (1 year)     | 1 | +        |    | •  | • | 1   |
| Gual 2001            | Abstinence (180 days)   | 1 | +        | +  | •  | • | 1   |
| Gual 2002            | Abstinence (180 days)   | 1 | •        | •  | •  | • | 1   |
| Gustafson 2014       | Abstinence (12 months)  | • | 1        | •  |    | • |     |
| Huang 2002           | Abstinence (3 months)   | 1 | •        | •  | •  | • | 1   |
| Huang 2005           | Abstinence (14 weeks)   | 1 | +        | •  | •  | • | !   |
| Janiri 1997          | Abstinence (90 days)    | 1 | !        | 1  |    | ! |     |
| Jirapramukpitak 2020 | Abstinence (12 weeks)   | 1 | +        | •  | •  | • | 1   |
| Joos 2013            | Abstinence (8.5 months) | • | •        |    | •  | 1 |     |

| Trial           | Outcome                | R | De       | Mi | Me | S | 0 |
|-----------------|------------------------|---|----------|----|----|---|---|
| Kampman 2007    | Abstinence (12 weeks)  | 1 | •        | •  | •  | • |   |
| Kiefer 2003     | Abstinence (12 weeks)  | • | <b>+</b> | •  | •  | + | • |
| Ladewig 1993    | Abstinence (12 months) | 1 | <b>+</b> | •  | •  | + | 1 |
| Landabaso 1999  | Abstinence (12 months) | ! | 1        | •  |    | ! |   |
| Mann 2006       | Abstinence (24 weeks)  | 1 | +        | !  | •  | • | ! |
| Marra 2002      | Abstinence (12 months) | 1 | +        |    | •  | + |   |
| Martinotti 2007 | Abstinence (90 days)   | • | !        |    | •  | + |   |
| Martinotti 2009 | Abstinence (16 weeks)  | • | +        | !  | •  | + | 1 |
| Martinotti 2010 | Abstinence (16 weeks)  | • | <b>+</b> | 1  | •  | + |   |
| MATCH project   | Abstinence (9 months)  | • | 1        | •  | •  | + | 1 |
| Moncini 2000    | Abstinence (6 months)  | • | <b>+</b> | 1  | •  | + | 1 |
| Moraes 2010     | Abstinence (12 weeks)  | • | 1        |    |    | + |   |
| Mueller 1997    | Abstinence (12 months) | 1 | <b>+</b> |    | •  | + |   |
| Oslin 2005      | Abstinence (3 months)  | ! | <b>+</b> | •  |    | + |   |
| Paille 1995     | Abstinence (360 days)  | 1 | +        |    | •  | + |   |
| Pelc 1992       | Abstinence (180 days)  | 1 | +        |    | •  | 1 |   |
| Pelc 1997       | Abstinence (90 days)   | 1 | +        |    | •  | + |   |
| Pelc 2005       | Abstinence (26 weeks)  | • |          |    |    | + |   |
| Poldrugo 1997   | Abstinence (12 months) | • | +        |    | •  | + |   |
| Ponce 2005      | Abstinence (12 weeks)  | 1 | !        |    | •  | + |   |
| PREDICT study   | Abstinence (90 days)   | • | <b>+</b> | •  | •  | + | + |
| Richter 2012    | Abstinence (16 weeks)  | • | <b>+</b> |    | •  | + |   |
| Rubio 2005      | Abstinence (12 weeks)  | 1 | 1        | 1  | •  | + |   |
| Sass 1996       | Abstinence (48 weeks)  | • | <b>+</b> |    | •  | + | ! |
| Schmidt 2002    | Abstinence (12 months) | 1 | <b>+</b> |    | •  | + |   |
| Stella 2008     | Abstinence (6 months)  | ! | 1        | •  |    | + |   |
| Tempesta 2000   | Abstinence (270 days)  | • | +        | •  | •  | + | + |
| Ulrichsen 2010  | Abstinence (6 months)  | • | 1        | 1  |    | • |   |
| Volpicelli 1997 | Abstinence (12 weeks)  | 1 | •        | !  | •  | + | ! |
| Wetzel 2004     | Abstinence (52 weeks)  | • | <b>+</b> | 1  | •  | + | ! |
| Whitworth 1996  | Abstinence (360 days)  | • | •        | •  | •  | • | • |
| Wiesbeck 2001   | Abstinence (12 months) | 1 | •        | 1  | •  | • | 1 |

- R Bias arising from the randomization process
- De Bias due to deviations from intended interventions
- Mi Bias due to missing outcome data
- Me Bias in measurement of the outcome
- S Bias in selection of the reported result
- Overall risk of bias

Low riskSome concernsHigh risk

| Reference                                  | MATCH project  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial; Trial protocol; Grant database summary (e.g. NIH RePORTER, Research Councils UK Gateway to Research)   |
|--|--|-------------------------------|--|---------------|--|
| Outcome                                    | Abstinence (9 months)  | Results                       | 79/266 (CBT) vs 69/261 (MET) vs 72/247 (TS                   | F)            |  |
| Domain                                     | Signalling question  |                               |  | Response      | Comments   |
|  | 1.1 Was the allocation sequence random?  |                               |  | Υ             | "The randomization process is centrally controlled by the (Yale) CC."  |
| Bias arising from                          | ne randomization   |                               |  |               | "To ensure consistent delivery of treatments across sites, training, supervision, and certification of therapists are centralized at the Yale CC   |
| process                                    |  |                               |  |               | "This procedure was successful, in that there were no significant differences across treatments on the matching variables assessed at baseline"  |
|  | Risk of bias judgement   |                               |  | Low           | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | Υ             | Afficiant and Af |
|  | 2.2 Were carers and trial personnel aware of parti                                       | icipants' assigned interve    | ntion during the trial?                                      | PY            | Interventions were different and MET had only 4 sessions so it was impossible to blind participants.   |
| Discount of                                | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | from the intended interve     | ention beyond what would be expected in usual                | NI            |  |
| Bias due to<br>deviations from<br>intended | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                          | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA         |  |
| interventions                              | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?   | N             |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |  |
|  | Risk of bias judgement   |                               |  | Some concerns | It was impossible to blind participants in this trial due to nature of interventions employed, which potentially induce deviations from intended interventions. On the other hand, the authors applied ITT analyses. Together, these contributed to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | Y             | Whole data were supplied by the committee.   |
| Bias due to missing outcome                | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?                | ng outcome data and reas      | ions for missing outcome data similar across                 | NA            |  |
| data                                       | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | s were robust to the prese    | ence of missing outcome data?                                | NA            |  |
|  | Risk of bias judgement   |                               |  | Low           | The MATCH project commeittee provided the data and nearly all participants were followed during 9 months period in the main analysis.  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | PY            | It was impossible to blind outcome assessors.  |
| Bias in<br>measurement of<br>the outcome   | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                  | PN            | "Laboratory tests are used to screen subjects for exclusion criteria (e.g., unreported drug use), monitor changes in alcohol consumption"  |
| 201001110                                  | Risk of bias judgement   |                               |  |               | Although it was impossible to blind outcome assesser(patients), the outcome (abstinence) was confirmed by laboratory tests, which put lywrisk of bias in this domain.  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |  |
| Bias in selection of the reported          | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                | N             | All time points were reported  |
|  | 5.2 multiple analyses of the data?   |                               |  | N             |  |
|  | Risk of bias judgement   |                               |  | Low           | The reviewer re-analysed total abstinence, aligning to the common definition. This was not included in the protocol so we rated "Low" in selection of the reported results.  |
| Overall bias                               | Risk of bias judgement   |                               |  | Some concerns | Some concerns in deviations from the intended interventions contributed to "some concerns" in overall bias.  |

| Reference  | 4   | Aim                         | assignment to intervention (the 'intention-to-     | Source                  | learned self-left) with search self-the high  |
|--|---|-----------------------------|--|-------------------------|---|
| Reference  | Angelone 1998   | Aiiii                       | treat effect)                                      | Source                  | Journal article(s) with results of the trial  |
| Outcome  | Abstinence (16 weeks)   | Results                     | 17/33 (Citalopram 20 mg) vs 14/25 (Fluvoixar       | mine 150 mg) vs 7/23 (l | No pharmacological treatment)   |
| Domain   | Signalling question   |                             |  | Response                | Comments  |
|  | 1.1 Was the allocation sequence random?   |                             | NI   | -Only stated "random"   |   |
| Bias arising from  | 1.2 Was the allocation sequence concealed until p   | participants were recruited | and assigned to interventions?                     | NI                      |   |
| the randomization process  | 1.3 Were there baseline imbalances that suggest   | a problem with the rando    | nization process?                                  | PN                      | A significant difference among groups, 23 vs 25 vs 33 but it was done deliberately, "The citalopram group was deliberately made larger a priori to achieve more experience with this drug, which is relatively new in Italy". No significant difference among characteristics of the study sample besides age and M.F. ratio in the citalopram group. |
|  | Risk of bias judgement  |                             |  | Some concerns           | No details were given regarding randomisation process. Although there were some difference between aga and M.F ratio among trials, it might due to small number of participants in this trial as by chance. Together these contributed to "some concerns" in this domain.   |
| Were participants aware of their assigned intervention during the trial? |   |                             |  | NI                      | Did not address blinding procedures except psychiatrists.   |
| Bias due to<br>deviations from<br>intended                               | 2.2 Were carers and trial personnel aware of parti  | icipants' assigned interve  | ation during the trial?                            | PN                      | "Psychiatric assessment was made by a trained psychiatrist (blind to the medication) every 2 weeks starting from the fourth week."  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                             | from the intended interve   | ntion beyond what would be expected in usual       |                         | One of the groups did not receive interventions, which might lead to deviations.  |
|  | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                           | ended intervention unbala   | nced between groups and likely to have affected th | NA NA                   |   |
| interventions  | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                       | to have affected the outc   | ome?   | N                       |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sub-<br>participants in the wrong group? | bstantial impact (on the es | timated effect of intervention) of analysing       | NA                      |   |
|  | Risk of bias judgement  |                             |  | Some concerns           | There was no complete information regarding blinding and one group did not receive any interventions (treated as usual), which might I to deviation. On the other hand, the authors applied ITT analyses. Together, these contributed to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly  | all, participants randomiz  | ed?  | N                       | Some drop-outs were seen owing to side effects or moved were not included n=3 of 25 in fluvoxamine group; n=5 of 33 in citalopram group   |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missir intervention groups?                 | ng outcome data and reas    | ons for missing outcome data similar across        | PN                      | 0%; 12%; 15% respectively - not clear if reasons for missing outcome data are similar or not.   |
| 4-4-   | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                      | s were robust to the prese  | ence of missing outcome data?                      | PY                      | The authors did not perform sensitivity analyses but both on-treatment and ITT analyses led same results.   |
|  | Risk of bias judgement  |                             |  | Low                     | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |
|  |   |                             |  |                         | Did not address blinding of participants in the trial and the outcome was self-assessed and confirmed by relatives.   |
| Bias in  | 4.1 Were outcome assessors aware of the interve   | ention received by study p  | articipants?                                       | PN                      | "The presence of relatives, or other key individuals for the patient, was required at each assessment, to confirm the patient's report and to obtain additional information about their alcohol intake."  |
| measurement of<br>the outcome  | 4.2 If Y/PY/NI to 4.1: Was the assessment of the o  | outcome likely to be influe | nced by knowledge of intervention received?        | NA                      |   |
|  | Risk of bias judgement  |                             |  | Low                     | Abstinence was confirmed by relatives or key individuals, which strengthend the reliability of results.   |

|                        | e the reported outcome data likely to have been selected, on the basis of the results, from          |               |  |  |  |  |  |  |
|------------------------|--|---------------|--|--|--|--|--|--|
| of the reported result | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? | PN            |  |  |  |  |  |  |
|                        | 5.2 multiple analyses of the data?   | PN            |  |  |  |  |  |  |
|                        | Risk of bias judgement   | Low           | No protocol or statisitical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |  |  |
| Overall bias           | Risk of bias judgement   | Some concerns | Lack of detailed randomisation process and potential deviations from the intended interventions due to difference among interventions, together, these contributed to "some concerns" in overall bias for this trial.                    |  |  |  |  |  |

| Reference                         | Baltieri 2004   | Aim                            | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial   |
|-----------------------------------|---|--------------------------------|--|---------------|--|
| Outcome                           | Abstinence (24 weeks) Results 17/40 (Acamprosate 1998 mg) vs 7/35 (Placet   |                                |  | bo)           |  |
| Domain                            | Signalling question   |                                |  | Response      | Comments   |
|                                   | 1.1 Was the allocation sequence random?   |                                |  | NI            |  |
| Bias arising from                 | 1.2 Was the allocation sequence concealed until   | I participants were recruited  | I and assigned to interventions?                                 | NI            | -Only stated "random"  |
| the randomization process         | 1.3 Were there baseline imbalances that sugges  | st a problem with the randor   | nization process?  | PN            | There were 35 and 40 patients in placebo and acamprosate groups; The average daily alcohol intake was slight higher in acamprosate group than placebo group (370.1 (164.91) vs 348.5 (132.46)) but not statistically significant.  |
|                                   | Risk of bias judgement  |                                |  | Some concerns | No details were given regarding randomisation process and no significant difference between groups suggesting "Some concerns" in this domain.  |
|                                   | 2.1 Were participants aware of their assigned int   | tervention during the trial?   |  | PN            | -"double-blind"  |
|                                   | 2.2 Were carers and trial personnel aware of par  | rticipants' assigned interver  | ntion during the trial?  | PN            | - double-billind   |
| Bias due to                       | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?  | ns from the intended interve   | ntion beyond what would be expected in usual                     | NA            |  |
| deviations from<br>intended       | 2.4 If Y/PY to 2.3: Were these deviations from in outcome?  | ntended intervention unbala    | nced between groups and likely to have affected th               | • NA          |  |
| interventions                     | 2.5 If N/PN/NI to 2.4: Were these deviations likel  | ly to have affected the outc   | ome?   | N             |  |
|                                   | 2.6 If Y/PY/NI to 2.5: Was there potential for a suparticipants in the wrong group?   | ubstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |  |
|                                   | Risk of bias judgement  |                                |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |
|                                   | 3.1 Were outcome data available for all, or nearly  | ly all, participants randomiz  | ed?  | N             | "Only 58 (77%) of patients remained for the length of the study."  |
| Bias due to missing outcome       | 3.2 If NPNNI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups? |                                |  | Υ             | "Ten patients who were receiving acamprosate and seven patients who were receiving placebo dropped out." "The reasons for dropping were unwillingness to continue the treatment (two patients of the acamprosate group and two of the placebo group); "protocol violation," which was defined as the use of other psychopharmacological drugs during the study (one patient of the acamprosate group and one of the placebo group); and unavailability for follow-up (seven patients of the acamprosate group and four of the placebo group)." |
| data                              | 3.3 If N/PN/NI to 3.1: Is there evidence that resul   | ilts were robust to the prese  | nce of missing outcome data?                                     | PN            | Conservative "Patients who missed<br>a visit or withdrew from the study were deemed to be<br>nonabstinent at the time those data were not available" and no sensitivity analysis.  |
|                                   | Risk of bias judgement  |                                |  | Low           | Although there were some missing data, results still stood in consideration of balanced missing data. "Low" risk of bias in this domain wa rated.  |
| Bias in                           | 4.1 Were outcome assessors aware of the intervention received by study participants?  |                                |  | PN            | "double-blind" "Major variables recorded at each visit included clinical examination results, patients' self-reported quantity and frequency alcohol consumption and drug side effects. The patients' declaration of drinking behavior was verified by the results of y-glutamyttransferase (GGT) levels in every case and by interviewing a family member if possible."   |
| measurement of<br>the outcome     | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe    | nced by knowledge of intervention received?                      | NA            |  |
|                                   | Risk of bias judgement  |                                |  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |
|                                   | Are the reported outcome data likely to have been   | en selected, on the basis of   | the results, from  |               |  |
| Bias in selection of the reported | 5.1 multiple outcome measurements (e.g. sca   | ales, definitions, time points | ) within the outcome domain?                                     | PN            | "The patients' declaration of drinking behavior was verified by the results of γ-glutamyltransferase (GGT) levels in every case and by interviewing a family member if possible."  |
| result                            | 5.2 multiple analyses of the data?  |                                |  | PN            |  |
|                                   | Risk of bias judgement  |                                |  | Low           | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                      | Risk of bias judgement  |                                |  | Some concerns | Lack of detailed randomisation process contributed to "some concerns" in overall bias for this trial.  |

| Reference                           | Baltieri 2008   | Aim                         | assignment to intervention (the 'intention-to-<br>treat' effect) | Source          | Journal article(s) with results of the trial   |  |  |
|-------------------------------------|---|-----------------------------|--|-----------------|--|--|--|
| Outcome                             | Abstinence (12 weeks) Results 14/49 (Naltrexone) vs 15/54 (Placebo) vs 24/5   |                             |  | 52 (Topiramate) |  |  |  |
| Domain                              | Signalling question   |                             |  | Response        | Comments   |  |  |
|                                     | 1.1 Was the allocation sequence random?   |                             |  | Y               | "patients were assigned randomly to one of the three medication conditions through a random number list" "Medication was dispensed under double-blind conditions. Only two pharmacists from the pharmacy sector at the Psychiatric Institute of the                              |  |  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until   | participants were recruited | I and assigned to interventions?                                 | PY              | Clinical Hospital of the University of São Paulo knew which medication corresponded to the specific code. The packages containiting capsules were distributed to patients by two blinded research assistants, who also assessed patient outcomes throughout the situation.       |  |  |
| process                             | 1.3 Were there baseline imbalances that suggest   | a problem with the randor   | nization process?  | PN              | *As shown in Table 2, therewere no significant differences among the groups at baseline on any socio-demographic, drug use, hepati function or psychometric variables measured.*   |  |  |
|                                     | Risk of bias judgement  |                             |  | Low             | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |  |  |
|                                     | 2.1 Were participants aware of their assigned intervention during the trial?  |                             |  | PN              | "double-blind"; "Validity of the double-blind procedure was verified by obtaining a prediction from each patient and staff member as to whether a given individual had received active or placebo medication during the study." "Overall, researchers were able to differentiate |  |  |
|                                     | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?                                      |                             |  | PN              | active treatment (naltrexone or topiramate) correctly from placebo treatment in 33.6% of cases. Among subjects, 27% were able to differentiate active treatment (naltrexone or topiramate) correctly from placebo treatment."  |  |  |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?     |                             |  | NA              |  |  |  |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome? |                             | NA NA  |                 |  |  |  |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely   | to have affected the outc   | ome?   | N               |  |  |  |

|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? |      |  |
|--|---|------|--|
|  | Risk of bias judgement  | Low  | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |
|  |   |      | 70/155 patients dropped out.   |
| Bias due to missing outcome              |   |      | More drop-outs (57.4%) in placebo group than other groups (40.8% and 36.4%).  *Differences between conditions in overall dropout rates approached significance (X2 = 5.10, P < 0.07) and were statistically significant within the lost-to-follow-up category (X = 7.723, P < 0.02) with a significant difference between topiramate and placebo in post-hoc analysis. |
| data                                     | 3.3 If NPNNI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN   | Conservative "Patients who missed a visit or withdrew from the study were deemed to be non-abstinent at the time of missed visits." and no sensitivity analysis  |
|  | Risk of bias judgement  | High | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PN   | "two blinded research assistants, who also assessed patient outcomes throughout the study."  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA   |  |
|  | Risk of bias judgement  |      | Double-blind design in the outcome assessors put low risk of bias in this trial.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |      |  |
| Bias in selection                        | ne reported   |      | "Alcohol consumption during the treatment was determined using a dailymonitoring card and compliance was evaluated by self-report, capsules count of the returned medication package and the dailymonitoring card."  |
|  |   |      |  |
|  | Risk of bias judgement  | Low  | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                             | Risk of bias judgement  | High | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias.  |
|  |   |      |  |

|  |  |                              | 1  | ı        | T   |  |  |  |
|--|--|------------------------------|--|----------|---|--|--|--|
| Reference                                      | Bender 2007  | Aim                          | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial  |  |  |  |
| Outcome  | Abstinence (24 weeks)  | Results                      | 54/150 (Placebo ) vs 37/149 (Tiapride 300 mg                 | 3)       |   |  |  |  |
| Domain   | Signalling question  |                              |  | Response | Comments  |  |  |  |
|  | randomization  |                              |  |          | "patients were randomly assigned to one of the two treatment groups according to a predefined random code."  "Eligible patients were chronologically randomized by assigning them the lowest unassigned treatment number available at the study centre."                                      |  |  |  |
| Bias arising from the randomization process    |  |                              |  |          | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions?  |  |  |  |
| process  | 1.3 Were there baseline imbalances that suggest  | t a problem with the rando   | mization process?  | N        | *Tiapride (n = 149) vs Placebo (n = 150)  |  |  |  |
|  | Risk of bias judgement   |                              |  | Low      | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |  |  |  |
|  | 2.1 Were participants aware of their assigned into   | ervention during the trial?  |  | N        | "This multi-centre, randomized, double-blind, placebocontrolled, parallel-group study was conducted at 11 centres in Germany (six psychiatric university hospitals, three non-academic psychiatric hospitals, one day-clinic and one private practice)."                                      |  |  |  |
|  | 2.2 Were carers and trial personnel aware of par   | ticipants' assigned interve  | ntion during the trial?                                      | PN       | "Study medication was administered in tablets indistinguishable in colour, size, form, smell, taste, consistency, and packaging."   |  |  |  |
| Bias due to                                    | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?   | s from the intended interven | ention beyond what would be expected in usual                | NA       |   |  |  |  |
| deviations from<br>intended                    | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?   | tended intervention unbala   | nced between groups and likely to have affected the          | e NA     |   |  |  |  |
| interventions                                  | 2.5 If N/PN/NI to 2.4: Were these deviations likely  | y to have affected the outo  | iome?  | N        |   |  |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing<br>participants in the wrong group? |                              |  |          |   |  |  |  |
|  | Risk of bias judgement   |                              |  | Low      | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |  |  |  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?   |                              |  | N        | *Of the 299 patients participating in the study, 31 patients (21%) in the tiapride group and 35 patients (23%) in the placebo group discontinued the treatment prematurely.*  |  |  |  |
| Bias due to                                    | 3.2 If NPNNI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                      |                              |  |          | They did not give reasons for mssing outcome data but the reasons should be expected to be similar across intervention groups.  "The number of dropouts due to adverse events or intercurrent illnesses was comparable in both groups (tiapride, n=10; placebo, n=9)."                        |  |  |  |
| missing outcome<br>data                        | 3.3 If N/PN/NI to 3.1: Is there evidence that resul  | Its were robust to the prese | ence of missing outcome data?                                | PY       | "In the worst-case analysis, all dropouts for unknown reasons (lost to follow-up: tiapride, n=12; placebo, n=24) were considered as relap<br>In this analysis, the relapse rate was 62% in the tiapride group (93 patients) and 57% in the placebo group (85 patients)."                      |  |  |  |
|  | Risk of bias judgement   |                              |  | Low      | "The difference in relapse rates in the worst-case analysis was not statistically significant (x2 test, p=0.31)."  Although there were some missing data, results still stood in consideration of balanced missing data after sensitivity analysis. "Low" risk bias in this domain was rated. |  |  |  |
|  | 4.1 Were outcome assessors aware of the interv   | rention received by study r  | articipants?   | PN       | bias in this domain was rated.  "double-blind study" might suggest that outcome assessors were not aware of the intervention.   |  |  |  |
| Bias in measurement of                         | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   |                              |  | NA NA    |   |  |  |  |
| the outcome                                    | Risk of bias judgement   | outcome likely to be influe  | пова ву кломиниде от впетуенция тесетува?                    | Low      | Double-blind design that outcome assessers (patients) were not influenced by the knowledge of intervention received puts this domain a  |  |  |  |
|  | Are the reported outcome data likely to have bee   | on selected, on the basis of | f the results, from  | Low      | low risk of bias.   |  |  |  |
| Dies in salastic                               | 5.1 multiple outcome measurements (e.g. sca  |                              |  | PN       |   |  |  |  |
| Bias in selection<br>of the reported<br>result | 5.2 multiple analyses of the data?   | , _Januario, unid punt       | ,  | PN       |   |  |  |  |
|  | Risk of bias judgement   |                              |  | Low      | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the   |  |  |  |
| Overall bias                                   | Risk of bias judgement   |                              |  | Low      | authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  Overall low risk of bias   |  |  |  |
| Overall blas                                   | itiak of bias judgement  |                              |  | LUW      | UVELIGII JUW IISK OL DIGS   |  |  |  |

| Reference Besson 1998 All assignment of merevenion trief internation for international field internation for international field. Source Journal article(s) with results of the trial |
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|---|

| Outcome                                  | Abstinence (360 days) Results 14/55 (Acamprosate 1998 mg) vs 3/55 (Placel                     |  |   |               |  |
|--|---|--|---|---------------|--|
| Domain                                   | Signalling question   |  |   | Response      | Comments   |
|  | 1.1 Was the allocation sequence random?   |  |   | PY            | "randomized, parallel, double-blind, placebo-controlled study"   |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until   | participants were recruited  | d and assigned to interventions?                    | NI            | "Balanced randomization"   |
| the randomization process                | 1.3 Were there baseline imbalances that suggest   | a problem with the rando   | mization process?                                   | N             | No significant difference between groups was found.  |
|  | Risk of bias judgement  |  |   | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned into  | ervention during the trial?  |   | PN            | -"double-blind"  |
|  | 2.2 Were carers and trial personnel aware of part   | ticipants' assigned interver   | ntion during the trial?                             | PN            | - double-pilind  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                                 | s from the intended interve  | ention beyond what would be expected in usual       | NA            |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                                   | ended intervention unbala  | nced between groups and likely to have affected the | NA NA         |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely   | y to have affected the outo  | iome?   | N             |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group?          | bstantial impact (on the es  | stimated effect of intervention) of analysing       | NA            |  |
|  | Risk of bias judgement  |  |   |               | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly  | / all, participants randomiz   | ed?   | PN            | 36/55 participants in each group were nonattendant at 1y follow-up. In the analysis, non-attenders were assumed to have relapsed.  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                      | ing outcome data and reas  | sons for missing outcome data similar across        | PY            | Proportions of missing data identical in the two groups. Reasons for missing data approximately balanced between groups, although slightly more patients in the pacebo group were nonattendant due to relapse requiring rehospitalization, and slightly more patients were nonattendent due to concurrent illness in the acamposate group. |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result  | If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data? |   | PN            |  |
|  | Risk of bias judgement  |  |   | Low           | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.  |
|  | 4.1 Were outcome assessors aware of the interven  | ention received by study p   | articipants?  | PN            | "double-blind"   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe  | enced by knowledge of intervention received?        | NA            |  |
|  | Risk of bias judgement  |  |   | Low           | Double-blind design and self-reporting put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from |  |   |               |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca   | les, definitions, time points  | s) within the outcome domain?                       | PN            |  |
| result                                   | 5.2 multiple analyses of the data?  |  |   | PN            |  |
|  | Risk of bias judgement  |  |   | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                             | Risk of bias judgement  | ·  |   | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.  |

|  | I  |                                |  |  |   |  |  |
|--|--|--------------------------------|--|--|---|--|--|
| Reference  | Burtscheidt 2002   | Aim                            | assignment to intervention (the 'intention-to-<br>treat' effect) | Source   | Journal article(s) with results of the trial  |  |  |
| Outcome  | Abstinence (12 months) Results 11/40 (CBT) vs 8/40 (CST) vs 11/40 (Standard                                |                                |  | I therapy)   |   |  |  |
| Domain   | Signalling question  |                                |  |  | Comments  |  |  |
| 1.1 Was the allocation sequence random?                                  |  |                                |  | NI   | Preferences of the patients for any of the three treatment approaches did not emerge; there were no significant differences in age, sex, severity and duration of illness, and sociodemographic data in terms of education, employment, and familial status between the three |  |  |
| Bias arising from the randomization                                      | 1.2 Was the allocation sequence concealed until  | I participants were recruited  | d and assigned to interventions?                                 | NI   | therapy groups."  |  |  |
| process  | 1.3 Were there baseline imbalances that sugges   | at a problem with the rando    | mization process?  | PN   | there were no significant differences in age, sex, severity and duration of illness, and sociodemographic data in terms of education, employment, and familial status between the three therapy groups.   |  |  |
|  | Risk of bias judgement   |                                |  | Some concerns  | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |  |
| Were participants aware of their assigned intervention during the trial? |  |                                |  | PY   | No. billiodic   |  |  |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?         |                                |  |  | No blinding was used in this trial and interventions varied across groups.  |  |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?   | ns from the intended interve   | ntion beyond what would be expected in usual                     | NI   | No details on deviations from expected practice   |  |  |
| deviations from<br>intended  | 2.4 If Y/PY to 2.3: Were these deviations from in outcome?   | itended intervention unbala    | nced between groups and likely to have affected the              | NA NA  |   |  |  |
| interventions  | 2.5 If N/PN/NI to 2.4: Were these deviations likel   | ly to have affected the outc   | ome?   | N  | No evidence that patients recieved a treatment other than the one they were assigned to.  |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a suparticipants in the wrong group?                        | ubstantial impact (on the es   | stimated effect of intervention) of analysing                    | NA   |   |  |  |
|  | Risk of bias judgement   |                                |  | Some concerns  | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain   |  |  |
|  | 3.1 Were outcome data available for all, or nearly   | y all, participants randomiz   | ed?  | PN   | There were some missing data due to loss to follow-up (~15%).   |  |  |
| Bias due to missing outcome  | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?                                    | sing outcome data and reas     | ions for missing outcome data similar across                     | PY   | "There were no significant differences between the three treatment groups in this respect." = missing data rate.  No information provided on whether reasons for missing data were comparable between intervention groups   |  |  |
| data   | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data? |                                | NI   | Unclear how missing data were handled. No sensitivity analysis |   |  |  |
|  | Risk of bias judgement   |                                |  | Low  | Although there were some missing data, results still stood in consideration of balanced missing data. "Low" risk of bias in this domain was rated.  |  |  |
|  | 4.1 Were outcome assessors aware of the interv   | vention received by study p    | articipants?   | PY   | Self report and reports from family/friends, who are aware of the treatment received.   |  |  |
| Bias in<br>measurement of<br>the outcome                                 | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe    | nced by knowledge of intervention received?                      | PY   | Outcomes are subjective and could have been influenced by awareness of the treatment  |  |  |
|  | Risk of bias judgement   |                                |  | Some concerns  | Although this is an open study, the outcome (abstinence) was confirmed by family member and saliva test, which put "some concerns" ris of bias in this domain.  |  |  |
|  | Are the reported outcome data likely to have been  | en selected, on the basis of   | the results, from  |  |   |  |  |
| Bias in selection  | 5.1 multiple outcome measurements (e.g. sca  | ales, definitions, time points | s) within the outcome domain?                                    | PN   |   |  |  |

| result       | 5.2 multiple analyses of the data? | PN |   |
|--------------|------------------------------------|----|---|
|              | Risk of bias judgement             |    | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias | Risk of bias judgement             |    | Lack of detailed methods for the randomisation process and blinding of participants and personnel, together, these contributed to "some concerns" in overall bias for this trial.                               |

|  |   |                                | assignment to intervention (the 'intention-to-     |               |  |
|--|---|--------------------------------|--|---------------|--|
| Reference                                | Caputo 2003   | Aim                            | treat' effect)                                     | Source        | Journal article(s) with results of the trial   |
| Outcome                                  | Abstinence (3 months)   | Results                        | 12/18 (GHB 50 mg/kg) vs 6/17 (Naltrexone 50        | 0 mg)         |  |
| Domain                                   | Signalling question   |                                |  | Response      | Comments   |
|  | 1.1 Was the allocation sequence random?   |                                |  | NI            |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until   | participants were recruited    | d and assigned to interventions?                   | NI            | *"receive randomly during the treatment period, as well as on the possibility of dropping out of the study at any time"  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest   | t a problem with the rando     | mization process?                                  | N             | "At the time of admission to the study (Table 1), the two groups did not differ in terms of demographic data, education, employment, manial status, duration of alcohol addiction, time of abstinence, alcohol craving scale and alcohol dependence degree." |
|  | Risk of bias judgement  |                                |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?    |  | Υ             |  |
|  | 2.2 Were carers and trial personnel aware of par  | ticipants' assigned interver   | ntion during the trial?                            | NI            | "Patients were aware of the drug they would receive and were abstinent at the time of admission to the study."   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?                            | s from the intended interve    | ention beyond what would be expected in usual      | PN            | As both medications were used for treating alcohol dependence.   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                              | tended intervention unbala     | nced between groups and likely to have affected th | NA NA         |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outo    | ome?   | PN            |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | bstantial impact (on the es    | stimated effect of intervention) of analysing      | NA            |  |
|  | Risk of bias judgement  |                                |  | Low           | Although this is an open trial, both interventions were used clinically for treating alcohol dependence. This expects minimal deviations from the intended intervention beyond usual practice. Therefore, we rate "Low" risk of bias in this domain.         |
|  | 3.1 Were outcome data available for all, or nearly                                      | y all, participants randomiz   | ed?  | N             | *Eight (22.9%; seven males) patients dropped out: four patients developed severe side-effects [one (2.8%) in the GHB group and three (8.5%) in the NTX group]"   |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?                 | ing outcome data and reas      | sons for missing outcome data similar across       | PY            | % comparable across arms, and reasons seem broadly similar.  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that resul                                     | its were robust to the prese   | ence of missing outcome data?                      | PY            | No sensitivity analysis but results still stood by considering the missing data.   |
|  | Risk of bias judgement  |                                |  | Low           | Although there were some missing data, missing data presented equally in both groups and results stood the same in consideration of missing data. "Low" risk of bias in this domain was rated.   |
|  | 4.1 Were outcome assessors aware of the interv  | ention received by study p     | articipants?                                       | Y             | Open study   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe    | enced by knowledge of intervention received?       | PN            | "the interview of a family member and the determination of blood alcohol concentrations and alcohol in the saliva (Quantitative Ethanol Determination; Enzymatics Inc., Horsham, UK) at the end of every week of treatment"                                  |
|  | Risk of bias judgement  |                                |  | Low           | Although this is an open study, the outcome (abstinence) was confirmed by family member and saliva test, which put low risk of bias in this domain.  |
|  | Are the reported outcome data likely to have bee  | n selected, on the basis of    | the results, from                                  |               |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca   | eles, definitions, time points | s) within the outcome domain?                      | PN            |  |
|  | 5.2 multiple analyses of the data?  |                                |  | PN            |  |
|  | Risk of bias judgement  |                                |  | Low           | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.                      |
| Overall bias                             | Risk of bias judgement  |                                | ·  | Some concerns | Lack of detailed randomisation process contributed to "some concerns" in overall bias for this trial.  |

| Reference                           | Caputo 2007  | Aim  | assignment to intervention (the 'intention-to-<br>treat' effect) | Source                                   | Journal article(s) with results of the trial  |  |
|-------------------------------------|--|--|--|--|---|--|
| Outcome                             | Abstinence (3 months) Results 6/17 (Naltrexone 50 mg) vs 13/18 (GHB 50 mg                |  | g/kg + NTX 50 mg) vs   | /kg + NTX 50 mg) vs 12/18 (GHB 50 mg/kg) |   |  |
| Domain                              | Signalling question  |  |  | Response                                 | Comments  |  |
|                                     | 1.1 Was the allocation sequence random?  |  |  | NI                                       | *patients were randomly allocated to three groups."   |  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until  | participants were recruited  | and assigned to interventions?                                   | NI                                       | ,paterns were randonny anocated to undergroups.   |  |
| process                             | 1.3 Were there baseline imbalances that suggest  | a problem with the rando   | nization process?  | PN                                       | 20 vs 18 vs 17.   |  |
|                                     | Risk of bias judgement   |  |  | Some concerns                            | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
|                                     | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?  |  | Υ  | "an open trial"   |  |
|                                     | 2.2 Were carers and trial personnel aware of part  | ticipants' assigned interver   | ation during the trial?  | PY                                       | After providing their informed consent, being aware of the aim of the study, dosing rate and possible side-effects of the drugs they were going to receive, as well as the possibility of dropping out of the   |  |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve  | ntion beyond what would be expected in usual                     | NI                                       | No details on deviations from expected practice   |  |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala  | nced between groups and likely to have affected th               | • NA                                     |   |  |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | y to have affected the outo  | ome?   | PN                                       |   |  |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es  | timated effect of intervention) of analysing                     | NA                                       |   |  |
|                                     | Risk of bias judgement   |  |  | Some concerns                            | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |  |
|                                     | 3.1 Were outcome data available for all, or nearly                                       | 3.1 Were outcome data available for all, or nearly all, participants randomized? |  |  | There were around 10-25% of missing data in each group. (2/20 vs 3/18 vs 4/17)  |  |
| Bias due to missing outcome         | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ing outcome data and reas  | ons for missing outcome data similar across                      | PY                                       | "The incidence of each side-effect did not significantly differ between groups In addition to the patients who abandoned the study because of the occurrence of side-effects the distribution of drop-outs in the three groups did not differ significantly." |  |
| data                                | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese  | ince of missing outcome data?                                    | PY                                       | No mention of how missing data were handled but results stood in consideration of missing data.   |  |

|  | Risk of bias judgement  | Low           | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |  |  |  |
|--|---|---------------|---|--|--|--|
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?                                    | PY            | "open trial"  |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? |               | "These parameters were assessed on the basis of participant self-evaluation, the interview of a family member and the determination of alcohol concentrations in blood and saliva" - robust outcome                                     |  |  |  |
|  | Risk of bias judgement  | Low           | Although this is an open study, the outcome (abstinence) was confirmed by family member and blood/saliva test, which put low risk of bias in this domain.   |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from                           |               |   |  |  |  |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?                    | PN            |   |  |  |  |
| of the reported result                   | 5.2 multiple analyses of the data?  | PN            |   |  |  |  |
|  | Risk of bias judgement  | Low           | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Lack of detailed randomisation process, deviations from the intended interventions, together, these contributed to "some concerns" in overall bias for this trial.  |  |  |  |

| Reference                           | Chick 2004   | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial  |
|-------------------------------------|--|-------------------------------|--|----------|---|
| Outcome                             | Abstinence (52 weeks) Results 70/243 (Fluvoxamine 300mg) vs 72/249 (Plan                 |                               | bbo)   |          |   |
| Domain                              | Signalling question  |                               |  | Response | Comments  |
|                                     | 1.1 Was the allocation sequence random?  |                               |  | Y        | 'Randomisation after meeting inclusion and exclusion criteria was within centres, in blocks of eight, four patients per block to each treatment. At randomisation, patients were given the next sequential number at that centre, and received the trial supplies for that patient number." |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until  | participants were recruited   | and assigned to interventions?                               | Y        | "The randomisation code was provided by the department of statistics and data management at Solvay–Duphar B.V."   |
| process                             | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | nization process?  | N        | "At entry, there were no differences that reached statistical significance in the characteristics measured of patients allocated to the two treatment groups."  |
|                                     | Risk of bias judgement   |                               |  | Low      | This study employed adequate randomisation methods and represented low risk of bias in the randomisation process.   |
|                                     | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |  | PN       | *Fluvoxamine (50 mg) and placebo were supplied in indistinguishable yellow enteric-coated tablets, in numbered containers for dispensing.   |
|                                     | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ation during the trial?                                      | PN       | according to a randomisation schedule held centrally and by the clinic pharmacist*  |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual                 | NA       |   |
|                                     | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected th           | • NA     |   |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outo     | ome?   | N        |   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA       |   |
|                                     | Risk of bias judgement   |                               |  | Low      | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|                                     | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | N        | By week 52, only 75/243 of Flu group and 117/249 of Pla group remained.   |
| Bias due to                         | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | ons for missing outcome data similar across                  | PN       | More participants in fluvoxamine group withdrawn.  See Table 2 - propotions are similar but reasons different between treatement arms.  |
| missing outcome data                | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | nce of missing outcome data?                                 | PN       | No sensitivity analysis but used a conservative approach - "in which all drop-outs were to be regarded as treatment failures."  |
|                                     | Risk of bias judgement   |                               |  | High     | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
| Bias in                             | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?   | PN       | Patients were assessed, usually by the same rater at each occasion, after detoxification on the day of randomisation, and after 2, 4, 6, 8, 12, 16, 24, 32, 40 and 52 weeks of treatment." Robust double blind protocol means assessor would not know which treatment was received."        |
| measurement of<br>the outcome       | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                  | NA       |   |
|                                     | Risk of bias judgement   |                               |  | Low      | Double-blind design put this domain as low risk of bias.  |
|                                     | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |          |   |
| Bias in selection                   | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | e) within the outcome domain?                                | PN       |   |
| of the reported result              | 5.2 multiple analyses of the data?   |                               |  | PN       |   |
|                                     | Risk of bias judgement   |                               |  | Low      | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |
| Overall bias                        | Risk of bias judgement   |                               |  | High     | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias.   |

| Reference                           | Chick 2000  | Aim                        | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial   |
|-------------------------------------|---|----------------------------|--|----------|--|
| Outcome                             | Abstinence (6 months)   | Results                    | 35/289 (Acamprosate 1998 mg) vs 32/292 (P                    | lacebo)  |  |
| Domain                              | Signalling question   |                            |  | Response | Comments   |
|                                     | 1.1 Was the allocation sequence random?   |                            |  | Υ        | "Patients were then reassessed and, using randomization in blocks of eight, allocated"   |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until   | participants were recruite | d and assigned to interventions?                             | PY       | "identically presented placebo"  |
| process                             | 1.3 Were there baseline imbalances that suggest   | a problem with the rando   | mization process?  | N        | Not significant difference between groups (Table 1)  |
|                                     | Risk of bias judgement  |                            |  |          | Although there was no information regarding allocation concealment, this study employed adequate randomisation methods and identical placebo in the trial, which represents low risk of bias in the randomisation process. |
|                                     | 2.1 Were participants aware of their assigned intervention during the trial?  |                            |  | PY       | No blinding procedures were used.  |
|                                     | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?                                  |                            |  | PY       | two unituing procedures were used.   |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice? |                            |  | PN       | "It was intended that the medication would be used as an adjunct, not an alternative, to the clinic's usual psychosocial out-patient treatment programme."   |

| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the<br>outcome?                  | NA  |   |
|--|---|-----|---|
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N   |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA  |   |
|  | Risk of bias judgement  | Low | Although no blinding procedures were employed, this trial used identical placebo and aimed to be an adjunct, not an alternative, to the clinic's usual practice, we rated this domain as "Low" risk of bias.                            |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N   | "Only 203 patients completed the study [A: 100 (35%), P: 103 (35%)]."   |
| Bias due to<br>missing outcome           | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PY  | "There were no statistically significant differences in attendance between the treatment groups at any time point in the study." data appear similar per arm  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN  | "It was assumed that all patients who terminated treatment before the end of the study, including those experiencing adverse events, were treatment failures."  |
|  | Risk of bias judgement  | Low | High proportion of missing data but balanced missing data, suggesting "Low" risk of bias in this domain.  |
| Disc. in                                 | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PN  | Although there is no blinding, this trial employed identical placebo and uses of an alcolmeter.   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA  |   |
|  | Risk of bias judgement  | Low | Although this study did not emphasise blinding, the outcome (abstinence) was confirmed by biochemistry test, which put low risk of bias in this domain.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |     |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN  |   |
| result                                   | 5.2 multiple analyses of the data?  | PN  |   |
|  | Risk of bias judgement  | Low | No protocol or statistical analysis was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement  | Low | Low risk of bias overall  |
|  |   |     |   |

| Reference                                | Cornelius 1997   | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (12 weeks) Results 7/25 (Fluoxetine 20 mg) vs 4/26 (Flacebo )                 |                               |  |               |   |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruited   | I and assigned to interventions?                             | NI            | "Patient randomization was stratified for sex and race"   |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | nization process?  | N             | "No significant differences were seen between treatment groups for sex, race, age, or marital or employment status."  |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | N             | - Double-blind  |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?                                      | N             | -Double-billing   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual                 | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected th           | e NA          |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?   | PN            |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | Y             | "Forty-six of these patients (90% of those randomized) completed the pharmacotherapy study;<br>the other 5 patients (10%) dropped out before the end<br>of the trial."  |
| Bias due to<br>missing outcome           | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | ons for missing outcome data similar across                  | NA            |   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | PN            | The one year "evaluations of current symptoms were conducted by an interviewer who had been kept blind to the original assessment of protocol medication and to any subsequent medication use."                 |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                  | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | i) within the outcome domain?                                | NI            |   |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | NI            |   |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                               |  | Some concerns | Lack of detailed methods for the randomisation process contributed to *some concerns* in overall bias for this trial.   |

| Reference | Croissant 2006                          | Aim     | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial |
|-----------|---|---------|--|----------|--|
| Outcome   | Abstinence (24 weeks)                   | Results | 2/15 (Acamprosate 1998 mg) vs 4/15 (Oxcarbazepine 1200 mg)   |          |  |
| Domain    | Signalling question                     |         |  | Response | Comments                                     |
|           | 1.1 Was the allocation sequence random? |         |  | NI       | -only stated "random"                        |

|  |   |               | uniy stateu Tanuuni   |
|--|---|---------------|---|
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions?  | NI            |   |
| process                                  | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?   | N             | No significant imbalance between groups.  |
|  | Risk of bias judgement  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned intervention during the trial?  | Υ             | *we conducted an open-label,*   |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | Υ             | we conduced all open navel,   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NI            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the<br>outcome?                  | NA            |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N             |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |   |
|  | Risk of bias judgement  | Some concerns | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | PN            | Only 10/30 completed the study (24 weeks) and 4 lost without any information supplied.  |
| Bias due to missing outcome              | 3.2 If NIPNINI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | NI            |   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | NI            |   |
|  | Risk of bias judgement  | Some concerns | High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PY            | Drinking data collection was performed by a trained research assistant who was unblinded to treatment assignment, but not involved in the patient treatment.'   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | PN            |   |
|  | Risk of bias judgement  | Low           | Although this is an open study, the outcome (abstinence) is not influenced by knowledge of intervention received.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN            |   |
|  | 5.2 multiple analyses of the data?  | PN            |   |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.                     |
| Overall bias                             | Risk of bias judgement  | Some concerns | Lack of detailed randomisation process, potential deviations from the intended interventions due to difference among interventions and missing data, together, these contributed to "some concerns" in overall bias for this trial. |

| Reference F                       | Favre 1997   |                               |  |               |   |  |
|-----------------------------------|--|-------------------------------|--|---------------|---|--|
|                                   | . 41.0 1.001   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |  |
| Outcome                           | Abstinence (9 months)  | Results                       | 42/172 (Placebo ) vs 48/170 (Tianeptine 37.5 r                   | 29)           |   |  |
| Domain S                          | Signalling question  |                               |  | Response      | Comments  |  |
| 1                                 | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |  |
| Dido di lonig il oni              | 1.2 Was the allocation sequence concealed until p  | participants were recruited   | and assigned to interventions?                                   | NI            | only stated "random"  |  |
| the randomization process         | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | nization process?  | PN            | A difference in previous alcohol withdrawals was noted but might due to chance  |  |
| ŗ                                 | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
| -                                 | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | PN            |   |  |
| ī                                 | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | tion during the trial?   | PN            | "double-blind"  |  |
|                                   | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual                     | NA            |   |  |
| deviations from intended          | 2.4 If Y/PY to 2.3: Were these deviations from introutcome?                              | ended intervention unbala     | nced between groups and likely to have affected the              | NA.           |   |  |
| interventions<br>2                | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?   | N             |   |  |
|                                   | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |   |  |
| Ī                                 | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |  |
| ş                                 | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomize   | ed?  | N             | High rate of drop-outs - 60.2% patients permaturely discontinued  |  |
| Bias due to                       | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?                | ng outcome data and reas      | ons for missing outcome data similar across                      | PN            | "the premature terminations were more frequent in the tianeptine group (65.9% vs. 54.7%; P=0.04). "   |  |
| missing outcome                   |  |                               |  |               | No reasons of missing data were given.  |  |
| -                                 | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | is were robust to the prese   | nce of missing outcome data?                                     | PY            | They presented results by per protocol and ITT analyses, which led to the same results.   |  |
| F                                 | Risk of bias judgement   |                               |  | Some concerns | High porportion of missing data and imbalanced missing data without proper sensitivity analyses put "some concerns" risk of bias in this domain.  |  |
| Bias in                           | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?   | PN            | Self-reported and checked by biological results: Abstinence was determined if the patient said he had no more than one drink since the Ia visit, the GGT level and the mean corpuscular volume were normal, or had not increased since the last examination, and the blood alcoh was lower than 0.10 g/I. |  |
|                                   | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                      | NA            |   |  |
| Ī                                 | Risk of bias judgement   |                               |  | Low           | Double-blind design and self-reporting outcome (confirmed by biochemistry results) put this domain as low risk of bias.   |  |
| í                                 | Are the reported outcome data likely to have beer  | n selected, on the basis of   | the results, from  |               |   |  |
| Bias in selection of the reported | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | ) within the outcome domain?                                     | PN            |   |  |
|                                   | 5.2 multiple analyses of the data?   |                               |  | PN            |   |  |
| r                                 | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |  |
| Overall bias                      | Risk of bias judgement   |                               |  | Some concerns | High proportion of missing data and lack of detailed randomisation process contributed to "Some concerns" risk of bias in overall bias.   |  |

| Reference                                | Florez 2008   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial   |
|--|---|-------------------------------|--|---------------|--|
| Outcome                                  | Abstinence (6 months) Results 23/51 (Naltrexone 50 mg) vs 24/51 (Topiramate   |                               |  | ate )         |  |
| Domain                                   | Signalling question   |                               |  | Response      | Comments   |
|  | 1.1 Was the allocation sequence random?   |                               |  | NI            |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until p   | participants were recruited   | I and assigned to interventions?                                 | NI            | Only stated "random"   |
| process                                  | 1.3 Were there baseline imbalances that suggest   | t a problem with the randor   | nization process?  | N             | 51 vs 51   |
|  | Risk of bias judgement  |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned inte  | ervention during the trial?   |  | Y             | -'open-label"  |
|  | 2.2 Were carers and trial personnel aware of part   | ticipants' assigned interver  | ation during the trial?  | Y             | орен навон   |
| Bias due to deviations from              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?   | s from the intended interve   | ntion beyond what would be expected in usual                     | PY            | Nattrexone is used for alcohol dependence treatment but no topiramate. Also, more patients taking disulfiram and drop-out in nattrexone group.  mean number of psychotherapy sessions (8.61 for nattrexone; 9.20 for topiramate); patients taking disulfiram (6 patients, 11.76%, for nattrexone; 3 patients, 5.86% for topiramate); drop-outs (6 patients, 11.76%, for nattrexone; 4 patients, 7.84% for topiramate). |
| intended interventions                   | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?   | ended intervention unbala     | nced between groups and likely to have affected th               | e PY          | As they are related to outcome.  |
|  | 2.5 If N/PN/NI to 2.4: Were these deviations likely   | y to have affected the outc   | ome?   | N             |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group?                                    | bstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |  |
|  | Risk of bias judgement  |                               |  | High          | Open-label design and potential deviation evidence from the number of patients taking disulfiram, suggesting high risk of bias in this domain  |
|  | 3.1 Were outcome data available for all, or nearly  | all, participants randomiz    | ed?  | PY            | Almost all outcome data were available (6/51 patients, 11.76%, for naltrexone; 4/51 patients, 7.84% for topiramate).   |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missintervention groups?  | ing outcome data and reas     | ons for missing outcome data similar across                      | NA            |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result  | ts were robust to the prese   | ince of missing outcome data?                                    | NA            |  |
|  | Risk of bias judgement  |                               |  | Low           | Almost all outcome data were available, thus this domain was rated "Low" risk of bias.   |
|  | 4.1 Were outcome assessors aware of the interven  | ention received by study p    | articipants?   | Y             | "Open-label" and self-reported outcome   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? |                               | nced by knowledge of intervention received?                      | PN            | Abstinence was assessed by the participants and significant one with a clear definition.  *Accord intake was assessed at each treatment session. Both the patient and the significant other were interviewed and the highest intake level reported was used.*  |
|  | Risk of bias judgement  |                               |  | Low           | Although this is an open study, the outcome (abstinence) was confirmed by family member, which put low risk of bias in this domain.  |
|  | Are the reported outcome data likely to have been   | n selected, on the basis of   | the results, from  |               |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal  | les, definitions, time points | i) within the outcome domain?                                    | N             |  |
|  | 5.2 multiple analyses of the data?  |                               |  | N             |  |
|  | Risk of bias judgement  |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                             | Risk of bias judgement  |                               |  | High          | High risk of bias in deviations from the intended interventions contributed to "High" risk of bias in overall bias.  |

|                                     | I  |                             | 1  |               | 1   |
|-------------------------------------|--|-----------------------------|--|---------------|---|
| Reference                           | Friedmann 2008   | Aim                         | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |
| Outcome                             | Abstinence (6 months)  | Results                     | 12/85 (Placebo ) vs 8/88 (Trazodone )                            |               |   |
| Domain                              | Signalling question  |                             |  | Response      | Comments  |
|                                     | 1.1 Was the allocation sequence random?  |                             |  | Y             | "Um randomization software allocated subjects"  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until  | participants were recruited | d and assigned to interventions?                                 | NI            | - Um randomization soliware andcated subjects   |
|                                     | 1.3 Were there baseline imbalances that suggest  | a problem with the rando    | mization process?  | PN            | "The trazodone (N = 88) and placebo groups (N = 85) did not differ at baseline on any measured characteristic (Table 1)."   |
|                                     | Risk of bias judgement   |                             |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|                                     | 2.1 Were participants aware of their assigned inte                                       | rvention during the trial?  |  | PN            | -'double-blind" "identifical placebo"   |
|                                     | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver | ntion during the trial?  | PN            | double-unital Merininen pracesco  |
|                                     | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | from the intended interve   | ention beyond what would be expected in usual                    | NA            |   |
| intended                            | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                          | ended intervention unbala   | nced between groups and likely to have affected th               | e NA          |   |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outo   | ome?   | N             |   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | ostantial impact (on the es | stimated effect of intervention) of analysing                    | NA            |   |
|                                     | Risk of bias judgement   |                             |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|                                     | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz  | ed?  | N             | Missing data: 16/88 t vs 16/85 p, which is around 18%.  |
|                                     | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?                | ng outcome data and reas    | sons for missing outcome data similar across                     | Y             | From Fig 1 consort chart.   |
| missing outcome data                | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | s were robust to the prese  | ence of missing outcome data?                                    | PY            | *Mixed linear regression analyses with full information maximum likelihood (FIML) estimation compared the other drinking outcome trajectories by treatment condition across baseline, 1-, 3-, and 6-month intervals: **For the measure of complete abstinence, those who did not complete all follow-ups were assumed to have resumed drinking, and were therefore coded as not having achieved complete abstinence by the end of the study.* |
|                                     | Risk of bias judgement   |                             |  | Low           | Although there were some missing data, the authors used mixed linear regression analyses and conservative approach to analysis their results, resulting "Low" risk of bias in this domain.  |

|  | 4.1 Were outcome assessors aware of the intervention received by study participants?                                    | PN            | "double-blind" & Self-reported outcome  |  |  |  |  |
|--|---|---------------|---|--|--|--|--|
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? | NA            |   |  |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from                           |               |   |  |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?                    | PN            |   |  |  |  |  |
|  | 5.2 multiple analyses of the data?  | PN            |   |  |  |  |  |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Lack of detailed method for the randomisation process contributed to "some concerns" in overall bias for this trial.  |  |  |  |  |

| Reference                                | Fuente 1989   | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|---|-------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (6 months)   | Results                       | 10/28 (Lithium) vs 7/25 (Placebo)                            |               |   |
| Domain                                   | Signalling question   |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?   |                               |  | NI            | -Cnly stated "random"   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until   | participants were recruited   | d and assigned to interventions?                             | NI            | Only stated random  |
| process                                  | 1.3 Were there baseline imbalances that suggest   | a problem with the randor     | mization process?  | NI            | Did not provide basic characteristics of participants by groups   |
|  | Risk of bias judgement  |                               |  | Some concerns | No details were given regarding randomisation process and characteristics of participants by group, contributed to "some concerns" in the domain.   |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?   |  | PN            | The patient and the primary Investigator remained blind to the lithium or   |
|  | 2.2 Were carers and trial personnel aware of part                                       | ticipants' assigned interver  | ntion during the trial?                                      | PN            | placebo assignment."  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                           | s from the intended interve   | ention beyond what would be expected in usual                | NA            |   |
|  | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                             | ended intervention unbala     | nced between groups and likely to have affected th           | e NA          |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outo   | ome?   | N             |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                | NA            |   |
|  | Risk of bias judgement  |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly                                      | all, participants randomiz    | ed?  | PY            | Only half of participants completed the trial but the authors verified those patients dropped out.  |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                | ing outcome data and reas     | sons for missing outcome data similar across                 | NA            |   |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                    | ts were robust to the prese   | ence of missing outcome data?                                | NA            |   |
|  | Risk of bias judgement  |                               |  | Low           | Outcome data were available since the authors tried to verified patient's drinking conditions, contributing to "Low" risk of bias in this domain  |
| Disa to                                  | 4.1 Were outcome assessors aware of the interven  | ention received by study pa   | articipants?   | PN            | "double-blind" & self-report  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe   | enced by knowledge of intervention received?                 | NA            |   |
|  | Risk of bias judgement  |                               |  | Low           | Patients, as the outcome assessor, were blinded, thus this domain was rated as low risk of bias.  |
|  | Are the reported outcome data likely to have bee  | n selected, on the basis of   | f the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca   | les, definitions, time points | s) within the outcome domain?                                | PN            |   |
|  | 5.2 multiple analyses of the data?  |                               |  | PN            |   |
|  | Risk of bias judgement  |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement  |                               |  | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.   |

| Reference                           | Fuller 1986   | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source                   | Journal article(s) with results of the trial  |
|-------------------------------------|---|-----------------------------|--|--------------------------|---|
| Outcome                             | Abstinence (12 months)  | Results                     | 78/403 (Combined Disulfiram 1 mg + Placebo                   | o) vs 38/202 (Disulfiram | 250 mg)   |
| Domain                              | Signalling question   |                             |  | Response                 | Comments  |
|                                     | 1.1 Was the allocation sequence random?   |                             |  | PY                       |   |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until p   | participants were recruite  | d and assigned to interventions?                             | Υ                        | "Treatment assignment was done by opening sequentially numbered envelopes based on a randomization list."                     |
| process                             | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?   | PN                          |  |                          |   |
|                                     | Risk of bias judgement  |                             |  | Low                      | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process. |
|                                     | 2.1 Were participants aware of their assigned inte  | ervention during the trial? |  | PN                       | "double-blind" in the experimental arms but not control (riboflavin); all treatment   |
|                                     | 2.2 Were carers and trial personnel aware of parti  | icipants' assigned interve  | ntion during the trial?                                      | N                        | personnel and research assistants were blinded.   |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?     |                             |  | NA                       |   |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome? |                             |  | ne NA                    |   |
| interventions                       | 2.5 If NIPN/NI to 2.4: Were these deviations likely to have affected the outcome?   |                             |  | N                        |   |

|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |  |  |  |  |
|--|---|---------------|--|--|--|--|
|  | Risk of bias judgement  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |  |  |  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | PN            | There were around 10% of patients in each group with insufficient data to evaluate abstinence (Figure 1)   |  |  |  |
| Bias due to missing outcome              | 3.2 If NPN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                  | NI            | The proportion of drop-outs seems to be similar between groups but no details were given.  |  |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN            | Conservative analysis by assumming dropped out patients as "failed"  |  |  |  |
|  | Risk of bias judgement  | Some concerns | Although there were some missing data, the proportion of drop-outs seemed to be similar but no details were given. The authors did not un sensitivity analyses but they assummed drop-outs as failed. "Some concerns" risk of bias in this domain was rated. |  |  |  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N             | Abstinence (drinking) was reported by relative's/friend's interviews or from the urine or blood specimens.   |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA            |  |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |  |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN            |  |  |  |  |
|  | 5.2 multiple analyses of the data?  | PN            |  |  |  |  |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |  |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Some concerns overall due to the way of authors handling with missing data.  |  |  |  |

| Reference                                | Geerlings 1997   | Aim                            | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|--------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (1 year)  | Results                        | 14/128 (Acamprosate 1998 mg) vs 7/134 (Pla                   | acebo)        |   |
| Domain                                   | Signalling question  |                                |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                                |  | Y             | "were randomly assigned (balanced randomisation in groups of 4+4) to the study treatment"   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited    | and assigned to interventions?                               | PY            | "t appeared that many subjects only came for the medication and/or the results of blood test resuling in minimal contact with the clinic"  "double-blind"   |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | t a problem with the randor    | nization process?  | N             | Participants in placebo group seemed to be able to stay alcohol-free longer than participants in acamporsate group, which might be result from chance   |
|  | Risk of bias judgement   |                                |  | Low           | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|  | 2.1 Were participants aware of their assigned into                                   | ervention during the trial?    |  | PN            |   |
|  | 2.2 Were carers and trial personnel aware of part                                    | ticipants' assigned interver   | ntion during the trial?                                      | PN            | "double-blind"  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation: practice?                        | s from the intended interve    | ntion beyond what would be expected in usual                 | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                          | tended intervention unbala     | nced between groups and likely to have affected th           | e NA          |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | y to have affected the outo    | ome?   | N             |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | ibstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |   |
|  | Risk of bias judgement   |                                |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly                                   | y all, participants randomiz   | ed?  | N             | More than 64% of participant left prematurely.  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ing outcome data and reas      | ons for missing outcome data similar across                  | PN            | "30 of the 128 from the acamprosate group (23%) and 23 of the 134 from the placebo group (17%) completed treatment"<br>No details on reasons for missing outcomes for this period.                              |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | its were robust to the prese   | nce of missing outcome data?                                 | PN            | Drop-outs were assumed as relapsed.   |
|  | Risk of bias judgement   |                                |  | Some concerns | High porportion of missing data without sensitivity analysis put "some concerns" risk of bias in this domain.   |
|  | 4.1 Were outcome assessors aware of the interven                                     | ention received by study pa    | articipants?   | PN            | "double-blind"  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe    | nced by knowledge of intervention received?                  | NA            |   |
|  | Risk of bias judgement   |                                |  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have bee                                     | n selected, on the basis of    | the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca  | ales, definitions, time points | ) within the outcome domain?                                 | PN            |   |
|  | 5.2 multiple analyses of the data?   |                                |  | PN            |   |
|  | Risk of bias judgement   |                                |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                                |  | Some concerns | Some concerns overall due to high proportion of missing outcomes without sensitivity analysis   |

| Reference         | Gottlieb 1994  | Aim     | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial  |
|-------------------|--|---------|--|----------|---|
| Outcome           | Abstinence (1 year)  | Results | 7/50 (Atenolol 100mg) vs 8/50 (Placebo)                      |          |   |
| Domain            | Signalling question  |         |  | Response | Comments  |
|                   | 1.1 Was the allocation sequence random?  |         |  | Y        | "Randomization with a block size of 8 was carried out under the direction of one of us (LDG)."                                  |
| Bias arising from | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions? |         |  | NI       | "Neither the clinical personnel (physicians and counselors) nor the patients were aware of the subjects' treatment assignment." |

| process                                  | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?   | PN            | Craving for alcohol higher in the atenolol group, but no other differences so probably due to chance.   |
|--|---|---------------|---|
|  | Risk of bias judgement  | Some concerns | No details were given regarding randomisation process, contributed to *some concerns* in this domain.   |
|  | 2.1 Were participants aware of their assigned intervention during the trial?  | N             | -"double-blind"   |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | N             | - COUDIE-DING.  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the<br>outcome?                  | NA NA         |   |
| interventions                            | 2.5 If NPNNI to 2.4: Were these deviations likely to have affected the outcome?   | N             | Doesn't specifically state ITT but no patients were analysed in a group different to the one to which they were assigned. "Patients who did not return for follow-up and could not be contacted were presumed to have returned to drinking and were counted as treatment failures." |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N             | The authors reported drinking status in all participants  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PN            | Numbers who dropped out, presumed drinking slightly higher in the placebo group. Numbers who withdrew whilst not drinking: higher in the atenolol group (17 vs. 13).  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN            | May have led to a conservate estimate of the effect of atenolol.  |
|  | Risk of bias judgement  | High          | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
| Diagram in                               | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N             | "double-blind"  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | N             |   |
| result                                   | 5.2 multiple analyses of the data?  | N             |   |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |
| Overall bias                             | Risk of bias judgement  | High          | High risk of bias in missing data and some concerns in randomisation process contributed to "High" risk of bias in overall bias.  |

| Reference                                | Gual 2001 Aim assignment to intervention (the 'intention-to-treat' effect)               |                               |   | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|---|---------------|---|
| Outcome                                  | Abstinence (180 days)  | Results                       | 35/141 (Acamprosate 1998 mg) vs 26/147 (Pla         | acebo)        |   |
| Domain                                   | Signalling question  |                               |   | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |   | NI            |   |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                    | NI            | -Only stated "random", "double-blind"   |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the rando      | mization process?                                   | N             |   |
|  | Risk of bias judgement   |                               |   | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |   | PN            | -'double-blind'   |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?                             | PN            | - double-clina  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ention beyond what would be expected in usual       | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected the | NA NA         |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?  | N             | No, mITT (at least one dose) employed. No swapping of patients between groups.  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing       | NA            |   |
|  | Risk of bias judgement   |                               |   | Low           | Double-blind design and mITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?   | N             | More participants lost to follow-up and refused to comtinue in the placebo group. And more participants dropped before started the trial.   |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | sons for missing outcome data similar across        | PN            | Appears that % and reasons balanced between groups, with sole exception of "No data after baseline"   |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                       | PY            | The authors presented both ITT and pre-protocol analysis results, which led same conclusion.  |
|  | Risk of bias judgement   |                               |   | Low           | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?  | PN            | "double-blind"  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | enced by knowledge of intervention received?        | NA            |   |
|  | Risk of bias judgement   |                               |   | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | f the results, from                                 |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                       | PN            |   |
|  | 5.2 multiple analyses of the data?   |                               |   | PN            |   |
|  | Risk of bias judgement   |                               |   | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                               |   | Some concerns | Lack of detailed methods for the randomisation process these contributed to "some concerns" in overall bias for this trial.   |

| Reference                           | Gual 2002  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|-------------------------------------|--|-------------------------------|--|---------------|---|
| Outcome                             | Abstinence (180 days)  | Results                       | 19/43 (Placebo) vs 11/38 (Tiapride 300mg)                    |               |   |
| Domain                              | Signalling question  |                               |  | Response      | Comments  |
|                                     | 1.1 Was the allocation sequence random?  |                               |  | NI            | only stated "random", "double-blind"  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until                                      | participants were recruited   | and assigned to interventions?                               | NI            | Only Stated (allocin), doduce-onito   |
| process                             | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor     | nization process?  | PN            | Table 2 doesn't show any difference.  |
|                                     | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|                                     | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial?   |  | PN            | -"double-blind"   |
|                                     | 2.2 Were carers and trial personnel aware of part                                    | icipants' assigned interver   | ation during the trial?                                      | PN            | GOUNTE-VIIING   |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve     | ntion beyond what would be expected in usual                 | NA            |   |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                      | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA         |   |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outo     | ome?   | N             |   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |   |
|                                     | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|                                     | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz    | ed?  | N             | The attrition rate was higher in the placebo group (Table 4).   |
| Bias due to missing outcome         | 3.2 If N/PN/NI to 3.1: Are the proportions of missintervention groups?               | ng outcome data and reas      | ons for missing outcome data similar across                  | PN            | Imbalanced reasons between groups   |
| data                                | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | s were robust to the prese    | nce of missing outcome data?                                 | PY            | The authors performed analyses included and excluded patients dropped out, leading to the same conclusion.  |
|                                     | Risk of bias judgement   |                               |  | Low           | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |
| Bias in                             | 4.1 Were outcome assessors aware of the interve                                      | ention received by study pa   | articipants?   | PN            | "double-blind"  |
| measurement of the outcome          | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | nced by knowledge of intervention received?                  | NA            |   |
|                                     | Risk of bias judgement   |                               |  | Low           | Double-blind design puts this domain as low risk of bias.   |
|                                     | Are the reported outcome data likely to have been                                    | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported   | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | e) within the outcome domain?                                | NI            |   |
| result                              | 5.2 multiple analyses of the data?   |                               |  | NI            |   |
|                                     | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                        | Risk of bias judgement   |                               |  | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.   |

| Reference                                | Gustafson 2014   | Aim                         | assignment to intervention (the 'intention-to-          | Source        | Journal article(s) with results of the trial   |  |  |
|--|--|-----------------------------|---|---------------|--|--|--|
|  |  |                             | treat' effect)<br>81/170 (A-CHESS ) vs 63/179 (Control) |               |  |  |  |
| Outcome                                  | Abstinence (12 months)   | Results                     | 81/170 (A-CHESS ) VS 63/179 (Control)                   |               |  |  |  |
| Domain                                   | Signalling question  |                             |   | Response      | Comments   |  |  |
|  | 1.1 Was the allocation sequence random?  |                             |   | Y             | "patients were randomized to the control group or A-CHESS in a 1:1 ratio using a computer-generated random allocation sequencewith   |  |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until                                      | participants were recruited | I and assigned to interventions?                        | Y             | blocks of 8 .Randomizationwasimplemented usingsequentiallynumbered containers."  |  |  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor   | nization process?                                       | PN            |  |  |  |
|  | Risk of bias judgement   |                             |   | Low           | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |  |  |
|  | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial? |   | Y             | It was impossible to blind participants due to nature of interventions.  |  |  |
|  | 2.2 Were carers and trial personnel aware of parti                                   | icipants' assigned interver | ntion during the trial?                                 | Y             |  |  |  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve | ntion beyond what would be expected in usual            | NI            |  |  |  |
| deviations from intended                 | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                      | ended intervention unbala   | nced between groups and likely to have affected th      | e NA          |  |  |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outc   | ome?  | N             | ITT analysis   |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es | timated effect of intervention) of analysing            | NA            |  |  |  |
|  | Risk of bias judgement   |                             |   | Some concerns | It was impossible to blind participants in this trial, which might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.                                |  |  |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz  | ed?   | PN            | There were around 15% of lost to follow-up   |  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?            | ng outcome data and reas    | ons for missing outcome data similar across             | NI            | No reasons were given for missing data but the proportions were similar.   |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | ts were robust to the prese | ence of missing outcome data?                           | PY            | Yes, used mixed effect models  |  |  |
|  | Risk of bias judgement   |                             |   | Low           | Although there were some missing data, results still stood in consideration of missing data and the authors analysed results using mixed effect models. "Low" risk of bias in this domain was rated. |  |  |
|  | 4.1 Were outcome assessors aware of the interven                                     | ention received by study p  | articipants?  | Y             | Outcome assessors were participants.   |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe | nced by knowledge of intervention received?             | PY            | This is possible and self-reported outcome   |  |  |
|  | Risk of bias judgement   |                             | ·   | High          | Lack of blinding to outcome assessors (participants themselve) and self-reporting outcomes, which put "High" risk of bias in this domain.  |  |  |
|  | Are the reported outcome data likely to have been                                    | n selected, on the basis of | the results, from                                       |               |  |  |  |

| of the reported | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? | N |   |
|-----------------|--|---|---|
|                 | 5.2 multiple analyses of the data?   | N |   |
|                 | Risk of bias judgement   |   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described method section clearly. Thus, we rated "Low" risk of bias in this domain.     |
| Overall bias    | Risk of bias judgement   |   | The nature of interventions made it was impossible to blind participants, contributing deviations from the intended interventions and outcome measurements. Overally, these result "High" risk of bias overall. |

| Reference                                | Huang 2005   | Aim                          | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |  |
|--|--|------------------------------|--|---------------|---|--|
| Outcome                                  | Abstinence (14 weeks) Results 11/20 (Naltrexone 50mg) vs 13/20 (Placebo)                 |                              | •  |               |   |  |
| Domain                                   | Signalling question  |                              |  | Response      | Comments  |  |
|  | 1.1 Was the allocation sequence random?  |                              |  | NI            |   |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until  | participants were recruite   | d and assigned to interventions?                             | NI            | +Conly stated "random", "double-blind"  |  |
| process                                  | 1.3 Were there baseline imbalances that suggest  | t a problem with the rando   | mization process?  | N             | "As shown in Table 1, there were no significant differences in the distribution of demographic characteristics between the naltrexone and placebo-treated groups."  |  |
|  | Risk of bias judgement   |                              |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?  |  | PN            | -"double-blind"   |  |
|  | 2.2 Were carers and trial personnel aware of part  | ticipants' assigned interve  | ntion during the trial?                                      | PN            | OOLINE-UIII U   |  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve  | ention beyond what would be expected in usual                | NA            |   |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala    | nced between groups and likely to have affected th           | e NA          |   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | y to have affected the outo  | iome?  | N             | Appears to be ITT analysis, though not explicitly stated. No evidence of switches   |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the e   | stimated effect of intervention) of analysing                | NA            |   |  |
|  | Risk of bias judgement   |                              |  |               | ouble-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |  |
|  | 3.1 Were outcome data available for all, or nearly                                       | / all, participants randomiz | ed?  | N             | "nine (45%) did not complete the study, whereas in the placebo-treated group seven (35%) of 20 subjects failed to complete the study."  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ing outcome data and rea     | sons for missing outcome data similar across                 | PY            | Four of the nine non-completers in the nattrexone-treated group and three of the seven noncompleters in the placebo-treated group dropped out (p = 0.67) because of alcohol relapse, as defined in this study. However, the rest of the non-completers in both groups were reluctant to continue the study. |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the pres   | ence of missing outcome data?                                | NI            | No evidence of sensitivty analysis  |  |
|  | Risk of bias judgement   |                              |  | Low           | Although there were some missing data, results still stood in consideration of missing data, which was balanced in both groups. "Low" risk of blas in this domain was rated.  |  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p   | articipants?   | PN            | "double-blind"  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe  | enced by knowledge of intervention received?                 | NA            |   |  |
|  | Risk of bias judgement   |                              |  | Low           | Double-blind design and self-reporting outcome (confirmed by biochemistry results) put this domain as low risk of bias.   |  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis o   | f the results, from  |               |   |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time point | s) within the outcome domain?                                | PN            |   |  |
| result                                   | 5.2 multiple analyses of the data?   |                              |  | PN            |   |  |
|  | Risk of bias judgement   |                              |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |  |
| Overall bias                             | Risk of bias judgement   |                              |  | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.   |  |

| Reference                           | Huang 2002  | Aim                         | assignment to intervention (the 'intention-to-<br>treat' effect) | Source   | Journal article(s) with results of the trial  |
|-------------------------------------|---|-----------------------------|--|--|---|
| Outcome                             | Abstinence (3 months) Results 16/23 (Naltrexone 30mg) vs 6/22 (Placebo)                   |                             |  |  |   |
| Domain                              | Signalling question   |                             | Response   | Comments   |   |
|                                     | 1.1 Was the allocation sequence random?   |                             |  | Y  | -Block randomisation, no information on allocation concealment  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until   | participants were recruited | d and assigned to interventions?                                 | NI   | -bicck randomisation, no information on aniccation concealment  |
|                                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? |                             | N  | No significant difference in outcomes measured at baseline, including alcohol consumption and craving. |   |
|                                     | Risk of bias judgement  |                             |  | Some concerns  | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|                                     | 2.1 Were participants aware of their assigned inte  | ervention during the trial? |  | N  | -*sinale-blind*   |
|                                     | 2.2 Were carers and trial personnel aware of part   | icipants' assigned interver | ntion during the trial?  | PY   | Single-unitu  |
|                                     | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                             | from the intended interve   | ention beyond what would be expected in usual                    | PN   |   |
| intended                            | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                           | ended intervention unbala   | nced between groups and likely to have affected the              | ne NA  |   |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                       | to have affected the outc   | ome?   | N  |   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a sub-<br>participants in the wrong group? | bstantial impact (on the es | stimated effect of intervention) of analysing                    | NA   |   |
|                                     | Risk of bias judgement  |                             |  | Low  |   |
|                                     | 3.1 Were outcome data available for all, or nearly  | all, participants randomiz  | ed?  |  | Although a large proportion of the study group, only one patient dropped out in the naltrexone group and two in the placebo group. If thes drops outs were all abstinent it would not change the result that natrexone is superior. |

| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across<br>intervention groups? | NA            |   |
|--|--|---------------|---|
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?                                     | NA            |   |
|  | Risk of bias judgement   | Low           |   |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?   | PN            | Self-reporting and "single-blind"   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                        | NA            |   |
|  | Risk of bias judgement   | Low           | Single-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?   | PN            |   |
| result                                   | 5.2 multiple analyses of the data?   | PN            |   |
|  | Risk of bias judgement   | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.   |

| Reference   | Janiri 1997 Aim assignment to intervention (the 'intention-to-treat' effect)   |   | Source   | Conference abstract(s) about the trial |  |
|---|--|---|--|--|--|
| Outcome   | Abstinence (90 days)   | Results   | 9/25 (Fluoxetine 20mg) vs 3/25 (Fluvoxamine  | 100mg)                                 |  |
| Domain  | Signalling question  |   |  | Response                               | Comments   |
|   | 1.1 Was the allocation sequence random?  |   |  | PY                                     |  |
| Bias arising from the randomization   | 1.2 Was the allocation sequence concealed until p  | participants were recruited   | d and assigned to interventions?   | NI                                     | -Conly stated "random"   |
| process   | 1.3 Were there baseline imbalances that suggest  | a problem with the randor   | mization process?  | NI                                     |  |
|   | Risk of bias judgement   |   |  | Some concerns                          | Conference abstract with limited information   |
|   | 2.1 Were participants aware of their assigned inte   | rvention during the trial?  |  | Y                                      | - Open study   |
|   | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?  | NI                                     | Open study   |
| Bias due to   | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?  | from the intended interve   | ention beyond what would be expected in usual  | NI                                     |  |
| deviations from<br>intended   | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?  | ended intervention unbala   | nced between groups and likely to have affected th   | NA NA                                  |  |
| interventions   | 2.5 If N/PN/NI to 2.4: Were these deviations likely  | to have affected the outo   | ome?   | N                                      |  |
|   | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group?   | ostantial impact (on the es   | stimated effect of intervention) of analysing  | NA                                     |  |
|   |  |   |  |  |  |
|   | Risk of bias judgement   |   |  | Some concerns                          | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.   |
|   | Risk of bias judgement  3.1 Were outcome data available for all, or nearly   | all, participants randomiza   | ed?  | Some concerns                          | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  More than half participants dropped out  |
| Bias due to   | , ,  |   |  |  |  |
| Bias due to<br>missing outcome<br>data  | 3.1 Were outcome data available for all, or nearly     3.2 If N/PN/NI to 3.1: Are the proportions of missis  | ng outcome data and reas  | ions for missing outcome data similar across   | N                                      | More than half participants dropped out  |
| missing outcome   | 3.1 Were outcome data available for all, or nearly 3.2 If NIPNINI to 3.1: Are the proportions of missi intervention groups?  | ng outcome data and reas  | ions for missing outcome data similar across   | N<br>NI                                | More than half participants dropped out  Don't know drop-out rates in each group.  |
| missing outcome data  | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: Is there evidence that result  | ng outcome data and reas  | ons for missing outcome data similar across ince of missing outcome data?  | N<br>NI<br>PN                          | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given   |
| missing outcome data  Bias in measurement of  | 3.1 Were outcome data available for all, or nearly 3.2 If NPNNI to 3.1: Are the proportions of missi intervention groups? 3.3 If NPNNI to 3.1: Is there evidence that result Risk of bias judgement  | ng outcome data and reas s were robust to the prese   | ons for missing outcome data similar across<br>ince of missing outcome data?  articipants?   | N NI PN Some concerns                  | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.                                     |
| missing outcome data  Bias in   | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interventions.  | ng outcome data and reas s were robust to the prese   | ons for missing outcome data similar across<br>ince of missing outcome data?  articipants?   | N NI PN Some concerns                  | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.                                     |
| missing outcome data  Bias in measurement of  | 3.1 Were outcome data available for all, or nearly 3.2 If NPNNN to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNNN to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interve 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | ng outcome data and reas<br>s were robust to the prese<br>unition received by study pro-<br>butcome likely to be influe                 | one for missing outcome data similar across unce of missing outcome data?  articipants?  need by knowledge of intervention received? | N NI PN Some concerns PY               | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put *some concerns* in this domain.  Open study, self-reported outcomes |
| missing outcome data  Bias in measurement of the outcome                                    | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interve 4.2 If Y/PY/N1 to 4.1: Was the assessment of the Risk of bias judgement   | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?  | N NI PN Some concerns PY               | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put *some concerns* in this domain.  Open study, self-reported outcomes |
| missing outcome data  Bias in measurement of the outcome                                    | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the intervent 4.2 If YPYIN1 to 4.1: Was the assessment of the Risk of bias judgement Are the reported outcome data likely to have been  | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?  | N NI PN Some concerns PY PY High       | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put *some concerns* in this domain.  Open study, self-reported outcomes |
| missing outcome data  Bias in measurement of the outcome  Bias in selection of the reported | 3.1 Were outcome data available for all, or nearly 3.2 if NPNIN1 to 3.1: Are the proportions of missin intervention groups?  3.3 if NPNIN1 to 3.1: is there evidence that result  Risk of bias judgement  4.1 Were outcome assessors aware of the interve  4.2 if Y/PY/NI to 4.1: Was the assessment of the  Risk of bias judgement  Are the reported outcome data likely to have beer  5.1 multiple outcome measurements (e.g. scal | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?  | N NI PN Some concerns PY PY High       | More than half participants dropped out  Don't know drop-out rates in each group.  No reasons were given  High porportion of missing data and no detailed reasons for missing data put *some concerns* in this domain.  Open study, self-reported outcomes |

| Reference                           | Joos 2013  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial  |
|-------------------------------------|--|-----------------------------|--|--|---|
| Outcome                             | Abstinence (8.5 months)  | Results                     | 12/41 (Modafinil 300 mg) vs 6/42 (Placebo)                   |  |   |
| Domain                              | Signalling question  |                             |  | Response   | Comments  |
|                                     | 1.1 Was the allocation sequence random?  |                             |  |  | "A stratified, permuted block randomization was used with gender as the only stratum and blocks contained random sizes of 2, 4 or 6 allocations for mailes, and 2 or 4 allocations for females. Personnel, not associated with the wards involved in the study, generated the |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions? |                             |  | allocation sequence by using 'Random Allocation Software' (Saghaei, 2004) and assigned the patients to one of the 2 treatment groups.  Only these persons and the involved pharmacists were aware of the medication assignment." |   |
|                                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?                  |                             | N  | No significant difference between groups.  |   |
|                                     | Risk of bias judgement   |                             |  | Low  | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|                                     | 2.1 Were participants aware of their assigned intervention during the trial?                               |                             |  | N  |   |
|                                     | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver | ntion during the trial?                                      | N  | "Group allocation was blind for both the participants and the researchers or care providers, who enrolled, treated, or assessed the patient   |

| 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA   |   |
|---|--|---|
| 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected thoutcome?                       | NA NA  |   |
| 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | PN   |   |
| 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA   |   |
| Risk of bias judgement  | Low  | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
| 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N  | High proportion of drop-out: 17/41 and 14/42, including 5 and 3 declined to participate   |
| 3.2 If NPNINI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                  | N  | Overall, drop-out occurred equally within the modafiniland the placebo group' Contrary to numbers in figure 2   |
| 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | NI   | Did not mention how to handle missing data.   |
| Risk of bias judgement  | High   | No information how to handle missing data and contradictory in reported drop-outs in Figure 2 and contexts put this domain as "High" risk of bias.  |
| 4.1 Were outcome assessors aware of the intervention received by study participants?  | N  | double-blind  |
| 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA   |   |
| Risk of bias judgement  | Low  | Double-blind design puts this domain as low risk of bias.   |
| Are the reported outcome data likely to have been selected, on the basis of the results, from   |  |   |
| 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PY   |   |
| 5.2 multiple analyses of the data?  | N  |   |
| Risk of bias judgement  | Some concerns  | Abstence rate was not pre-specified in the methods section and not all results reported (follow-up 1), leading "some concerns" risk of bias in this domain.   |
| Risk of bias judgement  | High   | High risk of bias overall due to imcompleted outcome reporting (missing follow-up time point 1)   |
|   | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome?  2.5 If N/PNN1 to 2.4: Were these deviations likely to have affected the outcome?  2.6 If Y/PYNN to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group?  Risk of bias judgement  3.1 Were outcome data available for all, or nearly all, participants randomized?  3.2 If N/PNN1 to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?  3.3 If N/PNN1 to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  Risk of bias judgement  4.1 Were outcome assessors aware of the intervention received by study participants?  4.2 If Y/PYNN1 to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?  Risk of bias judgement  Are the reported outcome data likely to have been selected, on the basis of the results, from  5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  5.2 multiple analyses of the data?  Risk of bias judgement | PA 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome? 2.5 If N/PNN1 to 2.4: Were these deviations likely to have affected the outcome? PN 2.6 If Y/PYNN1 to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? Risk of bias judgement Low 3.1 Were outcome data available for all, or nearly all, participants randomized? 3.2 If N/PNN1 to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups? 3.3 If N/PNN1 to 3.1: Is there evidence that results were robust to the presence of missing outcome data? NI Risk of bias judgement High 4.1 Were outcome assessors aware of the intervention received by study participants? N 4.2 If Y/PYNN1 to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? NA Risk of bias judgement Low Are the reported outcome data likely to have been selected, on the basis of the results, from 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? PY 5.2 multiple analyses of the data? N Risk of bias judgement Some concerns |

| Reference                                | Kampman 2007 Aim assignment to intervention (the 'intention-to treat' effect)           |                               | Source   | Journal article(s) with results of the trial |   |
|--|---|-------------------------------|--|--|---|
| Outcome                                  | Abstinence (12 weeks)   | Results                       | 2/32 (Placebo) vs 9/29 (Quetiapine 400 mg)         |  |   |
| Domain                                   | Signalling question   |                               |  | Response                                     | Comments  |
|  | 1.1 Was the allocation sequence random?   |                               |  | NI   | -Only stated "random"   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until   | participants were recruited   | I and assigned to interventions?                   | NI   | Only stated Tallbulli   |
| process                                  | 1.3 Were there baseline imbalances that suggest   | t a problem with the randor   | nization process?                                  | PN   | 29 q vs 32 p (combined); some evidence of imbalances among participant characteristics, which might be by chance  |
|  | Risk of bias judgement  |                               |  | Some concerns                                | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?   |  | PN   | -*double-blind*   |
|  | 2.2 Were carers and trial personnel aware of part                                       | ticipants' assigned interver  | ation during the trial?                            | PN   | Quality-unitid  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                           | s from the intended interve   | ntion beyond what would be expected in usual       | NA   |   |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                             | ended intervention unbala     | nced between groups and likely to have affected th | ne NA  |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outo   | ome?   | N  | No evidence that patients recieved a treatment other than the one they were assigned to.  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing       | NA   |   |
|  | Risk of bias judgement  |                               |  | Low  | Double-blind design employed in this trial put low risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly                                      | all, participants randomiz    | ed?  | PN   | There were 6/29 q and 8/32 p missing data in both groups and reasons were not given.  |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                | ing outcome data and reas     | ons for missing outcome data similar across        | PY   | "there were no significant differences between medication and placebo groups in treatment completion (23/29, 77% for the quetiapine group; and 24/32, 75% for the placebo group)"                               |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                    | ts were robust to the prese   | ence of missing outcome data?                      | NI   | No information on how missing data handled, and no sensitivity analysis completed   |
|  | Risk of bias judgement  |                               |  | Low  | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |
| Disc. in                                 | 4.1 Were outcome assessors aware of the interven  | ention received by study pa   | articipants?                                       | PN   | "double-blind"; self-report   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe   | nced by knowledge of intervention received?        | NA   |   |
|  | Risk of bias judgement  |                               |  | Low  | Double-blind design and self-reporting outcome (abstinence) put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have bee  | n selected, on the basis of   | the results, from                                  |  |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca   | les, definitions, time points | e) within the outcome domain?                      | PN   |   |
|  | 5.2 multiple analyses of the data?  |                               |  | PN   |   |
|  | Risk of bias judgement  |                               |  | Low  | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement  |                               |  | Some concerns                                | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial.   |

| Reference | Kiefer 2003           | Aim     | assignment to intervention (the 'intention-to-treat' effect) | Source               | Journal article(s) with results of the trial     |          |
|-----------|-----------------------|---------|--|----------------------|--|----------|
| Outcome   | Abstinence (12 weeks) | Results | 26/40 (ACP 1998mg + NTX 50 mg) vs 17/40                      | (Acamprosate 1998 mg | ) vs 22/40 (Naltrexone 50 mg) vs 10/40 (Placebo) |          |
| Domain    | Signalling question   |         |  | Response             |  | Comments |

|                                     | 1.1 Was the allocation sequence random?   | Υ     | "Allocation codes were provided in sealed envelopes for each patient at the pharmacy of the University Hospital of Hamburg, where  |
|-------------------------------------|---|-------|--|
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions?  | Υ     | formulation and blinding was conducted. The randomization was organized by a computer-generated list (M.B.)."  |
| process                             | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?   | N     | Each group has a size of 40 and no significant difference among characteristics of participants.   |
|                                     | Risk of bias judgement  | Low   | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |
|                                     | 2.1 Were participants aware of their assigned intervention during the trial?  | N     | "Double-blind"   |
|                                     | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | PN    | "Medication was given in a double-dummy design."   |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA    |  |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected thoutcome?                       | NA NA |  |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N     | ITT analysis   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA    |  |
|                                     | Risk of bias judgement  | Low   | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.   |
|                                     | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N     | 10% dropped out; large % relapsed (fig 1 e.g. 12/40 for naltrexone, 17/40 for acamprosate) and so their assessments were discontinued.   |
| Bias due to missing outcome         | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PN    | NX: 12/40 relapse = 30%; acam 17/40 relapse 43%; N+A 9/40 relapsed 23% placebo 75% relapse adverse effects similar across tx groups but not placebo arm.   |
| data                                | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PY    | The authors used "multivariate analyses of covariance (MANCIVAs) with the time to the various events and the clumulative abstinence as dependent variables"  |
|                                     | Risk of bias judgement  | Low   | Although some missing data in this trial, the authors applied multivariate analyses of covariance and survival analyses on the results. So we rated "Low" risk of bias.  |
| Bias in                             | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N     | Self-report and confirmed by laboratory results.  "At each assessment, the patient was classified by the therapist as abstinent or relapsed according to his or her self-report."  "Dinking diary, laboratory measures, and interviews of collaterals were compared for consistency and were used to justify abstinence, lapses, and relapses (D.N., K.W.)." |
| measurement of<br>the outcome       | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA    |  |
|                                     | Risk of bias judgement  | Low   | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |
|                                     | Are the reported outcome data likely to have been selected, on the basis of the results, from   |       |  |
| Bias in selection of the reported   | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN    |  |
| result                              | 5.2 multiple analyses of the data?  | PN    |  |
|                                     | Risk of bias judgement  | Low   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                        | Risk of bias judgement  | Low   | Low risk of bias in all domains resulting low risk of bias overall.  |

|  | i .  |                               |  |               |   |  |
|--|--|-------------------------------|--|---------------|---|--|
| Reference                                | Ladewig 1993   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |  |
| Outcome                                  | Abstinence (12 months)   | Results                       | 8/29 (Acamprosate) vs 4/32 (Placebo)                             |               |   |  |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                                 | NI            | Only stated "random"  |  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | mization process?  | NI            | No baseline characteristics of participants was given by groups.  |  |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | PN            |   |  |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?  | PN            | "double-blind"  |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual                     | NA            |   |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected the              | NA NA         |   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?   | N             | Analysis was intention to treat.  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | PY            | The authors followed all participants and reported their outcomes (not by group)  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | ions for missing outcome data similar across                     | NA            |   |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                    | NA            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | Although there were some missing data, the authors followed all participants and reported their abstinence status during the trial. Therefore, we rated "Low" risk of bias in this domain.                      |  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | N             | "Double-blind"  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                      | NA            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |   |  |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                    | NI            |   |  |
| of the reported result                   | 5.2 multiple analyses of the data?   |                               |  | NI            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |
|  |  |                               |  |               |   |  |

| Overall bias | Risk of bias judgement | Some concerns | Lack of detailed methods for the randomisation process contributed to "some concerns" in overall bias for this trial. |
|--------------|------------------------|---------------|---|
|--------------|------------------------|---------------|---|

| Reference   | Landabaso 1999   | Aim   | assignment to intervention (the 'intention-to-<br>treat' effect)  | Source                  | Journal article(s) with results of the trial  |
|---|--|---|---|-------------------------|---|
| Outcome   | Abstinence (12 months)   | Results   | 3/15 (TAU) vs 11/15 (Naltrexone 25 mg)  | '                       |   |
| Domain  | Signalling question  |   |   | Response                | Comments  |
|   | 1.1 Was the allocation sequence random?  |   |   | NI                      |   |
| Bias arising from   | 1.2 Was the allocation sequence concealed until p  | participants were recruited   | d and assigned to interventions?  | NI                      | -Conly stated "random"  |
| the randomization process   | 1.3 Were there baseline imbalances that suggest  | a problem with the randor   | mization process?   | PN                      | Same size between two groups and no significant difference in characteristic between groups.  |
|   | Risk of bias judgement   |   |   | Some concerns           | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|   | 2.1 Were participants aware of their assigned inte   | ervention during the trial?   |   | NI                      | Sid-sek-address http://dis  |
|   | 2.2 Were carers and trial personnel aware of parti   | icipants' assigned interver   | ntion during the trial?   | NI                      | -Did not address blinding   |
| Bias due to   | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?  | from the intended interve   | ention beyond what would be expected in usual   | NI                      | No information on deviations from intended interventions.   |
| deviations from<br>intended   | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?  | ended intervention unbala   | nced between groups and likely to have affected the   | ne NA                   |   |
| interventions   | 2.5 If N/PN/NI to 2.4: Were these deviations likely  | to have affected the outo   | ome?  | PN                      | No evidence of patients being analysed in the incorrect group.  |
|   | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group?   | bstantial impact (on the es   | stimated effect of intervention) of analysing   | NA                      |   |
|   | Risk of bias judgement   |   |   |                         |   |
|   | Risk of bias judgement   |   |   | Some concerns           | There was no complete information regarding blinding, contributing to "some concerns" in this domain.   |
|   | Risk of bias judgement  3.1 Were outcome data available for all, or nearly   | all, participants randomize   | ed?   | Some concerns           | There was no complete information regarding blinding, contributing to "some concerns" in this domain.  Very small number of missing data (Table 2) and contexts   |
| Bias due to   |  |   |   |                         |   |
|   | 3.1 Were outcome data available for all, or nearly     3.2 If N/PN/NI to 3.1: Are the proportions of missis  | ng outcome data and reas  | cons for missing outcome data similar across  | PY                      |   |
| Bias due to missing outcome   | 3.1 Were outcome data available for all, or nearly 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?  | ng outcome data and reas  | cons for missing outcome data similar across  | PY<br>NA                |   |
| Bias due to<br>missing outcome<br>data  | 3.1 Were outcome data available for all, or nearly 3.2 if NPNNN to 3.1: Are the proportions of missis intervention groups? 3.3 if NPNNN to 3.1: Is there evidence that result  | ng outcome data and reas  | ons for missing outcome data similar across   | PY<br>NA<br>NA          | Very small number of missing data (Table 2) and contexts  |
| Bias due to missing outcome data  Bias in measurement of  | 3.1 Were outcome data available for all, or nearly 3.2 If NIPNINI to 3.1: Are the proportions of missi intervention groups? 3.3 If NIPNINI to 3.1: Is there evidence that result Risk of bias judgement  | ng outcome data and reas s were robust to the prese   | none for missing outcome data similar across unce of missing outcome data? articipants?   | PY NA NA Low            | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  |
| Bias due to missing outcome data  | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interventions.  | ng outcome data and reas<br>s were robust to the prese  | none for missing outcome data similar across unce of missing outcome data? articipants?   | PY NA NA Low NI         | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  Didn't address the method of assessing abstinence but it seemed to be self-report.  |
| Bias due to missing outcome data  Bias in measurement of  | 3.1 Were outcome data available for all, or nearly 3.2 if NPNINI to 3.1: Are the proportions of missis intervention groups? 3.3 if NPNINI to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interve 4.2 if Y/PY/NI to 4.1: Was the assessment of the  | ng outcome data and reas<br>s were robust to the prese<br>ention received by study pro<br>outcome likely to be influe                   | ons for missing outcome data similar across unce of missing outcome data?  articipants?  moded by knowledge of intervention received? | PY NA NA Low NI PY      | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  Didn't address the method of assessing abstinence but it seemed to be self-report.  |
| Bias due to missing outcome data  Bias in measurement of the outcome                                    | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interve 4.2 If Y/PY/NI to 4.1: Was the assessment of the Risk of bias judgement   | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?   | PY NA NA Low NI PY      | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  Didn't address the method of assessing abstinence but it seemed to be self-report.  |
| Bias due to missing outcome data  Bias in measurement of the outcome  Bias in selection of the reported | 3.1 Were outcome data available for all, or nearly 3.2 If NPNN1 to 3.1: Are the proportions of missis intervention groups? 3.3 If NPNN1 to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the intervent 4.2 If YIPYINI to 4.1: Was the assessment of the Risk of bias judgement Are the reported outcome data likely to have been   | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?   | PY NA NA Low NI PY High | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  Didn't address the method of assessing abstinence but it seemed to be self-report.  Potential for assessor bias in prompting of patients to accurately or not recall the number of drinks taken  No texts mentioned blinding outcome assessor (patient themselves) and potential bias, contributing to "High" risk of bias. |
| Bias due to missing outcome data  Bias in measurement of the outcome  Bias in selection of the reported | 3.1 Were outcome data available for all, or nearly 3.2 if NPNNN to 3.1: Are the proportions of missis intervention groups? 3.3 if NPNNN to 3.1: Is there evidence that result Risk of bias judgement 4.1 Were outcome assessors aware of the interve 4.2 if Y/PY/NI to 4.1: Was the assessment of the Risk of bias judgement Are the reported outcome data likely to have beer 5.1multiple outcome measurements (e.g. scal | ng outcome data and reas s were robust to the prese untion received by study productome likely to be influe a selected, on the basis of | one for missing outcome data similar across unce of missing outcome data? articipants? unced by knowledge of intervention received?   | PY NA NA Low NI PY High | Very small number of missing data (Table 2) and contexts  Almost all outcome data were available, thus this domain was rated "Low" risk of bias.  Didn't address the method of assessing abstinence but it seemed to be self-report.  Potential for assessor bias in prompting of patients to accurately or not recall the number of drinks taken  No texts mentioned blinding outcome assessor (patient themselves) and potential bias, contributing to "High" risk of bias. |

| Reference                              | Mann 2006  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial   |
|--|--|-----------------------------|--|---------------|--|
| Outcome                                | Abstinence (24 weeks) Results 9/74 (Galantamine 25 mg) vs 23/75 (Placebo)            |                             |  | )             |  |
| Domain                                 | Signalling question  |                             |  | Response      | Comments   |
|  | 1.1 Was the allocation sequence random?  |                             |  | NI            | Only stated "randomized"   |
| Bias arising from the randomization    | 1.2 Was the allocation sequence concealed until p                                    | participants were recruited | and assigned to interventions?                               | NI            | Ony stateu i anuonizeu   |
| process                                | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor   | nization process?  | PN            | "With regard to sociodemographic and prestudy data, both GAL and placebo groups were homogenous at baseline (Table 1)."  |
|  | Risk of bias judgement   |                             |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial? |  | PN            | -double-blind  |
|  | 2.2 Were carers and trial personnel aware of parti                                   | icipants' assigned interver | ntion during the trial?                                      | PN            | - Golden-Unitu   |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve   | ntion beyond what would be expected in usual                 | NA            |  |
| intended                               | 2.4 If Y/PY to 2.3: Were these deviations from introutcome?                          | ended intervention unbala   | nced between groups and likely to have affected the          | ne NA         |  |
| interventions                          | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outo   | ome?   | N             | No mention of patients not recieving their assigned intervention.  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es | timated effect of intervention) of analysing                 | NA            |  |
|  | Risk of bias judgement   |                             |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended intervention   |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz  | ed?  | N             | Only 64/149 patients completed the study.  |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?            | ng outcome data and reas    | ons for missing outcome data similar across                  | NI            | The authors did not publish the details of drop-outs.  |
| Bias due to<br>missing outcome<br>data | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | s were robust to the prese  | nce of missing outcome data?                                 | PN            | "If appropriate, we calculated last-observation-carried-forward (LOCF) analyses. A two-tailed P value less than 0.05 was considered to be significant. Missing data were not replaced." "Survival analyses carried out for each trial center yielded no between-center differences." |
|  | Risk of bias judgement   |                             |  | Some concerns | High proportion of drop-outs and lack of details of drop-outs put this domain as "some concerns".  |

|  | 4.1 Were outcome assessors aware of the intervention received by study participants?                                    | N             | By patient's diaries and double-blind   |  |  |  |
|--|---|---------------|---|--|--|--|
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? | NA            |   |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from                           |               |   |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?                    | PN            |   |  |  |  |
| result                                   | 5.2 multiple analyses of the data?  | PN            |   |  |  |  |
|  | Risk of bias judgement  |               | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Lack of detailed methods for the randomisation process and high proportion of missing data without details, together, these contributed to "some concerns" in overall bias for this trial.                      |  |  |  |

| Reference                                | Marra 2002   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (12 months)   | Results                       | 4/37 (Amisulpride 50 mg) vs 8/34 (Placebo)                       |               |   |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until p  | participants were recruited   | I and assigned to interventions?                                 | NI            | only stated "random"  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | nization process?  | PN            | Except VAS results, there were not significant difference between groups.   |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to *some concerns* in this domain.   |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | PN            |   |
|  | 2.2 Were carers and trial personnel aware of parti                                       | icipants' assigned interver   | ation during the trial?  | PN            | -pounie-pilina  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | from the intended interve     | ntion beyond what would be expected in usual                     | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                          | ended intervention unbala     | nced between groups and likely to have affected th               | e NA          |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outo     | ome?   | N             | "Data of the intention-to-treat population are presented. The intention-to-treat population included all patients." Noe evidence that patient were analysed in the wrong group                                  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put low risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | N             | There were high proportion of drop-outs (50% in placebo and 62.2% in AMI group)   |
| Bias due to                              | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?                | ng outcome data and reas      | ons for missing outcome data similar across                      | PN            | Numbers comparable but some difference in reasons between treatment arms. E.g number of drop-outs due to not severe adverse events  |
| missing outcome data                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | s were robust to the prese    | nce of missing outcome data?                                     | PN            | No sensitivity analysis presented.  Those who were drinking when they dropped out were considered to have been drinking from the time of dropout until the end of the 6-month reatment period.                  |
|  | Risk of bias judgement   |                               |  | High          | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?   | N             | self-reported; double-blind   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                      | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and self-reporting put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | ) within the outcome domain?                                     | N             |   |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | N             |   |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                               |  | High          | Lack of detailed methods for the randomisation process and missing data, together, these contributed to "High" in overall bias for this trial.  |

| Martinotti 2009   | Aim  | assignment to intervention (the 'intention-to-<br>treat' effect)   | Source   | Journal article(s) with results of the trial  |
|---|--|--|--|---|
| Abstinence (16 weeks)   | Results  | 12/29 (Aripiprazole 15 mg) vs 11/28 (Naltrexo  | ne 50 mg)  |   |
| Signalling question   |  |  | Response   | Comments  |
| 1.1 Was the allocation sequence random?   |  |  | Y  | -"Random assignment was achieved in a non-centre-specific manner with an interactive voice-response central randomisation service."   |
| 1.2 Was the allocation sequence concealed until   | participants were recruited  | d and assigned to interventions?   | PY   | Patiouri assignment was achieved in a not-centre-specific manner with an interactive voice-response central randomisation service.  |
| 1.3 Were there baseline imbalances that suggest   | a problem with the randor  | mization process?  |  | No detailed characteristic of participants but the authors stated that there were no significant differences betweene the baseline characteristics of patients.   |
| Risk of bias judgement  |  |  | Low  | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.   |
| 2.1 Were participants aware of their assigned into  | ervention during the trial?  |  | N  | -double-blind; identical placebo  |
| 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?                                      |  |  | PN   | uounie-unio, identical piaceto  |
|   |  |  | NA   |   |
| 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome? |  |  | • NA   |   |
|   | Abstinence (16 weeks)  Signalling question  1.1 Was the allocation sequence random?  1.2 Was the allocation sequence concealed until  1.3 Were there baseline imbalances that suggest  Risk of bias judgement  2.1 Were participants aware of their assigned intel  2.2 Were carers and trial personnel aware of part  2.3 If Y/PYNI to 2.1 or 2.2: Were there deviation practice?  2.4 If Y/PY to 2.3: Were these deviations from int | Abstinence (16 weeks)  Results  Signalling question  1.1 Was the allocation sequence random?  1.2 Was the allocation sequence concealed until participants were recruiter  1.3 Were there baseline imbalances that suggest a problem with the rando  Risk of bias judgement  2.1 Were participants aware of their assigned intervention during the trial?  2.2 Were carers and trial personnel aware of participants' assigned intervention to the participants assigned intervention to the participants are careful and trial personnel aware of participants assigned intervention to the participants as a signal to the participants are careful to the participants as a signal to the participants are careful to the participants as a signal to the participants are careful to the participants as a signal to the participants are careful to the participants as a signal to the participants are careful to the participants as a signal to the participants as a signal to the participants are careful to the participants are careful to the participants as a signal to the participants are careful to the participants as a signal to the participants are careful to the par | Abstinence (16 weeks)  Results  12/29 (Aripiprazole 15 mg) vs 11/28 (Naltrexc  Signalling question  1.1 Was the allocation sequence random?  1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions?  1.3 Were there baseline imbalances that suggest a problem with the randomization process?  Risk of bias judgement  2.1 Were participants aware of their assigned intervention during the trial?  2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  2.3 If YIPYNI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?  2.4 If YIPY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the | Abstinence (16 weeks)  Results  12/29 (Aripiprazole 15 mg) vs 11/28 (Naltrexone 50 mg)  Signalling question  Response  1.1 Was the allocation sequence random?  1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions?  Py  1.3 Were there baseline imbalances that suggest a problem with the randomization process?  PN  Risk of bias judgement  Low  2.1 Were participants aware of their assigned intervention during the trial?  N  2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  PN  2.3 If YIPYNI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?  2.4 If YIPY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the |

| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N             | "Primary and secondary efficacy analyses were performed on the intent-to-treat population, which included all randomly assigned patients who took at least one dose of study medication."                       |  |  |  |  |
|--|---|---------------|---|--|--|--|--|
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            | ,   |  |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |  |  |  |  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | PN            | Completion: 22/29 in ARI group and 21/28 in NAL group   |  |  |  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PN            | There were higher proportion of discontinuation due to adverse events in NAL group (17.8%), compared with (6.9%) the ARI group.   |  |  |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN            |   |  |  |  |  |
|  | Risk of bias judgement  | Some concerns | High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.  |  |  |  |  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N             | double-blind; self-evluation and family member interview  |  |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA            |   |  |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives) put this domain as low risk of bias.  |  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |   |  |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN            |   |  |  |  |  |
| result                                   | 5.2 multiple analyses of the data?  | PN            |   |  |  |  |  |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Some concerns overall due to missing data in this trial.  |  |  |  |  |
| 1  | •   |               | -   |  |  |  |  |

| Reference                                | Martinotti 2007  | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source                | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|-----------------------|---|
| Outcome                                  | Abstinence (90 days)   | Results                       | 11/27 (Naltrexone 50 mg) vs 29/57 (Combine                       | d: Oxcarbazepine High | +Low doses)   |
| Domain                                   | Signalling question  |                               |  | Response              | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | Υ                     |   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                                 | PY                    | "Random assignment was achieved in a non-centre-specific manner with an interactive voice-response central randomisation service."  |
| process                                  | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | mization process?  | PN                    | There was no significant difference between groups except OCDS between groups, which might result from chance.  |
|  | Risk of bias judgement   |                               |  | Low                   | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |  | Y                     | topen-trial   |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?  | Y                     | орентив   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ention beyond what would be expected in usual                    | NI                    |   |
| deviations from intended                 | 2.4 If Y/PY to 2.3: Were these deviations from into outcome?                             | ended intervention unbala     | nced between groups and likely to have affected th               | NA NA                 |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outo     | ome?   | N                     | No evidence of switching. The authors seemed to use ITT analysis.   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                    | NA                    |   |
|  | Risk of bias judgement   |                               |  | Some concerns         | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | eď?  | N                     | "patients who completed the study 93.1%77.7%75%"  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?                | ng outcome data and reas      | sons for missing outcome data similar across                     | N                     | There were higher proportion of droup-outs in low OXC and NAL groups.   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                    | N                     | No sensitivity analysis and the authors did not mention the methods for dealing drop-outs.  |
|  | Risk of bias judgement   |                               |  | High                  | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?   | Y                     | Self-evluation; family interview  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                      | PN                    | Abstinence was confirmed by family members  |
|  | Risk of bias judgement   |                               |  | Low                   | Although this is an open study, the outcome (abstinence) was confirmed by a family member, which put low risk of bias in this domain.   |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |                       |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                    | PN                    |   |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | PN                    |   |
|  | Risk of bias judgement   |                               |  | Low                   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                               |  | High                  | Open-label design and missing data put this trial "High" risk of bias overall   |

| Reference   |   | Martinotti 2010  | Aim     | assignment to intervention (the 'intention-to-treat' effect) | Source    | Journal article(s) with results of the trial   |
|-------------|---|--|---------|--|-----------|--|
| Outcome     |   | Abstinence (16 weeks)  | Results | 11/28 (Naltrexone 50 mg) vs 15/31 (Pregablin                 | 1 450 mg) |  |
| Domain      |   | Signalling question  |         |  | Response  | Comments   |
|             | 1.1 Was the allocation sequence random? |  |         |  | Υ         | "randomisation was performed using a common computer-generated system."                          |
| Bias arisin | ig ii oiii                              | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions? |         |  | PY        | "All study personnel in contact with the participants wre unaware of the randomisation sequence" |

| process                                  | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?   | PN            | No characteristic of participants but the authors stated that no significant differences between two groups.  |
|--|---|---------------|---|
|  | Risk of bias judgement  | Low           | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|  | 2.1 Were participants aware of their assigned intervention during the trial?  | N             | Double-blind Double-blind   |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | PN            | "tablets were identical in appearance and"  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome?                     | NA NA         |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N             | No evidence of switching interventions  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design and no evidence of switching interventions in the analysis in this trial put low risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N             | Drop-out: 4/31 (NAL) and 7/28 (PGB)   |
| Bias due to missing outcome              | 3.2 If NIPN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | NI            | "The overall rate of study discontinuation due to adverse event was 3.2% in the PRE group and 17.8% in the NAL group."  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | N             |   |
|  | Risk of bias judgement  | Some concerns | High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N             | double-blind; abstinence was evaluated by self-evaluation and family member interview.  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives) put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN            |   |
| result                                   | 5.2 multiple analyses of the data?  | PN            |   |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement  | Some concerns | Some concerns overall due to lack of details in missing data.   |

| Reference                                   | Moncini 2000  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial   |
|---|---|-------------------------------|--|---------------|--|
| Outcome                                     | Abstinence (6 months)   | Results                       | 6/9 (GHB 50 mg/kg) vs 4/8 (Placebo )                         |               |  |
| Domain                                      | Signalling question   |                               |  | Response      | Comments   |
|   | 1.1 Was the allocation sequence random?   |                               |  | NI            | Only stated "random"; "When discharged from the hospital, the patients were randomly divided into two groups, A and B"  "Might indicate a sign of sequence concealment: "They were randomly divided into two groups (group A and group B) and, when the code was opened, group A proved to have been treated with GHB (mean daily oral dose 50 mg/kg) and group B with placebo." |
| Bias arising from the randomization process | 1.2 Was the allocation sequence concealed until                                     | participants were recruite    | d and assigned to interventions?                             | PY            | "when the code was opeened, A provided to have been treated with GHB, B with placebo" suggests allocation concealment but no details   |
|   | 1.3 Were there baseline imbalances that sugges                                      | t a problem with the rando    | mization process?  | NI            | Did not provide characteristics of participants  |
|   | Risk of bias judgement  |                               |  | Low           | No details were given regarding randomisation generation but some indications regarding allocation sequence concealment - "Low" risk of bias   |
|   | 2.1 Were participants aware of their assigned int                                   | ervention during the trial?   |  | PN            |  |
|   | 2.2 Were carers and trial personnel aware of par                                    | ticipants' assigned interve   | ntion during the trial?                                      | PN            | -stated "double-blind study"   |
| Bias due to                                 | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?                        | s from the intended interven  | ention beyond what would be expected in usual                | NA            |  |
| deviations from<br>intended                 | 2.4 If Y/PY to 2.3: Were these deviations from in outcome?                          | tended intervention unbala    | nced between groups and likely to have affected th           | NA NA         |  |
| interventions                               | 2.5 If N/PN/NI to 2.4: Were these deviations likel                                  | y to have affected the outo   | ome?   | N             | No evidence of switching participants  |
|   | 2.6 If Y/PY/NI to 2.5: Was there potential for a suparticipants in the wrong group? | ubstantial impact (on the e   | stimated effect of intervention) of analysing                | NA            |  |
|   | Risk of bias judgement  |                               |  | Low           | Double-blind design put "Low" risk of bias in deviation from intended interventions.   |
|   | 3.1 Were outcome data available for all, or nearly                                  | y all, participants randomiz  | ed?  | PN            | Table 3; the drop-out rates were low (2/9, group A and 2/8, group B) but did not indicate the reasons.   |
| Bias due to                                 | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?             | ing outcome data and rea      | sons for missing outcome data similar across                 | NI            | The proportions of missing data were similar but no information regarding their reasons  |
| missing outcome<br>data                     | 3.3 If N/PN/NI to 3.1: Is there evidence that resul                                 | Its were robust to the pres   | ence of missing outcome data?                                | PN            | Small study  |
|   | Risk of bias judgement  |                               |  | Some concerns | There were some missing data. Although the numbers of missing data were similar, no details and small study effects put "some concerns in this domain.   |
|   | 4.1 Were outcome assessors aware of the interv                                      | rention received by study p   | articipants?   | PN            | Double-blind   |
| Bias in<br>measurement of<br>the outcome    | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                    | outcome likely to be influe   | enced by knowledge of intervention received?                 | NA            |  |
| and Juleonie                                | Risk of bias judgement  |                               |  | Low           | Double-blind design put this domain as low risk of bias.   |
|   | Are the reported outcome data likely to have been                                   | en selected, on the basis o   | f the results, from  |               |  |
| Bias in selection                           | 5.1 multiple outcome measurements (e.g. sca   | ales, definitions, time point | s) within the outcome domain?                                | PN            |  |
| of the reported<br>result                   | 5.2 multiple analyses of the data?  |                               |  | PN            |  |
|   | Risk of bias judgement  |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results. Thus, we rated "Low" risk of bias this domain.  |
| Overall bias                                | Risk of bias judgement  |                               |  | Some concerns | Some concerns with missing data due to no details of missing data and a small study.   |

| 1  |  |                                | 1  |               |   |
|--|--|--------------------------------|--|---------------|---|
| Reference                                | Moraes 2010  | Aim                            | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |
| Outcome                                  | Abstinence (12 weeks)  | Results                        | 25/58 (TAU) vs 36/62 (Home visit)                                |               |   |
| Domain                                   | Signalling question  |                                |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                                |  | Υ             | "with the use of a table of random numbers."  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited    | I and assigned to interventions?                                 | Υ             | "To avoid selection bias, the randomization was carried out by a UNIAD employee not involved in the study, and who did not have acce<br>any information regarding the research or the patients."                |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | t a problem with the randor    | nization process?  | PN            | "There was no difference between the HV treatment and CT in any of the variables analyzed in the beginning of the treatment (P>0.05), which guaranteed the homogeneity between the groups."                     |
|  | Risk of bias judgement   |                                |  | Low           | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|  | 2.1 Were participants aware of their assigned into                                   | ervention during the trial?    |  | Υ             | It was impossible to blind participants due to nature of interventions.   |
|  | 2.2 Were carers and trial personnel aware of part                                    | ticipants' assigned interver   | ation during the trial?  | Υ             | nt was impossible to bill by participants due to nature or interventions.   |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve    | ntion beyond what would be expected in usual                     | NI            | None reported.  |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                           | tended intervention unbala     | nced between groups and likely to have affected the              | NA NA         |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | y to have affected the outc    | ome?   | PN            | Appears that there were no incorrectly analysed patients -> no evidence of switches   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | ibstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |   |
|  | Risk of bias judgement   |                                |  | Some concerns | The difference between interventions in this trial might prompt deviations from the intended interventions, contributing to "some concern this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                   | y all, participants randomiz   | ed?  | N             | There were more participant lost to follow-up in CT group.  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ing outcome data and reas      | ons for missing outcome data similar across                      | N             | 22 lost (CT) vs 9 lost (HV)   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | its were robust to the prese   | nce of missing outcome data?                                     | N             | ITT analyses were used but huge imbalance in missing data between group so the reviewer rated as "no"   |
|  | Risk of bias judgement   |                                |  | High          | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
|  | 4.1 Were outcome assessors aware of the interven                                     | ention received by study p     | articipants?   | PY            | Self reported (presumed) alcohol consumption.   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe    | nced by knowledge of intervention received?                      | PY            | Subjective outcome, and potential for recall bias based on treatment received.  |
|  | Risk of bias judgement   |                                |  | High          | Lack of blinding to outcome assessors (participants themselve) and self-reporting outcomes, which put "some concerns" in this domain.   |
|  | Are the reported outcome data likely to have bee                                     | n selected, on the basis of    | the results, from  |               |   |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. sca  | eles, definitions, time points | e) within the outcome domain?                                    | PN            |   |
| of the reported result                   | 5.2 multiple analyses of the data?   |                                |  | PN            |   |
| result                                   |  |                                |  |               |   |
|  | Risk of bias judgement   |                                |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |

| Reference                                | Mueller 1997  | Aim                          | assignment to intervention (the 'intention-to-treat' effect) | Source                                      | Journal article(s) with results of the trial  |  |
|--|---|------------------------------|--|---|---|--|
| Outcome                                  | Abstinence (12 months) Results 2/13   |                              | 2/13 (Carbamazepine 600 mg) vs 4/16 (Place                   | 13 (Carbamazepine 600 mg) vs 4/16 (Placebo) |   |  |
| Domain                                   | Signalling question   |                              |  | Response                                    | Comments  |  |
|  | 1.1 Was the allocation sequence random?   |                              |  | NI  | "Once meeting eligibility criteria and providing signed consent, subjects were randomized to either carbamazepine or placebo"   |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until   | participants were recruite   | d and assigned to interventions?                             | NI  | No detailed info on randomisation or on allocation concealment  |  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest   | t a problem with the rando   | mization process?  | PN  | High risk of bias in the measurement of the outcome and some concerns in deviations from the intended interventions contributed to "High" risk of bias in overall bias. |  |
|  | Risk of bias judgement  |                              |  | Some concerns                               | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?  |  | PN  | "double-blind", "A medical physician who was not blind to the study protocol and who was never in contact with subjects, monitored levels                               |  |
|  | 2.2 Were carers and trial personnel aware of par  | ticipants' assigned interve  | ntion during the trial?                                      | PN  | during the treatment phase"   |  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?                            | s from the intended interven | ention beyond what would be expected in usual                | NA  |   |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                              | tended intervention unbala   | nced between groups and likely to have affected th           | e NA  |   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outo  | ome?   | N   | "Analyses were conducted for all subjects based on treatment assignment regardless of whether or when they stopped taking the study drug (intent-to-treat analysis)."   |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | ibstantial impact (on the e  | stimated effect of intervention) of analysing                | NA  |   |  |
|  | Risk of bias judgement  |                              |  | Low   | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |  |
|  | 3.1 Were outcome data available for all, or nearly                                      | y all, participants randomiz | ed?  | N   | There were 8/16 and 8/13 missing data.  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?                 | ing outcome data and reas    | sons for missing outcome data similar across                 | PN  | The number of missing data was similar between groups but there could be more participants dropped in orbamazepine group due to medication toxicity.                    |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that resul                                     | ts were robust to the pres   | ence of missing outcome data?                                | N   | No sensitivity analyses performed   |  |
|  | Risk of bias judgement  |                              |  | High  | High porportion of missing data and imbalanced missing data without sensitivity analysis put "High" risk of bias in this domain.  |  |
|  | 4.1 Were outcome assessors aware of the interv  | ention received by study p   | articipants?   | N   | "double-blind"; self-report   |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe  | enced by knowledge of intervention received?                 | NA  |   |  |
|  | Risk of bias judgement  |                              |  | Low   | Double-blind design put this domain as low risk of bias.  |  |

|                                   | Are the reported outcome data likely to have been selected, on the basis of the results, from        |      |   |  |  |  |  |  |
|-----------------------------------|--|------|---|--|--|--|--|--|
| Bias in selection of the reported | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? | PN   |   |  |  |  |  |  |
|                                   | 5.2 multiple analyses of the data?   | PN   |   |  |  |  |  |  |
|                                   | Risk of bias judgement   | Low  | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |  |  |  |  |
| Overall bias                      | Risk of bias judgement   | High | High risk of bias in missing data contributed to "High" risk of bias overall.   |  |  |  |  |  |

| Reference                                   | BACLAD study   | Aim                           | assignment to intervention (the 'intention-to-      | Source   | Journal article(s) with results of the trial  |
|---|--|-------------------------------|---|----------|---|
|   | ,  |                               | treat' effect)                                      |          | pourrai di dolejo ji mili rodano di dife titali   |
| Outcome                                     | Abstinence (24 weeks) Results 10/28 (Baclofen 270 mg) vs 3/28 (Placebo )                 |                               |   |          |   |
| Domain                                      | Signalling question  |                               |   | Response | Comments  |
|   | 1.1 Was the allocation sequence random?  |                               |   | Υ        | "accoring to a computer-generated randomization list (in blocks of 4; straftification with regard to sex)."  "The ranomization list was kept by the biometrician and the study pharmacist who prepared the study medication packages. The study—pharmacist did not have any further role in the trial." |
| Bias arising from the randomization process | 1.2 Was the allocation sequence concealed until  | participants were recruited   | and assigned to interventions?                      | PY       | Sealed envelopes containing study medication details were kept at the outpatient unit to be opened by a staff member in case of a study drug-related emergency  |
|   | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | nization process?                                   | N        | No significant difference between groups.   |
|   | Risk of bias judgement   |                               |   | Low      | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.   |
|   | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial?   |   | N        | double-blind; identifical placebo   |
|   | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | tion during the trial?                              | PN       | Country administration processes  |
| Bias due to                                 | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual        | NA       |   |
| deviations from<br>intended                 | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected the | he NA    |   |
| interventions                               | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?  | N        | No evidence of switching  |
|   | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing        | NA       |   |
|   | Risk of bias judgement   |                               |   | Low      | Double-blind design employed in this trial put "Low" risk of bias in deviation from intended interventions.   |
|   | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?   | PN       | Some drop-outs observed in Figure 2   |
| Bias due to missing outcome                 | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | ons for missing outcome data similar across         | PY       | The numbers of drop-outs were small in each category.   |
|   | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | nce of missing outcome data?                        | PY       | The results remained in considering of missing data.  |
|   | Risk of bias judgement   |                               |   | Low      | Although there were some missing data, results still stood in consideration of missing data. "Low" risk of bias in this domain was rated.   |
|   | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?  | N        | Abstinence was assessed by subjective report plus negative breathalyzer test as well as a level of carbohydrate-deficient transferrin (CD within the normal range, or, if increased, lower compared to the baseline level.  |
| Bias in<br>measurement of<br>the outcome    | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?         | NA       |   |
|   | Risk of bias judgement   |                               |   | Low      | Double-blind design and self-reporting outcome (confirmed by biochemistry results) put this domain as low risk of bias.   |
|   | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from                                   |          |   |
| Bias in selection of the reported           | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | ) within the outcome domain?                        | PN       |   |
|   | 5.2 multiple analyses of the data?   |                               |   | PN       |   |
|   | Risk of bias judgement   |                               |   | Low      | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |
| Overall bias                                | Risk of bias judgement   |                               |   | Low      | Low risk of bias  |

| Reference                            | Oslin 2005  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |  |
|--------------------------------------|---|-----------------------------|--|---------------|---|--|
| Outcome                              | Abstinence (3 months)   | Results                     | 16/37 (Naltrexone 50 mg) vs 20/37 (Placebo)                  | )             |   |  |
| Domain                               | Signalling question   |                             |  | Response      | Comments  |  |
|                                      | 1.1 Was the allocation sequence random?   |                             |  | Y             | -PRandomisation was stratifited by gender and recruitment site in a block design,"  |  |
| Bias arising from the randomization  | 1.2 Was the allocation sequence concealed until   | participants were recruited | I and assigned to interventions?                             | NI            | Patituulinsatuuli was suduttieu uy geriuer ahu reculuirienti site iir a uuck uestgir.   |  |
| process                              | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? |                             |  | N             | "Table 1" & "There were no significant differences between treatment groups on any of the demographic variables."   |  |
|                                      | Risk of bias judgement  |                             |  | Some concerns | Uncertain with the allocation concealment put this domain "some concerns"   |  |
|                                      | 2.1 Were participants aware of their assigned inte  | ervention during the trial? |  | NI            | Not stated  |  |
|                                      | 2.2 Were carers and trial personnel aware of part   | icipants' assigned interver | ntion during the trial?                                      | NI            | INV SIZEOU.   |  |
| Bias due to deviations from intended | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                             | s from the intended interve | ntion beyond what would be expected in usual                 | PN            | "Overall, 83.8% of subjects completed 3 months of psychosocial treatment, as defined by attending at least 80% of the weekly therapy visits. There was no difference between treatment groups in the proportion of subjects completing treatment (89.2% for the placebo group and 81.1% for the naltrexone group; Wald χ2 [1]=0.042; odds ratio (OR): 1.16; 95% confidence interval (CI): 0.28–4.91; p=0.838)."  There was no difference between treatment groups in the proportion of subjects adherent to naltrexone/placebo (Wald χ2 [1]=0.029; OR 1.11; 95% CI: 0.32–3.84; p=0.864) or sertraline (Wald χ2 [1]=0.511; OR: 1.54; 95% CI: 0.47–5.07; p=0.475)." |  |
| interventions                        | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                           | ended intervention unbala   | nced between groups and likely to have affected th           | ne NA         |   |  |
|                                      | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                       | to have affected the outc   | ome?   | N             | No evidence that patients recieved a treatment other than the one they were assigned to.  |  |

|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA   |  |  |  |  |  |
|--|---|------|--|--|--|--|--|
|  | Risk of bias judgement  | Low  | There was no complete information regarding blinding but no difference in attendance of psychosocial treatment and sertraline adherence, suggesting "Low" deviations from intended interventions.                      |  |  |  |  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | PY   |  |  |  |  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | NA   |  |  |  |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | NA   |  |  |  |  |  |
|  | Risk of bias judgement  | Low  | The authors did not report drop-outs so we assumed that no missing data - "Low" risk of bias in this domain.   |  |  |  |  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | NI   | No mention of blinding   |  |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | PY   | By Time-Line-Follow-Back (patient self-report), placebo controlled trial, so knowldge of intervention may have effected the results of the TLFB, with those on active treatment understating their alcohol consumption |  |  |  |  |
|  | Risk of bias judgement  | High | No mention of blinding to outcome assessors (participants themselves) and possible chance of knowldge of intervention may have effected outcomes - "High" risk of bias   |  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |      |  |  |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN   |  |  |  |  |  |
| result                                   | 5.2 multiple analyses of the data?  | PN   |  |  |  |  |  |
|  | Risk of bias judgement  | Low  | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results. Thus, we rated "Low" risk of bias in this domain.   |  |  |  |  |
| Overall bias                             | Risk of bias judgement  | High | Lack of detailed methods for the randomisation process and potential bias in outcome measurement, together, these contributed to "High" in overall bias for this trial.  |  |  |  |  |

| Reference                                | Paille 1995  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source                  | Journal article(s) with results of the trial   |
|--|--|-------------------------------|--|-------------------------|--|
| Outcome                                  | Abstinence (360 days)  | Results                       | 67/361 (Combined: Acamprosae High+Low d                      | oses) vs 20/177 (Placel | bo)  |
| Domain                                   | Signalling question  |                               |  | Response                | Comments   |
|  | 1.1 Was the allocation sequence random?  |                               |  | PY                      | "According to a predetermined randomization list, eligible patients were assigned treatment with either 333 mg Acamprosate tablets on a  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited   | and assigned to interventions?                               | NI                      | dosage of four or six tablets per day in divided doses, or a matching placebo tablet."   |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor     | nization process?  | PN                      | "no significant differences were found between the three groups on any of the variables measured at baseline"  |
|  | Risk of bias judgement   |                               |  | Some concerns           | No details were given regarding allocation concealment process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial?   |  | N                       | -"double-blind"  |
|  | 2.2 Were carers and trial personnel aware of part                                    | icipants' assigned interver   | ation during the trial?                                      | PN                      | GOLDING CONTROL OF THE CONTROL OF TH |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve     | ntion beyond what would be expected in usual                 | NA                      |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                      | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA                   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outo     | ome?   | N                       | 'Data were therefore analysed on an intention-to-treat basis. All patients who had taken the treatment at least once were included in the analysis of treatment success or failure." No evidence that patients anlysed in incorrect group.   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA                      |  |
|  | Risk of bias judgement   |                               |  | Low                     | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz    | ed?  | PN                      | PLA (35%) vs ACA (48.5%)   |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?            | ng outcome data and reas      | ons for missing outcome data similar across                  | PN                      | More participants in placebo group refused to the treatment or noncompliance   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | s were robust to the prese    | nce of missing outcome data?                                 | PN                      | No sensitivity analyses but the authors treated drop-outs as not abstinent   |
|  | Risk of bias judgement   |                               |  | High                    | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |
|  | 4.1 Were outcome assessors aware of the interven                                     | ention received by study pa   | articipants?   | N                       | Reported by patients and double-blind  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | nced by knowledge of intervention received?                  | NA                      |  |
|  | Risk of bias judgement   |                               |  | Low                     | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been                                    | n selected, on the basis of   | the results, from  |                         |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | ) within the outcome domain?                                 | PN                      |  |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | PN                      |  |
|  | Risk of bias judgement   |                               |  | Low                     | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                             | Risk of bias judgement   |                               |  | High                    | Lack of detailed methods for the randomisation process and potential bias due to imbalanced missing data, together, these contributed to "High" risk of bias in overall bias for this trial.   |

| Reference                           | Pelc 1992   | Aim | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial; Other systematic review and meta-anaylsis |
|-------------------------------------|---|-----|--|----------|---|
| Outcome                             | Abstinence (180 days) Results 14/55 (Acamprosate 1999 mg) vs 2/47 (Place                  |     |  | bo)      |   |
| Domain                              | Signalling question   |     |  | Response | Comments  |
|                                     | 1.1 Was the allocation sequence random?   |     |  | NI       |   |
| Bias arising from the randomization |   |     | d and assigned to interventions?                             | NI       | Not information on randomisation or concealment   |
|                                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? |     |  | NI       |   |

|  | Risk of bias judgement  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|--|---|---------------|---|
|  | 2.1 Were participants aware of their assigned intervention during the trial?  |               | -"double-blind"   |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | PN            | - double-clina  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected the outcome?                     | NA NA         |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | PN            | Not clear from content but no suggestion of this.   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design (though very little information) employed in this trial put "Low" risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N             | 80% for placebo vs ~50% for intervention  |
| Bias due to missing outcome              | 3.2 If NIPN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | N             | More drop-out in placebo group  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN            | No information how did the authors handle the data  |
|  | Risk of bias judgement  | High          | High porportion of missing data and no detailed methods for missing data put "High" risk of bias in this domain.  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PN            | Did not indicate the methods for assessing abstinence but the authors stated this was a double-blind study  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA            |   |
|  | Risk of bias judgement  | Low           | Double-blind design put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |   |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | NI            |   |
| of the reported result                   | 5.2 multiple analyses of the data?  | NI            |   |
|  | Risk of bias judgement  | Some concerns | No protocol was found and the authors did not describe the method for abstinence clearly. Thus, we rated "Some concerns" risk of bias in this domain.                                   |
| Overall bias                             | Risk of bias judgement  | High          | High risk of bias in missing data, some concerns in randomisation process and little information regarding the methods and analyses contributed to "High" risk of bias in overall bias. |

| Reference                                | Pelc 2005  | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source   | Journal article(s) with results of the trial   |  |  |
|--|--|-------------------------------|--|----------|--|--|--|
| Outcome                                  | Abstinence (26 weeks) Results 8/50 (Acamprosate) vs 16/50 (Acamprosate +                 |                               |  |          | Nurse follow-up)   |  |  |
| Domain                                   | Signalling question  |                               |  | Response | Comments   |  |  |
|  | 1.1 Was the allocation sequence random?  |                               |  | Y        | **Investigators telephoned the centre before the inclusion of each subject, to obtain a randomization number defining the group to which the   |  |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                                 | Υ        | patient was to be assigned."   |  |  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the rando      | mization process?  | PN       | There were a few differences in the educational status among two groups and marital status but these should be caused by chance rather than a problem with randolmization process.                                 |  |  |
|  | Risk of bias judgement   |                               |  | Low      | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |  |  |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |  | Y        | -An open study.  |  |  |
|  | 2.2 Were carers and trial personnel aware of part  | ticipants' assigned interver  | ntion during the trial?  | Υ        | , an open oddy.  |  |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ention beyond what would be expected in usual                    | PY       | There was a high attendence in the self-group participantion in the "no nurse follow-up" group.  |  |  |
| Bias due to<br>deviations from           | 2.4 If Y/PY to 2.3: Were these deviations from into                                      | ended intervention unbala     | nced between groups and likely to have affected the              |          | The subgroup analysis showed that self-help group participation had interaction with treatment   |  |  |
| intended<br>interventions                | outcome?   | onded micromical dribate      | need between groups and mery to have anceded an                  | PY       | "Although the results should be interpreted cautiously on account of the relatively low number of patients, significant treatment interaction were observed between gender and participation in self-help groups." |  |  |
|  | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | y to have affected the outo   | ome?   | N        | ITT analysis   |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                    | NA       |  |  |  |
|  | Risk of bias judgement   |                               |  | High     | Open-label design and possible deviations from intended interventions contributed to "High" risk of bias   |  |  |
|  | 3.1 Were outcome data available for all, or nearly                                       | / all, participants randomiz  | ed?  | N        | High proportion of missing data (Figure 1)   |  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ing outcome data and reas     | sons for missing outcome data similar across                     | PN       | Numbers and reasons were different between groups.   |  |  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                    | PN       | No sensitivity analysis  |  |  |
|  | Risk of bias judgement   |                               |  | High     | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |  |  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | Υ        | Should be patient self-report and this trial is an open trial so outcome assessors were aware of the intervention received by study participants.  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | enced by knowledge of intervention received?                     | PY       | Possible influence by the knowledge of interventions   |  |  |
|  | Risk of bias judgement   |                               |  | High     | This is an open study and the outcome (abstinence) could be influenced by the knowledge of interventions. Therefore, we rated "High" in this domain.   |  |  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | f the results, from  |          |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                    | PN       |  |  |  |
|  | 5.2 multiple analyses of the data?   |                               |  | PN       |  |  |  |
|  | Risk of bias judgement   |                               |  | Low      | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.    |  |  |
| Overall bias                             | Risk of bias judgement   |                               |  | High     | High risk of bias in the deviations from the intended interventions, some concerns in missing data and outcome measurements put "High risk of bias in overall bias.  |  |  |
|  |  |                               |  |          |  |  |  |

|  |  |                              | assignment to intervention (the 'intention-to-      | _                       |  |
|--|--|------------------------------|---|-------------------------|--|
| Reference                                | Pelc 1997  | Aim                          | treat' effect)                                      | Source                  | Journal article(s) with results of the trial   |
| Outcome                                  | Abstinence (90 days)   | Results                      | 60/126 (Combined: Acamprosate High+Low of           | doses) vs 16/62 (Placeb | 000)   |
| Domain                                   | Signalling question  |                              |   | Response                | Comments   |
|  | 1.1 Was the allocation sequence random?  |                              |   | NI                      |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruite   | d and assigned to interventions?                    | NI                      | -Only stated "Random"; "The patients were randomly assigned to one of the three treatment groups"  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the rando     | mization process?                                   | N                       | Equal number of participants in each group and no difference among characteristics of participants.  "A total of 188 patients were included in the trial: 62 were randomised to placebo (placebo), 63 to acamprosate 1332 mg/day (acamp. 1382) and 63 to acamprosate 1998 mg/day (acamp. 1998). No statistical difference was present for any criterion at inclusion." |
|  | Risk of bias judgement   |                              |   | Some concerns           | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?  |   | PN                      | -"double-blind"  |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interve   | ntion during the trial?                             | PN                      | double-sind  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interven | ention beyond what would be expected in usual       | NA                      |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala    | nnced between groups and likely to have affected th | NA NA                   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outo    | come?   | N                       | ITT analysis   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the e   | stimated effect of intervention) of analysing       | NA                      |  |
|  | Risk of bias judgement   |                              |   | Low                     | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz   | red?  | PN                      | loss to follow up 24% control, 9.5% acamp 1332, 9.5% acadmp 1998, so uneven and reasons not given, total 32% lost from placebo (exd relapse) -20% acadmp 1332 and 17% from acamp 1998  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas     | sons for missing outcome data similar across        | PN                      | Difference in the proportions of missing data was observed and no details were given   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese  | ence of missing outcome data?                       | PN                      | No sensitivity analysis was performed. The authors treated participants dropped out as non abstinent   |
|  | Risk of bias judgement   |                              |   | High                    | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p   | varticipants?                                       | N                       | "double-blind"; alcohol consumption was assessed by review of patients' diary consumption cards and confirmed by urine test at each test.  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe  | enced by knowledge of intervention received?        | NA                      |  |
|  | Risk of bias judgement   |                              |   | Low                     | Double-blind design and self-reporting outcome (confirmed by biochemistry results) put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis o   | f the results, from                                 |                         |  |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time point | s) within the outcome domain?                       | PN                      |  |
| of the reported result                   | 5.2 multiple analyses of the data?   |                              |   | PN                      |  |
|  | Risk of bias judgement   |                              |   | Low                     | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                             | Risk of bias judgement   |                              |   | High                    | Lack of detailed methods for the randomisation process and imbalanced missing data, together, these contributed to "High" in overall bias for this trial.  |

| Reference                                | Poldrugo 1997   | Aim                         | assignment to intervention (the 'intention-to-<br>treat' effect) | Source   | Journal article(s) with results of the trial  |
|--|---|-----------------------------|--|----------|---|
| Outcome                                  | Abstinence (12 months)  | Results                     | 53/122 (Acamprosate ) vs 37/124 (Placebo )                       |          |   |
| Domain                                   | Signalling question   |                             |  | Response | Comments  |
|  | 1.1 Was the allocation sequence random?   |                             |  | PY       | Did not stated the method but "Patients were randomized by individual subject randomization to the acamprosate group" |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until   | participants were recruited | d and assigned to interventions?                                 | PY       |   |
| process                                  | 1.3 Were there baseline imbalances that suggest   | a problem with the rando    | mization process?  | N        | No significant difference found between groups.   |
|  | Risk of bias judgement  |                             |  | Low      |   |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial? |  | PN       | -'double-blind'   |
|  | 2.2 Were carers and trial personnel aware of part                                       | icipants' assigned interver | ntion during the trial?  | PN       | 4 double-onitu  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                           | s from the intended interve | ention beyond what would be expected in usual                    | NA       |   |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                             | ended intervention unbala   | nced between groups and likely to have affected to               | he NA    |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | to have affected the outc   | iome?  | N        |   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | bstantial impact (on the es | stimated effect of intervention) of analysing                    | NA       |   |
|  | Risk of bias judgement  |                             |  | Low      |   |
|  | 3.1 Were outcome data available for all, or nearly                                      | all, participants randomiz  | ed?  | N        | There were 46.7% (Ac) and 62.1% (PI) withdrawn in the group and more during the follow-up periods.                    |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                | ng outcome data and reas    | sons for missing outcome data similar across                     | PN       | More participants in placebo group refused to continue and severe relapsed.   |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                    | ts were robust to the prese | ence of missing outcome data?                                    | N        | Although the authors used ITT analyses, the imbalanced missing data could not premit robust results.                  |
|  | Risk of bias judgement  |                             |  | High     | Imbalanced missing outcome data across the groups led to high risk of bias  |
|  | 4.1 Were outcome assessors aware of the interven  | ention received by study p  | articipants?   | PN       | "double-blind"  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe | enced by knowledge of intervention received?                     | NA       |   |
|  | Risk of bias judgement  |                             |  | Low      |   |

| Bias in selection of the reported result | Are the reported outcome data likely to have been selected, on the basis of the results, from        |      |  |  |  |  |  |  |
|--|--|------|--|--|--|--|--|--|
|  | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? | N    |  |  |  |  |  |  |
|  | 5.2 multiple analyses of the data?   | N    |  |  |  |  |  |  |
|  | Risk of bias judgement   |      | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results. Thus, we rated "Low" risk of bias in this domain. |  |  |  |  |  |
| Overall bias                             | Risk of bias judgement   | High | High risk of bias due to imbalanced missing outcome data.  |  |  |  |  |  |

| Reference                                  | Ponce 2005   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|---------------|---|
| Outcome                                    | Abstinence (12 weeks)  | Results                       | 38/50 (Naltrexone 50mg) vs 21/50 (TAU)                           |               |   |
| Domain                                     | Signalling question  |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |
| Bias arising from                          | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                                 | NI            | Only stated "random"  |
| the randomization process                  | 1.3 Were there baseline imbalances that suggest  | t a problem with the randor   | mization process?  | N             | No significant difference found between groups at baseline (table 1)  |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |  | PN            |   |
|  | 2.2 Were carers and trial personnel aware of part  | ticipants' assigned interver  | ntion during the trial?  | PY            | "single-blind" but it was impossible to blind participants as this trial did not provide placebo.   |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ntion beyond what would be expected in usual                     | NI            |   |
| Bias due to<br>deviations from<br>intended | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala     | nced between groups and likely to have affected th               | NA NA         |   |
| interventions                              | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | y to have affected the outo   | ome?   | N             | No switching  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                    | NA            |   |
|  | Risk of bias judgement   |                               |  | Some concerns | It was impossible to blind participants in this trial due to nature of interventions employed, which potentially induce deviations from intended interventions. On the other hand, the authors applied ITT analyses. Together, these contributed to "some concerns" in this domain. |
|  | 3.1 Were outcome data available for all, or nearly                                       | / all, participants randomize | ed?  | N             | 19 (NAT) and 8 (Non) abandoned the trial. (27/100 abandoned treatment.)   |
| Bias due to missing outcome                | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ing outcome data and reas     | ons for missing outcome data similar across                      | N             | More patients left the trial in no treatment group.   |
| data                                       | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                    | PN            | No sensitivity analysis   |
|  | Risk of bias judgement   |                               |  | High          | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study pa   | articipants?   | PN            | Participants was blinded  |
| Bias in<br>measurement of<br>the outcome   | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | inced by knowledge of intervention received?                     | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | Single-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported          | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                    | PN            |   |
| result                                     | 5.2 multiple analyses of the data?   |                               |  | PN            |   |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results. Thus, we rated "Low" risk of bias this domain.   |
| Overall bias                               | Risk of bias judgement   |                               |  | High          | High risk of bias derived from the missing data, deviations from the intended interventions and lack of details in the randomisation process together, these put "High" risk of bias.   |

| Reference                   | Richter 2012  | Aim                         | assignment to intervention (the 'intention-to-<br>treat' effect) | Source  | Journal article(s) with results of the trial   |
|-----------------------------|---|-----------------------------|--|---|--|
| Outcome                     | Abstinence (16 weeks)   | Results                     | 33/95 (Levetiracetam 2000 mg) vs 36/106 (PI                      | acebo)  |  |
| Domain                      | Signalling question   |                             |  | Response  | Comments   |
|                             | 1.1 Was the allocation sequence random?   |                             |  | Y   | -PRandomization was computerized, central and independent of the center, and blinded for physician and participants.*                |
| Bias arising from           | 1.2 Was the allocation sequence concealed until   | participants were recruited | d and assigned to interventions?                                 | Y   | Transcribed was computed, central and independent of the center, and dimed to physician and parcepants.                              |
| process                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? |                             | N  | No significant difference between groups (Table 1). |  |
|                             | Risk of bias judgement  |                             |  | Low   | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.        |
|                             | 2.1 Were participants aware of their assigned into  | ervention during the trial? |  | N   | "double-blind"; "Randomization was computerized, central and independent of the center, and blinded for physician and participants." |
|                             | 2.2 Were carers and trial personnel aware of part   | icipants' assigned interver | ntion during the trial?  | N   |  |
| Bias due to                 | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                             | from the intended interve   | ention beyond what would be expected in usual                    | NA  |  |
| deviations from<br>intended | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                                | ended intervention unbala   | nced between groups and likely to have affected th               | NA NA   |  |
| interventions               | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                       | to have affected the outc   | ome?   | N   | ITT analysis   |
|                             | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group?  | bstantial impact (on the es | stimated effect of intervention) of analysing                    | NA  |  |
|                             | Risk of bias judgement  |                             |  | Low   | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.         |

|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?   | N    | "Overall, 79% patients (n = 158) completed the trial per protocol: 80 (75%) of 106 in the placebo and 78 (82%) of 95 in the LEV group."  |  |  |  |
|--|--|------|--|--|--|--|
| Bias due to missing outcome              | 3.2 If NIPNNI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups? | PN   | "Dropout reasons in the placebo group (n = 26) were depression with suicidal tendency (severe AE), a panic attack (severe AE), 8 side effects, a refusal of participation, 8 noncompliances, 2 other causes, 4 unknown reasons. In the LEV group (n = 12), we counted 2 side effects, a refusal of participation, 8 noncompliances, and 1 unknown reason as dropouts." |  |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?                                 | PN   | No sensitivity analysis but the authors treated drop-outs as non abstinent   |  |  |  |
|  | Risk of bias judgement   | High | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |  |  |  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?   | N    | "double-blind"   |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                    | NA   |  |  |  |  |
|  | Risk of bias judgement   | Low  | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |  |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from  |      |  |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?                                       | PN   |  |  |  |  |
| result                                   | 5.2 multiple analyses of the data?   | PN   |  |  |  |  |
|  | Risk of bias judgement   | Low  | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |  |  |  |
| Overall bias                             | Risk of bias judgement   | High | High risk of bias in overall bias domain due to imbalanced missing data.   |  |  |  |

| Reference                                | Rubio 2005   | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (12 weeks)  | Results                       | 111/168 (Naltrexone 50 mg) vs 95/168 (TAU)                   |               |   |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            | -Cnly stated "random"   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited   | and assigned to interventions?                               | NI            | Ony saleu Tanuun  |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor     | nization process?  | N             | No significant difference between groups (Table 1).   |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial?   |  | Y             | physician and patient being open to the study medicationmore closely mirrors routine clinical practice in Spain, than a double-blind  |
|  | 2.2 Were carers and trial personnel aware of part                                    | icipants' assigned interver   | ation during the trial?                                      | Y             | study'  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve     | ntion beyond what would be expected in usual                 | NI            |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                      | ended intervention unbala     | nced between groups and likely to have affected th           | e NA          |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outc     | ome?   | PN            | seems to be ITT analysis  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |   |
|  | Risk of bias judgement   |                               |  | Some concerns | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz    | ed?  | N             | high rate of drop outs (27.98% in NAL and 34.52% in control)  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missintervention groups?               | ng outcome data and reas      | ons for missing outcome data similar across                  | NI            | The proportion of drop-outs did not differ between groups but there was no reasons reported.  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | s were robust to the prese    | nce of missing outcome data?                                 | PN            | No information regarding the imputation methods   |
|  | Risk of bias judgement   |                               |  | Some concerns | There were some missing data, which were not evenly distributed in both groups and no details reported. "Some concerns" was rated in this domain.   |
|  | 4.1 Were outcome assessors aware of the intervent                                    | ention received by study p    | articipants?   | Y             | "on the basis of the participant's self data on alcohol intake and consumption pattern (Miller, 1996)", "In addition, the following biological parameters of alcohol use were used: serum aspartate aminotransferase (AST), alanine aminotransferase (ALT), gamma-glutamyltransferase (GGT), and carbohydrate-deficient transferrin (CDT)." |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | nced by knowledge of intervention received?                  | PN            | "on the basis of the participant's self data on alcohol intake and consumption pattern (Miller, 1996)", "In addition, the following biological parameters of alcohol use were used: serum aspartate aminotransferase (AST), alanine aminotransferase (ALT), gamma-glutamyltransferase (GGT), and carbohydrate-deficient transferrin (CDT)." |
|  | Risk of bias judgement   |                               |  | Low           | Although this was an open-label study, outcome was confirmed by biochemistry methods.   |
|  | Are the reported outcome data likely to have been                                    | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | ) within the outcome domain?                                 | PN            |   |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | PN            |   |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |
| Overall bias                             | Risk of bias judgement   |                               |  | Some concerns | Some concerns due to lack of details in randomisaion process, open-label design and no details in missing data.   |

| Reference                           | Sass 1996   | Aim     | assignment to intervention (the 'intention-to-<br>treat' effect) | Source                 | Journal article(s) with results of the trial  |
|-------------------------------------|---|---------|--|------------------------|---|
| Outcome                             | Abstinence (48 weeks)   | Results | 61/136 (Acamprosate 1998 mg) vs 34/136 (P                        | flacebo )              |   |
| Domain                              | Signalling question   |         |  | Response               | Comments  |
|                                     | 1.1 Was the allocation sequence random?   |         |  | Y                      | "Sealed envelope randomization with balance by blocks of 8 (4 per study medication) was used to obtain equal numbers per treatm |
| Bias arising from the randomization |   |         | Y  | group at each center." |   |
|                                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? |         |  | N                      |   |

|  | Risk of bias judgement  | Low   | This study employed adequate randomisation methods in the trial and represents low risk of bias in the randomisation process.  |
|--|---|-------|--|
|  | 2.1 Were participants aware of their assigned intervention during the trial?  |       |  |
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | N     | "double-blind"; Treatment consisted of counseling or psychotherapy, to which blinded study medication"   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA    |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected th outcome?                      | NA NA |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N     | ITT analyses condcuted   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA    |  |
|  | Risk of bias judgement  | Low   | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.   |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N     | "33% of placeob treated patients unwilling to continue vs 14.7% of acamprosate treated patients. large proportion withdrawn, 42% acamprosate; 60% placebo." Appears that 16% more patients treated with placebo relapsed and withdrew. |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PN    | As above   |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | PN    | The authors presented PP and ITT results. No sensitivity analysis but treated drop-outs as non abstinent   |
|  | Risk of bias judgement  | High  | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | N     | "Double-blind", "A patient's declaration of drinking behavior was verified by the results of a breathalyzer test and GGT levels in every case and by interviewing a family member if possible."  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | NA    |  |
|  | Risk of bias judgement  | Low   | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |       |  |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN    |  |
| of the reported result                   | 5.2 multiple analyses of the data?  | PN    |  |
|  | Risk of bias judgement  | Low   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.                        |
| Overall bias                             | Risk of bias judgement  | High  | High risk of bias in overall bias due to imbalanced missing data.  |

| <u> </u>                                 | Schmidt 2002   | Aim                          | ssignment to intervention (the 'intention-to-<br>reat' effect) |               | Journal article(s) with results of the trial  |  |
|--|--|------------------------------|--|---------------|---|--|
| Outcome A                                | Abstinence (12 months) Results 8/57 (Lisuride) vs 19/63 (Placebo)                    |                              |  |               |   |  |
| Domain S                                 | Signalling question  |                              |  | Response      | Comments  |  |
| 1  | 1.1 Was the allocation sequence random?  |                              |  | NI            | Only stated "random"  |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until p                                    | participants were recruited  | and assigned to interventions?                                 | NI            | Only Stated Tandom  |  |
|  | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor    | nization process?  | N             | No evidence of differences in baseline characteristics.   |  |
| F  | Risk of bias judgement   |                              |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
| 2  | 2.1 Were participants aware of their assigned inte                                   | rvention during the trial?   |  | PN            | -"double-blind"   |  |
| 2  | 2.2 Were carers and trial personnel aware of parti                                   | cipants' assigned interven   | tion during the trial?   | PN            | uoune-onini   |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve    | ntion beyond what would be expected in usual                   | NA            |   |  |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from inte-<br>outcome?                     | ended intervention unbalar   | nced between groups and likely to have affected th             | NA NA         |   |  |
| interventions 2                          | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outcome | ome?   | N             | "intend to treat analysis" and no evidence of swapping patients   |  |
| 2<br>p                                   | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | ostantial impact (on the es  | timated effect of intervention) of analysing                   | NA            |   |  |
| F  | Risk of bias judgement   |                              |  | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |  |
| 3  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomize  | ed?  | N             | There were some missing data (Table 2)  |  |
| Bias due to ir missing outcome           | 3.2 If N/PN/NI to 3.1: Are the proportions of missin<br>ntervention groups?          | ng outcome data and reas     | ons for missing outcome data similar across                    | N             | Similar proportions of missing outcome data but more participants in lisuride group (n = 9) dropped out due to adverse event compared to placebo group (n = 3)  |  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that results                                | s were robust to the prese   | nce of missing outcome data?                                   | PN            | No sensitivity analysis   |  |
| F  | Risk of bias judgement   |                              |  | High          | The authors removed 16 patients from the ITT analysis and imbalanced missing data in adverse events put this domain in "High" risk of blas.   |  |
|  | 4.1 Were outcome assessors aware of the interve                                      | ntion received by study pa   | articipants?   | PN            | "double-blind"  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the o                                   | outcome likely to be influe  | nced by knowledge of intervention received?                    | NA            |   |  |
| F  | Risk of bias judgement   |                              |  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |  |
| 4  | Are the reported outcome data likely to have been                                    | selected, on the basis of    | the results, from  |               |   |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scale  | es, definitions, time points | ) within the outcome domain?                                   | PN            |   |  |
|  | 5.2 multiple analyses of the data?   |                              |  | PN            |   |  |
| F  | Risk of bias judgement   |                              |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |
| Overall bias F                           | Risk of bias judgement   |                              |  | High          | Lack of detailed methods for the randomisation process contributed to "High" risk of bias in overall bias for this trial.   |  |

| Reference                                | Stella 2008  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|---------------|---|
| Outcome                                  | Abstinence (6 months) Results 2/12 (Escitalopram 20 mg) vs 6/12 (GHB 75 m                |                               |  |               | s 4/12 (NTX 50mg + EST 20 mg) vs 10/12 (NTX 50mg + GHB 75mg/kg + ETP 20 mg)   |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                             | NI            | Only stated "random", "They were randomized into four groups."  |
| process                                  | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | mization process?  | PN            | Same number in each group. Some difference in education status and employment but might be from by chance   |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |  | Y             | -'open tial"  |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interver   | ntion during the trial?                                      | PY            | open utai   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ention beyond what would be expected in usual                | NI            | They all received pharmacological and psychological interventions.  |
| toaoa                                    | 2.4 If Y/PY to 2.3: Were these deviations from into<br>outcome?                          | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA         |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the outc     | ome?   | N             | Seemed to be ITT analysis   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                | NA            |   |
|  | Risk of bias judgement   |                               |  | Some concerns | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomiz    | ed?  | PY            | Did not provide information regarding missing outcome data.   |
| Bias due to<br>missing outcome           | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and reas      | sons for missing outcome data similar across                 | NA            |   |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                | NA            |   |
|  | Risk of bias judgement   |                               |  | Low           | The authors did not provide missing data so the reviewer assumed there was no missing data, especially this trial involved small numbers of participants. "Low" risk of bias                                    |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | Υ             | Open study  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | inced by knowledge of intervention received?                 | PY            |   |
|  | Risk of bias judgement   |                               |  | High          | Open study and the outcome can be influenced by the knowledge of interventions - "High" risk of bias  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                | PN            |   |
|  | 5.2 multiple analyses of the data?   |                               |  | PN            |   |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
|  | I .  |                               |  |               |   |

| Reference                                | Tempesta 2000  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial   |  |  |  |
|--|--|-----------------------------|--|----------|--|--|--|--|
| Outcome                                  | Abstinence (270 days)  |                             |  |          | acebo)   |  |  |  |
| Domain                                   | Signalling question  |                             |  | Response | Comments   |  |  |  |
|  | 1.1 Was the allocation sequence random?  |                             |  | PY       |  |  |  |  |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until  | participants were recruite  | d and assigned to interventions?                             | PY       | "randomized, by sealed envelope with balance by blocks of eight"   |  |  |  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest  | a problem with the rando    | mization process?  | PN       | Placebo group had higher proportion of patients with high consumption awareness and previous treatment for alcoholism, which might result by chance. |  |  |  |
|  | Risk of bias judgement   |                             |  | Low      | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.                      |  |  |  |
|  | 2.1 Were participants aware of their assigned inte                                       | ervention during the trial? |  | N        | double-blind; identical placebo  |  |  |  |
|  | 2.2 Were carers and trial personnel aware of part  | icipants' assigned interve  | ntion during the trial?                                      | PN       | Did not mention the blinding of carers and trial personnel. Based on double-blind, the reviewer chose "probably not"                                 |  |  |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interv  | ention beyond what would be expected in usual                | NA       |  |  |  |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                               | ended intervention unbala   | nced between groups and likely to have affected th           | ne NA    |  |  |  |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | to have affected the out    | come?  | N        | "Intention to treat (ITT) statistical principles were followed"  |  |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the e  | stimated effect of intervention) of analysing                | NA       |  |  |  |  |
|  | Risk of bias judgement   |                             |  | Low      | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.                         |  |  |  |
|  | 3.1 Were outcome data available for all, or nearly                                       | all, participants randomic  | red?   | N        | High proportion of drop-outs and lost to follow-up - 25% of patients dropped out over course of study.   |  |  |  |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ng outcome data and rea     | sons for missing outcome data similar across                 | PY       | Reasons and % seem similar across arms (Table 2)   |  |  |  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the pres  | ence of missing outcome data?                                | PN       | No sensitivity analysis but the authors treated "drop-out" as non abstinent  |  |  |  |
|  | Risk of bias judgement   |                             |  | Low      | Although there were some missing data, results still stood in consideration of balanced missing data. "Low" risk of bias in this domain was rated.   |  |  |  |
|  | 4.1 Were outcome assessors aware of the interven   | ention received by study p  | varticipants?  | N        | Double-blind design  |  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influ  | enced by knowledge of intervention received?                 | NA       |  |  |  |  |
|  | Risk of bias judgement   |                             |  | Low      | Double-blind design put this domain as low risk of bias.   |  |  |  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of | f the results, from  |          |  |  |  |  |

| Bias in selection of the reported | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain? | PN  |   |
|-----------------------------------|--|-----|---|
|                                   | 5.2 multiple analyses of the data?   | PN  |   |
|                                   | Risk of bias judgement   |     | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                      | Risk of bias judgement   | Low | Low risk of bias  |

| Reference                                   | Ulrichsen 2010  | Aim                            | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial  |
|---|---|--------------------------------|--|---------------|---|
| Outcome                                     | Abstinence (6 months)   | Results                        | 4/20 (TAU) vs 5/19 (Disulfiram 229 mg)                           | •             |   |
| Domain                                      | Signalling question   |                                |  | Response      | Comments  |
|   | 1.1 Was the allocation sequence random?   |                                |  | Y             | "A nurse from the department not participating in the study performed randomization using sealed envelopes containing a label for one of<br>the two treatment conditions."  "In order to ensure a balanced number of patients in each group the envelopes were arranged in blocks of 6–10. In each block, half were |
| Bias arising from the randomization process | 1.2 Was the allocation sequence concealed until   | participants were recruited    | I and assigned to interventions?                                 | Y             | labelled "disulfiram" and half were labelled "control".  "The envelopes were arranged and sealed by a secretary not participating in the study who was instructed to arrange the labels in a rand order."   |
|   | 1.3 Were there baseline imbalances that suggest   | t a problem with the randor    | nization process?  | N             | No significant difference between groups (Table 1)  |
|   | Risk of bias judgement  |                                |  | Low           | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.   |
|   | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?    |  | Υ             |   |
|   | 2.2 Were carers and trial personnel aware of par  | ticipants' assigned interver   | ation during the trial?  | Υ             |   |
| Bias due to                                 | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?                            | s from the intended interve    | ntion beyond what would be expected in usual                     | NI            |   |
| deviations from<br>intended                 | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                             | tended intervention unbala     | nced between groups and likely to have affected th               | e NA          |   |
| interventions                               | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outo    | ome?   | N             | "All data were used on an intention-to-treat basis."  |
|   | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | bstantial impact (on the es    | timated effect of intervention) of analysing                     | NA            |   |
|   | Risk of bias judgement  |                                |  | Some concerns | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain   |
|   | 3.1 Were outcome data available for all, or nearly                                      | y all, participants randomiz   | ed?  | N             | "Whereas 17 patients in the disulfi ram group started group treatment, only seven completed it (41%). In the control group fewer started, 15, but 10 of these completed group treatment (67%)."   |
| Bias due to missing outcome                 | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?                 | ing outcome data and reas      | ons for missing outcome data similar across                      | NI            | There was no statistically significant difference in the proportions of missing outcomes. No reasons were given.  |
|   | 3.3 If N/PN/NI to 3.1: Is there evidence that resul                                     | ts were robust to the prese    | nce of missing outcome data?                                     | PN            | No information regarding sensitivity analysis but the authors treated all drop-outs as relapsed.  |
|   | Risk of bias judgement  |                                |  | Some concerns | High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.  |
|   | 4.1 Were outcome assessors aware of the interv  | ention received by study pa    | articipants?   | PY            | No information regarding the method of assessing abstinence but since this is an open-trial, patients were aware of the intervention received.  |
| Bias in<br>measurement of<br>the outcome    | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe    | nced by knowledge of intervention received?                      | PY            | Outcomes can be influenced by the knowledge of interventions  |
|   | Risk of bias judgement  |                                |  | High          | Open-label design and outcome can be influenced by the knowledge of interventions - "High" was rated.   |
|   | Are the reported outcome data likely to have bee  | n selected, on the basis of    | the results, from  |               |   |
| Dido iii oolootioii                         | 5.1 multiple outcome measurements (e.g. sca   | ales, definitions, time points | e) within the outcome domain?                                    | PN            |   |
| of the reported result                      | 5.2 multiple analyses of the data?  |                                |  | PN            |   |
|   | Risk of bias judgement  |                                |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.   |
| Overall bias                                | Risk of bias judgement  |                                |  | High          | High in overall bias due to open-label design and missing data without details.   |

| Reference                           | Volpicelli 1997   | Aim                         | assignment to intervention (the 'intention-to-treat' effect)                                    | Source        | Journal article(s) with results of the trial   |  |  |
|-------------------------------------|---|-----------------------------|---|---------------|--|--|--|
| Outcome                             | Abstinence (12 weeks)   | Results                     | 21/48 (Naltrexone 50 mg) vs 17/49 (Placebo  | )             |  |  |  |
| Domain                              | Signalling question   |                             |   | Response      | Comments   |  |  |
|                                     | 1.1 Was the allocation sequence random?   |                             |   | Υ             | +"computer randomized block of 20 subjects"  |  |  |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until   | participants were recruited | I and assigned to interventions?  | NI            | computer randomized block of zu subjects   |  |  |
| process                             | 1.3 Were there baseline imbalances that suggest a problem with the randomization process? | N                           | "The baseline sociodemographics of the 2 study groups of the sample did not differ (Table 1 )." |               |  |  |  |
|                                     | Risk of bias judgement  |                             |   | Some concerns | No details were given regarding allocation concealment, contributed to "some concerns" in this domain.                       |  |  |
|                                     | 2.1 Were participants aware of their assigned inte  | rvention during the trial?  |   | PN            |  |  |  |
|                                     | 2.2 Were carers and trial personnel aware of parti  | icipants' assigned interver | ation during the trial?   | PN            | -Conly stated "double-blind"   |  |  |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                             | from the intended interve   | ntion beyond what would be expected in usual  | NA            |  |  |  |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                           | ended intervention unbala   | nced between groups and likely to have affected th  | e NA          |  |  |  |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                       | to have affected the outc   | ome?  | N             | ITT analysis   |  |  |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group?  | ostantial impact (on the es | timated effect of intervention) of analysing  | NA            |  |  |  |
|                                     | Risk of bias judgement  |                             |   | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions. |  |  |

|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | N             | *Of the 49 subjects in the placebo group, 36 (73%) completed the treatment protocol, compared with 35 (73%) of 48 naltrexone-treated subjects."            |  |  |
|--|---|---------------|--|--|--|
| Bias due to missing outcome              | 3.2 If NIPN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups? | NI            | The proportions of drop-outs were similar but no reasons by group  |  |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?                                  | PN            | No mention of how missing data was dealt with, and no sensitivity analysis.  |  |  |
|  | Risk of bias judgement  | Some concerns | Some concerns due to missing data and no details.  |  |  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PN            | Double-blind design  |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                     | NA            |  |  |  |
|  | Risk of bias judgement  | Low           | Double-blind design and self-reporting outcome (confirmed by relatives and biochemistry results) put this domain as low risk of bias.                      |  |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN            |  |  |  |
| result                                   | 5.2 multiple analyses of the data?  | PN            |  |  |  |
|  | Risk of bias judgement  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results. Thus, we rated "Low" risk of bias in this domain. |  |  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Some concerns due to lack of details in randomisation process and missing data   |  |  |

| Reference                                | Wetzel 2004  | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source                | Journal article(s) with results of the trial  |
|--|--|-------------------------------|--|-----------------------|---|
| Outcome                                  | Abstinence (52 weeks)  | Results                       | 12/53 (Nefazodone 600 mg + CBT) vs 9/50 (f                   | Nefazodone 600 mg + G | GC) vs 12/50 (Placebo + CBT) vs 13/47 (Placebo + GC)  |
| Domain                                   | Signalling question  |                               |  | Response              | Comments  |
|  | 1.1 Was the allocation sequence random?  |                               |  | Y                     |   |
| Bias arising from                        | 1.2 Was the allocation sequence concealed until                                      | participants were recruited   | d and assigned to interventions?                             | PY                    | "Randomization followed a centralized assignment procedure independent of responsible or treating clinicians and hospitals."  |
| the randomization process                | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor     | mization process?  | N                     |   |
|  | Risk of bias judgement   |                               |  | Low                   | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.   |
|  | 2.1 Were participants aware of their assigned inte                                   | ervention during the trial?   |  | PN                    | "double-blind"  |
|  | 2.2 Were carers and trial personnel aware of parti                                   | icipants' assigned interver   | ntion during the trial?                                      | PN                    | "Both study medications contained riboflavin to control for medication compliance by urine samples without breaking the blind."   |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | from the intended interve     | ention beyond what would be expected in usual                | NA                    |   |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from inte<br>outcome?                      | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA                 |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | to have affected the outc     | ome?   | N                     | "All results reported are based on ITT statistics", no evidence of switches etc.  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a subparticipants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                | NA                    |   |
|  | Risk of bias judgement   |                               |  | Low                   | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz    | ed?  | N                     | High proportion of drop-outs (Figure 1).  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missin intervention groups?            | ng outcome data and reas      | sons for missing outcome data similar across                 | NI                    | % similar between arms. No breakdown of reasons given.  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | s were robust to the prese    | ence of missing outcome data?                                | N                     | No sensitivity anaylsis.  |
|  | Risk of bias judgement   |                               |  | Some concerns         | High porportion of missing data and no detailed reasons for missing data put "some concerns" in this domain.  |
|  | 4.1 Were outcome assessors aware of the interven                                     | ention received by study p    | articipants?   | N                     | double-blind  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | nced by knowledge of intervention received?                  | NA                    |   |
|  | Risk of bias judgement   |                               |  | Low                   | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |
|  | Are the reported outcome data likely to have been                                    | n selected, on the basis of   | the results, from  |                       |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                | PN                    |   |
| result                                   | 5.2 multiple analyses of the data?   |                               |  | PN                    |   |
|  | Risk of bias judgement   |                               |  | Low                   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                               |  | Some concerns         | Some concerns due to lack of details in missing data.   |

| Reference                           | Whitworth 1996   | Aim | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial  |       |
|-------------------------------------|--|-----|--|----------|---|-------|
| Outcome                             | Abstinence (360 days) Results 41/224 (Acamprosate 1998 mg) vs 16/224 (Pl                                   |     | flacebo)   |          |   |       |
| Domain                              | Signalling question  |     |  | Response | Comments  |       |
|                                     | 1.1 Was the allocation sequence random?  |     |  | Y        | "Rnadomisation was by computer-generated list organised in blocks of eight."  |       |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until participants were recruited and assigned to interventions? |     |  | Y        | Allocation codes were provided in sealed envelopes for each patient."   |       |
|                                     | 1.3 Were there baseline imbalances that suggest a problem with the randomization process?                  |     |  | PN       | "The groups were well matched in terms of demographic and alcoholrelated baseline variables on the day of selection and on day 0 (table | a 1)" |
|                                     | Risk of bias judgement   |     |  | Low      | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.         |       |
|                                     | 2.1 Were participants aware of their assigned intervention during the trial?                               |     |  | PN       | The duration of double-blind treatment was 360 days   |       |
|                                     |  |     |  |          | The duration of doline-billion treatment was and date   |       |

| 1  |   | пте читации от чочиле-интя веаптеля массоч чаус |   |  |
|--|---|---|---|--|
|  | 2.2 Were carers and trial personnel aware of participants' assigned intervention during the trial?  | PN  | ·   |  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations from the intended intervention beyond what would be expected in usual practice?                         | NA  |   |  |
| deviations from<br>intended              | 2.4 If Y/PY to 2.3: Were these deviations from intended intervention unbalanced between groups and likely to have affected th outcome?                      | NA NA   |   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely to have affected the outcome?   | N   | Modified ITT used and no evidence of patient switching  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA  |   |  |
|  | Risk of bias judgement  | Low   | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |  |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | PN  | At 12 months, only 40% of patients remaining. Additionally, 7 patients excluded under mITT protocol   |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | PY  | %'s and reasons for missingness is similar between groups.  |  |
| data                                     | 3.3 If NPN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?   | N   | No sensitivity analysis   |  |
|  | Risk of bias judgement  | Low   | Although there were some missing data, results still stood in consideration of balanced missing data between groups. "Low" risk of bias in this domain was rated.   |  |
| Plan to                                  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | PN  | "double-blind"  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | PY N Low  |   |  |
|  | Risk of bias judgement  | NA N        | Double-blind design and self-reporting put this domain as low risk of bias.   |  |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |   |   |  |
| Bias in selection                        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | PN  |   |  |
| of the reported<br>result                | 5.2 multiple analyses of the data?  | N   |   |  |
|  | Risk of bias judgement  | Low   | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |
| Overall bias                             | Risk of bias judgement  | Low   | Low risk of bias  |  |
|  |   |   |   |  |

| Reference                     | Wiesbeck 2001  | Aim   | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial   |
|-------------------------------|--|---|--|---------------|--|
| Outcome                       | Abstinence (12 months)   | Results   | 34/142 (Flupenthixol 10 mg) vs 58/139 (Place                     | ebo)          |  |
| Domain                        | Signalling question  |   |  | Response      | Comments   |
|                               | 1.1 Was the allocation sequence random?  |   |  | NI            | only stated "random"   |
| Bias arising from             | 1.2 Was the allocation sequence concealed until                                      | he allocation sequence concealed until participants were recruited and assigned to interventions? |  |               | only stated random   |
| the randomization process     | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor   | nization process?  | N             | "groups were well matched" Table 1   |
|                               | Risk of bias judgement   |   |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|                               | 2.1 Were participants aware of their assigned into                                   | ervention during the trial?   |  | PN            | -"double-blind"  |
|                               | 2.2 Were carers and trial personnel aware of part                                    | ticipants' assigned interver  | tion during the trial?   | PN            | - double-china   |
| Bias due to                   | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve   | ntion beyond what would be expected in usual                     | NA            |  |
| deviations from<br>intended   | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                          | ended intervention unbala   | nced between groups and likely to have affected th               | e NA          |  |
| interventions                 | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | y to have affected the outo   | ome?   | N             | No evidence of patients being analysed in wrong group. mITT used.  |
|                               | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                     | NA            |  |
|                               | Risk of bias judgement   |   |  | Low           | Double-blind design and mITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |
|                               | 3.1 Were outcome data available for all, or nearly                                   | / all, participants randomiz  | ed?  | N             | "Of 281 patients enrolled, 91 (32.4%) completed the trial (6 months treatment, 6 months follow-up)"  |
| Bias due to missing outcome   | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ing outcome data and reas   | ons for missing outcome data similar across                      | N             | More patients in FLUX group dropped out due to severe relapse.   |
| data                          | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | ts were robust to the prese   | nce of missing outcome data?                                     | N             | No sensitivity analyses  |
|                               | Risk of bias judgement   |   |  | Some concerns | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain.   |
| Bias in                       | 4.1 Were outcome assessors aware of the intervent                                    | ention received by study pa   | articipants?   | PN            | "double-blind"; "Outcome variables were based on absolute abstinence, which was defined as no alcohol consumption. To be considered abstinent, the patient's self-report had to be in accordance with the investigated clinical assessment and the result of a breath analyser." |
| measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | nced by knowledge of intervention received?                      | NA            |  |
|                               | Risk of bias judgement   |   |  | Low           | Double-blind design and self-reporting outcome (confirmed by biochemistry results) put this domain as low risk of bias.  |
|                               | Are the reported outcome data likely to have bee                                     | n selected, on the basis of   | the results, from  |               |  |
| Bias in selection             | 5.1 multiple outcome measurements (e.g. sca  | les, definitions, time points   | ) within the outcome domain?                                     | N             |  |
| of the reported result        | 5.2 multiple analyses of the data?   |   |  | N             |  |
|                               | Risk of bias judgement   |   |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain.  |
| Overall bias                  | Risk of bias judgement   |   |  | Some concerns | Lack of detailed methods for the randomisation process and substantial difference in the reasons for missing data, together, these contributed to "some concerns" in overall bias for this trial.  |

| Reference Florez 2010 Aim assignment to intervention (the 'intention-to-treat' effect) Source | Journal article(s) with results of the trial |
|---|--|
|---|--|

| Outcome                                  | Abstinence (6 months)  | Results                        | 38/91 (Naltrexone 50 mg) vs 43/91 (Topiramate       | e 200 mg)     |   |
|--|--|--------------------------------|---|---------------|---|
| Domain                                   | Signalling question  |                                |   | Response      | Comments  |
|  | 1.1 Was the allocation sequence random?  |                                |   | NI            |   |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited    | I and assigned to interventions?                    | NI            | Only stated "random"  |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | t a problem with the randor    | nization process?                                   | PN            | "At baseline, the 2 treatment groups were homogeneous with respect to sociodemographic, clinical, and alcoholrelated variables ( tables 1–3 )."   |
|  | Risk of bias judgement   |                                |   | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |
|  | 2.1 Were participants aware of their assigned into                                   | ervention during the trial?    |   | Υ             | naturalistic design   |
|  | 2.2 Were carers and trial personnel aware of part                                    | ticipants' assigned interver   | ation during the trial?                             | Υ             | riadulatistic designi   |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve    | ntion beyond what would be expected in usual        | NI            |   |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                           | tended intervention unbala     | nced between groups and likely to have affected the | NA            |   |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | y to have affected the outo    | ome?  | N             | No evidence of swapping   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | bstantial impact (on the es    | timated effect of intervention) of analysing        | NA            |   |
|  | Risk of bias judgement   |                                |   | Some concerns | The open label design in this trial might prompt deviations from the intended interventions, contributing to "some concerns" in this domain.  |
|  | 3.1 Were outcome data available for all, or nearly                                   | y all, participants randomiz   | ed?   | Υ             | "The 2 treatments did not differ with respect to treatment adherence, which was high in both groups." >90% for both at 3 months   |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ing outcome data and reas      | ons for missing outcome data similar across         | NA            |   |
| 4-4-                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | ts were robust to the prese    | nce of missing outcome data?                        | NA            |   |
|  | Risk of bias judgement   |                                |   | Low           | The proportions of missing data were small, suggesting "Low" risk of bias.  |
| Disc. in                                 | 4.1 Were outcome assessors aware of the interven                                     | ention received by study pa    | articipants?  | Y             | *Alcohol intake was assessed at each treatment session. Both the patient and the significant other were interviewed and the higher reported intake level was used.*   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe    | nced by knowledge of intervention received?         | PY            | Outcomes might be influenced by the knowledge of interventions.   |
|  | Risk of bias judgement   |                                |   | High          | High risk of bias due to outcomes can be influenced by the knowledge of interventions.  |
|  | Are the reported outcome data likely to have bee                                     | n selected, on the basis of    | the results, from                                   |               |   |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca  | ales, definitions, time points | i) within the outcome domain?                       |               | "Alcohol intake was assessed at each treatment session. Both<br>the patient and the significant other were interviewed and the higher reported intake level was used."  |
|  | 5.2 multiple analyses of the data?   |                                |   | PN            |   |
|  | Risk of bias judgement   |                                |   | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |
| Overall bias                             | Risk of bias judgement   |                                |   | High          | Lack of details in randomisation and open-label design contributed to "High" risk of bias in this trial.  |

|  |   |                                | assignment to intervention (the 'intention-to-     |               |  |  |  |
|--|---|--------------------------------|--|---------------|--|--|--|
| Reference                                | GATE 2 study  | Aim                            | treat' effect)                                     | Source        | Conference abstract(s) about the trial; Personal communication with trialist   |  |  |
| Outcome                                  | Abstinence (12 months)  | Results                        | 63/154 (GHB (44.3-52.5 mg/kg)) vs 48/160 (P        | Placebo)      | ebo)   |  |  |
| Domain                                   | Signalling question   |                                |  | Response      | Comments   |  |  |
|  | 1.1 Was the allocation sequence random?   |                                |  | NI            |  |  |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until   | participants were recruited    | d and assigned to interventions?                   | NI            |  |  |  |
| process                                  | 1.3 Were there baseline imbalances that suggest   | t a problem with the randor    | mization process?                                  | NI            |  |  |  |
|  | Risk of bias judgement  |                                |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.                            |  |  |
|  | 2.1 Were participants aware of their assigned into                                      | ervention during the trial?    |  | PN            | double-bind"   |  |  |
|  | 2.2 Were carers and trial personnel aware of par  | ticipants' assigned interver   | ntion during the trial?                            | PN            | GOUNTE-UNITA   |  |  |
|  | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation practice?                            | s from the intended interve    | ention beyond what would be expected in usual      | NA            |  |  |  |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                              | tended intervention unbala     | nced between groups and likely to have affected th | NA NA         |  |  |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                     | y to have affected the outc    | ome?   | PN            | No evidence of switching patients  |  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su<br>participants in the wrong group? | ubstantial impact (on the es   | stimated effect of intervention) of analysing      | NA            |  |  |  |
|  | Risk of bias judgement  |                                |  | Low           | Double-blind design employed in this trial put "Low" risk of bias in deviation from intended interventions.                      |  |  |
|  | 3.1 Were outcome data available for all, or nearly                                      | y all, participants randomiz   | eď?  | N             | Very a few participants completed the trial -48% and 36% of patients left at 6 months.   |  |  |
|  | 3.2 If N/PN/NI to 3.1: Are the proportions of miss intervention groups?                 | ing outcome data and reas      | ons for missing outcome data similar across        | PN            | No reasons were provided   |  |  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that resul                                     | Its were robust to the prese   | ence of missing outcome data?                      | PN            | No sensitivity analyses  |  |  |
|  | Risk of bias judgement  |                                |  | High          | High porportion of missing data and imbalanced missing data without sensitivity analysis put "high" risk of bias in this domain. |  |  |
| Direction                                | 4.1 Were outcome assessors aware of the interv  | rention received by study p    | articipants?                                       | PN            | "double-blind"   |  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the  | outcome likely to be influe    | enced by knowledge of intervention received?       | NA            |  |  |  |
|  | Risk of bias judgement  |                                |  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.  |  |  |
|  | Are the reported outcome data likely to have bee  | en selected, on the basis of   | the results, from                                  |               |  |  |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca   | ales, definitions, time points | s) within the outcome domain?                      | NI            |  |  |  |
|  | 5.2 multiple analyses of the data?  |                                |  | NI            |  |  |  |

|              | Risk of bias judgement | Some concerns | No full study report put this domain as "some concerns"   |
|--------------|------------------------|---------------|---|
| Overall bias | Risk of bias judgement | High          | "High" risk of bias due to lack of full reports, details of randomisation process and missing data. |

| Reference                                | Barrias 1997   | Aim                           | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial  |  |
|--|--|-------------------------------|--|---------------|---|--|
| Outcome                                  | Abstinence (360 days) Results 31/152 (Placebo) vs 76/172 (Acamprosate 15             |                               |  | 98 mg)        |   |  |
| Domain                                   | Signalling question  |                               |  | Response      | Comments  |  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            | Only stated "random" but no methods were mentioned  |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until                                      | participants were recruited   | d and assigned to interventions?                             | NI            | Only stated. Failubilit but no metrous were menibried   |  |
| process                                  | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor     | mization process?  | N             | No significant difference between groups (Table 3)  |  |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.   |  |
|  | 2.1 Were participants aware of their assigned into                                   | ervention during the trial?   |  | PN            | -"double-blind"   |  |
|  | 2.2 Were carers and trial personnel aware of part                                    | ticipants' assigned interver  | ntion during the trial?                                      | PN            | - uuulie-viiriu   |  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve   | ention beyond what would be expected in usual                | NA            |   |  |
| intended                                 | 2.4 If Y/PY to 2.3: Were these deviations from intoutcome?                           | ended intervention unbala     | nced between groups and likely to have affected th           | NA NA         |   |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                  | y to have affected the outc   | ome?   | N             | No evidence of switching  |  |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | bstantial impact (on the es   | timated effect of intervention) of analysing                 | NA            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.  |  |
|  | 3.1 Were outcome data available for all, or nearly                                   | all, participants randomiz    | ed?  | N             | 45% missing from placebo and 43% missing from ACP over course of entire study. No breakdown by time point.  |  |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ing outcome data and reas     | ions for missing outcome data similar across                 | PY            | Table 1 and 5, % and reasons seem comparable between treatment arms.  |  |
|  | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | ts were robust to the prese   | ence of missing outcome data?                                | PN            | No senstivity analyses  |  |
|  | Risk of bias judgement   |                               |  | Low           | Although there were some missing data, results still stood in consideration of missing data balanced betwee groups. "Low" risk of bias i domain was rated.  |  |
| Disc. In                                 | 4.1 Were outcome assessors aware of the interven                                     | ention received by study p    | articipants?   | PN            | "double-blind"  |  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the                                     | outcome likely to be influe   | inced by knowledge of intervention received?                 | NA            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | Double-blind design and self-reporting outcome put this domain as low risk of bias.   |  |
|  | Are the reported outcome data likely to have bee                                     | n selected, on the basis of   | the results, from  |               |   |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. sca  | les, definitions, time points | s) within the outcome domain?                                | PN            |   |  |
|  | 5.2 multiple analyses of the data?   |                               |  | PN            |   |  |
|  | Risk of bias judgement   |                               |  | Low           | No protocol was found but nature of outcome, abstinence, presents low risk of selected reported results and the authors described the method section clearly. Thus, we rated "Low" risk of bias in this domain. |  |
| Overall bias                             | Risk of bias judgement   |                               |  | Some concerns | Some concerns from lack of randomisation process details.   |  |

| Reference                           | PREDICT study  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source   | Journal article(s) with results of the trial; Non-commercial trial registry record (e.g. ClinicalTrials.gov record); Research ethics application              |
|-------------------------------------|--|-----------------------------|--|----------|---|
| Outcome                             | Abstinence (90 days) Results 76/172 (Acamprosate 1998 mg) vs 73/169 (Na              |                             | itrexone 100mg) vs 41/86 (Placebo)                           |          |   |
| Domain                              | Signalling question  |                             |  | Response | Comments  |
|                                     | 1.1 Was the allocation sequence random?  |                             |  | Υ        | "using an imbelanced block-randomization algorithm"   |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until                                      | participants were recruited | d and assigned to interventions?                             | PY       | "the trial register stated "triple" masking, which suggest possible allocation concealment."  |
| process                             | 1.3 Were there baseline imbalances that suggest                                      | a problem with the randor   | mization process?  | N        | No significant difference between groups was found  |
|                                     | Risk of bias judgement   |                             |  | Low      | This study employed adequate randomisation methods in the trial and represents "Low" risk of bias in the randomisation process.                               |
|                                     | 2.1 Were participants aware of their assigned into                                   | ervention during the trial? |  | PN       | -"double-blind"   |
|                                     | 2.2 Were carers and trial personnel aware of part                                    | icipants' assigned interver | ntion during the trial?                                      | PN       | - GOUNG-CHING   |
| Bias due to                         | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                        | s from the intended interve | ention beyond what would be expected in usual                | NA       |   |
| deviations from<br>intended         | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?                          | ended intervention unbala   | nced between groups and likely to have affected th           | NA NA    |   |
| interventions                       | 2.5 If NFN/NI to 2.4: Were these deviations likely to have affected the outcome?     | N                           | No evidence of switches.                                     |          |   |
|                                     | 2.6 If Y/PY/NI to 2.5: Was there potential for a su participants in the wrong group? | bstantial impact (on the es | stimated effect of intervention) of analysing                | NA       |   |
|                                     | Risk of bias judgement   |                             |  | Low      | Double-blind design and ITT analysis employed in this trial put "Low" risk of bias in deviation from intended interventions.                                  |
|                                     | 3.1 Were outcome data available for all, or nearly all, participants randomized?     |                             |  | N        | There were some drop-outs among groups (more than 10%)  |
| Bias due to                         | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?             | ng outcome data and reas    | ons for missing outcome data similar across                  | PY       | The proportions of missing data among groups were similar between groups.   |
| missing outcome data                | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                 | ts were robust to the prese | ence of missing outcome data?                                | PN       | No sensitivity analysis   |
|                                     | Risk of bias judgement   |                             |  | Low      | Although there were some missing data, results still stood in consideration of balanced missing data among groups. "Low" risk of bias in hi domain was rated. |

|                                    | 4.1 Were outcome assessors aware of the intervention received by study participants?                                    | N   | "Double-blind"  |  |  |  |  |  |
|------------------------------------|---|-----|---|--|--|--|--|--|
| Bias in measurement of the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received? | NA  |   |  |  |  |  |  |
|                                    | Risk of bias judgement  | Low | Double-blind design put this domain as low risk of bias.  |  |  |  |  |  |
|                                    | Are the reported outcome data likely to have been selected, on the basis of the results, from                           |     |   |  |  |  |  |  |
| Bias in selection of the reported  | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?                    |     | Pre-registered on clinical trials gov, but no definitely given for abstinence, as continuous abstinence not one of the outcomes (data retrieved from personal communication). Based on this, it is unlikely that selective reporting has occured. |  |  |  |  |  |
| '                                  | 5.2 multiple analyses of the data?  |     | Pre-registered on clincial trials gov, but no definitely given for abstinence, as continuous abstinence not one of the outcomes (data retrieved from personal communication). Based on this, it is unlikely that selective reporting has occured. |  |  |  |  |  |
|                                    | Risk of bias judgement  | Low | Protocol was found on ClinicalTrial.gov. No evidence of selection of reporting due to the nature of outcome (abstinence).   |  |  |  |  |  |
| Overall bias                       | Risk of bias judgement  | Low | Low risk of bias  |  |  |  |  |  |

| Reference                                | Coriale 2019   | Aim                           | assignment to intervention (the 'intention-to-<br>treat' effect) | Source        | Journal article(s) with results of the trial   |
|--|--|-------------------------------|--|---------------|--|
| Outcome                                  | Abstinence (365 days)  | Results                       | 0/43 (CBT) vs 4/47 (MET)   |               |  |
|  |  |                               |  |               |  |
|  | 1.1 Was the allocation sequence random?  |                               |  | NI            |  |
| Bias arising from the randomization      | 1.2 Was the allocation sequence concealed until  | participants were recruited   | d and assigned to interventions?                                 | NI            | No information regarding randomisation process   |
| process                                  | 1.3 Were there baseline imbalances that suggest  | a problem with the randor     | mization process?  | PN            | No significant difference between groups was found   |
|  | Risk of bias judgement   |                               |  | Some concerns | No details were given regarding randomisation process, contributed to "some concerns" in this domain.  |
|  | 2.1 Were participants aware of their assigned into                                       | ervention during the trial?   |  | Y             | Two interventions were different - MET with 3 sessions vs CBT with 5 sessions. No blinding information.  |
|  | 2.2 Were carers and trial personnel aware of part  | ticipants' assigned interver  | ntion during the trial?  | PY            | TWO metretions were directly with 3 sessions vs CD1 with 3 sessions. We diffusly information.  |
| Bias due to                              | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviations practice?                            | s from the intended interve   | ention beyond what would be expected in usual                    | PN            | Although patients with MET had less theraputic sessions, it was expected in usual practice.  |
| deviations from                          | 2.4 If Y/PY to 2.3: Were these deviations from into<br>outcome?                          | ended intervention unbala     | nced between groups and likely to have affected the              | NA NA         |  |
| interventions                            | 2.5 If N/PN/NI to 2.4: Were these deviations likely                                      | y to have affected the outc   | ome?   | N             | No evidence of switches.   |
|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a sul<br>participants in the wrong group? | bstantial impact (on the es   | stimated effect of intervention) of analysing                    | NA            |  |
|  | Risk of bias judgement   |                               |  | Low           | Although it was impossible to blind participants in this trial due to nature of interventions employed, this was expected in psychosocial interventions and would not lead to deviation. On the other hand, the authors applied ITT analyses. Together, these contributed to "low" in this domain. |
|  | 3.1 Were outcome data available for all, or nearly                                       | / all, participants randomiz  | ed?  | N             | There were some drop-outs among groups (more than 10%)   |
| Bias due to missing outcome              | 3.2 If N/PN/NI to 3.1: Are the proportions of missi intervention groups?                 | ing outcome data and reas     | ions for missing outcome data similar across                     | PN            | The proportions of missing data among groups were not similar between groups.  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that result                                     | ts were robust to the prese   | ence of missing outcome data?                                    | PN            | No sensitivity analysis  |
|  | Risk of bias judgement   |                               |  | High          | Disproportional missing outcome data led to high risk of bias.   |
| Disa to                                  | 4.1 Were outcome assessors aware of the interven   | ention received by study p    | articipants?   | Y             | It was impossible to blind outcome assessors (participants).   |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the   | outcome likely to be influe   | nced by knowledge of intervention received?                      | PY            | "Blood alcohol levels were measured in all participants by using Alcoscan AL7000" every month. However, the test only provides daily measurement and hard to know the drinking habit throughout the trial period.  |
|  | Risk of bias judgement   |                               |  | Some concerns | Lack of blinding to outcome assessors (participants themselve) and self-reporting outcomes, which put "some concerns" in this domain.  |
|  | Are the reported outcome data likely to have been  | n selected, on the basis of   | the results, from  |               |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scal   | les, definitions, time points | s) within the outcome domain?                                    | PY            | Describes itself as a 2y follow-up study but only has data for the first year. There were other follow-up time points at 45 days, 90 days, an 180 days. Continuous abstinence data is not reported for these timepoints.   |
|  | 5.2 multiple analyses of the data?   |                               |  | N             |  |
|  | Risk of bias judgement   |                               |  | Some concerns | The authors described itself as a 2y follow-up study but only has data for the first year. However, continuous abstinence data were not reported for all the timepoints, leading to some concerns.   |
| Overall bias                             | Risk of bias judgement   |                               |  | High          | Disporportional dropouts and unclear methods in randomisation process led to high risk of bias.  |

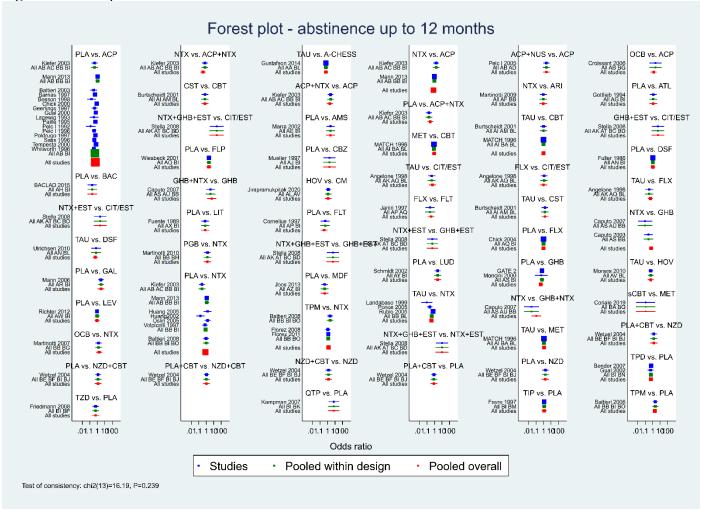
| Reference                           | Jirapramukpitak 2020  | Aim                         | assignment to intervention (the 'intention-to-treat' effect) | Source        | Journal article(s) with results of the trial; Non-commercial trial registry record (e.g. ClinicalTrials.gov record)   |
|-------------------------------------|---|-----------------------------|--|---------------|---|
| Outcome                             | Abstinence (12 weeks)   | Results                     | 12/80 (Home visits) vs 10/79 (Contingency m                  | anagement)    |   |
|                                     |   |                             |  |               |   |
|                                     | 1.1 Was the allocation sequence random?                       |                             |  | Y             | "The unit of randomization was the individual participant. Randomization of participants to different arms was carried out at the Coordinating Centre in the Mental Health Clinic of Thammasat University Hospital using a standard randomization table (Pocock, 1983)" |
| Bias arising from the randomization | 1.2 Was the allocation sequence concealed until               | participants were recruited | d and assigned to interventions?                             | NI            | No adequate information regarding allocation concealment.   |
|                                     | 1.3 Were there baseline imbalances that suggest               | a problem with the randor   | mization process?  | PN            | No significant difference between groups was found  |
|                                     | Risk of bias judgement  |                             |  | Some concerns | Adequate information was given for randomisation generation, however, no information of allocation concealment was given - leading to 'some concerns'.  |
|                                     | 2.1 Were participants aware of their assigned into            | ervention during the trial? |  | PY            | No blinding information was provided and it was impossible to blind the participants.   |
|                                     | 2.2 Were carers and trial personnel aware of part             | icipants' assigned interver | ntion during the trial?                                      | PY            | two olinoing mormation was provided and it was impossible to billiour the participants.   |
|                                     | 2.3 If Y/PY/NI to 2.1 or 2.2: Were there deviation: practice? | s from the intended interve | ention beyond what would be expected in usual                | PN            | Not reported but unlikely   |
| deviations from                     | 2.4 If Y/PY to 2.3: Were these deviations from int outcome?   | ended intervention unbala   | nced between groups and likely to have affected th           | e NA          |   |
| interventions                       | 2.5 If N/PN/NI to 2.4: Were these deviations likely           | to have affected the outc   | ome?   | N             | No evidence of switches.  |

|  | 2.6 If Y/PY/NI to 2.5: Was there potential for a substantial impact (on the estimated effect of intervention) of analysing participants in the wrong group? | NA            |  |
|--|---|---------------|--|
|  | Risk of bias judgement  | Low           | Although it was impossible to blind participants in this trial due to nature of interventions employed, this was expected in psychosocial interventions and would not lead to deviation. On the other hand, the authors applied ITT analyses. Together, these contributed to "low" in this domain. |
|  | 3.1 Were outcome data available for all, or nearly all, participants randomized?  | Y             | Only 1 dropout in each group (1/80 vs 1/42+37)   |
| Bias due to missing outcome              | 3.2 If NIPN/NI to 3.1: Are the proportions of missing outcome data and reasons for missing outcome data similar across intervention groups?                 | NA            |  |
| data                                     | 3.3 If N/PN/NI to 3.1: Is there evidence that results were robust to the presence of missing outcome data?  | NA            |  |
|  | Risk of bias judgement  | Low           | Nearly all patients were followed during the trial.  |
|  | 4.1 Were outcome assessors aware of the intervention received by study participants?  | Y             | It was impossible to blind outcome assessors.  |
| Bias in<br>measurement of<br>the outcome | 4.2 If Y/PY/NI to 4.1: Was the assessment of the outcome likely to be influenced by knowledge of intervention received?                                     | PN            | "All negative samples were confirmed by reports of no drinking provided by participants themselves and their informants."  |
|  | Risk of bias judgement  | Low           | Although there were no blinding to outcome assessors, the authors sought different sources to confirm patients' abstinence status.   |
|  | Are the reported outcome data likely to have been selected, on the basis of the results, from   |               |  |
| Bias in selection of the reported        | 5.1 multiple outcome measurements (e.g. scales, definitions, time points) within the outcome domain?  | N             | Pre-registered on Thailand National trial register, but no definitely given for abstinence nor patient criteria.   |
| result                                   | 5.2 multiple analyses of the data?  | N             |  |
|  | Risk of bias judgement  | Low           | Protocol was found on ClinicalTrial.gov. No evidence of selection of reporting due to the nature of outcome (abstinence).  |
| Overall bias                             | Risk of bias judgement  | Some concerns | Some concerns in overall bias due to no adequate information in allocation concealment.  |

### SUPPLEMENT 7. NETWORK META-ANALYSIS RESULTS

# Abstinence up to 12 months

Figure 1. Forest plot



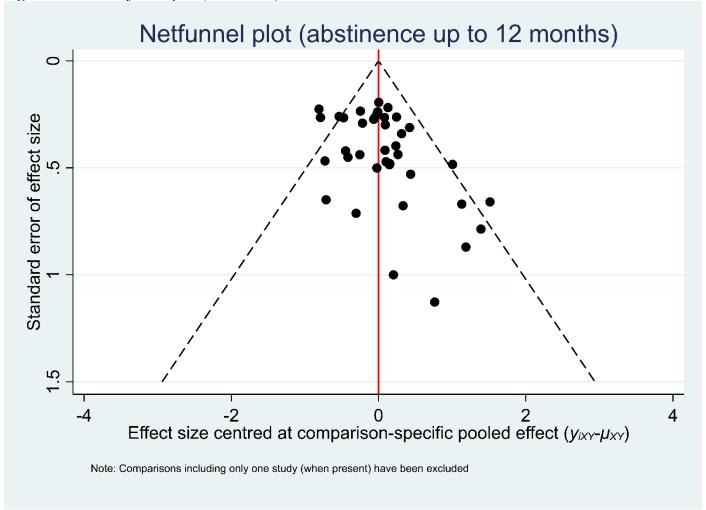
Results are displayed as a point estimate and 95% confidence interval. The blue colour represents direct evidence from each study, grouped by design. The green colour represents pooled treatment effect in each design, estimated by the inconsistency model. The red colour represents overall treatment effect, estimated by the consistency model.

Table 1. Node-splitting (abstinence)

|         |             | Direct   |           | Indirect |           | Difference |           |       |          |
|---------|-------------|----------|-----------|----------|-----------|------------|-----------|-------|----------|
|         |             | Coef.    | Std. Err. | Coef.    | Std. Err. | Coef.      | Std. Err. | P>z   | tau      |
| PLA     | PLA+CBT     |          |           |          |           |            |           |       |          |
| PLA     | QTP         | •        | •         | •        |           | •          |           | •     | •        |
| PLA     | TIP         | •        | •         | •        |           | •          |           | •     | •        |
| PLA     | TPD         |          |           |          |           | •          |           |       | •        |
| PLA     | TPM         | 0.814736 | 0.509303  | 0.540395 | 0.366589  | 0.274342   | 0.629272  | 0.663 | 0.299866 |
| PLA     | TZD         |          | •         |          | •         |            |           |       | ·        |
| A-CHESS | TAU         | -0.51627 | 0.363653  | -1.29957 | 1231.272  | 0.783306   | 1231.272  | 0.999 | 0.290118 |
| ACP     | PLA         | -0.65397 | 0.117392  | 0.304833 | 0.629399  | -0.9588    | 0.643923  | 0.136 | 0.289871 |
| ACP     | ACP+NTX     | 0.92132  | 0.547655  | 0.116536 | 0.836263  | 0.804784   | 0.99201   | 0.417 | 0.2962   |
| ACP     | ACP+NUS     | 0.904456 | 0.569991  | -1.34822 | 1456.669  | 2.252678   | 1456.669  | 0.999 | 0.290118 |
| ACP     | NTX         | 0.122482 | 0.284545  | -0.6017  | 0.234572  | 0.724177   | 0.36849   | 0.049 | 0.256902 |
| ACP     | OCB         | 0.860201 | 1.002166  | 0.076789 | 0.589631  | 0.783412   | 1.162756  | 0.5   | 0.294118 |
| ACP+NTX | PLA         | -1.71765 | 0.567955  | -0.48557 | 0.809991  | -1.23208   | 1.012692  | 0.224 | 0.281689 |
| ACP+NTX | NTX         | -0.41837 | 0.528692  | -2.47313 | 0.84248   | 2.054762   | 0.985661  | 0.037 | 0.261944 |
| AMS     | PLA         |          | •         |          | •         |            |           |       |          |
| ARI     | NTX         | -0.08701 | 0.613236  | 0.620899 | 1287.11   | -0.70791   | 1287.11   | 1     | 0.290118 |
| ATL     | PLA         |          |           |          |           |            |           |       |          |
| BAC     | PLA         | •        | •         |          |           | •          |           |       |          |
| CBT     | CST         | -0.41689 | 0.611872  | -0.46981 | 1.258119  | 0.052918   | 1.376784  | 0.969 | 0.304541 |
| CBT     | MET         | -0.16173 | 0.361184  | -0.10881 | 1.329843  | -0.05292   | 1.376789  | 0.969 | 0.304544 |
| CBT     | TAU         | -0.0194  | 0.298849  | -1.67797 | 984.7167  | 1.658568   | 984.7168  | 0.999 | 0.290118 |
| CBZ     | PLA         |          |           |          |           | •          |           |       | •        |
| CIT/EST | FLX         | 0.180537 | 0.607011  | -0.95736 | 1.490609  | 1.137902   | 1.634749  | 0.486 | 0.291206 |
| CIT/EST | GHB+EST     | 1.609438 | 1.008713  | -1.32642 | 1267.588  | 2.935857   | 1267.589  | 0.998 | 0.290118 |
| CIT/EST | NTX+EST     | 0.916291 | 1.029159  | -2.01988 | 1274.543  | 2.936171   | 1274.544  | 0.998 | 0.290118 |
| CIT/EST | NTX+GHB+EST | 3.218876 | 1.133212  | 0.28268  | 1266.704  | 2.936196   | 1266.704  | 0.998 | 0.290118 |
| CIT/EST | TAU         | -0.8873  | 0.641468  | 0.250613 | 1.446674  | -1.13792   | 1.634752  | 0.486 | 0.291206 |
| CM      | HOV         | 0.19692  | 0.544702  | -0.08256 | 1848.571  | 0.279478   | 1848.571  | 1     | 0.290118 |
| CST     | TAU         | 0.416894 | 0.611873  | 0.363975 | 1.258123  | 0.052919   | 1.376789  | 0.969 | 0.304544 |
| DSF     | PLA         | 0.035164 | 0.372964  | 0.332208 | 0.88312   | -0.29704   | 0.958646  | 0.757 | 0.301316 |
| DSF     | TAU         | -0.35668 | 0.821413  | -0.65372 | 0.494244  | 0.297045   | 0.958643  | 0.757 | 0.301316 |
| FLP     | PLA         |          |           |          |           | •          |           |       | •        |
| FLT     | PLA         | -0.76029 | 0.762042  | -1.5056  | 0.861604  | 0.745314   | 1.150247  | 0.517 | 0.294687 |
| FLT     | FLX         | -1.41707 | 0.799525  | -0.67175 | 0.82694   | -0.74531   | 1.150248  | 0.517 | 0.294687 |
| FLX     | PLA         | 0.005313 | 0.360103  | -0.13521 | 0.623805  | 0.140522   | 0.720282  | 0.845 | 0.300116 |
| FLX     | TAU         | -1.06784 | 0.672678  | -0.49888 | 0.464337  | -0.56896   | 0.817377  | 0.486 | 0.291206 |
| GAL     | PLA         | •        | •         | •        | •         |            |           | •     |          |
| GHB     | PLA         | -0.50268 | 0.340922  | -2.01097 | 0.660777  | 1.508285   | 0.743209  | 0.042 | 0.271361 |
| GHB     | GHB+NTX     | 1.360977 | 0.750039  | 5.387009 | 2.334613  | -4.02603   | 2.424004  | 0.097 | 0.278033 |
| GHB     | NTX         | -1.62158 | 0.637137  | -0.11329 | 0.382275  | -1.50829   | 0.743209  | 0.042 | 0.271361 |
| GHB+EST | NTX+EST     |          | •         |          |           |            |           |       | •        |
| GHB+EST | NTX+GHB+EST | •        | •         |          |           |            |           |       |          |
| GHB+NTX | NTX         | -3.7281  | 1.190263  | 0.297948 | 1.699391  | -4.02605   | 2.424007  | 0.097 | 0.278033 |
| HOV     | TAU         | -0.60305 | 0.469799  | -0.92794 | 733.2632  | 0.324883   | 733.2633  | 1     | 0.290118 |
| LEV     | PLA         | •        | •         |          |           | •          |           |       | •        |
|         |             |          |           |          |           |            |           |       |          |

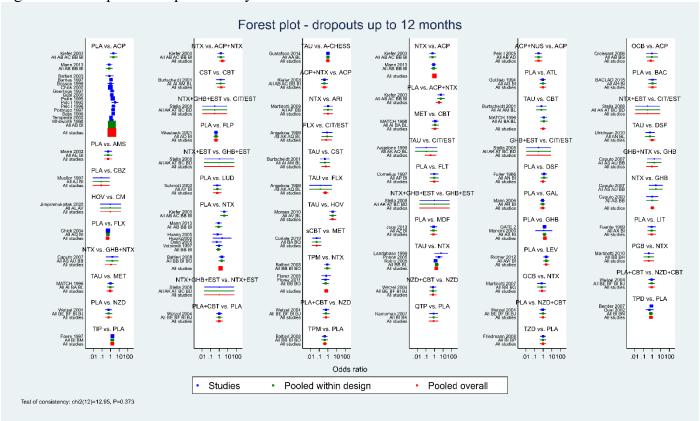
| LIT     | PLA         |          |          |          |          | •        |          |       |          |
|---------|-------------|----------|----------|----------|----------|----------|----------|-------|----------|
| LUD     | PLA         |          |          |          |          |          |          |       |          |
| MDF     | PLA         |          |          |          |          |          | •        |       | •        |
| MET     | TAU         | 0.135269 | 0.363389 | 0.188184 | 1.328039 | -0.05292 | 1.376788 | 0.969 | 0.304544 |
| MET     | sCBT        | -2.19723 | 1.533743 | 0.553999 | 2815.784 | -2.75122 | 2815.783 | 0.999 | 0.290118 |
| NTX     | PLA         | -0.25331 | 0.204816 | -0.46341 | 0.341154 | 0.210096 | 0.403923 | 0.603 | 0.293073 |
| NTX     | OCB         | 0.409785 | 0.556876 | 1.193194 | 1.02073  | -0.78341 | 1.162755 | 0.5   | 0.294118 |
| NTX     | PGB         | 0.37078  | 0.602551 | -0.64357 | 1288.186 | 1.014346 | 1288.186 | 0.999 | 0.290118 |
| NTX     | TAU         | -0.91979 | 0.304091 | -1.15391 | 0.605356 | 0.234114 | 0.676155 | 0.729 | 0.295614 |
| NTX     | TPM         | 0.330564 | 0.274948 | 0.243677 | 0.98146  | 0.086887 | 1.025683 | 0.932 | 0.303161 |
| NTX+EST | NTX+GHB+EST |          |          |          |          |          | •        |       | •        |
| NZD     | PLA         |          |          |          |          |          | •        |       | ē        |
| NZD     | NZD+CBT     |          |          |          |          |          |          |       |          |
| NZD     | PLA+CBT     |          |          | •        |          |          | •        | •     |          |
| NZD+CBT | PLA         |          |          |          |          |          |          |       |          |
| NZD+CBT | PLA+CBT     | •        |          | •        |          |          | •        | •     |          |
|         |             |          |          |          |          |          |          |       |          |

Figure 2. Network funnel plot (abstinence)



# **Dropout up to 12 months**

Figure 3. Forest plot of drop-outs analysis



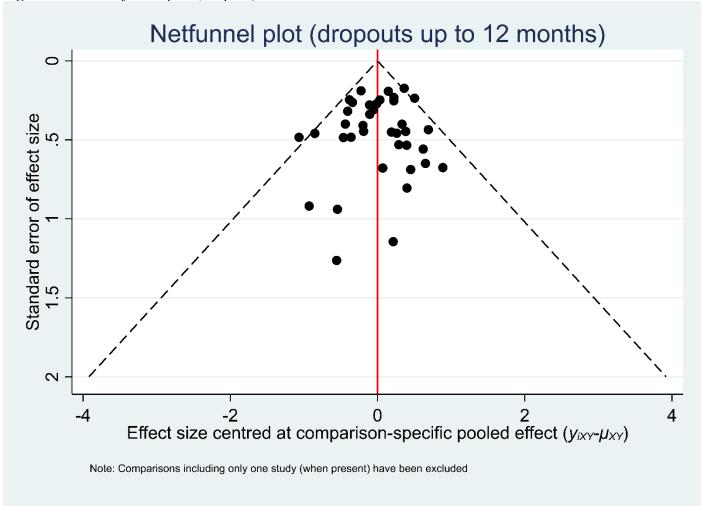
Results are displayed as a point estimate and 95% confidence interval. The blue colour represents direct evidence from each study, grouped by design. The green colour represents pooled treatment effect in each design, estimated by the inconsistency model. The red colour represents overall treatment effect, estimated by the consistency model.

Table 2. Node-splitting (dropouts)

|         |             | Direct        |          | Indirect |          | Difference |          |          |          |
|---------|-------------|---------------|----------|----------|----------|------------|----------|----------|----------|
|         |             | Coef.         | Std. Err | Coef.    | Std. Err | Coef.      | Std. Err | P> z     | tau      |
| PLA     | PLA+CBT     | •             |          |          |          |            |          | •        | •        |
| PLA     | QTP         | •             |          |          |          |            |          | •        | •        |
| PLA     | TIP         | •             | •        |          |          |            |          |          |          |
| PLA     | TPD         | •             |          |          |          |            |          |          | •        |
| PLA     | TPM         | -0.85717      | 0.438536 | -0.75042 | 0.449083 | -0.10676   | 0.625541 | 0.864    | 0.183587 |
| PLA     | TZD         | •             |          |          |          |            |          | •        | •        |
| A-CHESS | TAU         | -0.00038      | 0.311569 | 0.280841 | 1492.644 | -0.28122   | 1492.644 | 1        | 0.176039 |
| ACP     | PLA         | 0.330842      | 0.086642 | -0.16479 | 0.625469 | 0.495634   | 0.633593 | 0.434    | 0.178747 |
| ACP     | ACP+NTX     | -0.92132      | 0.495941 | -0.80972 | 0.757769 | -0.1116    | 0.897215 | 0.901    | 0.183754 |
| ACP     | ACP+NUS     | -1.25276      | 0.512965 | 0.845478 | 1452.535 | -2.09824   | 1452.535 | 0.999    | 0.176039 |
| ACP     | NTX         | -0.3302       | 0.300366 | 0.135351 | 0.232708 | -0.46555   | 0.379473 | 0.22     | 0.179053 |
| ACP     | OCB         | -4.61E-<br>11 | 0.794858 | -0.47552 | 0.642769 | 0.475522   | 1.022228 | 0.642    | 0.178322 |
| ACP+NTX | PLA         | 1.717651      | 0.520764 | 0.22224  | 0.739002 | 1.495412   | 0.929626 | 0.108    | 0.167246 |
| ACP+NTX | NTX         | 0.418369      | 0.489406 | 2.036704 | 0.804256 | -1.61834   | 0.931979 | 0.082    | 0.16917  |
| AMS     | PLA         |               | •        | •        | •        |            |          |          |          |
| ARI     | NTX         | 0.04652       | 0.640139 | -0.71762 | 1474.968 | 0.764144   | 1474.968 | 1        | 0.176039 |
| ATL     | PLA         | •             | •        | •        |          |            |          | •        | •        |
| BAC     | PLA         | •             | •        | •        | •        |            |          | •        | •        |
| CBT     | CST         | 0.348307      | 0.619736 | 1.626864 | 1.57539  | -1.27856   | 1.71627  | 0.456    | 0.178168 |
| CBT     | MET         | 0.210046      | 0.472228 | -1.0685  | 1.639959 | 1.278549   | 1.716268 | 0.456    | 0.178167 |
| CBT     | TAU         | -0.02346      | 0.397696 | -1.52566 | 1013.869 | 1.502203   | 1013.869 | 0.999    | 0.176039 |
| CBZ     | PLA         | •             | •        | •        | •        |            |          | •        | •        |
| CIT/EST | FLX         | -0.2156       | 0.761052 | -3.09107 | 3.070197 | 2.875473   | 3.198721 | 0.369    | 0.179264 |
| CIT/EST | GHB+EST     | -1.18199      | 1.692517 | -2.02125 | 2695.903 | 0.839252   | 2695.903 | 1        | 0.176039 |
| CIT/EST | NTX+EST     | -1.18199      | 1.692517 | -2.01512 | 2815.408 | 0.833126   | 2815.408 | 1        | 0.176039 |
| CIT/EST | NTX+GHB+EST | -1.18199      | 1.692517 | -2.03141 | 2710.643 | 0.849418   | 2710.643 | 1        | 0.176044 |
| CIT/EST | TAU         | -2.20499      | 1.5138   | 0.6705   | 2.070987 | -2.87549   | 3.198729 | 0.369    | 0.17926  |
| CM      | HOV         | -0.01274      | 1.43404  | -2.4357  | 5676.054 | 2.422963   | 5676.054 | 1        | 0.176042 |
| CST     | TAU         | -0.81093      | 0.682475 | 0.467628 | 1.495579 | -1.27856   | 1.71627  | 0.456    | 0.178168 |
| DSF     | PLA         | 0.236114      | 0.464725 | -0.7928  | 0.744771 | 1.028915   | 0.877868 | 0.241    | 0.182219 |
| DSF     | TAU         | -0.539        | 0.677786 | 0.48992  | 0.557905 | -1.02892   | 0.877868 | 0.241    | 0.182219 |
| FLP     | PLA         | •             | •        | •        | •        |            |          | •        | •        |
| FLT     | PLA         |               |          |          |          |            |          | •        | •        |
| FLX     | PLA         | -0.72824      | 0.260791 | -2.16598 | 1.577959 | 1.437743   | 1.599365 | 0.369    | 0.179264 |
| FLX     | TAU         | -1.98939      | 1.550757 | -0.55165 | 0.391318 | -1.43775   | 1.599368 | 0.369    | 0.179268 |
| GAL     | PLA         | •             | •        | •        | •        | •          | •        | •        | •        |
| GHB     | PLA         | 0.362111      | 0.313136 | 0.867034 | 0.650325 | -0.50492   | 0.721766 | 0.484    | 0.178825 |
| GHB     | GHB+NTX     | -1.18199      | 0.587787 | 0.993152 | -1.47256 | 1.670678   | 2.060345 | 2.022035 | 0.308    |
| GHB     | NTX         | 0.477011      | 0.624589 | -0.02791 | 0.361717 | 0.504923   | 0.721762 | 0.484    | 0.178815 |
| GHB+EST | NTX+EST     |               |          | •        |          |            |          | •        | •        |
| GHB+EST | NTX+GHB+EST |               |          | •        |          |            |          | •        | •        |
| GHB+NTX | NTX         | 0.430783      | 0.870471 | -1.62956 | 1.864688 | 2.060346   | 2.022035 | 0.308    | 0.175488 |
| HOV     | TAU         | 1.280591      | 0.483943 | 0.352238 | 1285.977 | 0.928353   | 1285.977 | 0.999    | 0.176039 |
| LEV     | PLA         |               |          |          |          |            | •        |          | •        |

| LIT     | PLA         |          |          |          |          |          |          | •     | •        |
|---------|-------------|----------|----------|----------|----------|----------|----------|-------|----------|
| LUD     | PLA         |          |          |          |          |          |          | •     | •        |
| MDF     | PLA         |          |          |          |          |          |          |       |          |
| MET     | TAU         | -0.03339 | 0.46286  | -1.31195 | 1.647948 | 1.27856  | 1.716265 | 0.456 | 0.178167 |
| MET     | sCBT        | -2.99906 | 0.637673 | -0.05343 | 1332.038 | -2.94563 | 1332.038 | 0.998 | 0.176039 |
| NTX     | PLA         | 0.275413 | 0.212147 | 0.565414 | 0.34505  | -0.29    | 0.415252 | 0.485 | 0.182508 |
| NTX     | OCB         | -0.42121 | 0.614841 | 0.054309 | 0.816653 | -0.47552 | 1.022228 | 0.642 | 0.178322 |
| NTX     | PGB         | -0.81093 | 0.713094 | 0.666773 | 1639.611 | -1.4777  | 1639.611 | 0.999 | 0.176039 |
| NTX     | TAU         | 0.609427 | 0.25855  | -0.5841  | 0.751799 | 1.193525 | 0.796821 | 0.134 | 0.18505  |
| NTX     | TPM         | -0.38548 | 0.313498 | -0.89778 | 0.849904 | 0.512298 | 0.906585 | 0.572 | 0.182587 |
| NTX+EST | NTX+GHB+EST |          |          |          |          |          |          |       |          |
| NZD     | PLA         |          |          |          |          |          |          |       | •        |
| NZD     | NZD+CBT     |          |          |          |          |          |          |       |          |
| NZD     | PLA+CBT     |          |          |          |          |          |          | •     |          |
| NZD+CBT | PLA         |          |          |          |          |          |          |       |          |
| NZD+CBT | PLA+CBT     | •        |          |          |          |          |          | •     |          |
|         |             |          |          |          |          |          |          |       |          |

Figure 4. Network funnel plot (dropout)



#### **SUPPLEMENT 8. ADDITIONAL ANALYSES**

In the additional analyses, we performed meta-regression on the main outcome data. We found no convincing causes of heterogeneity in intervention effects across the five variables we examined (Table 1 and Table 2). The few regression coefficients (3 out of 116) that suggested associations were compatible with chance.

Results of further sensitivity analyses focusing on different time points are presented in Figures S1-S6 for short term, Figures S7-S18 for medium term and Figures S19-S24 for long-term time points. In the medium-term analysis, there was no connected network so two subset network analyses were conducted using TAU (subset 1) and PLA (subset 2) as references.

Results for analyses based on type of interventions appear in Figures S25-S30 for psychotherapy and Figures S31-S36 for pharmacotherapy, with outcomes up to 12 months. Results were broadly in agreement.

The following abbreviations are used in the figures throughout the documents:

A-CHESS = Addiction-Comprehensive Health Enhancement Support System. ACP = acamprosate.

ACP+NTX =acamprosate + naltrexone. ACP+NUS = acamprosate + nurse visits. AMS = amisulpride.

ARI = aripiprazole. ATL = atenolol. BAC = baclofen. CBT = cognitive behavioural therapy. CBZ = carbamazepine. CIT/EST = citalopram or escitalopram. CST = coping skill training. DSF = disulfiram. FLP = flupenthixol. FLT = fluoxetine. FLX = fluvoixamine.

GAL = galantamine. GHB = sodium oxybate. GHB+EST = sodium oxybate + escitalopram.

GHB+NTX = sodium oxybate + naltrexone. HOV = home visit. LEV = levetiracetam. LIT = lithium.

LUD = lisuride. MDF = modafinil. MET = motivational enhancement therapy. NTX = naltrexone.

NTX+EST = naltrexone + escitalopram. NTX+EST+GHB = escitalopram + naltrexone + sodium oxybate. NFZ = nefazodone. NFZ+CBT = nefazodone + cognitive behavioural therapy. OCB = oxcarbazepine. PGB = pregabalin. PLA = placebo. PLA+CBT = placebo + cognitive behavioural therapy. QTP = quetiapine. sCBT = short-form CBT. TAU = treatment as usual. TIP = tiapride. TPD = tiapride. TPM = topiramate. TZD = trazodone.

The following captions for all network plots throughout the documents: The size of circles is proportional to the number of randomised patients and the width of lines is proportional to the number of studies in each direct comparison. The colour of lines represents the overall risk of bias in the majority studies (green: low risk of bias; yellow: some concerns; red: high risk of bias).

# NETWORK META-REGRESSION

Table 1. Abstinence up to 12 months

| Comparisons<br>(vs PLA) | %Female                        | Mean age                  | Detoxification settings      | Detoxification methods      | Continent of study sites    |
|-------------------------|--------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|
| ACP                     | -1.27 (-5.14, 2.6)             | -0.08 (-0.18, 0.02)       | -0.40 (-0.86, 0.06)          | -0.20 (-0.74, 0.34)         | 0.16 (-0.27, 0.58)          |
| СВТ                     | -1.06 (-15.34,<br>13.22)       | 0.11 (-2.26, 2.49)        |                              |                             | 0.00 (-331.51,<br>331.51)   |
| CIT/EST                 | 75.88 (-21806.16,<br>21957.92) | 0.54 (-122.50,<br>123.58) | 1.3 (-1250.35,<br>1252.94)   |                             |                             |
| DSF                     | -0.58 (-7.07, 5.9)             | 0.21 (-0.04, 0.45)        | 0.50 (-1.48, 2.51)           | 0.26 (-1.89, 2.41)          | -0.36 (-2.34, 1.62)         |
| FLT                     | -0.99 (-10.67, 8.68)           | 0.14 (-0.11, 0.38)        |                              | -0.65 (-2.95, 1.65)         | 0.73 (-1.62, 3.09)          |
| FLX                     | 7.12 (-18.67, 32.92)           | 0.33 (0.04, 0.63)*        | 0.10 (-1.74, 1.94)           | 0.94 (-0.99, 2.88)          |                             |
| GHB                     | -1.02 (-7.46, 5.42)            | 0.35 (-0.69, 1.39)        | -0.02 (-2.16, 2.13)          |                             |                             |
| HOV                     | 0.72 (-12057.07,<br>12058.51)  | -0.09 (-66.07,<br>65.90)  | -0.52 (-1722.04,<br>1721.01) | 0.87 (-1789.65,<br>1791.38) | -0.18 (-758.82,<br>758.46)  |
| MET                     | 15.55 (-18501.25,<br>18532.35) | 0.22 (-100.08,<br>100.52) | -1.76 (3199.45,<br>3195.93)  | 2.10 (-2724.46,<br>2728.66) | 1.49 (-2450.35,<br>2453.33) |
| NTX                     | 0.22 (-3.45, 3.89)             | -0.03 (-0.08, 0.02)       | 0.67 (-0.12, 1.46)           | -0.06 (-1.08, 0.96)         | 0.03 (-0.3, 0.35)           |
| OCB                     | 8.02 (-22.14, 38.18)           | -0.9 (-4.57, 2.76)        | 1.17 (-1.18, 3.52)           | -0.86 (-3.33, 1.61)         |                             |
| TAU                     | -0.79 (-4.68, 3.10)            | 0.17 (0.01, 0.32)*        | -0.13 (-1.61, 1.35)          | 1.25 (-0.31, 2.81)          | 0.02 (-331.48,<br>331.53)   |
| TPD                     | 1.11 (-10.42, 12.64)           | 0.06 (-0.44, 0.55)        | -0.13 (-1.45, 1.18)          | -0.13 (-1.49, 1.22)         | 0.13 (-1.32, 1.58)          |
| TPM                     | -3.03 (-10.71, 4.66)           | -0.15 (-0.45, 0.15)       | 1.06 (-0.19, 2.31)           |                             | 0.17 (-0.25, 0.60)          |

Numbers are shown in exponential coefficient (95% confidence intervals).

Table 2. Dropout up to 12 months

| Comparisons<br>(vs PLA) | %Female                        | Mean age                  | Detoxification settings      | Detoxification methods      | Continent of study sites    |
|-------------------------|--------------------------------|---------------------------|------------------------------|-----------------------------|-----------------------------|
| ACP                     | -2.82 (-5.62, -<br>0.03)*      | 0.04 (-0.06, 0.14)        | -0.19 (-0.52, 0.15)          | 0.04 (-0.36, 0.43)          | 0.21 (-0.19, 0.6)           |
| CBT                     | 6.79 (-9.9, 23.48)             | 1.15 (-2.21, 4.51)        |                              |                             | 0.78 (-379.32,<br>380.88)   |
| CIT/EST                 | 100.71 (-39838,<br>40039.62)   | 0.19 (-260.26,<br>260.63) | 2.06 (-2524.57,<br>2528.68)  |                             |                             |
| DSF                     | 3.16 (-2.43, 8.75)             | -0.06 (-0.31, 0.19)       | -1.41 (-3.23, 0.42)          | 0.51 (-1.4, 2.43)           | 1.08 (-0.66, 2.82)          |
| FLX                     | 21.20 (-24.45,<br>66.86)       | 0.05 (-0.46, 0.55)        | 1.87 (-1.39, 5.14)           | 1.00 (-2.25, 4.25)          |                             |
| GHB                     | 1.17 (-4.61, 6.96)             | -0.06 (-1.24, 1.11)       | 0.20 (-2.14, 2.54)           |                             |                             |
| HOV                     | 11.88 (-45625.06,<br>45648.82) | 0.31 (-196.64,<br>197.26) | -0.84 (-3953.41,<br>3951.74) | 0.20 (-5510.28,<br>5510.67) | 0.41 (-1214.97,<br>1215.80) |
| MET                     | 6.06 (-14398.85,<br>14410.97)  | 0.48 (-122.24,<br>123.39) | -1.04 (-1290.66,<br>1288.58) | 0.58 (-1296.58,<br>1296.58) | 1.60 (-1336.98,<br>1340.18) |
| NTX                     | -0.49 (-3.79, 2.81)            | 0.02 (-0.05, 0.08)        | -0.76 (-0.56, 0.44)          | -0.32 (-1.23, 0.59)         | -0.15 (-0.43, 0.13)         |
| OCB                     | 4.30 (-21.27, 29.87)           | -0.91 (-4.27, 2.44)       | -0.18 (-2.27, 1.90)          | -0.67 (-2.82, 1.49)         |                             |
| TAU                     | 0.40 (-3.08, 3.87)             | -0.13 (-0.29, 0.04)       | -0.02 (-1.42, 1.38)          | -1.32 (-2.73, 0.09)         | 0.14 (-379.96,<br>380.24)   |
| TPD                     | 4.24 (-5.97, 14.45)            | 0.21 (-0.32, 0.74)        | -0.50 (-1.78, 0.77)          | -0.50 (-1.81, 0.80)         | 0.50 (-0.80, 1.81)          |
| TPM                     | -1.88 (-9.51, 5.75)            | -0.06 (-0.42, 0.31)       | -0.42 (-1.75, 0.92)          |                             | -0.01 (-0.42, 0.41)         |

Numbers are shown in exponential coefficient (95% confidence intervals)

# SHORT-TERM

Figure S1. Network plot of abstinence analysis in short-term (3-6 months)

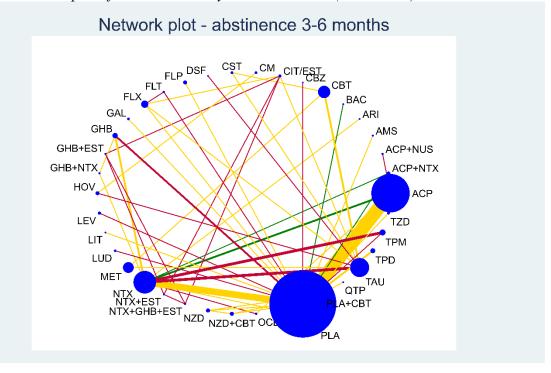


Figure S2. Interval plot of abstinence analysis in short-term (3-6 months)

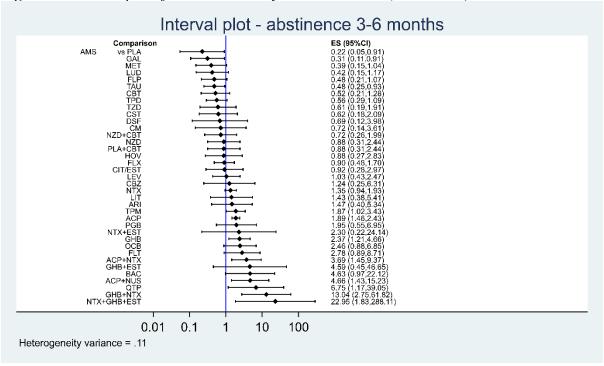


Figure S3. Forest plot of abstinence analysis in short-term (3-6 months)

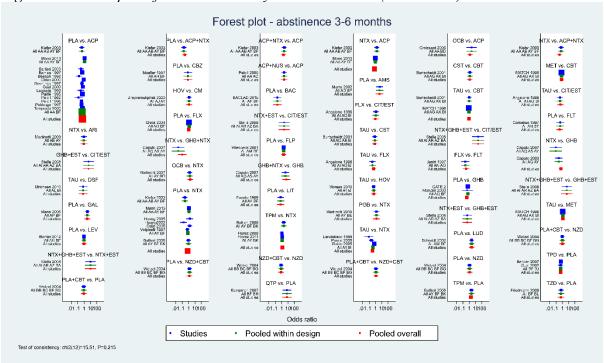


Figure S4. Network plot of drop-out analysis in short-term (3-6 months)

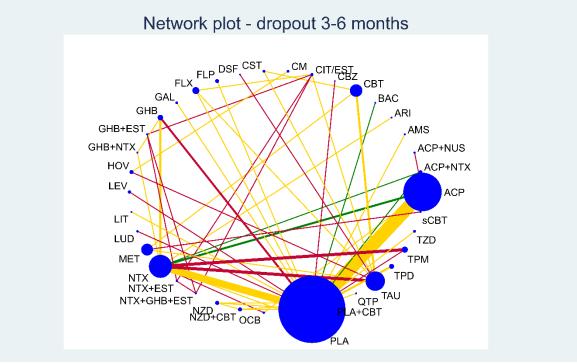


Figure S5. Interval plot of dropout analysis in short-term (3-6 months)

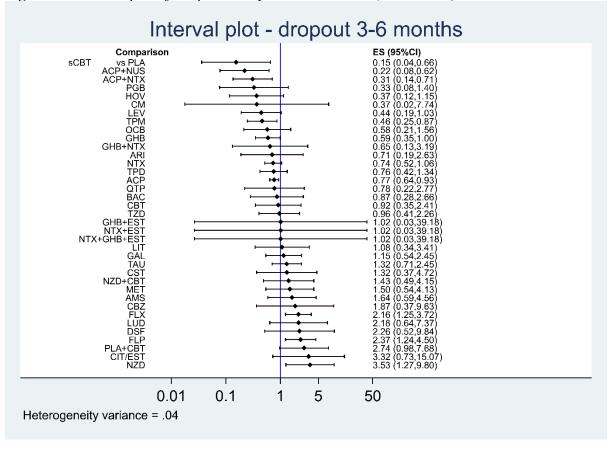
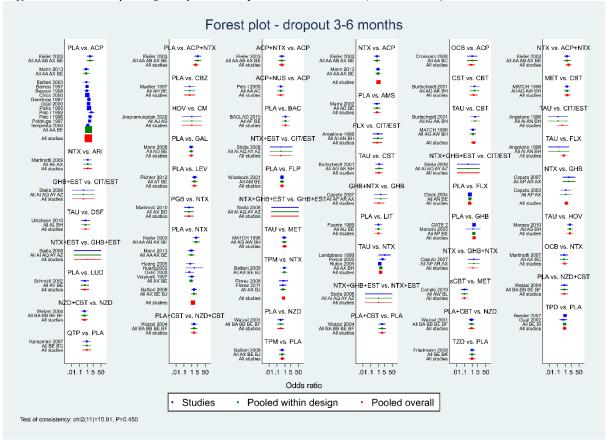


Figure S6. Forest plot of dropout analysis in short-term (3-6 months)



# **MEDIUM-TERM**

Figure S7. Network plot of abstinence analysis in medium-term (6-12 months) (Subset 1)



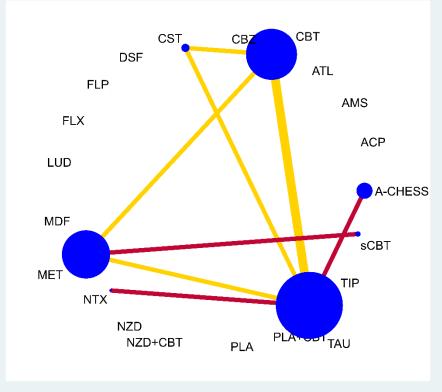


Figure S8. Interval plot of abstinence analysis in medium-term (6-12 months) (Subset 1)

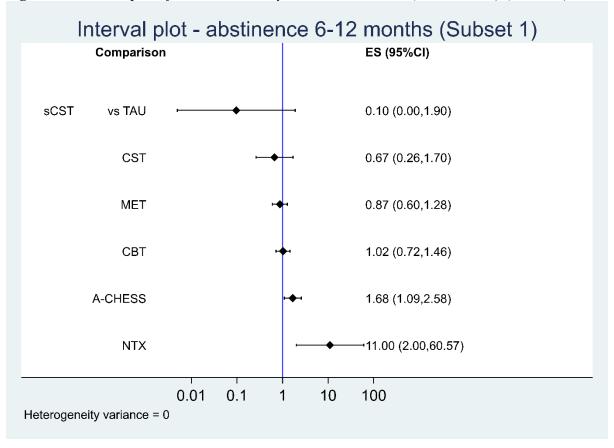


Figure S9. Forest plot for abstinence analysis in medium-term (6-12 months) (Subset 1)

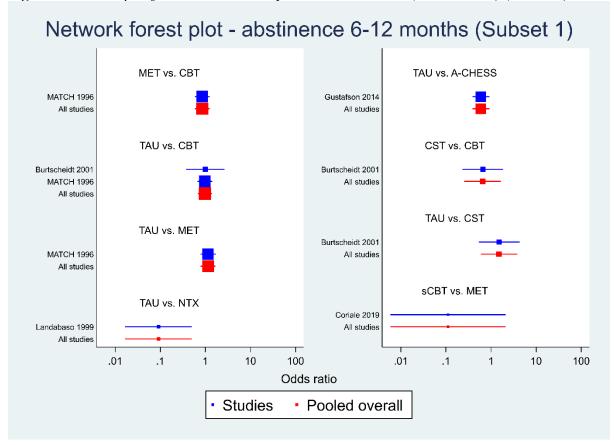
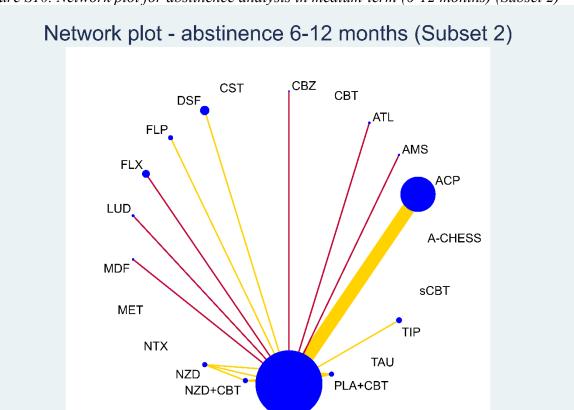


Figure S10. Network plot for abstinence analysis in medium-term (6-12 months) (Subset 2)



PLA

Figure S11. Interval plot for abstinence analysis in medium-term (6-12 months) (Subset 2)

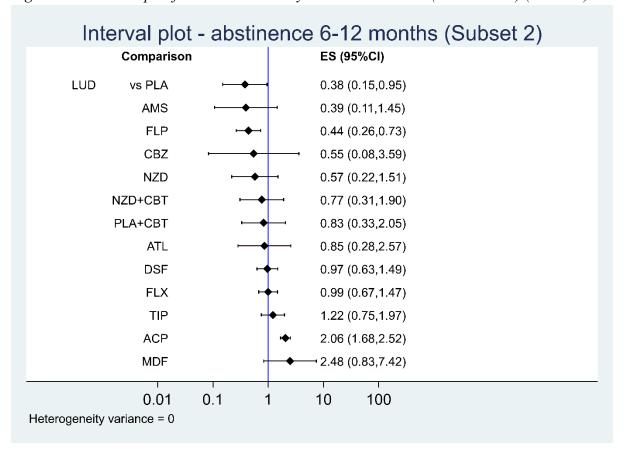


Figure S12. Forest plot for abstinence analysis in medium-term (Subset 2)

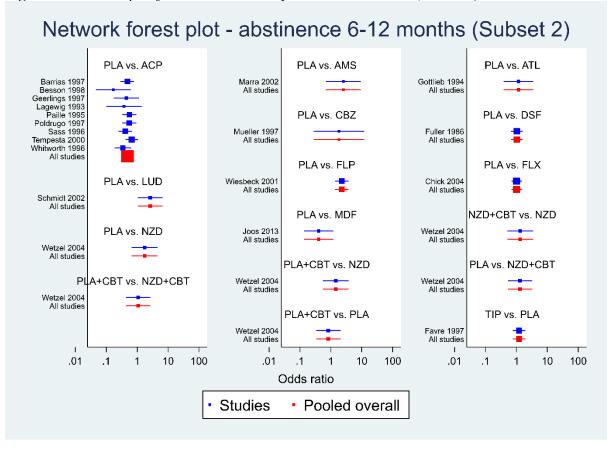


Figure S13. Network plot of dropout analysis in medium-term (6-12 months) (Subset 1)

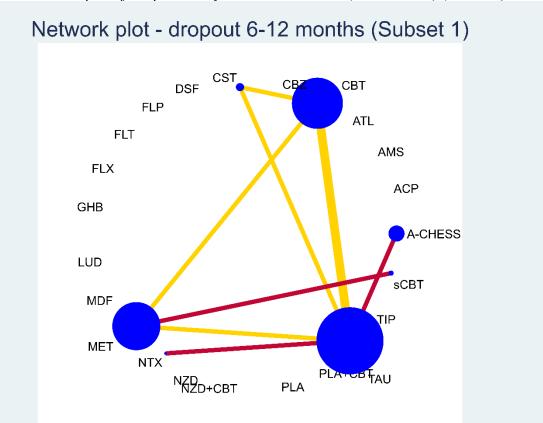


Figure S14. Interval plot of dropout analysis in medium-term (6-12 months) (Subset 1)

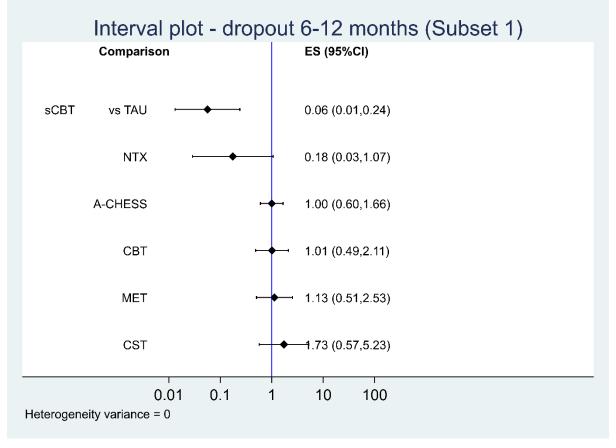


Figure S15. Forest plot of dropout analysis in medium-term (6-12 months) (Subset 1)

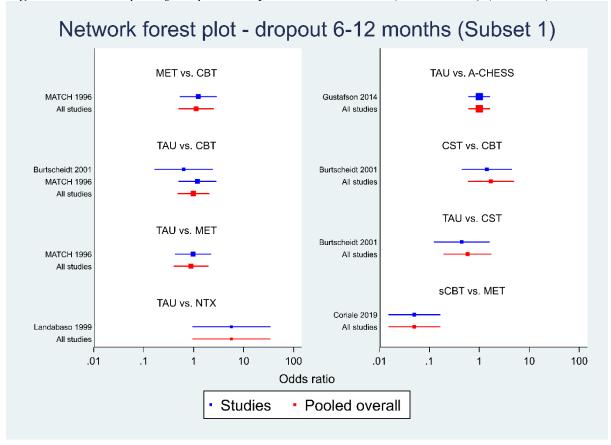


Figure S16. Network plot of dropout analysis in medium-term (6-12 months) (Subset 2)

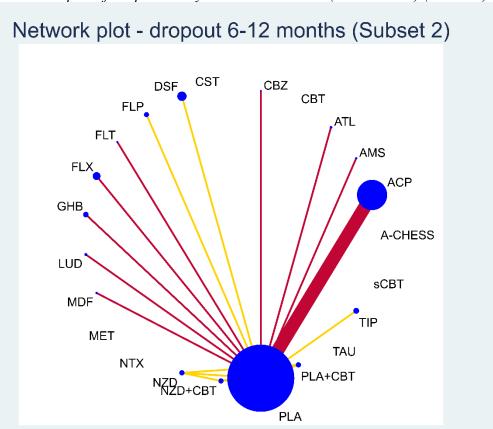


Figure S17. Interval plot of dropout analysis in medium-term (6-12 months) (Subset 2)

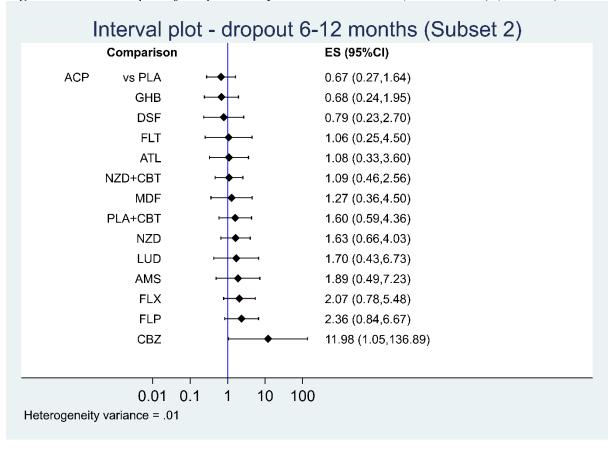
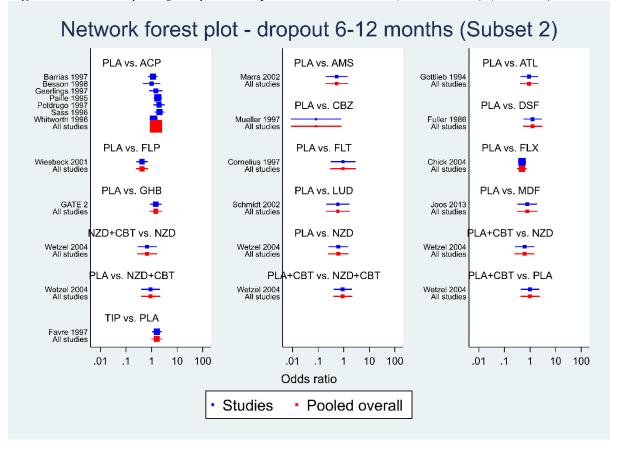


Figure S18. Forest plot of dropout analysis in medium-term (6-12 months) (Subset 2)



# LONG-TERM Figure S19. Network plot of abstinence analysis in long-term (12-24 months)

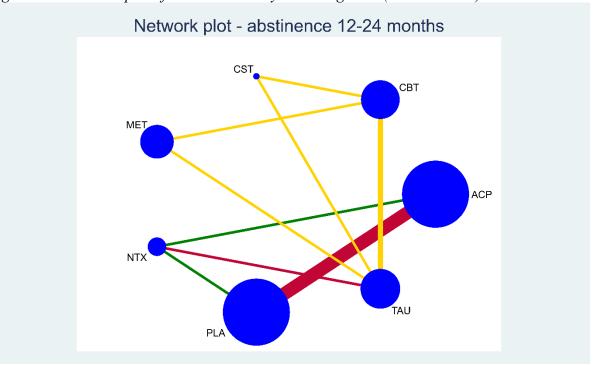
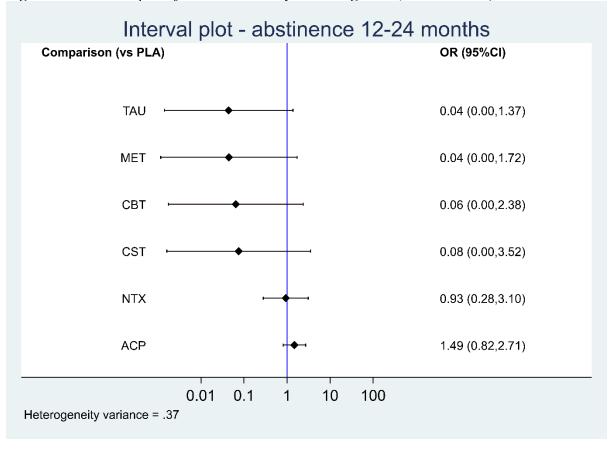


Figure S20. Interval plot of abstinence analysis in long-term (12-24 months)



Forest plot - abstinence 12-24 months PLA vs. ACP NTX vs. ACP MET vs. CBT CST vs. CBT TAU vs. CBT Burtscheidt 2001 All B C G MATCH 1996 All B D G TAU vs. CST All studies TAU vs. MET MATCH 1996 All B D G All studies PLA vs. NTX Mann 2013 All A E F All studies TAU vs. NTX Landabaso 1999 All E G All studies .01 10 100 .01 10 100 Odds ratio Pooled within design Studies Pooled overall Test of consistency: chi2(2)=5.68, P=0.058

Figure S21. Forest plot of abstinence analysis in long-term (12-24 months)

Network plot - dropout 12-24 months СВТ MET ACP

Figure S22. Network plot of dropout analysis in long-term (12-24 months)

Figure S23. Interval plot of dropout analysis in long-term (12-24 months)

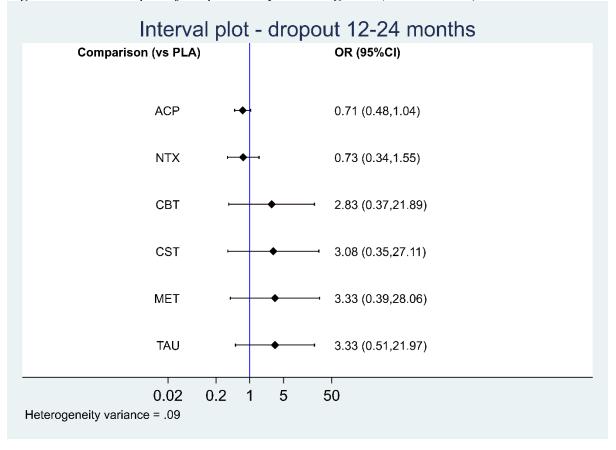
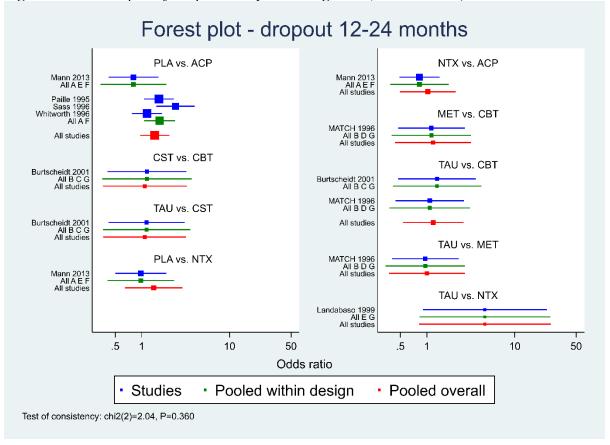


Figure S24. Forest plot of dropout analysis in long-term (12-24 months)



## STUDIES WITH PSYCHOTHERAPY ONLY

Figure S25. Network plot of abstinence analysis up to 12 months

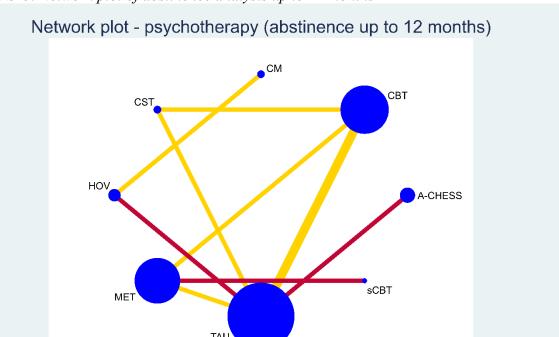


Figure S26. Interval plot of abstinence analysis up to 12 months

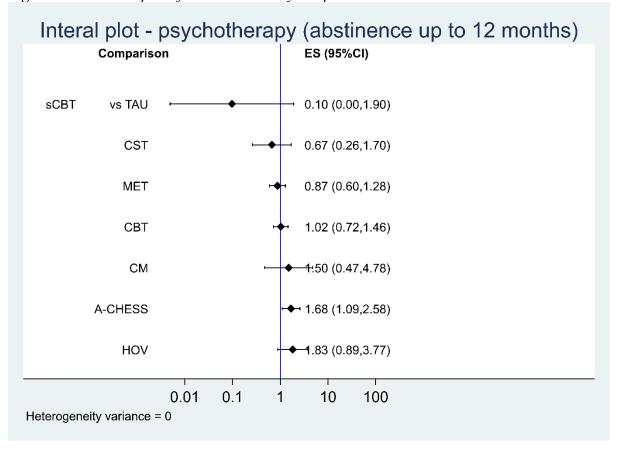


Figure S27. Forest plot of abstinence analysis up to 12 months

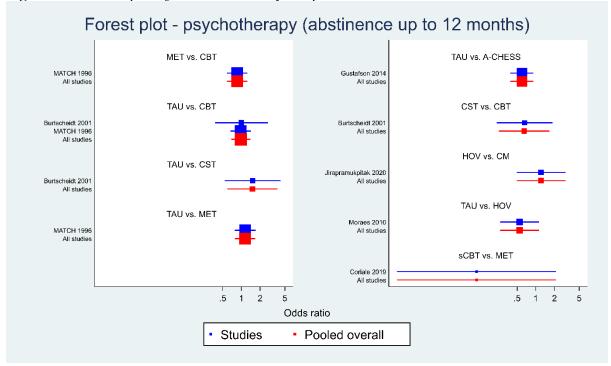


Figure S28. Network plot of dropout analysis up to 12 months

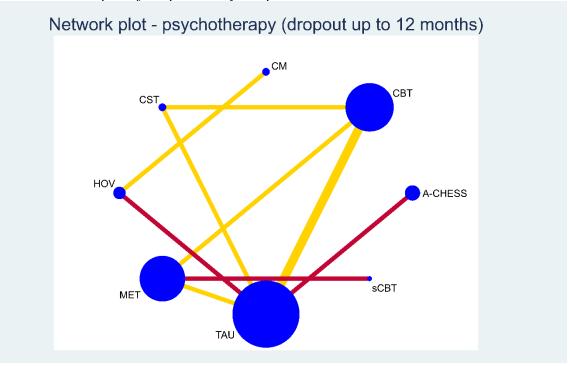


Figure S29. Interval plot of dropout analysis up to 12 months

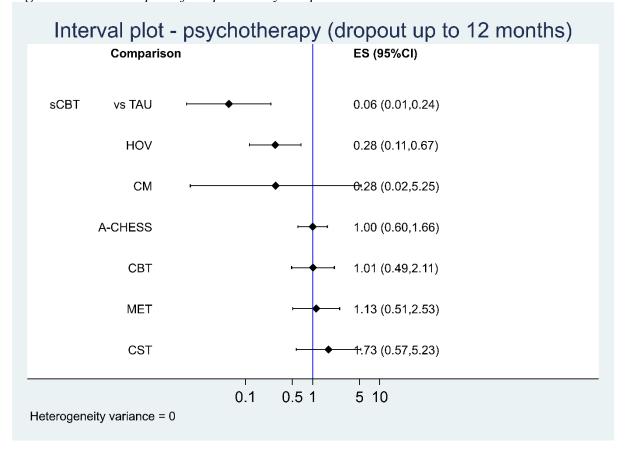
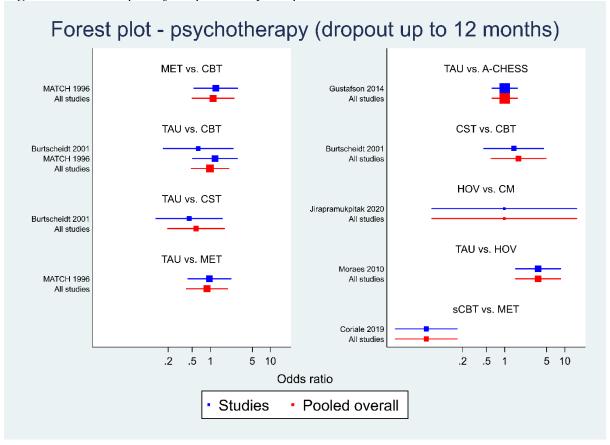


Figure S30. Forest plot of dropout analysis up to 12 months



## STUDIES WITH PHARMACOTHERAPY

Figure S31. Network plot of abstinence analysis up to 12 months

## Network plot - pharmacotherapy (abstinence up to 12 months)

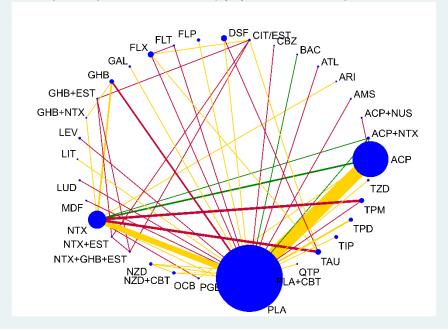


Figure S32. Interval plot of abstinence analysis up to 12 months

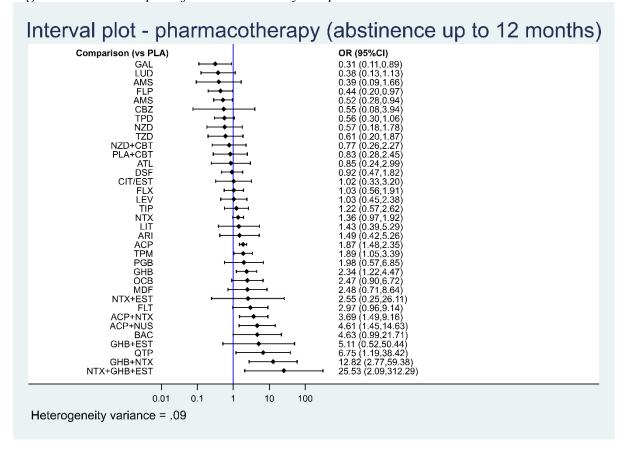


Figure S33. Forest plot of abstinence analysis up to 12 months

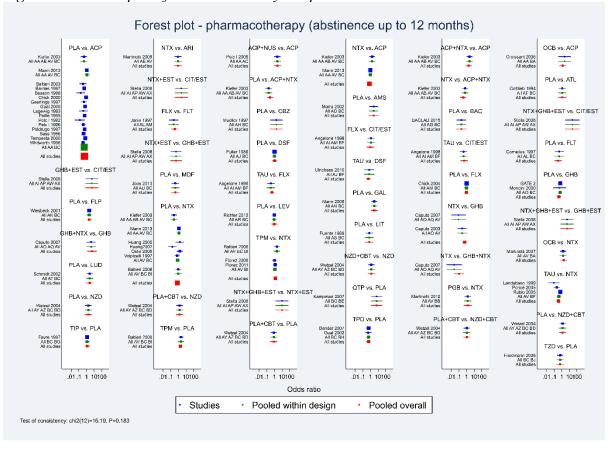


Figure S34. Network plot of dropout analysis up to 12 months

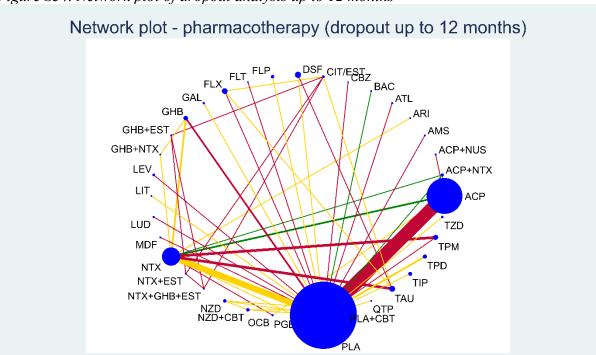


Figure S35. Interval plot of dropout analysis up to 12 months

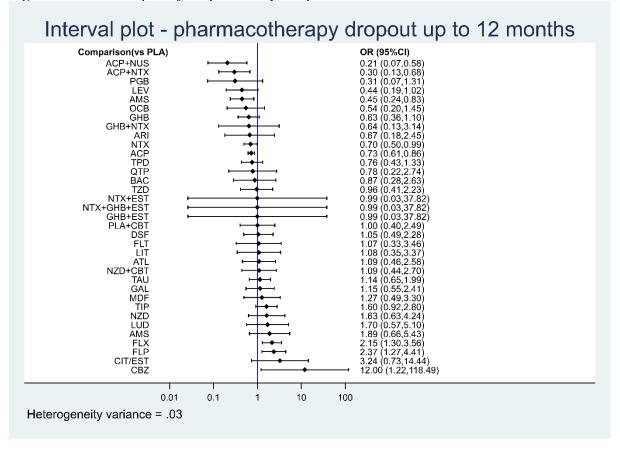


Figure S36. Forest plot of dropout analysis up to 12 months

