**SUPPLEMENTARY DATA PSM-D-14-00251 (Lemmens *et al.*)**

**DATA SUPPLEMENT I:** Detailed procedure of statistical analyses

*Statistical Analyses*

We started by mapping out patient flow from screening to randomization. After that, we explored pre-treatment demographic and clinical variables of the three groups using descriptive statistics and checked for baseline differences between conditions in terms of size and clinical importance. Subsequently, therapist characteristics, treatment- and study compliance, and treatment integrity was determined, followed by examination of descriptive statistics on all clinical outcome measures at each time-point.

In order to examine whether CT and IPT differed in the reduction of depressive symptoms mixed (multilevel) regression analysis using restricted maximum likelihood estimation was used. Visual inspection of change on the primary outcome BDI-II over time showed separate linear time slopes for the acute phase and the follow-up. Since it was not possible to fit them in one model, we separately assessed change over time for the Treatment Phase (0-7 months) and the Trial Follow-up Phase (7-12 months). Further inspection of the data and residuals of ordinary mixed regression showed that the assumption of normality was violated by a right skewed distribution from month 7 onwards. Therefore, gamma regression with a log link was used with BDI-II + 1 scores (1 added as gamma regression cannot handle zero’s and quite some participants had zero scores). All analyses were intention-to-treat, meaning that all patients that enrolled in the study were included in the analyses, irrespective of completing therapy or assessments ([Hollis & Campbell 1999](#_ENREF_3)). Acute effects were examined by modeling time effects from baseline to 7 months using an unstructured covariance structure for the repeated parts as simpler models had poorer fit. For the enduring effects (7 – 12 months), a Toeplitz covariance structure was used, being the simplest structure NS different from unstructured.

Our initial basic model was a 3-levelrepeated measures design (therapists, patients and measurements) with depression severity (measured with the BDI-II) as the dependent variable, condition (CT vs. IPT, centered at -0.5 and 0.5) as a between subject variable and time of measurement in weeks as a within-subject factor. We set weeks at zero at 7 months, respectively at 12 months, so that the main effect of condition represented the condition effect at these measurements. The difference between CT and IPT was represented by the time\*condition interaction in the model. Because of relevant differences in baseline severity (BDI-II) and quality of life utilities (EQ5D) between CT and IPT, we controlled for this in all analyses by adding their standardised baseline scores as covariates to all models[[1]](#footnote-1). Despite trying various (simple) models and covariance structures, the estimations including therapists as random level failed to converge, probably because the number of patients nested within therapists was too small. Therefore therapist was omitted from further analyses as a random effect. Nevertheless, the effect of therapist was examined later by adding it as a fixed effect to the final model (see further).

After that, change on secondary outcomes was assessed by testing the 2-level basic model (time, condition, and time\*condition, controlling for baseline BDI-II and EQ5D scores) on dependent variables BSI, WSAS, RAND36 and EQ5D. For RAND36, mixed models regression was used. Given the right skewed distribution of BSI and WSAS scores, we used gamma regression with a log link for BSI +1 and WSAS+1 scores. Since EQ5D utilities showed a left skewed distribution, scores were transformed ((-1 \* EQ5D utility score + 1.01)\*100) to meet assumptions of gamma regression.

Effect sizes Cohen’s *d* and *r* ([Cohen 1988](#_ENREF_1)) for the continuous primary and secondary outcomes were computed from the multilevel estimates. Within-condition change was defined as Cohen’s *d* = (baseline mean – mean at time *i*)/(√baseline variance). Between-group effect sizes were determined by calculating the difference between the within-condition effect sizes of CT and IPT at time *i*. *r* was defined as √(*F*/(*F* + d.f.)).

Then, we tested whether initial depression severity moderated the effect of time and condition by adding the two- and three-way interaction(s) of baseline depression severity (continuous standardised BDI-II score) with time and condition to the basic model of the primary outcome BDI-II. The moderator\*condition and moderator\*time\*condition interactions were of primary interest in this analysis. Power analysis showed that our study was powered at 80% to detect medium effect size interactions (*f* = 0.25) at two tailed α = .05. Non-significant interactions were hierarchically excluded from the model until only statistically significant prognostic variables remained. Subsequently, we checked for influence of therapist and number of sessions by univariately adding them as fixed factors (main effect, and interaction with time) to the final model. To conclude, several other baseline characteristics that displayed potentially relevant differences between the treatment groups (gender, work- and marital status) were added to the model as covariates to see whether they would affect the results. All effects were tested at the *p* < 0.05 level (two-tailed).

Subsequently, we examined whether therapy outperformed the waiting list by comparing change in BDI-II scores of patients in the active groups after 2 months of therapy with those of patients in the WLC condition after 2 months of no-treatment. All analyses were carried out in SPSS version 21.0 and results are reported according to the CONSORT guidelines for reporting trials ([Moher *et al.* 2010](#_ENREF_7)).

The methodology of Jacobson & Truax ([1991](#_ENREF_4)) was used to determine the proportion of patients that showed clinically meaningful change on the BDI-II. Response (the minimum amount of decrease in symptoms that has to be accomplished during therapy) was defined as a decrease of at least 9 BDI-II points during the Treatment Phase. Remission (the cut-off point between healthy and ‘ill’) was defined as an absolute value of 9 or less on the BDI-II. To examine frequency differences in response and remission rates between the groups, mixed binary logistic regression with an unstructured covariance structure was used. All models were controlled for standardised baseline BDI-II and EQ5D scores, Time\*Baseline BDI-II, and Condition\*Time. All analyses were carried out in SPSS version 21.0 and results are reported according to the CONSORT guidelines for reporting trials ([Moher *et al.* 2001](#_ENREF_8)).

In order to determine the relative contribution of our study to the field, we meta-analysed findings from all four randomised trials that examined individual CT and IPT (Elkin *et al.* 1989; Luty *et al.* 2007; Quilty *et al.* 2008; Lemmens *et al.* 2014). Using the statistical program Open Meta Analysis ([Wallace *et al.* 2012](#_ENREF_10)), we analysed the post-treatment BDI-II scores with a random-effects model using the unstandardized mean difference score with a 95% confidence interval (CI). Since other trials did not adjust their outcome variable according to baseline values, we included non-covariate corrected means as estimates of the effects of the current study. As a sensitivity analysis, we repeated the analysis with adjusted post-treatment BDI-II scores. The same set of four studies was used to perform trial sequential analysis on the BDI-II. Following [Jakobsen *et al.* (2012](#_ENREF_5)), we conducted two analyses; one with a minimal relevant difference of 4 BDI points and 80% power, and one with more strict presumptions (BDI difference of 3 points and 90% power). Both analyses were based on a type I error of 5% and on the variance of all trials. Similar to the meta-analysis, effects of both non-covariate corrected as well as covariate corrected means as estimates of the effects of the current study were explored. In addition, resembling Jakobsen *et al.* (2012) bias risk was assessed with regard to sequence generation, allocation concealment, intention-to-treat analysis, blinding, drop-out, outcome measure reporting, presence of economic- and academic bias (see data supplement V for a full description of the criteria). An independent rater[[2]](#footnote-2) checked the generated table entries for accuracy.

*References:*

**Cohen J** 1988. *Statistical power analysis for the behavioral sciences.* Hillsdale, NJ, Erlbaum.

**Elkin I, Shea MT, Watkins JT, Imber SD** 1989. National Institute of Mental Health Treatment of Depression Collaborative Research Program: General effectiveness of treatments. *Archives of General Psychiatry* **46,** 971-982.

**Hollis S, Campbell F** 1999. What is meant by intention to treat analysis? Survey of published randomised controlled trials. *British Medical Journal***,** 670-674.

**Jacobson NS, Truax P** 1991. Clinical significance: A statistical approach to define meaningful change in psychotherapy research. *Journal of Consulting and Clinical Psychology* **59,** 12-19.

**Jakobsen JC, Hansen JL, Simonsen S, Simonsen E, Gluud C** 2012. Effects of cognitive therapy versus interpersonal psychotherapy in patients with major depressive disorder: a systematic review of randomized clinical trials with meta-analyses and trial sequential analyses. *Psychological Medicine* **42,** 1343-1357.

**Luty SE, Carter JD, McKenzie JM, Rae AM, Frampton CMA, Mulder RT, Joyce PR** 2007. Randomised controlled trial of interpersonal psychotherapy and cognitive-behavioural therapy for depression. *British Journal of Psychiatry* **190,** 496-502.

**Moher D, Hopewell S, Schulz KF, Montori V, Gotzsche PC, Deveraux PJ, Elbourne D, Egger M, Altman DG** 2010. Research Methods & Reporting: CONSORT 2010 Explanation and Elaboration: Updated guidelines for reporting parallel group ranomised trials. *BMJ (Clinical Research Ed.)* **340,** c869.

**Moher D, Schulz KF, Altman DG** 2001. The CONSORT statement: revised recommendations for improving the quality of reports of parallel-group randomised trials. *The Lancet* **357,** 1191-1194.

**Quilty LC, McBride C, Bagby RM** 2008. Evidence for the cognitive mediational model of cognitive behavioural therapy for depression. *Psychological Medicine* **38,** 1531-1541.

**Wallace BC, Daharbreh IJ, Trikalinos TA, Lau J, Trow P, Schmid CH** 2012. Closing the Gap between Methodologists and End-Users: R as a Computational Back-End. *Journal of Statistical Software* **49**.

**DATA SUPPLEMENT II:**

Final BDI-II model in the Treatment Phase (0-7 months) controlled for potential confounders.

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| **Data Supplement II:** Final BDI-II model in the Treatment Phase (0-7 months) controlled for potential confounders. |
|  | **B** | **95% CI** | ***F*** | **d.f.** | ***r*\*** | ***p*** |
| **Final Model**  |  |  |  |  |  |  |
| - | Intercept | 2.71 | 2.59 – 2.83 | 37.59 | 274 | 0.35 | < .001 |
| - | Baseline Severity | 0.35 | 0.28 – 0.43 | 88.74 | 274 | 0.49 | < .001 |
| -  | Baseline Quality of Life | -0.10 | -0.17 – -0.02 |  6.30 | 274 | 0.15 |  .01 |
| - | Time | -0.02 | -0.03 – -0.02 | 59.81 | 274 | 0.42 | < .001 |
| - | Condition | -0.01 | -0.25 – 0.23 |  0.01 | 274 | 0.01 |  .94 |
| - | Time x Condition | 0.00 | -0.01 – 0.02 |  0.38 | 274 | 0.04 |  .54 |
| **Sessions** |  |  |  |  |  |  |
| - | Intercept | 2.71 | 2.59 – 2.83 | 31.48 | 273 | 0.32 | < .001 |
| - | Baseline Severity | 0.35 | 0.28 – 0.43 | 86.81 | 273 | 0.49 | < .001 |
| -  | Baseline Quality of Life | -0.10 | -0.17 – -0.02 |  6.19 | 273 | 0.15 |  .01 |
| - | Time | -0.02 | -0.03 – -0.02 | 59.49 | 273 | 0.42 | < .001 |
| - | Condition | -0.01 | -0.25 – 0.23 |  0.01 | 273 | 0.01 |  .95 |
| - | Time x Condition | 0.00 | -0.01 – 0.02 |  0.36 | 273 | 0.04 |  .55 |
| - | Number of sessions | 0.05 | -0.03 – 0.12 |  1.55 | 273 | 0.08 |  .21 |
| **Therapist** |  |  |  |  |  |  |
| - | Intercept | 16.05 | 9.88 – 22.22 | 15.64 | 267 | 0.24 | < .001 |
| - | Baseline Severity | 6.34 | 4.77 – 7.91 | 63.37 | 267 | 0.44 | < .001 |
| -  | Baseline Quality of Life | -2.27 | -3.83 – -0.71 |  8.19 | 267 | 0.17 |  .01 |
| - | Time | -0.40 | -0.56 – -0.36 | 81.13 | 267 | 0.48 | < .001 |
| - | Condition | 0.58 | -9.24 – 10.40 |  0.01 | 267 | 0.01 |  .91 |
| - | Time x Condition | 0.06 | -0.14 – 0.26 |  0.30 | 267 | 0.03 |  .58 |
| - | Therapist |  - | - |  0.35 | 267 | 0.04 |  .93 |
| **Employment** |  |  |  |  |  |  |
| - | Intercept | 2.71 | 2.59 – 2.83 | 32.67 | 271 | 0.33 | < .001 |
| - | Baseline Severity | 0.36 | 0.29 – 0.43 | 92.81 | 271 | 0.51 | < .001 |
| -  | Baseline Quality of Life | -0.09 | -0.16 – -0.01 |  5.51 | 271 | 0.14 |  .02 |
| - | Time | -0.03 | -0.03 – -0.02 | 59.60 | 271 | 0.42 | < .001 |
| - | Condition | -0.00 | -0.24 – 0.24 |  0.00 | 271 | 0.00 |  .99 |
| - | Time x Condition | 0.00 | -0.01 – 0.02 |  0.31 | 271 | 0.03 |  .58 |
| - | Employment | 0.11 | -0.03 – 0.25 |  2.32 | 271 | 0.09 |  .13 |
| **Gender** |  |  |  |  |  |  |
| - | Intercept | 2.69 | 2.57 – 2.81 | 31.25 | 273 | 0.32 | < .001 |
| - | Baseline Severity | 0.35 | 0.27 – 0.42 | 84.60 | 273 | 0.49 |  < .001 |
| -  | Baseline Quality of Life | -0.09 | -0.17 – -0.02 |  5.80 | 273 | 0.14 |  .02 |
| - | Time | -0.02 | -0.03 – -0.02 | 60.83 | 273 | 0.43 | < .001 |
| - | Condition | 0.00 | -0.24 – 0.24 |  0.00 | 273 | 0.00 |  .97 |
| - | Time x Condition | 0.00 | -0.01 – 0.02 |  0.39 | 273 | 0.04 |  .53 |
| - | Gender | 0.09 | -0.06 – 0.25 |  1.48 | 273 | 0.07 |  .23 |
| **Partner**   |  |  |  |  |  |  |
| - | Intercept | 2.71 | 2.59 – 2.83 | 31.35 | 273 | 0.32 | < .001 |
| - | Baseline Severity | 0.34 | 0.28 – 0.43 | 88.58 | 273 | 0.49 | < .001 |
| -  | Baseline Quality of Life | -0.10 | -0.17 – -0.02 |  6.27 | 273 | 0.15 |  .13 |
| - | Time | -0.02 | -0.03 – -0.02 | 60.27 | 273 | 0.43 | < .001 |
| - | Condition | -0.01 | -0.25 – 0.23 |  0.01 | 273 | 0.01 |  .93 |
| - | Time x Condition | 0.00 | -0.01 – 0.02 |  0.37 | 273 | 0.04 |  .54 |
| - | Partner | 0.02 | -0.12 – 0.17 |  0.08 | 273 | 0.02 |  .78 |
| Note: Mixed Models Gamma Regression with log-link on Beck Depression Inventory-II (BDI-II) + 1; Baseline Severity is standardised BDI-II score at baseline; Baseline Quality of Life is standardised EQ5D utility score at baseline; Condition is CT vs. IPT, centered at -.5 and .5 respectively; Time is the linear trend in weeks, with week = 0 at 7 months; Time effects represent change from baseline to 7 months, Condition main effects represent the difference between conditions at 7 months; \* = Effect size *r* =√(*F*/(*F*+d.f.)). |

**DATA SUPPLEMENT III:**

Final BDI-II model in the Trial FU Phase (7-12 months) controlled for potential confounders.

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| **Data Supplement III:** Final BDI-II model in the Trial FU Phase (7-12 months) controlled for potential confounders. |
|  | **B** | **95% CI** | ***F*** | **d.f.** | ***r*\*** | ***p*** |
| **Final Model**  |  |  |  |  |  |  |
| - | Intercept | 2.72 | 2.60 – 2.85 | 10.72 | 758 | 0.12 | < .001 |
| - | Baseline Severity | 0.34 | 0.21 – 0.46 | 27.38 | 758 | 0.19 | < .001 |
| -  | Baseline Quality of Life | -0.18 | -0.31 – -0.06 |  8.27 | 758 | 0.10 | < .001 |
| - | Time | 0.00 | -0.00 – 0.00 |  0.12 | 758 | 0.01 |  .73 |
| - | Condition | 0.05 | -0.20 – 0.30 |  0.14 | 758 | 0.01 |  .71 |
| - | Time x Condition | 0.01 | -0.00 – 0.01 |  2.06 | 758 | 0.05 |  .15 |
| **Sessions** |  |  |  |  |  |  |
| - | Intercept | 2.72 | 2.60 – 2.85 |  8.86 | 757 | 0.11 | < .001 |
| - | Baseline Severity | 0.34 | 0.21 – 0.46 | 26.24 | 757 | 0.18 | < .001 |
| -  | Baseline Quality of Life | -0.18 | -0.31 - -0.06 |  8.17 | 757 | 0.10 | < .001 |
| - | Time | 0.00 | -0.03 – 0.00 |  0.11 | 757 | 0.01 |  .74 |
| - | Condition | 0.05 | -0.21 – 0.30 |  0.14 | 757 | 0.01 |  .71 |
| - | Time x Condition | 0.01 | -0.00 – 0.01 |  2.06 | 757 | 0.05 |  .15 |
| - | Number of sessions | 0.00 | -0.13 – 0.13 |  0.00 | 757 | 0.00 |  .98 |
| **Therapist** |  |  |  |  |  |  |
| - | Intercept | 13.43 | 5.28 – 21.58 |  3.40 | 751 | 0.07 | < .001 |
| - | Baseline Severity | 4.10 | 2.05 – 6.15 | 15.45 | 751 | 0.14 | < .001 |
| -  | Baseline Quality of Life | -3.05 | -5.07 – -1.04 |  8.83 | 751 | 0.11 | < .001 |
| - | Time | 0.01 | -0.05 – 0.06 |  0.04 | 751 | 0.01 |  .85 |
| - | Condition | -2.65 | -15.81 – 10.50 |  0.16 | 751 | 0.01 |  .69 |
| - | Time x Condition | 0.07 | -0.04 – 0.19 |  1.54 | 751 | 0.05 |  .22 |
| - | Therapist |  - | - |  0.20 | 751 | 0.02 |  .99 |
| **Employment** |  |  |  |  |  |  |
| - | Intercept | 2.72 | 2.60 – 2.85 |  9.93 | 751 | 0.11 | < .001 |
| - | Baseline Severity | 0.34 | 0.22 – 0.47 | 29.05 | 751 | 0.19 | < .001 |
| -  | Baseline Quality of Life | -0.17 | -0.30 - -0.04 |  6.89 | 751 | 0.10 |  .01 |
| - | Time | 0.00 | -0.00 – 0.00 |  0.05 | 751 | 0.01 |  .82 |
| - | Condition | 0.08 | -0.18 – 0.33 |  0.36 | 751 | 0.02 |  .55 |
| - | Time x Condition | 0.01 | -0.00 – 0.01 |  2.72 | 751 | 0.06 |  .10 |
| - | Employment | 0.22 | -0.02 – 0.46 |  3.14 | 751 | 0.06 |  .08 |
| **Gender** |  |  |  |  |  |  |
| - | Intercept | 2.70 | 2.57 – 2.84 |  9.02 | 757 | 0.11 | < .001 |
| - | Baseline Severity | 0.33 | 0.21 – 0.46 | 26.45 | 757 | 0.18 | < .001 |
| -  | Baseline Quality of Life | -0.19 | -0.31 - -0.06 |  8.27 | 757 | 0.10 | < .001 |
| - | Time | 0.00 | -0.00 – 0.01 |  0.19 | 757 | 0.02 |  .66 |
| - | Condition | 0.06 | -0.20 – 0.32 |  0.21 | 757 | 0.02 |  .65 |
| - | Time x Condition | 0.01 | -0.00 – 0.01 |  1.99 | 757 | 0.05 |  .16 |
| - | Gender | 0.11 | -0.14 – 0.37 |  0.75 | 757 | 0.03 |  .39 |
| **Partner**   |  |  |  |  |  |  |
| - | Intercept | 2.73 | 2.60 – 2.86 |  8.89 | 757 | 0.11 | < .001 |
| - | Baseline Severity | 0.34 | 0.21 – 0.46 | 27.21 | 757 | 0.19 | < .001 |
| -  | Baseline Quality of Life | -0.19 | -0.31 – -0.06 |  8.31 | 757 | 0.10 | < .001 |
| - | Time | 0.00 | -0.00 – 0.01 |  0.12 | 757 | 0.01 |  .73 |
| - | Condition | 0.05 | -0.21 – 0.30 |  0.13 | 757 | 0.01 |  .72 |
| - | Time x Condition | 0.01 | -0.00 – 0.01 |  2.04 | 757 | 0.05 |  .15 |
| - | Partner | 0.03 | -0.22 – 0.27 |  0.04 | 757 | 0.01 |  .84 |
| Note: Mixed Models Gamma Regression with log-link on Beck Depression Inventory-II (BDI-II) + 1; Baseline Severity is standardised BDI-II score at baseline; Baseline Quality of Life is standardised EQ5D utility score at baseline; Condition is CT vs. IPT, centered at -.5 and .5 respectively; Time is the linear trend in weeks, with week = 0 at 12 months; Time effects represent change from 7 to 12 months, Condition main effects represent the difference between conditions at 12 months; \* = Effect size *r* =√(*F*/(*F*+d.f.)). |

**DATA SUPPLEMENT IV:**

Observed and Mixed Regression based estimated Response and Remission rates (%) in the active conditions based on the BDI-II (*n* = 151).

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| **Data supplement IV:** Observed and Mixed Regression based estimated Response and Remission rates (%) in the active conditions based on the BDI-II (*n* = 151). |
|  | **Observed Values** |  | **Mixed Regression Based Estimates** |
|  | **CT**  | **IPT** |  | **CT** | **IPT** |  |
|  | **(*n* = 76)** | **(*n* = 75)** |  | **(*n* = 76)** | **(*n* = 75)** | **B** | **95% CI** | ***F*** | **d.f.** | ***p*** |
| **Response** |  |  |
| - | 3 months | 40.8% | 44.0% |  | 40.5% | 45.0% | -0.05 | -0.22 – 0.12 | 0.28 | 575 | .60 |
| - | 7 months | 68.4% | 66.7% |  | 69.5% | 69.1% | 0.00 | -0.15 – 0.16 | 0.00 | 575 | .96 |
| - | 9 months | 57.9% | 61.3% |  | 58.1% | 63.7% | -0.06 | -0.22 – 0.11 | 0.45 | 575 | .50 |
| - | 12 months | 60.5% | 54.7% |  | 60.1% | 57.4% | 0.03 | -0.14 – 0.19 | 0.10 | 575 | .76 |
| **Remission** |
| - | 3 months | 11.8% | 13.3% |  |  2.0% | 5.1% | -0.03 | -0.07 – 0.01 | 2.47 | 575 | .12 |
| - | 7 months | 34.2% | 34.7% |  | 26.9% | 36.5% | -0.10 | -0.27 – 0.08 | 1.21 | 575 | .27 |
| - | 9 months | 36.8% | 37.3% |  | 31.3% | 40.7% | -0.09 | -0.26 – 0.08 | 1.20 | 575 | .28 |
| - | 12 months | 42.1% | 32.0% |  | 36.3% | 34.1% |  0.02 | -0.15 – 0.19 | 0.06 | 575 | .81 |
| Note: Binary Logistic Mixed Model Regression on Response/Remission = yes/no; All models are controlled for standardised baseline BDI-II and EQ5D scores, Time\*baseline BDI-II, and Condition\*Time; Condition is CT vs. IPT, centered at -.5 and.5 respectively; Time ranges from 2 – 5 and represents 3, 7, 9, 12 month assessment; CT = Cognitive Therapy; IPT = Interpersonal Psychotherapy; BDI-II = Beck Depression Inventory Second Edition; Response = A decrease of at least 9 BDI-II points from baseline to the specific assessment point; Remission = Absolute BDI-II score of 9 or less (Jacobson & Truax, 1991). Data unavailable for 3, 17, 23, and 25 patients at 3, 7, 9, and 12 months respectively. |

**DATA SUPPLEMENT V:** Assessment of bias risk

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| **Data supplement V:** Assessment of bias risk (using the method of Jakobsen et al. 2012) |
| **Criterion** | **Description\*** | **Yes/No** | **Line of reasoning (source: Lemmens et al. 2011; submitted)** |
| Sequence Generation | Description of a random component in the sequence generation process. Such as: referring to a random number table. | Y | *‘Randomization took place at the research center. The researcher pressed the ‘assign’ button on the computer screen, after which the database randomly allocated the participant to one of three conditions using computer-generated block randomization (10:10:4) The random allocation sequence was generated by an independent computer scientist and concealed from the researchers that were involved in the randomization procedure in order to prevent prediction of future assignment’.* |
| Allocation Concealment | Participant and investigators enrolling participants could not foresee assignment because allocation was concealed by central allocation, or sequentially number drug containers or envelopes, or an equivalent method. | Y | *‘Randomization took place at the research center. The researcher pressed the ‘assign’ button on the computer screen, after which the database randomly allocated the participant to one of three conditions using computer-generated block randomization (10:10:4) The random allocation sequence was generated by an independent computer scientist and concealed from the researchers that were involved in the randomization procedure in order to prevent prediction of future assignment*.’ |
| ITT analysis | Patients are analyzed according to the randomization scheme. In other words, for the purposes of ITT analysis, everyone who begins the treatment is considered to be part of the trial, whether he or she finishes it or not. | Y | *‘All analyses were intention-to-treat, meaning that all patients that enrolled in the study were included in the analyses, irrespective of completing therapy or assessments’*  |
| Blinding  | Knowledge of the allocated interventions was adequately prevented during the study. As indicated by one of three criteria 1) no blinding, but no consequences by lack of blinding on outcome (measures); 2) blinding and unlikely that blinding could have been broken, 3) only partial blinding, but not likely to introduce bias.  | Y | *‘With regard to the nature of interventions, blinding of patients and therapists for treatment condition was not possible’*. However, we think it is unlikely that the lack of blinding has influenced outcome, mainly because all outcome measures were self-report measures, and patients were not aware of study aims. However, the fact that the researchers who conducted statistical analyses were not blind for the coding of CT and IPT is a limitation of the current study.  |
| Comparability of drop-outs in intervention groups?  | Missing outcome data balanced in numbers across intervention groups, with similar reasons for missing data across groups | Y | *‘No significant differences in attrition rates emerged across conditions (See Consort Flow Chart)’.* Missing outcome data is balanced in numbers across intervention groups. At 7 months (the end of the acute phase), 6 patients in CT and 10 in IPT were lost to follow-up. At 12 months this was 11 (14.5%) for CT ad 14 (18.7%) for IPT. Reasons for drop-out were similar across groups. Patients either were unattainable/did not respond to contact requests (7 in CT vs. 8 in IPT), or no longer wanted to participate in the trial (3 in CT vs. 6 in IPT). 1 moved abroad (CT). Even though the 12-month attrition rates are within (the low) range of other clinical trials, they might have introduced bias, which could be a limitation of the study. However, we do not consider it likely that the drop-out rates have caused any large biases because missings were handled carefully. By using mixed regression (a method that takes the nested structure of the data into consideration and can deal with autocorrelation and missing values, see Singer & Willet, 2003, Oxford University Press).  |
| Free of selective outcome measure reporting | The study protocol is available and all of the study’s pre-specified (primary and secondary ) outcomes that are of interest in the review have been reported in the pre-specified way | Y | We pre-specified all of the study’s outcomes in our protocol paper (Lemmens et al., 2011). As can be seen in the protocol paper, we included several categories of measurements: primary and secondary outcome measures (in terms of symptoms and quality of life), process measures, and economic evaluation measures. The present study examines the clinical effectiveness, and therefore included all clinical outcome and quality of life measures.  |
| Free of Economic bias | Economic bias may be present if a trial is financed by an individual or organization that might have an interest in a given result from the trial | Y | *‘This research was financed by the research institute of Experimental Psychopathology (EPP) and the Academic Community Mental Health Centre (RIAGG). Both organizations have no special interests in specific outcomes of the trial’.* EPP is an independent non-profit research institute that aims to unravel underlying mechanisms of the etiology, maintenance and treatment of select psychopathological conditions. EPP has created an excellent track record in a continuum from basic to applied clinical research. RIAGG is a research oriented routine clinical setting in Maastricht, the Netherlands, providing EPP’s researchers with a stable clinical infrastructure where long-term studies can be executed. RIAGG has no interest in specific outcomes of the trial, since both CT and IPT are already delivered as routine psychological therapies for depression in the clinic. We therefore feel free to say that our trial free of industry sponsorship or other types of for-profit support that may manipulate the trial design, conductance or results of the trial.  |
| Free of Academic bias  | Academic bias may be present if one or more of the trialists have an academic or personal interest in a given result from the trial | Y | *‘The authors declare to have no conflict of interest, or personal gain’*  |
| \*Definitions come from Higgins & Green (2011) ‘The Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0’. Obtained via the Cochrane Hepato-Biliary group’s (CHBG) website http://hbg.cochrane.org/information-authors |

1. The baseline covariates BDI-II and EQ5D were significantly correlated to all outcome measures (BDI-II, EQ5D, BSI, WSAS and RAND36) at 7 and 12 months (Pearson’s *r* ranging from -36 to .50. at *p* = .01). [↑](#footnote-ref-1)
2. Given his role as editor of the Cochrane Hepato-Biliary Group (CHBG), and expertise in assessment of bias risk, we asked dr. J. Jakobsen (PhD, MD) to do this. [↑](#footnote-ref-2)