

## List of Tables in Supplementary Materials

- Table S1: List of included systematic reviews (network/meta-analysis)**
- Table S2: List of excluded reports by searching systematic reviews (network/meta-analysis)**
- Table S3: List of included randomized controlled trials**
- Table S4: List of excluded reports by searching randomized controlled trials**
- Table S5: Characteristics of included randomized controlled trials**
- Table S6: Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**
- Table S7: Heterogeneity and inconsistency for all comparisons in Grp1**
- Table S8: Heterogeneity and inconsistency for all comparisons in Grp2**
- Table S9: Comparison matrix for subgroup analysis among mild depression in Grp 1**
- Table S10: Comparison matrix for subgroup analysis among moderate depression in Grp 1**
- Table S11: Comparison matrix for subgroup analysis among severe depression in Grp 1**
- Table S12: Comparison matrix for subgroup analysis of RCTs using HRSD in Grp 1**
- Table S13: Comparison matrix for subgroup analysis of RCTs using BDI in Grp 1**
- Table S14: Comparison matrix for subgroup analysis of RCTs with low risk of bias in Grp 1**
- Table S15: Comparison matrix for subgroup analysis among mild depression in Grp 2**
- Table S16: Comparison matrix for subgroup analysis among moderate depression in Grp 2**
- Table S17: Comparison matrix for subgroup analysis among severe depression in Grp 2**
- Table S18: Comparison matrix for subgroup analysis of RCTs using HRSD in Grp 2**
- Table S19: Comparison matrix for subgroup analysis of RCTs using BDI in Grp 2**
- Table S20: Comparison matrix for subgroup analysis of RCTs with low risk of bias in Grp 2**

**Table S1: List of Included systematic reviews (network/meta-analysis)**

| <b>Author</b> | <b>published year</b> | <b>title</b>  |
|---------------|-----------------------|---|
| Aderka        | 2012                  | Sudden gains during psychological treatments of anxiety and depression: a meta-analysis   |
| Amick         | 2015                  | Comparative benefits and harms of second generation antidepressants and cognitive behavioral therapies in initial treatment of major depressive disorder: systematic review and meta-analysis |
| Andersson     | 2009                  | Internet-based and other computerized psychological treatments for adult depression: a meta-analysis  |
| Andrews       | 2010                  | Computer therapy for the anxiety and depressive disorders is effective, acceptable and practical health care: a meta-analysis   |
| Andrews       | 2018                  | Computer therapy for the anxiety and depression disorders is effective, acceptable and practical health care: An updated meta-analysis  |
| Baardseth     | 2013                  | Cognitive-behavioral therapy versus other therapies: redux  |
| Barbato       | 2018                  | Couple therapy for depression   |
| Barth         | 2013                  | Comparative efficacy of seven psychotherapeutic interventions for patients with depression: a network meta-analysis   |
| Bee           | 2008                  | Psychotherapy mediated by remote communication technologies: a meta-analytic review   |
| Berryhill     | 2019                  | Videoconferencing Psychotherapy and Depression: A Systematic Review   |
| Boschloo      | 2019                  | The symptom-specific efficacy of antidepressant medication vs. cognitive behavioral therapy in the treatment of depression: results from an individual patient data meta-analysis             |
| Bosmans       | 2008                  | Are psychological treatments for depression in primary care cost-effective?   |
| Bower         | 2011                  | Counselling for mental health and psychosocial problems in primary care   |
| Braun         | 2013                  | Comparing bona fide psychotherapies of depression in adults with two meta-analytical approaches   |
| Brown         | 2019                  | Pharmacy-based management for depression in adults  |
| Cape          | 2010                  | Brief psychological therapies for anxiety and depression in primary care: meta-analysis and meta-regression   |
| Chartier      | 2013                  | Behavioural activation for depression: efficacy, effectiveness and dissemination  |
| Coull         | 2011                  | The clinical effectiveness of CBT-based guided self-help interventions for anxiety and depressive disorders: a systematic review  |
| Cristea       | 2015                  | The effects of cognitive behavior therapy for adult depression on dysfunctional thinking: A meta-analysis   |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|           |      |   |
|-----------|------|---|
| Cristea   | 2017 | The effects of cognitive behavioral therapy are not systematically falling: A revision of Johnsen and Friborg (2015)  |
| Cuijpers  | 2008 | Psychotherapy for depression in adults: a meta-analysis of comparative outcome studies  |
| Cuijpers  | 2008 | Are psychological and pharmacologic interventions equally effective in the treatment of adult depressive disorders? A meta-analysis of comparative studies      |
| Cuijpers  | 2009 | Psychological treatment of depression in primary care: a meta-analysis  |
| Cuijpers  | 2009 | Psychotherapy versus the combination of psychotherapy and pharmacotherapy in the treatment of depression: a meta-analysis                                       |
| Cuijpers  | 2011 | Psychological treatment of depression: results of a series of meta-analyses   |
| Cuijpers  | 2011 | Interpersonal psychotherapy for depression: a meta-analysis   |
| Cuijpers  | 2014 | The effects of psychotherapies for major depression in adults on remission, recovery and improvement: a meta-analysis   |
| Cuijpers  | 2014 | Gender as predictor and moderator of outcome in cognitive behavior therapy and pharmacotherapy for adult depression: an "individual patient data" meta-analysis |
| Cuijpers  | 2016 | Psychological Treatment of Depression in College Students: A Metaanalysis   |
| Cuijpers  | 2016 | Interpersonal Psychotherapy for Mental Health Problems: A Comprehensive Meta-Analysis   |
| Cuijpers  | 2016 | How effective are cognitive behavior therapies for major depression and anxiety disorders? A meta-analytic update of the evidence                               |
| Cuijpers  | 2017 | Melancholic and atypical depression as predictor and moderator of outcome in cognitive behavior therapy and pharmacotherapy for adult depression                |
| Cuijpers  | 2018 | Negative effects of psychotherapies for adult depression: A meta-analysis of deterioration rates  |
| Cuijpers  | 2019 | Effectiveness and Acceptability of Cognitive Behavior Therapy Delivery Formats in Adults With Depression: A Network Meta-analysis                               |
| †Ciharova | 2021 | Cognitive restructuring, behavioral activation and cognitive-behavioral therapy in the treatment of adult depression: A network meta-analysis                   |
| Cuijpers  | 2020 | The effects of fifteen evidence-supported therapies for adult depression: A meta-analytic review  |
| Cuijpers  | 2020 | A network meta-analysis of the effects of psychotherapies, pharmacotherapies and their combination in the treatment of adult depression                         |
| Cuijpers  | 2021 | The effects of psychotherapies for depression on response, remission, reliable change, and deterioration: A meta-analysis                                       |
| Cuijpers  | 2021 | Psychologic Treatment of Depression Compared With Pharmacotherapy and Combined Treatment in Primary Care: A Network Meta-Analysis                               |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|              |      |   |
|--------------|------|---|
| Cuijpers     | 2021 | Psychotherapies for depression: a network meta-analysis covering efficacy, acceptability and long-term outcomes of all main treatment types                           |
| De Maat      | 2006 | Relative efficacy of psychotherapy and pharmacotherapy in the treatment of depression: A meta-analysis  |
| de Mello     | 2005 | A systematic review of research findings on the efficacy of interpersonal therapy for depressive disorders  |
| Dedert       | 2013 | Computerized Cognitive Behavioral Therapy for Adults with Depressive or Anxiety Disorders   |
| DeRubeis     | 1999 | Medications versus cognitive behavior therapy for severely depressed outpatients: mega-analysis of four randomized comparisons  |
| Dobson       | 1989 | A meta-analysis of the efficacy of cognitive therapy for depression   |
| Domhardt     | 2021 | Mediators and mechanisms of change in internet- and mobile-based interventions for depression: A systematic review  |
| Driessen     | 2010 | The efficacy of short-term psychodynamic psychotherapy for depression: a meta-analysis  |
| Driessen     | 2010 | Does pretreatment severity moderate the efficacy of psychological treatment of adult outpatient depression? A meta-analysis   |
| Driessen     | 2015 | The efficacy of short-term psychodynamic psychotherapy for depression: A meta-analysis update   |
| Ebrahim      | 2012 | Effectiveness of cognitive behavioral therapy for depression in patients receiving disability benefits: a systematic review and individual patient data meta-analysis |
| Ekers        | 2008 | A meta-analysis of randomized trials of behavioural treatment of depression   |
| Elayne Ahern | 2018 | Clinical efficacy and economic evaluation of online cognitive behavioral therapy for major depressive disorder: a systematic review and meta-analysis                 |
| Feng         | 2012 | The effect of cognitive behavioral group therapy for depression: a meta-analysis 2000-2010  |
| Firth        | 2017 | The efficacy of smartphone-based mental health interventions for depressive symptoms: a meta-analysis of randomized controlled trials                                 |
| Fordham      | 2021 | Cognitive-behavioural therapy for a variety of conditions: an overview of systematic reviews and panoramic meta-analysis  |
| Fu           | 2020 | Effectiveness of digital psychological interventions for mental health problems in low-income and middle-income countries: a systematic review and meta-analysis      |
| Fu           | 2020 | Psychological interventions for depression in Chinese university students: A systematic review and meta-analysis  |
| Furukawa     | 2017 | Initial severity of depression and efficacy of cognitive-behavioural therapy: individual-participant data meta-analysis of pill-placebo-controlled trials             |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|            |      |  |
|------------|------|--|
| Furukawa   | 2021 | Dismantling, optimising, and personalising internet cognitive behavioural therapy for depression: a systematic review and component network meta-analysis using individual participant data                  |
| Gaffan     | 1995 | Researcher allegiance and meta-analysis: the case of cognitive therapy for depression  |
| Gellatly   | 2007 | What makes self-help interventions effective in the management of depressive symptoms? Meta-analysis and meta-regression   |
| Gloaguen   | 1998 | A meta-analysis of the effects of cognitive therapy in depressed patients  |
| †Wampold   | 2002 | A meta-(re)analysis of the effects of cognitive therapy versus 'other therapies' for depression  |
| †Parker    | 2008 | Quantified superiority of cognitive behaviour therapy to antidepressant drugs: a challenge to an earlier meta-analysis   |
| Griffiths  | 2007 | Internet-based mental health programs: a powerful tool in the rural medical kit  |
| Hedman     | 2012 | Cognitive behavior therapy via the Internet: a systematic review of applications, clinical efficacy and cost-effectiveness   |
| Hegerl     | 2004 | Should combined pharmaco- and psychotherapy be offered to depressed patients? A qualitative review of randomized clinical trials from the 1990s  |
| Henken     | 2007 | Family therapy for depression  |
| Hrynyschyn | 2021 | Effectiveness of Smartphone-Based Cognitive Behavioral Therapy Among Patients With Major Depression: Systematic Review of Health Implications  |
| Huguet     | 2018 | A systematic review and meta-analysis on the efficacy of Internet-delivered behavioral activation  |
| Hunot      | 2013 | 'Third wave' cognitive and behavioural therapies versus other psychological therapies for depression   |
| Huntley    | 2012 | Group psychological therapies for depression in the community: systematic review and meta-analysis   |
| Ijaz       | 2018 | Psychological therapies for treatment-resistant depression in adults   |
| Jakobsen   | 2011 | The effect of interpersonal psychotherapy and other psychodynamic therapies versus 'treatment as usual' in patients with major depressive disorder   |
| Jakobsen   | 2011 | The effects of cognitive therapy versus 'no intervention' for major depressive disorder  |
| Jakobsen   | 2011 | The Effects of Cognitive Therapy versus 'No Intervention' for Major Depressive Disorder  |
| Jakobsen   | 2011 | The effects of cognitive therapy versus 'treatment as usual' in patients with major depressive disorder  |
| Jakobsen   | 2012 | The effect of adding psychodynamic therapy to antidepressants in patients with major depressive disorder. A systematic review of randomized clinical trials with meta-analyses and trial sequential analyses |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|              |      |  |
|--------------|------|--|
| Jakobsen     | 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   |
| Jakobsen     | 2014 | Systematic reviews of randomised clinical trials examining the effects of psychotherapeutic interventions versus "no intervention" for acute major depressive disorder and a randomised trial examining the effects of "third wave" cognitive therapy versus mentalization-based treatment for acute major depressive disorder |
| Johnsen      | 2015 | The effects of cognitive behavioral therapy as an anti-depressive treatment is falling: A meta-analysis  |
| Kaltenthaler | 2002 | A systematic review and economic evaluation of computerised cognitive behaviour therapy for depression and anxiety   |
| Kaltenthaler | 2008 | Computerised cognitive-behavioural therapy for depression: systematic review   |
| Kaltenthaler | 2008 | The acceptability to patients of computerized cognitive behaviour therapy for depression: a systematic review  |
| Karyotaki    | 2017 | Efficacy of Self-guided Internet-Based Cognitive Behavioral Therapy in the Treatment of Depressive Symptoms: A Meta-analysis of Individual Participant Data  |
| †Karyotaki   | 2018 | Is self-guided internet-based cognitive behavioural therapy (iCBT) harmful? An individual participant data meta-analysis   |
| Karyotaki    | 2021 | Internet-Based Cognitive Behavioral Therapy for Depression: A Systematic Review and Individual Patient Data Network Meta-analysis  |
| Kendrick     | 2016 | Routine use of patient reported outcome measures (PROMs) for improving treatment of common mental health disorders in adults   |
| Kohnen       | 2021 | Evidence on Technology-Based Psychological Interventions in Diagnosed Depression: Systematic Review  |
| Kriston      | 2014 | Efficacy and acceptability of acute treatments for persistent depressive disorder: a network meta-analysis   |
| Kuroda       | 2021 | Discovering Common Elements of Empirically Supported Self-Help Interventions for Depression in Primary Care: a Systematic Review   |
| Leichsenring | 2001 | Comparative effects of short-term psychodynamic psychotherapy and cognitive-behavioral therapy in depression: a meta-analytic approach   |
| Leichsenring | 2014 | Empirically supported methods of short-term psychodynamic therapy in depression - towards an evidence-based unified protocol   |
| Li           | 2018 | Cognitive behavioral therapy for treatment-resistant depression: A systematic review and meta-analysis   |
| Linde        | 2015 | Comparative effectiveness of psychological treatments for depressive disorders in primary care: network meta-analysis  |
| †Linde       | 2015 | Effectiveness of psychological treatments for depressive disorders in primary care: systematic review and meta-analysis  |
| Luo          | 2020 | A comparison of electronically-delivered and face to face cognitive behavioural therapies in depressive disorders: A systematic review and meta-analysis   |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|                     |      |  |
|---------------------|------|--|
| Malik               | 2021 | Behavioral Activation as an 'active ingredient' of interventions addressing depression and anxiety among young people: a systematic review and evidence synthesis              |
| Maund               | 2019 | Managing Antidepressant Discontinuation: A Systematic Review   |
| Mazzucchelli        | 2010 | Behavioral activation interventions for well-being: A meta-analysis  |
| McNaughton          | 2009 | Brief interventions for depression in primary care A systematic review   |
| Mogoase             | 2017 | Internet-Based Psychotherapy for Adult Depression: What About the Mechanisms of Change?  |
| Musiat              | 2022 | Impact of guidance on intervention adherence in computerised interventions for mental health problems: a meta-analysis   |
| Negt                | 2016 | The treatment of chronic depression with cognitive behavioral analysis system of psychotherapy: a systematic review and meta-analysis of randomized-controlled clinical trials |
| Ng                  | 2018 | The efficacy of cognitive behavioral therapy for Chinese people: A meta-analysis   |
| Okumura             | 2014 | Efficacy and acceptability of group cognitive behavioral therapy for depression: a systematic review and meta-analysis   |
| Pang                | 2021 | Efficacy of web-based self-management interventions for depressive symptoms: a meta-analysis of randomized controlled trials   |
| Phadsri             | 2021 | Nonpharmacological Treatment for Supporting Social Participation of Adults with Depression   |
| Pim Cuijpers        | 2013 | A meta-analysis of cognitive-behavioural therapy for adult depression, alone and in comparison with other treatments   |
| Rice                | 2014 | Online and social networking interventions for the treatment of depression in young people: a systematic review  |
| Roshanaei-Moghaddam | 2011 | Relative effects of CBT and pharmacotherapy in depression versus anxiety: is medication somewhat better for depression, and CBT somewhat better for anxiety?                   |
| Rost                | 2017 | User Acceptance of Computerized Cognitive Behavioral Therapy for Depression: Systematic Review   |
| Saddichha           | 2014 | Online interventions for depression and anxiety - a systematic review  |
| Santoft             | 2019 | Cognitive behaviour therapy for depression in primary care: systematic review and meta-analysis  |
| Senanayake          | 2019 | Effectiveness of text messaging interventions for the management of depression: A systematic review and meta-analysis  |
| Shalom              | 2020 | A meta-analysis of sudden gains in psychotherapy: Outcome and moderators   |
| Shinohara           | 2013 | Behavioural therapies versus other psychological therapies for depression  |
| Silman              | 2020 | How effective is augmentation with psychotherapy as a next-step option for treatment-resistant depression?   |
| Simmonds-Buckley    | 2019 | Acceptability and Efficacy of Group Behavioral Activation for Depression Among Adults: A Meta-Analysis   |

(Table S1 continued on the next page)

**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|                  |      |   |
|------------------|------|---|
| Simmonds-Buckley | 2020 | Acceptability and Effectiveness of NHS-Recommended e-Therapies for Depression, Anxiety, and Stress: Meta-Analysis   |
| Six              | 2021 | Examining the Effectiveness of Gamification in Mental Health Apps for Depression: Systematic Review and Meta-analysis   |
| So               | 2013 | Is computerised CBT really helpful for adult depression?-A meta-analytic re-evaluation of CCBT for adult depression in terms of clinical implementation and methodological validity |
| Spek             | 2007 | Internet-based cognitive behaviour therapy for symptoms of depression and anxiety: a meta-analysis  |
| Stein            | 2021 | Looking beyond depression: a meta-analysis of the effect of behavioral activation on depression, anxiety, and activation  |
| Steinert         | 2017 | Psychodynamic Therapy: As Efficacious as Other Empirically Supported Treatments? A Meta-Analysis Testing Equivalence of Outcomes  |
| Svartberg        | 1991 | Comparative effects of short-term psychodynamic psychotherapy: a meta-analysis  |
| Sztein           | 2018 | Efficacy of cognitive behavioural therapy delivered over the Internet for depressive symptoms: A systematic review and meta-analysis  |
| Thase            | 1997 | Treatment of major depression with psychotherapy or psychotherapy-pharmacotherapy combinations  |
| Timbie           | 2006 | A Meta-Analysis of Labor Supply Effects of Interventions for Major Depressive Disorder  |
| Tolin            | 2010 | Is cognitive-behavioral therapy more effective than other therapies? A meta-analytic review   |
| Tolin            | 2017 | Can Cognitive Behavioral Therapy for Anxiety and Depression Be Improved with Pharmacotherapy? A Meta-analysis   |
| Trivedi          | 2011 | Examination of the utility of psychotherapy for patients with treatment resistant depression: a systematic review   |
| Twomey           | 2015 | Effectiveness of cognitive behavioural therapy for anxiety and depression in primary care: a meta-analysis  |
| Twomey           | 2017 | Effectiveness of a freely available computerised cognitive behavioural therapy programme (MoodGYM) for depression: Meta-analysis  |
| Twomey           | 2017 | Effectiveness of an individually-tailored computerised CBT programme (Deprexis) for depression: A meta-analysis   |
| Uphoff           | 2020 | Behavioural activation therapy for depression in adults   |
| Vallury          | 2015 | Computerized Cognitive Behavior Therapy for Anxiety and Depression in Rural Areas: A Systematic Review  |
| van Ballegooijen | 2014 | Adherence to Internet-based and face-to-face cognitive behavioural therapy for depression: a meta-analysis  |
| van Bronswijk    | 2019 | Effectiveness of psychotherapy for treatment-resistant depression: a meta-analysis and meta-regression  |
| van Hees         | 2013 | The effectiveness of individual interpersonal psychotherapy as a treatment for major depressive disorder in adult outpatients: a systematic review                                  |
| van't Hof        | 2011 | Psychological treatments for depression and anxiety disorders in low- and middle- income countries: a meta-analysis   |
| Vittengl         | 2016 | Divergent Outcomes in Cognitive-Behavioral Therapy and Pharmacotherapy for Adult Depression   |

(Table S1 continued on the next page)



**Table S1: (continued) List of Included systematic reviews (network/meta-analysis)**

|             |      |  |
|-------------|------|--|
| Wade        | 2010 | Use of the Internet to Assist in the Treatment of Depression and Anxiety: A Systematic Review  |
| Wakefield   | 2021 | Improving Access to Psychological Therapies (IAPT) in the United Kingdom: A systematic review and meta-analysis of 10-years of practice-based evidence   |
| Waller      | 2009 | Barriers to the uptake of computerized cognitive behavioural therapy: a systematic review of the quantitative and qualitative evidence   |
| Watts       | 2015 | Treatment-as-usual (TAU) is anything but usual: a meta-analysis of CBT versus TAU for anxiety and depression   |
| Weitz       | 2015 | Baseline Depression Severity as Moderator of Depression Outcomes Between Cognitive Behavioral Therapy vs Pharmacotherapy: An Individual Patient Data Meta-analysis                                       |
| Wells       | 2018 | Computer-Assisted Cognitive-Behavior Therapy for Depression in Primary Care: Systematic Review and Meta-Analysis   |
| Whiston     | 2019 | Towards personalising treatment: a systematic review and meta-analysis of face-to-face efficacy moderators of cognitive-behavioral therapy and interpersonal psychotherapy for major depressive disorder |
| Wilks       | 2016 | Are Trials of Computerized Therapy Generalizable? A Multidimensional Meta-analysis   |
| Wright      | 2019 | Computer-Assisted Cognitive-Behavior Therapy for Depression: A Systematic Review and Meta-Analysis   |
| López-López | 2019 | The process and delivery of CBT for depression in adults: a systematic review and network meta-analysis  |
| †Wu         | 2020 | Cost-Effectiveness of Different Formats for Delivery of Cognitive Behavioral Therapy for Depression: A Systematic Review Based Economic Model  |
| Zakhour     | 2020 | Cognitive-behavioral therapy for treatment-resistant depression in adults and adolescents: a systematic review   |
| Zhang       | 2019 | The effectiveness of four empirically supported psychotherapies for primary care depression and anxiety: A systematic review and meta-analysis   |
| Zhao        | 2017 | Systematic review of the information and communication technology features of web- and mobile-based psychoeducational interventions for depression   |
| Zhou        | 2016 | Internet-based cognitive behavioural therapy for subthreshold depression: a systematic review and meta-analysis  |
| Zhou        | 2017 | Effect of Cognitive Behavioral Therapy Versus Interpersonal Psychotherapy in Patients with Major Depressive Disorder: A Meta-analysis of Randomized Controlled Trials                                    |
| Zhou        | 2021 | Are online mental health interventions for youth effective? A systematic review  |

†The same data as the above study was used

**Table S2 : List of excluded reports by searching systematic reviews (network/meta-analysis)**

| <b>Author</b>           | <b>published year</b> | <b>exclusion reason</b>  |
|-------------------------|-----------------------|--|
| Abbass                  | 2003                  | unsuitable study format (non-systematic review)                            |
| Baker                   | 2015                  | Study aims other than intervention efficacy                                |
| Bourbeau                | 2020                  | unsuitable intervention (exercise)   |
| Bower                   | 2001                  | unsuitable participants  |
| Brunwasser              | 2009                  | unsuitable participants  |
| Chen                    | 2019                  | lack of data   |
| Ciapponi                | 2017                  | Study aims other than intervention efficacy                                |
| Cuijpers                | 2019                  | unsuitable intervention  |
| Cuijpers                | 2021                  | unsuitable intervention  |
| Etzelmueller            | 2020                  | no RCT included  |
| Farah                   | 2016                  | unsuitable study format (a review of systematic reviews and meta-analyses) |
| Fernandez               | 2021                  | unsuitable intervention  |
| Furukawa                | 2021                  | unsuitable intervention  |
| Gaudio                  | 2009                  | unsuitable study format (Letter)   |
| Gonzalez-Valero         | 2019                  | no RCT included  |
| Gould                   | 2001                  | unsuitable study format (letter to the editor)                             |
| Hans                    | 2013                  | no RCT included  |
| Hoppen                  | 2021                  | unsuitable intervention (exercise)   |
| Hoyer                   | 2020                  | unsuitable study format (non-systematic review)                            |
| Huguet                  | 2016                  | Study aims other than intervention efficacy                                |
| Jain                    | 2015                  | Study aims other than intervention efficacy                                |
| Jonasson                | 2019                  | unsuitable intervention  |
| Kayrouz                 | 2018                  | unsuitable participants  |
| Khan                    | 2007                  | unsuitable study format (meta-synthesis)                                   |
| Leigh-Hunt              | 2015                  | unsuitable participants  |
| Ma                      | 2021                  | unsuitable participants  |
| Machmutow               | 2019                  | Study aims other than intervention efficacy                                |
| Maleki                  | 2020                  | unsuitable intervention  |
| Mayo-Wilson             | 2007                  | unsuitable study format (letter)   |
| McCall                  | 2021                  | unsuitable intervention  |
| Oestergaard             | 2011                  | unsuitable study format (a systematic review of systematic reviews)        |
| Oliveira                | 2021                  | unsuitable participants  |
| Ontario, Health Quality | 2019                  | unsuitable study format (analysis of meta-analysis)                        |

(Table S2 continued on the next page)

**Table S2 : (continued) List of excluded reports by searching systematic reviews (network/meta-analysis)**

|             |      |   |
|-------------|------|---|
| Pantoja     | 2017 | Study aims other than intervention efficacy                         |
| Parker      | 2003 | unsuitable study format (non-systematic review)                     |
| Parker      | 2006 | unsuitable study format (non-systematic review)                     |
| Pott        | 2022 | unsuitable participants (substance users)                           |
| Price       | 2007 | unsuitable study format (a systematic review of systematic reviews) |
| Rifkin      | 2003 | unsuitable study format (letter)                                    |
| Rutherford  | 2009 | unsuitable study format (a review of a meta-analysis)               |
| Schmidt     | 2018 | unsuitable study format (comment)                                   |
| Scott       | 2001 | unsuitable study format (non-systematic review)                     |
| Sin         | 2015 | unsuitable participants (siblings of patients)                      |
| Sturmev     | 2009 | unsuitable study format (review of three meta-analysis)             |
| Svarterg    | 1993 | unsuitable study format (letter)                                    |
| Twomev      | 2016 | unsuitable study format (letter)                                    |
| Van Leeuwen | 2021 | unsuitable intervention   |

RCT = randomized controlled trial

**Table S3: List of included randomized controlled trials**

| <b>Author</b> | <b>published year</b> | <b>title</b>   |
|---------------|-----------------------|--|
| Altamura      | 2017                  | Comparing interpersonal counseling and antidepressant treatment in primary care patients with anxious and no anxious major depression disorder: a randomized control trial           |
| Andersson     | 2013                  | Randomised controlled non-inferiority trial with 3-year follow-up of internet-delivered versus face-to-face group cognitive behavioural therapy for depression                       |
| Bagby         | 2008                  | Personality and Differential Treatment Response in Major Depression: A Randomized Controlled Trial Comparing Cognitive-Behavioural Therapy and Pharmacotherapy                       |
| Barber        | 2012                  | Short-term dynamic psychotherapy versus pharmacotherapy for major depressive disorder: a randomized, placebo-controlled trial  |
| Berger        | 2011                  | Internet-based treatment of depression: a randomized controlled trial comparing guided with unguided self-help   |
| Bernecker     | 2016                  | Attachment style as a moderating influence on the efficacy of cognitive-behavioral and interpersonal psychotherapy for depression: A failure to replicate                            |
| Blackburn     | 1997                  | Controlled acute and follow-up trial of cognitive therapy and pharmacotherapy in out-patients with recurrent depression  |
| Blom          | 2007                  | Combination treatment for acute depression is superior only when psychotherapy is added to medication  |
| †Blom         | 2007                  | Severity and duration of depression, not personality factors, predict short term outcome in the treatment of major depression.   |
| Bodenmann     | 2008                  | Effects of coping-oriented couples therapy on depression: a randomized clinical trial  |
| Bright        | 1999                  | Professional and paraprofessional group treatments for depression: A comparison of cognitive-behavioral and mutual support interventions.  |
| Brown         | 1996                  | Treatment outcomes for primary care patients with major depression and lifetime anxiety disorders  |
| Browne        | 2002                  | Sertraline and/or interpersonal psychotherapy for patients with dysthymic disorder in primary care: 6-month comparison with longitudinal 2-year follow-up of effectiveness and costs |
| Bruijniks     | 2020                  | The effects of once- versus twice-weekly sessions on psychotherapy outcomes in depressed patients  |
| †Bruijniks    | 2021                  | The relation between therapy quality, therapy processes and outcomes and identifying for whom therapy quality matters in CBT and IPT for depression                                  |
| †Bruijniks    | 2022                  | Individual differences in response to once versus twice weekly sessions of CBT and IPT for depression  |
| Burnand       | 2002                  | Psychodynamic psychotherapy and clomipramine in the treatment of major depression  |

(Table S3 continued on the next page)

**Table S3: (continued) List of included randomized controlled trials**

|            |      |  |
|------------|------|--|
| Chan       | 2012 | A Chinese Chan-based mind-body intervention for patients with depression   |
| Chiang     | 2015 | One-Year Follow-Up of the Effectiveness of Cognitive Behavioral Group Therapy for Patients' Depression: A Randomized, Single-Blinded, Controlled Study                                       |
| de Jonghe  | 2001 | Combining psychotherapy and antidepressants in the treatment of depression   |
| de Mello   | 2001 | A randomized controlled trial comparing moclobemide and moclobemide plus interpersonal psychotherapy in the treatment of dysthymic disorder  |
| Dimidjian  | 2006 | Randomized trial of behavioral activation, cognitive therapy, and antidepressant medication in the acute treatment of adults with major depression   |
| †Coffman   | 2007 | Extreme nonresponse in cognitive therapy: can behavioral activation succeed where cognitive therapy fails?   |
| Dozois     | 2009 | Changes in self-schema structure in cognitive therapy for major depressive disorder: a randomized clinical trial   |
| †Dozois    | 2014 | Changes in core beliefs (early maladaptive schemas) and self-representation in cognitive therapy and pharmacotherapy for depression  |
| Dunlop     | 2017 | Effects of Patient Preferences on Outcomes in the Predictors of Remission in Depression to Individual and Combined Treatments (PReDICT) Study  |
| Dunner     | 1996 | Cognitive therapy versus fluoxetine in the treatment of dysthymic disorder   |
| Ekers      | 2011 | Behavioural activation delivered by the non-specialist: phase II randomised controlled trial   |
| Elkin      | 1989 | National Institute of Mental Health Treatment of Depression Collaborative Research Program. General effectiveness of treatments  |
| †Shea      | 1992 | Course of depressive symptoms over follow-up. Findings from the National Institutes of Mental Health Treatment of Depression Collaborative Research Program.                                 |
| Embling    | 2002 | The effectiveness of cognitive behavioural therapy in depression   |
| Fonagy     | 2015 | Pragmatic randomized controlled trial of long-term psychoanalytic psychotherapy for treatment-resistant depression: the Tavistock Adult Depression Study (TADS)                              |
| Gibbons    | 2016 | Comparative Effectiveness of Cognitive Therapy and Dynamic Psychotherapy for Major Depressive Disorder in a Community Mental Health Setting: A Randomized Clinical Noninferiority Trial      |
| †Jennissen | 2021 | Insight as a mechanism of change in dynamic therapy for major depressive disorder  |
| Han        | 2020 | A mind-body lifestyle intervention enhances emotional control in patients with major depressive disorder: a randomized, controlled study   |
| Hemanny    | 2020 | Efficacy of trial-based cognitive therapy, behavioral activation and treatment as usual in the treatment of major depressive disorder: preliminary findings from a randomized clinical trial |

(Table S3 continued on the next page)

**Table S3: (continued) List of included randomized controlled trials**

|                |      |  |
|----------------|------|--|
| Holländare     | 2011 | Randomized trial of Internet-based relapse prevention for partially remitted depression  |
| †Holländare    | 2013 | Two-year outcome of internet-based relapse prevention for partially remitted depression  |
| Hollon         | 1992 | Cognitive therapy and pharmacotherapy for depression   |
| Jacobson       | 1996 | A component analysis of cognitive-behavioral treatment for depression  |
| Jarrett        | 1999 | Treatment of atypical depression with cognitive therapy or phenelzine: a double-blind, placebo-controlled trial  |
| Johansson      | 2012 | Tailored vs. standardized internet-based cognitive behavior therapy for depression and comorbid symptoms: a randomized controlled trial  |
| Johansson      | 2019 | Effectiveness of guided internet-delivered cognitive behavior therapy for depression in routine psychiatry: A randomized controlled trial  |
| Katayama       | 2022 | Cognitive behavioral therapy effects on frontopolar cortex function during future thinking in major depressive disorder: A randomized clinical trial   |
| Keller         | 2000 | A comparison of nefazodone, the cognitive behavioral-analysis system of psychotherapy, and their combination for the treatment of chronic depression   |
| Kennedy        | 2007 | Differences in Brain Glucose Metabolism Between Responders to CBT and Venlafaxine in a 16-Week Randomized Controlled Trial   |
| King           | 2014 | Comparison of non-directive counselling and cognitive behaviour therapy for patients presenting in general practice with an ICD-10 depressive episode: a randomized control trial                                  |
| †Bower         | 2000 | Randomised controlled trial of non-directive counseling cognitive behaviour therapy, and usual general practitioner care for patients with depression. II : cost effectiveness.                                    |
| †King          | 2000 | Randomised controlled trial of non-directive counselling, cognitive-behaviour therapy and usual general practitioner care in the management of depression as well as mixed anxiety and depression in primary care. |
| †Ward          | 2000 | Randomised controlled trial of non-directive counseling, cognitive-behaviour therapy, and usual general practitioner care for patients with depression. :Clinical effectiveness                                    |
| Kocsis         | 2009 | Cognitive behavioral analysis system of psychotherapy and brief supportive psychotherapy for augmentation of antidepressant nonresponse in chronic depression: the REVAMP Trial                                    |
| Kooistra       | 2019 | Cost and Effectiveness of Blended Versus Standard Cognitive Behavioral Therapy for Outpatients With Depression in Routine Specialized Mental Health Care: Pilot Randomized Controlled Trial                        |
| Lemmens        | 2015 | Clinical effectiveness of cognitive therapy v. interpersonal psychotherapy for depression: results of a randomized controlled trial  |
| †van Bronswijk | 2021 | Precision medicine for long-term depression outcomes using the Personalized Advantage Index approach: cognitive therapy or interpersonal psychotherapy?  |

(Table S3 continued on the next page)

**Table S3: (continued) List of included randomized controlled trials**

|                |      |  |
|----------------|------|--|
| †van Bronswijk | 2021 | Selecting the optimal treatment for a depressed individual: Clinical judgment or statistical prediction?   |
| †Kuzminskaite  | 2021 | Patient Choice in Depression Psychotherapy: Outcomes of Patient-Preferred Therapy Versus Randomly Allocated Therapy  |
| Mantani        | 2017 | Smartphone Cognitive Behavioral Therapy as an Adjunct to Pharmacotherapy for Refractory Depression: Randomized Controlled Trial  |
| Markowitz      | 2005 | A comparative trial of psychotherapy and pharmacotherapy for "pure" dysthymic patients   |
| Marshall       | 2008 | Self-criticism predicts differential response to treatment for major depression  |
| McBride        | 2006 | Attachment as moderator of treatment outcome in major depression: a randomized control trial of interpersonal psychotherapy versus cognitive behavior therapy  |
| McBride        | 2007 | Changes in autobiographical memory specificity following cognitive behavior therapy and pharmacotherapy for major depression   |
| McGrath        | 2013 | Toward a neuroimaging treatment selection biomarker for major depressive disorder  |
| McKnight       | 1992 | Dexamethasone Suppression Test and Response to Cognitive Therapy and Antidepressant Medication   |
| Menchetti      | 2014 | Moderators of remission with interpersonal counselling or drug treatment in primary care patients with depression: randomised controlled trial   |
| Michalak       | 2015 | A randomized controlled trial on the efficacy of mindfulness-based cognitive therapy and a group version of cognitive behavioral analysis system of psychotherapy for chronically depressed patients |
| Mohr           | 2013 | A randomized controlled trial evaluating a manualized Tele Coaching protocol for improving adherence to a web-based intervention for the treatment of depression                                     |
| Murphy         | 1995 | Cognitive behavior therapy, relaxation training, and tricyclic antidepressant medication in the treatment of depression  |
| Nakagawa       | 2017 | Effectiveness of Supplementary Cognitive-Behavioral Therapy for Pharmacotherapy-Resistant Depression: A Randomized Controlled Trial  |
| †Sado          | 2021 | Cost-effectiveness analyses of augmented cognitive behavioral therapy for pharmacotherapy-resistant depression at secondary mental health care settings  |
| Nakao          | 2018 | Web-Based Cognitive Behavioral Therapy Blended With Face-to-Face Sessions for Major Depression: Randomized Controlled Trial  |
| Oehler         | 2020 | Efficacy of a Guided Web-Based Self-Management Intervention for Depression or Dysthymia: Randomized Controlled Trial With a 12-Month Follow-Up Using an Active Control Condition                     |
| Parker         | 2013 | The superiority of antidepressant medication to cognitive behavior therapy in melancholic depressed patients: a 12-week single-blind randomized study  |

(Table S3 continued on the next page)

**Table S3: (continued) List of included randomized controlled trials**

|           |      |  |
|-----------|------|--|
| Perini    | 2009 | Clinician-assisted Internet-based treatment is effective for depression: Randomized controlled trial   |
| Power     | 2012 | A randomized controlled trial of IPT versus CBT in primary care: with some cautionary notes about handling missing values in clinical trials                               |
| Propst    | 1992 | Comparative efficacy of religious and nonreligious cognitive-behavioral therapy for the treatment of clinical depression in religious individuals                          |
| Quilty    | 2008 | Evidence for the cognitive mediational model of cognitive behavioural therapy for depression   |
| Quilty    | 2014 | Cognitive Structure and Processing During Cognitive Behavioral Therapy vs. Pharmacotherapy for Depression  |
| Ravindran | 1999 | Treatment of primary dysthymia with group cognitive therapy and pharmacotherapy: clinical symptoms and functional impairments  |
| Reins     | 2019 | The more I got, the less I need? Efficacy of Internet-based guided self-help compared to online psychoeducation for major depressive disorder                              |
| Richards  | 2017 | Cost and Outcome of Behavioural Activation (COBRA): a randomised controlled trial of behavioural activation versus cognitive-behavioural therapy for depression            |
| †Richards | 2016 | Cost and Outcome of Behavioural Activation versus Cognitive Behavioural Therapy for Depression (COBRA): a randomised, controlled, non-inferiority trial.                   |
| Rief      | 2018 | Comparing the Efficacy of CBASP with Two Versions of CBT for Depression in a Routine Care Center: A Randomized Clinical Trial  |
| Sava      | 2009 | Cost-effectiveness and cost-utility of cognitive therapy, rational emotive behavioral therapy, and fluoxetine (Prozac) in treating depression: a randomized clinical trial |
| Schramm   | 2011 | Cognitive behavioral analysis system of psychotherapy versus interpersonal psychotherapy for early-onset chronic depression: a randomized pilot study                      |
| Schramm   | 2015 | Cognitive Behavioral Analysis System of Psychotherapy versus Escitalopram in Chronic Major Depression  |
| Schramm   | 2017 | Effect of Disorder-Specific vs Nonspecific Psychotherapy for Chronic Depression A Randomized Clinical Trial  |
| †Meister  | 2020 | Adverse events during a disorder-specific psychotherapy compared to a nonspecific psychotherapy in patients with chronic depression  |
| Scott     | 1992 | Edinburgh primary care depression study: treatment outcome, patient satisfaction, and cost after 16 weeks  |
| Scott     | 1997 | Acute and one-year outcome of a randomised controlled trial of brief cognitive therapy for major depressive disorder in primary care                                       |
| Scott     | 2000 | Effects of cognitive therapy on psychological symptoms and social functioning in residual depression   |
| †Paykel   | 1999 | Prevention of relapse in residual depression by cognitive therapy.   |

(Table S3 continued on the next page)



**Table S3: (continued) List of included randomized controlled trials**

|                |      |   |
|----------------|------|---|
| †Scott         | 2003 | Use of cognitive therapy for relapse prevention in chronic depression. Cost-effectiveness study.  |
| †Paykel        | 2005 | Duration of relapse prevention after cognitive therapy in residual depression: follow up of controlled trial.   |
| Segal          | 2006 | Cognitive Reactivity to Sad Mood Provocation and the Prediction of Depressive Relapse   |
| Shamsaei       | 2008 | Efficacy of Pharmacotherapy and Cognitive Therapy, Alone and in Combination in Major Depressive Disorder  |
| Shapiro        | 1990 | The Second Sheffield Psychotherapy Project :Rationale, design and preliminary outcome data  |
| Shapiro        | 1994 | Effects of treatment duration and severity of depression on the effectiveness of cognitive-behavioral and psychodynamic-interpersonal psychotherapy   |
| †Hardy         | 1995 | Impact of cluster C personality disorders on outcomes of contrasting brief psychotherapies for depression.  |
| Smith          | 2017 | Help from home for depression: A randomised controlled trial comparing internet-delivered cognitive behaviour therapy with bibliotherapy for depression   |
| Souza          | 2016 | Interpersonal psychotherapy as add-on for treatment-resistant depression: A pragmatic randomized controlled trial   |
| Stravynski     | 1994 | The treatment of depression with group behavioural-cognitive therapy and imipramine   |
| Thase          | 2018 | Improving the Efficiency of Psychotherapy for Depression: Computer-Assisted Versus Standard CBT   |
| Tollefson      | 1990 | 24 Hour Urinary Dehydroepiandrosterone Sulfate in Unipolar Depression Treated with Cognitive and/or Pharmacotherapy   |
| Tong           | 2020 | Group cognitive behavioural therapy can reduce stigma and improve treatment compliance in major depressive disorder patients  |
| Vernmark       | 2010 | Internet administered guided self-help versus individualized e-mail therapy: A randomized trial of two versions of CBT for major depression   |
| †Andersson     | 2013 | A 3.5-year follow-up of internet-delivered cognitive behavior therapy for major depression  |
| Wiles          | 2008 | A Randomized Controlled Trial of Cognitive Behavioural Therapy as an Adjunct to Pharmacotherapy in Primary Care Based Patients with Treatment Resistant Depression: A Pilot Study                           |
| †Mcknight      | 2013 | Cognitive-behavioral therapy improved response and remission at 6 and 12 months in treatment-resistant depression   |
| †Wiles         | 2014 | Clinical effectiveness and cost effectiveness of cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment-resistant depression in primary care: the CoBaIT randomised controlled trial. |
| †Hollingshurst | 2014 | Cost-effectiveness of cognitive-behavioural therapy as an adjunct to pharmacotherapy for treatment resistant depression in primary care: economic evaluation of the CoBaIT Trial.                           |
| †Abel          | 2016 | Sudden gains in cognitive-behavior therapy for treatment-resistant depression: processes of change.   |

(Table S3 continued on the next page)

**Table S3: (continued) List of included randomized controlled trials**

|             |      |   |
|-------------|------|---|
| †Wiles      | 2016 | Long-term effectiveness and cost effectiveness of cognitive behavioural therapy as an adjunct to pharmacotherapy for treatment-resistant depression in primary care: follow-up of the CoBaIT randomised controlled trial. |
| Wollersheim | 1991 | Group treatment of unipolar depression: A comparison of coping, supportive, bibliotherapy, and delayed treatment groups.  |
| Wong        | 2008 | Cognitive behavioral treatment groups for people with chronic depression in Hong Kong: a randomized wait-list control design  |
| †Wong       | 2008 | Cognitive and Health-Related Outcomes of Group Cognitive Behavioural Treatment for People With Depressive Symptoms in Hong Kong: Randomized Wait-List Control Study.  |
| Zu          | 2014 | A comparison of cognitive-behavioral therapy, antidepressants, their combination and standard treatment for Chinese patients with moderate-severe major depressive disorders  |

†The same data as the above study was used.

**Table S4: List of excluded reports by searching randomized controlled trials**

| <b>Author</b>   | <b>published year</b> | <b>exclusion reason</b>  |
|-----------------|-----------------------|--|
| Andersson       | 2005                  | unsuitable participants (no diagnosis of depression)             |
| Barker          | 1987                  | unsuitable participants (inpatients)                             |
| Beach           | 1992                  | unsuitable participants (marital discord)                        |
| Beevers         | 2017                  | unsuitable participants (no diagnosis of depression)             |
| Bellack         | 1981                  | unsuitable intervention (Placebo +DYN)                           |
| Beutler         | 1981                  | study aims other than intervention efficacy                      |
| Beutler         | 1991                  | study aims other than intervention efficacy                      |
| Blackburn       | 1981                  | lack of data   |
| Blackburn       | 1986                  | unsuitable participants (patients after cognitive therapy)       |
| Bolier          | 2013                  | unsuitable participants (no diagnosis of depression)             |
| Braithwaite     | 2007                  | unsuitable participants (no diagnosis of depression)             |
| Chowdhary       | 2016                  | unsuitable participants (no diagnosis of depression)             |
| Christensen     | 2004                  | study aims other than intervention efficacy                      |
| Christensen     | 2006                  | unsuitable participants (no diagnosis of depression)             |
| Conradi         | 2007                  | lack of data   |
| Conradi         | 2008                  | lack of data   |
| Covi            | 1987                  | lack of data   |
| Cramer          | 2011                  | unsuitable participants (no diagnosis of depression)             |
| Crits-Christoph | 2021                  | lack of data   |
| Cuijpers        | 2005                  | unsuitable participants (mood disorder)                          |
| Dalgard         | 2006                  | lack of data   |
| de Graaf        | 2009                  | unsuitable intervention (unsupported iCBT)                       |
| den Boer        | 2007                  | unsuitable participants (no diagnosis of depression)             |
| DeRubeis        | 2005                  | lack of data   |
| DiMascio        | 1979                  | lack of data   |
| Donker          | 2013                  | unsuitable intervention (internet IPT)                           |
| Driessen        | 2013                  | lack of data   |
| Dunn            | 1979                  | unsuitable participants (no diagnosis of depression)             |
| Earll           | 1982                  | unsuitable participants (no diagnosis of depression)             |
| Ekeblad         | 2016                  | unsuitable intervention (mindfulness)                            |
| Ekers           | 2011                  | study aims other than intervention efficacy (cost effectiveness) |
| Fennell         | 1987                  | lack of data   |
| Fleming         | 1980                  | unsuitable participants (no diagnosis of depression)             |
| Fonagy          | 2020                  | non-RCT  |
| Forand          | 2018                  | unsuitable participants (no diagnosis of depression)             |

(Table S4 continued on the next page)

**Table S4: (continued) List of excluded reports by searching randomized controlled trials**

|                |      |  |
|----------------|------|--|
| Geraedts       | 2014 | unsuitable participants (no diagnosis of depression) |
| Gibbons        | 2012 | unsuitable participants (no diagnosis of depression) |
| Gilbody        | 2015 | unsuitable participants (no diagnosis of depression) |
| Hallgren       | 2015 | unsuitable participants (no diagnosis of depression) |
| Hallgren       | 2016 | unsuitable participants (no diagnosis of depression) |
| Hamamci        | 2006 | unsuitable participants (no diagnosis of depression) |
| Hamdan-Mansour | 2009 | unsuitable participants (no diagnosis of depression) |
| Hammen         | 1975 | non-RCT  |
| Hellerstein    | 2001 | unsuitable intervention (combined CBT with IPT)      |
| Hickie         | 2010 | unsuitable participants (no diagnosis of depression) |
| Hoifodt        | 2013 | unsuitable participants (no diagnosis of depression) |
| Holdsworth     | 2009 | unsuitable participants (non-depression included )   |
| Hopko          | 2003 | non-RCT  |
| Husain         | 2014 | unsuitable participants (no diagnosis of depression) |
| Hyer           | 2008 | unsuitable participants (elderly)                    |
| Jacobs         | 2001 | unsuitable participants (non-depression included )   |
| Kanter         | 2015 | unsuitable participants (immigrant)                  |
| Katon          | 1996 | unsuitable participants (no diagnosis of depression) |
| Kellett        | 2021 | non-RCT  |
| Kessler        | 2009 | unsuitable intervention (online CBT)                 |
| Kivi           | 2014 | lack of data   |
| Klein          | 2016 | unsuitable participants (no diagnosis of depression) |
| Kovacs         | 1981 | unsuitable participants (no diagnosis of depression) |
| Kramer         | 2021 | unsuitable participants (no diagnosis of depression) |
| Kürümlüoğlugil | 2022 | outcomes by other scales (ATQ, DAS, ICDS)            |
| Lambert        | 2018 | unsuitable participants (no diagnosis of depression) |
| Lang           | 2006 | outcomes by other scales (Brief Symptom Inventory)   |
| Lave           | 1998 | lack of data   |
| Lee            | 2022 | unsuitable intervention (group BA)                   |
| Levesque       | 2011 | unsuitable intervention (preventive therapy)         |
| Levin          | 2011 | unsuitable participants (non-depression included )   |
| Littlewood     | 2015 | unsuitable participants (no diagnosis of depression) |
| Lobner         | 2018 | unsuitable intervention (unsupported iCBT)           |
| Luty           | 2007 | unsuitable participants (included bipolar)           |
| Mackinnon      | 2008 | unsuitable participants (no diagnosis of depression) |
| Martin         | 2001 | non-RCT  |

(Table S4 continued on the next page)

**Table S4: (continued) List of excluded reports by searching randomized controlled trials**

|            |      |   |
|------------|------|---|
| Maynard    | 1993 | unsuitable participants (no diagnosis of depression)                          |
| McClay     | 2015 | unsuitable participants (no diagnosis of depression)                          |
| McCrone    | 2004 | unsuitable participants (no diagnosis of depression)                          |
| McIndoo    | 2016 | unsuitable participants (no diagnosis of depression)                          |
| McLean     | 1979 | unsuitable intervention (BT (non-CBT, non-BA) vs TAU)                         |
| McLean     | 1990 | unsuitable intervention   |
| McNamara   | 1986 | unsuitable participants (no diagnosis of depression)                          |
| Melville   | 2010 | non-RCT   |
| Meyer      | 2009 | unsuitable intervention (iCBT without support)                                |
| Miranda    | 2003 | unsuitable intervention (CBT group included group therapy and individual one) |
| Moggia     | 2020 | unsuitable intervention (CBT vs DFT)  |
| Moradveisi | 2013 | lack of data  |
| Moradveisi | 2015 | lack of data  |
| Moritz     | 2012 | unsuitable intervention (iCBT without support)                                |
| Mukhtar    | 2011 | outcomes by other scales (DAS, ATQ)   |
| Murphy     | 1984 | unsuitable participants (affective disorder)                                  |
| Neimeyer   | 1990 | unsuitable intervention (group IPT )  |
| Newby      | 2013 | unsuitable participants (no diagnosis of depression)                          |
| Newby      | 2014 | unsuitable intervention (duration: 1 week)                                    |
| Nezu       | 1989 | unsuitable intervention (PST v s CBT)   |
| Nwabuko    | 2020 | unsuitable participants (no diagnosis of depression)                          |
| Ofoegbu    | 2020 | unsuitable participants (no diagnosis of depression)                          |
| Omidi      | 2013 | outcomes by other scales (BSI)  |
| Pace       | 1993 | unsuitable participants (no diagnosis of depression)                          |
| Patel      | 2017 | unsuitable participants (no diagnosis of depression)                          |
| Perry      | 2020 | study aims other than intervention efficacy                                   |
| Peters     | 2020 | unsuitable intervention (narrative therapy v s CBT)                           |
| Phillips   | 2014 | unsuitable participants (non-depression included )                            |
| Pittaway   | 2009 | unsuitable participants (non-depression included )                            |
| Place      | 2020 | unsuitable intervention (TAU vs TAU + mobile monitoring)                      |
| Proudfoot  | 2003 | unsuitable participants (non-depression included )                            |
| Proudfoot  | 2004 | unsuitable participants (non-depression included )                            |
| Raevuori   | 2021 | unsuitable intervention (mindfulness)   |
| Revicki    | 2005 | unsuitable intervention (CBT group including group and individual therapy)    |
| Richards   | 2015 | unsuitable intervention (TAU vs TAU + preventing cognitive therapy)           |

(Table S4 continued on the next page)

**Table S4: (continued) List of excluded reports by searching randomized controlled trials**

|                |      |  |
|----------------|------|--|
| Rizvi          | 2015 | lack of data   |
| Robichaud      | 2020 | unsuitable participants (no diagnosis of depression)                         |
| Robson         | 1984 | unsuitable participants (non-depression included )                           |
| Roepke         | 2015 | unsuitable participants (no diagnosis of depression)                         |
| Ross           | 1985 | unsuitable participants (no diagnosis of depression)                         |
| Rush           | 1977 | unsuitable participants (no diagnosis of depression)                         |
| Rush           | 1981 | non-RCT  |
| Ruwaard        | 2009 | unsuitable participants (no diagnosis of depression)                         |
| Salisbury      | 2016 | unsuitable intervention (Bibliotherapy)                                      |
| Salminen       | 2008 | lack of data   |
| Saloheimo      | 2016 | lack of data   |
| Santos         | 2017 | unsuitable participants (immigrants)   |
| Schloegelhofer | 2014 | unsuitable intervention (Bibliotherapy)                                      |
| Schneider      | 2014 | study aims other than intervention efficacy                                  |
| Schulberg      | 1996 | lack of data   |
| Scott          | 1990 | non-RCT  |
| Selmi          | 1991 | unsuitable participants (no diagnosis of depression)                         |
| Serretti       | 2013 | non-RCT  |
| Shapiro        | 1982 | unsuitable participants (adjustment disorder with depressed or anxious mood) |
| Shaw           | 1977 | unsuitable participants (no diagnosis of depression)                         |
| Simons         | 1984 | unsuitable participants (affective disorder)                                 |
| Simons         | 1984 | unsuitable participants (affective disorder)                                 |
| Simpson        | 2003 | unsuitable participants (no diagnosis of depression)                         |
| Songprakun     | 2012 | unsuitable intervention (Bibliotherapy vs TAU)                               |
| Stiles-Shields | 2019 | unsuitable participants (no diagnosis of depression)                         |
| Tang           | 2002 | non-RCT  |
| Tang           | 2005 | unsuitable intervention (AT v s CT)  |
| Teasdale       | 1984 | lack of data   |
| Titov          | 2011 | unsuitable intervention (transdiagnostic iCBT)                               |
| Tonning        | 2021 | unsuitable participants (just discharged patients)                           |
| Town           | 2017 | lack of data   |
| Town           | 2022 | lack of data   |
| Tulbure        | 2018 | unsuitable intervention (MBCT vs religious CBT vs WLC)                       |
| Twomey         | 2014 | unsuitable participants (non-depression included )                           |
| Tyrer          | 1988 | unsuitable participants (non-depression included )                           |
| Usaf           | 1990 | lack of data   |

(Table S4 continued on the next page)

**Table S4: (continued) List of excluded reports by searching randomized controlled trials**

|            |      |  |
|------------|------|--|
| Wagner     | 2014 | unsuitable participants (no diagnosis of depression)   |
| Wang       | 2021 | lack of data   |
| Warmerdam  | 2008 | unsuitable participants (no diagnosis of depression)   |
| Weissman   | 1979 | outcomes by other scales (Raskin Three Area Depression Scale)                                      |
| Weobong    | 2017 | unsuitable participants (no diagnosis of depression)   |
| Wetzel     | 1992 | unsuitable participants (no diagnosis of depression)   |
| Wiersma    | 2014 | unsuitable intervention (CBASP v s TAU which included many psychotherapy, e.g., CBT,IPT,DYN, etc.) |
| Wierzbicki | 1987 | unsuitable participants (affective disorder)   |
| Wilson     | 1983 | unsuitable participants (no diagnosis of depression)   |
| Wright     | 2005 | lack of data   |
| Yeung      | 2018 | unsuitable participants (no diagnosis of depression)   |
| Zeiss      | 1979 | unsuitable intervention  |
| Zemestani  | 2016 | unsuitable intervention (group BA vs metacognitive therapy)  |
| Zettle     | 1992 | non-RCT  |

AT = automatic thoughts, ATQ = automatic thoughts questionnaire, BA = behavioral activation, BSI = brief symptom inventory, BT = behavioral therapy, CBASP=cognitive behavioral analysis system of psychotherapy, CBT = cognitive behavioral therapy, CT = cognitive therapy, DAS = dysfunctional attitude scale, DFT = Dilemma focused therapy, DYN = psychoanalytic/psychodynamic psychotherapy, iCBT = computerized- or internet-cognitive behavior therapy, ICDS = interpersonal cognitive distortions scale, IPT = interpersonal psychotherapy, MBCT = mindfulness-based cognitive therapy, PST = problem solving therapy, RCT(s) = randomized controlled trial(s), TAU = treatment-as-usual, WLC = wait list control

**Table S5: Characteristics of included randomized controlled trials**

| Nr. | Author    | year | treatment                | mean age (SD) | baseline severity | primary outcome | secondary outcome | Duration (Weeks) | sessions | study form | note            |
|-----|-----------|------|--------------------------|---------------|-------------------|-----------------|-------------------|------------------|----------|------------|-----------------|
| 1   | Altamura  | 2017 | 1) IPT                   | 40.36(12.46)  | mild              | HRSD            |                   | 8                | 6        | PP         | with anxiety    |
|     |           |      | 2) TAU (pharmacotherapy) | 39.62(10.74)  |                   |                 |                   |                  |          |            |                 |
| 2   | Altamura  | 2017 | 1) IPT                   | 40.36(12.46)  | mild              | HRSD            |                   | 8                | 6        | PP         | without anxiety |
|     |           |      | 2) TAU (pharmacotherapy) | 39.62(10.74)  |                   |                 |                   |                  |          |            |                 |
| 3   | Andersson | 2013 | 1) iCBT                  | 42.37 (13.5)  | moderate          | BDI             | MADRS-S           | 9                | 8        | PP         |                 |
|     |           |      | 2) gCBT                  |               |                   |                 |                   |                  |          |            |                 |
| 4   | Bagby     | 2008 | 1) CBT (ftf)             | 38.1 (12.21)  | severe            | HRSD            |                   | 16~20            | 16~20    | PP         |                 |
|     |           |      | 2) TAU (pharmacotherapy) |               |                   |                 |                   |                  |          |            |                 |
| 5   | Barber    | 2012 | 1) DYN                   | 47.5 (12.2)   | severe            | HRSD            |                   | 16               | 20       | ITT        |                 |
|     |           |      | 2) TAU (pharmacotherapy) |               |                   |                 |                   |                  |          |            |                 |
| 6   | Berger    | 2011 | 1) iCBT                  | 38.8 (14.0)   | moderate          | BDI             |                   | 10               | 10       | ITT        |                 |
|     |           |      | 2) WLC                   |               |                   |                 |                   |                  |          |            |                 |
| 7   | Bernecker | 2016 | 1) CBT (ftf)             | 42.89(12.51)  | moderate          | BDI             |                   | 16               | 16       | PP         |                 |
|     |           |      | 2) IPT                   | 34.06 (10.4)  |                   |                 |                   |                  |          |            |                 |
| 8   | Blackburn | 1997 | 1) TAU (pharmacotherapy) | 40.1 (12.7)   | severe            | HRSD            | BDI               | 16               | 16       | mITT       |                 |
|     |           |      | 2) CBT (ftf)             | 39.6 (12)     |                   |                 |                   |                  |          |            |                 |
| 9   | Blom      | 2007 | 1) IPT                   | 41.08 (12.2)  | severe            | HRSD            | MADRS             | 12               | 12       | PP         |                 |
|     |           |      | 2) IPT+p                 | 41.08 (10.5)  |                   |                 |                   |                  |          |            |                 |
|     |           |      | 3) TAU (pharmacotherapy) | 40.08 (11.4)  |                   |                 |                   |                  |          |            |                 |
| 10  | Bodenmann | 2008 | 1) CBT (ftf) + p         | 44.35         | moderate          | HRSD            | BDI               | 20               | 20       | PP         |                 |
|     |           |      | 2) IPT+p                 | 47.33         |                   |                 |                   |                  |          |            |                 |

(Table S5 continued on the next page)



**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |           |      |   |              |          |       |     |    |       |     |                               |
|----|-----------|------|---|--------------|----------|-------|-----|----|-------|-----|-------------------------------|
| 11 | Bright    | 1999 | 1) gCBT                                     | 45.8         | moderate | HRSD  | BDI | 10 | 10    | PP  | by professional therapist     |
|    |           |      | 2) TAU (mutual support group therapy)       |              |          |       |     |    |       |     |                               |
| 12 | Bright    | 1999 | 1) gCBT                                     | 45.8         | moderate | HRSD  | BDI | 10 | 10    | PP  | by paraprofessional therapist |
|    |           |      | 2) TAU (mutual support group therapy)       |              |          |       |     |    |       |     |                               |
| 13 | Brown     | 1996 | 1) IPT                                      | 35 (11.6)    | severe   | HRSD  |     | 16 | 16~20 | ITT | without lifetime anxiety      |
|    |           |      | 2) TAU (pharmacotherapy)                    |              |          |       |     |    |       |     |                               |
| 14 | Brown     | 1996 | 1) IPT                                      | 40 (11.2)    | severe   | HRSD  |     | 16 | 16~20 | ITT | with lifetime anxiety         |
|    |           |      | 2) TAU (pharmacotherapy)                    |              |          |       |     |    |       |     |                               |
| 15 | Browne    | 2002 | 1) IPT+p                                    | 42.4 (12.0)  | moderate | MADRS |     | 24 | 12    | PP  |                               |
|    |           |      | 2) IPT                                      |              |          |       |     |    |       |     |                               |
|    |           |      | 3) TAU (pharmacotherapy)                    |              |          |       |     |    |       |     |                               |
| 16 | Bruijniks | 2020 | 1) CBT (ftf)                                | 37.85(12.26) | severe   | BDI   |     | 16 | 12~20 | ITT | twice weekly sessions         |
|    |           |      | 2) IPT                                      |              |          |       |     |    |       |     |                               |
| 17 | Bruijniks | 2020 | 1) CBT (ftf)                                | 37.85(12.26) | severe   | BDI   |     | 24 | 12~20 | ITT | once weekly sessions          |
|    |           |      | 2) IPT                                      |              |          |       |     |    |       |     |                               |
| 18 | Burnand   | 2002 | 1) DYN+p                                    | 36 (9.5)     | severe   | HRSD  |     | 10 | N/I   | ITT |                               |
|    |           |      | 2) TAU (pharmacotherapy)                    |              |          |       |     |    |       |     |                               |
| 19 | Chan      | 2012 | 1) gCBT+p                                   | 46.94 (6.54) | mild     | HRSD  |     | 10 | 10    | PP  |                               |
|    |           |      | 2) TAU (pharmacotherapy)                    | 45.44 (8.25) |          |       |     |    |       |     |                               |
| 20 | Chiang    | 2015 | 1) gCBT+p                                   | 45.43(10.88) | severe   | HRSD  | BDI | 12 | 12    | ITT |                               |
|    |           |      | 2) TAU (usual outpatient psychiatric care ) | 46.81(10.38) |          |       |     |    |       |     |                               |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |           |      |                                     |                  |          |      |       |    |       |     |                         |
|----|-----------|------|-------------------------------------|------------------|----------|------|-------|----|-------|-----|-------------------------|
| 21 | De Jonghe | 2001 | 1) DYN+p                            | 34               | severe   | HRSD |       | 24 | 16    | ITT |                         |
|    |           |      | 2) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 22 | de Mello  | 2001 | 1) IPT+p                            | N/I              | severe   | HRSD | MADRS | 16 | 16    | PP  |                         |
|    |           |      | 2) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 23 | Dimidjian | 2006 | 1) BA                               | 39.95<br>(10.28) | moderate | HRSD | BDI   | 16 | max24 | PP  | low<br>severity<br>MDD  |
|    |           |      | 2) CBT (ftf)                        |                  |          |      |       |    |       |     |                         |
|    |           |      | 3) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 24 | Dimidjian | 2006 | 1) BA                               | 39.86<br>(11.50) | severe   | HRSD | BDI   | 16 | max24 | PP  | high<br>severity<br>MDD |
|    |           |      | 2) CBT (ftf)                        |                  |          |      |       |    |       |     |                         |
|    |           |      | 3) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 25 | Dozois    | 2009 | 1) CBT (ftf) +p                     | 46.25 (10.6)     | severe   | HRSD | BDI   | 15 | 15    | PP  |                         |
|    |           |      | 2) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 26 | Dunlop    | 2017 | 1) CBT (ftf)                        | 40.0 (11.7)      | moderate | HRSD | BDI   | 12 | 16    | ITT |                         |
|    |           |      | 2) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
|    |           |      | 3) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 27 | Dunner    | 1996 | 1) CBT (ftf)                        | 35.9             | moderate | HRSD | BDI   | 16 | 16    | PP  |                         |
|    |           |      | 2) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 28 | Ekers     | 2011 | 1) BA+p                             | 44.72            | severe   | BDI  |       | 12 | 12    | PP  |                         |
|    |           |      | 2) TAU (by general<br>practitioner) |                  |          |      |       |    |       |     |                         |
| 29 | Elkin     | 1989 | 1) CBT (ftf)                        | 35 (8.5)         | severe   | HRSD | BDI   | 16 | 16~20 | ITT |                         |
|    |           |      | 2) IPT                              |                  |          |      |       |    |       |     |                         |
|    |           |      | 3) TAU<br>(pharmacotherapy)         |                  |          |      |       |    |       |     |                         |
| 30 | Embling   | 2002 | 1) gCBT+p                           | N/I              | severe   | BDI  |       | 8  | 12    | ITT |                         |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |            |      |  |              |          |      |         |     |       |     |  |
|----|------------|------|--|--------------|----------|------|---------|-----|-------|-----|--|
|    |            |      | 2) TAU<br>(antidepressants and clinical management)  |              |          |      |         |     |       |     |  |
| 31 | Fonagy     | 2015 | 1) DYN+p   | 42.7 (10.4)  | severe   | HRSD | BDI     | 24  | 24    | ITT |  |
|    |            |      | 2) TAU<br>(interventions by practitioner)  | 46.1 (9.9)   |          |      |         |     |       |     |  |
| 32 | Gibbons    | 2016 | 1) DYN   | 36.2 (12.1)  | severe   | HRSD |         | 20  | 16    | ITT |  |
|    |            |      | 2) CBT (ftf)   |              |          |      |         |     |       |     |  |
| 33 | Han        | 2020 | 1) gCBT+p  | 46.94 (6.54) | mild     | HRSD | BDI     | 10  | 10    | PP  |  |
|    |            |      | 2) TAU (usual care without psychological intervention)   | 45.44 (8.25) |          |      |         |     |       |     |  |
| 34 | Hemanny    | 2019 | 1) CBT (ftf) +p  | 39.6 (10.4)  | severe   | HRSD | BDI     | 12  | 12    | ITT |  |
|    |            |      | 2) BA+p  | 40.9 (11.0)  |          |      |         |     |       |     |  |
|    |            |      | 3) TAU<br>(pharmacotherapy, etc.)  | 38.7 (11.9)  |          |      |         |     |       |     |  |
| 35 | Hollandare | 2011 | 1) iCBT  | 45.3 (12.8)  | mild     | BDI  | MADRS-S | 10  | 10~17 | PP  |  |
|    |            |      | 2) TAU( telephone interview, e-mail contact with a personal therapist for non-specific support.) |              |          |      |         |     |       |     |  |
| 36 | Hollon     | 1992 | 1) CBT (ftf)   | 32.6 (10.8)  | severe   | HRSD | BDI     | 12  | 20    | ITT |  |
|    |            |      | 2) CBT (ftf) +p  |              |          |      |         |     |       |     |  |
|    |            |      | 3) TAU<br>(pharmacotherapy)  |              |          |      |         |     |       |     |  |
| 37 | Jacobson   | 1996 | 1) CBT (ftf)   | 38.3         | moderate | BDI  |         | N/I | 12~20 | PP  |  |
|    |            |      | 2) BA  | 36.6         |          |      |         |     |       |     |  |
| 38 | Jarrett    | 1999 | 1) CBT (ftf)   | 39.8 (1.48)  | moderate | HRSD | BDI     | 10  | 20    | ITT |  |
|    |            |      | 2) TAU<br>(pharmacotherapy)  | 38.7 (1.63)  |          |      |         |     |       |     |  |
| 39 | Johansson  | 2012 | 1) TAU (online group discussion)   | 44.7 (12.1)  | moderate | BDI  | MADRS-S | 10  | 8     | ITT |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |           |      |  |             |          |         |      |    |       |     |  |
|----|-----------|------|--|-------------|----------|---------|------|----|-------|-----|--|
|    |           |      | 2) iCBT (tailored)                     |             |          |         |      |    |       |     | treatment targeted both depression and comorbid symptoms |
|    |           |      | 3) iCBT                                |             |          |         |      |    |       |     |  |
| 40 | Johansson | 2019 | 1) iCBT+p                              | 39          | moderate | MADRS-S |      | 8  | 8     | ITT |  |
|    |           |      | 2) TAU (pharmacotherapy)               |             |          |         |      |    |       |     |  |
| 41 | Katayama  | 2022 | 1) CBT (ftf) +p                        | 38          | severe   | HRSD    |      | 16 | 16    | ITT |  |
|    |           |      | 2) TAU (pharmacotherapy)               | 37.4        |          |         |      |    |       |     |  |
| 42 | Keller    | 2000 | 1) CBT (ftf)                           | 43 (10.7)   | moderate | HRSD    |      | 12 | 16    | PP  |  |
|    |           |      | 2) TAU (pharmacotherapy)               |             |          |         |      |    |       |     |  |
|    |           |      | 3) CBT (ftf) +p                        |             |          |         |      |    |       |     |  |
| 43 | Kennedy   | 2007 | 1) CBT (ftf)                           | 30 (9.8)    | severe   | HRSD    |      | 16 | 16    | PP  |  |
|    |           |      | 2) TAU (pharmacotherapy)               | 41.25 (9.4) |          |         |      |    |       |     |  |
| 44 | King      | 2014 | 1) CBT (ftf)                           | 37 (1.5)    | moderate | BDI     |      | 12 | 12    | ITT |  |
|    |           |      | 2) TAU(non-directive counseling)       | 34 (1.7)    |          |         |      |    |       |     |  |
|    |           |      | 3) TAU (by general practitioner)       | 46 (3.1)    |          |         |      |    |       |     |  |
| 45 | Kocsis    | 2009 | 1) CBT (ftf) +p                        | 46.4 (11.7) | mild     | HRSD    | QIDS | 12 | 16    | PP  |  |
|    |           |      | 2) TAU(brief supportive psychotherapy) | 45.3 (11.9) |          |         |      |    |       |     |  |
|    |           |      | 3)TAU (pharmacotherapy)                | 43.2 (13.4) |          |         |      |    |       |     |  |
| 46 | Kooistra  | 2019 | 1) iCBT+p                              | 38.8 (10.9) | severe   | IDS-SR  |      | 20 | 18    | PP  |  |
|    |           |      | 2) CBT (ftf) +p                        |             |          |         |      |    |       |     |  |
| 47 | Lemmens   | 2015 | 1) CBT (ftf)                           | 41.2 (12.1) | moderate | BDI     |      | 12 | 16-20 | ITT |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |           |   |                             |                   |          |       |       |       |       |      |  |
|----|-----------|---|-----------------------------|-------------------|----------|-------|-------|-------|-------|------|--|
|    |           |   | 2) IPT                      |                   |          |       |       |       |       |      |  |
| 48 | Mantani   | 2017  | 1) iCBT+p                   | 40.2 (8.8)        | moderate | BDI   | PHQ-9 | 9     | 8     | ITT  |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) | 41.6 (8.9)        |          |       |       |       |       |      |  |
| 49 | Markowitz | 2005  | 1) IPT                      | approximate<br>40 | mild     | HRSD  | BDI   | 16    | 16~18 | ITT  |  |
|    |           | 2) IPT+p                                      |                             |                   |          |       |       |       |       |      |  |
|    |           | 3) TAU<br>(brief supportive<br>psychotherapy) |                             |                   |          |       |       |       |       |      |  |
|    |           | 4) TAU<br>(pharmacotherapy)                   |                             |                   |          |       |       |       |       |      |  |
| 50 | Marshall  | 2008  | 1) CBT (ftf)                | N/I               | moderate | HRSD  |       | 16    | 16    | PP   |  |
|    |           | 2) IPT  |                             |                   |          |       |       |       |       |      |  |
|    |           | 3) TAU<br>(pharmacotherapy)                   |                             |                   |          |       |       |       |       |      |  |
| 51 | McBride   | 2006  | 1) CBT (ftf)                | 40.20(12.21)      | moderate | HRSD  | BDI   | 12~16 | 12~16 | ITT  |  |
|    |           |   | 2) IPT                      |                   |          |       |       |       |       |      |  |
| 52 | McBride   | 2007  | 1) CBT (ftf)                | 40.71(10.79)      | severe   | BDI   |       | 16    | 16    | ITT  |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) |                   |          |       |       |       |       |      |  |
| 53 | McGrath   | 2013  | 1) CBT (ftf)                | 43.7              | severe   | HRSD  | BDI   | 12    | 16    | PP   |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) | 40                |          |       |       |       |       |      |  |
| 54 | Mcknight  | 1992  | 1) CBT (ftf)                | 37.5              | moderate | BDI   |       | 8     | 8     | mITT |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) |                   |          |       |       |       |       |      |  |
| 55 | Menchetti | 2014  | 1) IPT                      | 44.9 (14.1)       | moderate | HRSD  |       | 8     | 6     | ITT  |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) |                   |          |       |       |       |       |      |  |
| 56 | Michalak  | 2015  | 1) gCBT+p                   | 50.2 (10.5)       | moderate | HRSD  | BDI   | 8     | 8     | PP   |  |
|    |           |   | 2) TAU<br>(pharmacotherapy) | 54 (13.24)        |          |       |       |       |       |      |  |
| 57 | Mohr      | 2013  | 1) iCBT+p                   | 47.6 (12.4)       | moderate | PHQ-9 |       | 6     | 6     | ITT  |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |          |      |   |               |          |       |       |       |       |     |  |
|----|----------|------|---|---------------|----------|-------|-------|-------|-------|-----|--|
|    |          |      | 2) TAU (pharmacotherapy)                      | 48.49 (11.7)  |          |       |       |       |       |     |  |
| 58 | Murphy   | 1995 | 1) CBT (ftf)                                  | 39.4 (10.9)   | moderate | HRSD  | BDI   | 16    | 16~20 | PP  |  |
|    |          |      | 2) TAU (pharmacotherapy)                      |               |          |       |       |       |       |     |  |
|    |          |      | 3)TAU (relaxation training)                   |               |          |       |       |       |       |     |  |
| 59 | Nakagawa | 2017 | 1) CBT (ftf) +p                               | 39.5 (9.2)    | severe   | HRSD  | BDI   | 16    | 16    | ITT |  |
|    |          |      | 2) TAU (pharmacotherapy)                      | 41.7 (10.7)   |          |       |       |       |       |     |  |
| 60 | Nakao    | 2018 | 1) iCBT+p                                     | 40.2 (9.8)    | moderate | HRSD  | BDI   | 12    | 12    | ITT |  |
|    |          |      | 2) TAU (pharmacotherapy)                      |               |          |       |       |       |       |     |  |
| 61 | Oehler   | 2020 | 1) iCBT+p                                     | 42.9 (12.4)   | mild     | PHQ-9 |       | 6     | 6     | PP  |  |
|    |          |      | 2) TAU(online relaxation and pharmacotherapy) | 41.7 (12.4)   |          |       |       |       |       |     |  |
| 62 | Parker   | 2013 | 1) CBT (ftf)                                  | 48 (9.5)      | moderate | HRSD  | QIDS  | 12    | 12    | PP  |  |
|    |          |      | 2) TAU (pharmacotherapy)                      | 46.8 (13.5)   |          |       |       |       |       |     |  |
| 63 | Perini   | 2009 | 1) iCBT                                       | 49.29 (12.06) | moderate | BDI   | PHQ-9 | 8     | 6     | ITT |  |
|    |          |      | 2) TAU (pharmacotherapy)                      |               |          |       |       |       |       |     |  |
| 64 | Power    | 2012 | 1) CBT (ftf) +p                               | 36.1 (11.3)   | moderate | BDI   |       | 12~16 | 12~16 | PP  |  |
|    |          |      | 2) IPT+p                                      |               |          |       |       |       |       |     |  |
|    |          |      | 3) TAU (pharmacotherapy)                      |               |          |       |       |       |       |     |  |
| 65 | Propst   | 1992 | 1) CBT (ftf)                                  | 40            | mild     | HRSD  | BDI   | 12    | 18    | PP  |  |
|    |          |      | 2) WLC  |               |          |       |       |       |       |     |  |
| 66 | Quilty   | 2008 | 1) CBT (ftf)                                  | 42.07(12.34)  | moderate | HRSD  | BDI   | 16~20 | 16~20 | ITT |  |
|    |          |      | 2) IPT  | 42.70(13.14)  |          |       |       |       |       |     |  |
|    |          |      | 3) TAU (pharmacotherapy)                      | 43.07(11.80)  |          |       |       |       |       |     |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |           |      |   |               |          |       |        |    |       |      |  |  |
|----|-----------|------|---|---------------|----------|-------|--------|----|-------|------|--|--|
| 67 | Quilty    | 2014 | 1) CBT (ftf)                                      | 33.61 (9.97)  | moderate | HRSD  | BDI    | 16 | 16    | ITT  |  |  |
|    |           |      | 2) TAU (pharmacotherapy)                          |               |          |       |        |    |       |      |  |  |
| 68 | Ravindran | 1999 | 1) gCBT+p   | N/I           | moderate | HRSD  |        | 12 | 12    | ITT  |  |  |
|    |           |      | 2) TAU (pharmacotherapy)                          |               |          |       |        |    |       |      |  |  |
| 69 | Reins     | 2019 | 1) iCBT+p   | 41.6 (10.8)   | moderate | HRSD  | PHQ-9  | 6  | 6     | ITT  |  |  |
|    |           |      | 2) TAU (online psychoeducation + pharmacotherapy) |               |          |       |        |    |       |      |  |  |
| 70 | Richards  | 2017 | 1) CBT (ftf) +p                                   | 43.5 (14.1)   | moderate | PHQ   |        | 24 | 20    | PP   |  |  |
|    |           |      | 2) BA+p   |               |          |       |        |    |       |      |  |  |
| 71 | Rief      | 2018 | 1) CBT (ftf)                                      | 40.4 (13)     | moderate | BDI   |        | 16 | 16    | ITT  |  |  |
|    |           |      | 2) TAU (pharmacotherapy)                          | 38.8 (13.7)   |          |       |        |    |       |      |  |  |
| 72 | Sava      | 2009 | 1) TAU  | 39            | moderate | BDI   |        | 14 | max20 | ITT  |  |  |
|    |           |      | 2) CBT (ftf)                                      | 37            |          |       |        |    |       |      |  |  |
| 73 | Schramm   | 2011 | 1) CBT (ftf)                                      | 41.1 (12.7)   | moderate | HRSD  | BDI    | 16 | 22    | ITT  |  |  |
|    |           |      | 2) IPT  | 39.4 (10.6)   |          |       |        |    |       |      |  |  |
| 74 | Schramm   | 2015 | 1) CBT (ftf)                                      | 43.63 (10.56) | moderate | MADRS |        | 8  | 12    | ITT  |  |  |
|    |           |      | 2) TAU (pharmacotherapy)                          |               |          |       |        |    |       |      |  |  |
| 75 | Schramm   | 2017 | 1) CBT (ftf)                                      | 44.7 (12.1)   | moderate | HRSD  | IDS-SR | 20 | 24    | ITT  |  |  |
|    |           |      | 2) TAU  | 45.2 (11.6)   |          |       |        |    |       |      |  |  |
| 76 | Scott     | 1992 | 1) CBT (ftf)                                      | N/I           | severe   | HRSD  |        | 16 | 16    | mITT |  |  |
|    |           |      | 2) TAU (pharmacotherapy)                          |               |          |       |        |    |       |      |  |  |
|    |           |      | 3) TAU (by general practitioner)                  |               |          |       |        |    |       |      |  |  |
| 77 | Scott     | 1997 | 1) CBT (ftf) +p                                   | 41 (10.4)     | moderate | HRSD  | BDI    | 6  | 6     | PP   |  |  |
|    |           |      | 2) TAU (pharmacotherapy, counselling)             |               |          |       |        |    |       |      |  |  |
| 78 | Scott     | 2000 | 1) CBT (ftf) +p                                   | 43.5 (9.8)    | mild     | HRSD  | BDI    | 20 | 16    | ITT  |  |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |          |      |  |              |          |       |     |    |    |     |                                 |
|----|----------|------|--|--------------|----------|-------|-----|----|----|-----|---------------------------------|
|    |          |      | 2) TAU (clinical management + pharmacotherapy) | 43.2 (11.2)  |          |       |     |    |    |     |                                 |
| 79 | Segal    | 2006 | 1) CBT (ftf)                                   | 37.89(11.25) | severe   | HRSD  | BDI | 24 | 22 | PP  |                                 |
|    |          |      | 2) TAU (pharmacotherapy)                       | 36.84(11.59) |          |       |     |    |    |     |                                 |
| 80 | Shamsaei | 2008 | 1) CBT (ftf)                                   | 36 (11)      | severe   | BDI   |     | 8  | 8  | ITT |                                 |
|    |          |      | 2) CBT (ftf) +p                                |              |          |       |     |    |    |     |                                 |
|    |          |      | 3) TAU (pharmacotherapy)                       |              |          |       |     |    |    |     |                                 |
| 81 | Shapiro  | 1990 | 1) DYN   | N/I          | mild     | BDI   |     | 8  | 8  | ITT | 8sessions                       |
|    |          |      | 2) CBT (ftf)                                   |              |          |       |     |    |    |     |                                 |
| 82 | Shapiro  | 1990 | 1) DYN   | N/I          | mild     | BDI   |     | 16 | 16 | ITT | 16 sessions                     |
|    |          |      | 2) CBT (ftf)                                   |              |          |       |     |    |    |     |                                 |
| 83 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | mild     | BDI   |     | 8  | 8  | PP  | low severity (BDI = 16-20)      |
|    |          |      | 2) IPT   |              |          |       |     |    |    |     |                                 |
| 84 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | mild     | BDI   |     | 8  | 8  | PP  | moderate severity (BDI = 21-26) |
|    |          |      | 2) IPT   |              |          |       |     |    |    |     |                                 |
| 85 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | moderate | BDI   |     | 8  | 8  | PP  | high severity (BDI ≥ 27)        |
|    |          |      | 2) IPT   |              |          |       |     |    |    |     |                                 |
| 86 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | mild     | BDI   |     | 16 | 16 | PP  | low severity (BDI = 16-20)      |
|    |          |      | 2) IPT   |              |          |       |     |    |    |     |                                 |
| 87 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | mild     | BDI   |     | 16 | 16 | PP  | moderate severity (BDI = 21-26) |
|    |          |      | 2) IPT   |              |          |       |     |    |    |     |                                 |
| 88 | Shapiro  | 1994 | 1) CBT (ftf)                                   | 40.5 (9.5)   | severe   | BDI   |     | 16 | 16 | PP  | high severity (BDI ≥ 27)        |
|    |          |      | 2)IPT  |              |          |       |     |    |    |     |                                 |
| 89 | Smith    | 2017 | 1) iCBT  | 42.50(12.63) | moderate | PHQ-9 |     | 12 | 6  | PP  |                                 |

(Table S5 continued on the next page)



**Table S5: (continued) Characteristics of included randomized controlled trials**

|    |             |      |  |                  |          |      |         |       |       |     |  |
|----|-------------|------|--|------------------|----------|------|---------|-------|-------|-----|--|
|    |             |      | 2) TAU<br>(Any treatment that has already started can be continued.) | 37.59<br>(13.29) |          |      |         |       |       |     |  |
| 90 | Souza       | 2016 | 1) IPT+p   | 49.3 (12.31)     | severe   | HRSD | BDI     | 16~19 | 16    | ITT |  |
|    |             |      | 2) TAU<br>(pharmacotherapy + clinical management)                    | 49.18 (12.5)     |          |      |         |       |       |     |  |
| 91 | Stravynski  | 1994 | 1) gCBT  | N/I              | severe   | HRSD | BDI     | 15    | 15    | N/I |  |
|    |             |      | 2) gCBT+p  |                  |          |      |         |       |       |     |  |
| 92 | Thase       | 2018 | 1) iCBT  | 46.3 (14,3)      | severe   | HRSD | BDI     | 16    | 9     | ITT |  |
|    |             |      | 2) CBT (ftf)   |                  |          |      |         |       |       |     |  |
| 93 | Tollefson   | 1990 | 1) CBT (ftf)   | 33.64(10.36)     | severe   | HRSD |         | 12    | 16    | ITT |  |
|    |             |      | 2) CBT (ftf) +p  |                  |          |      |         |       |       |     |  |
|    |             |      | 3) TAU<br>(pharmacotherapy)  |                  |          |      |         |       |       |     |  |
| 94 | Tong        | 2020 | 1) gCBT+p  | 38.67(13.17)     | moderate | HRSD |         | 8     | 8     | PP  |  |
|    |             |      | 2) TAU<br>(pharmacotherapy)  | 36.82 (8.3)      |          |      |         |       |       |     |  |
| 95 | Vernmark    | 2010 | 1) iCBT  | 37 (12.9)        | moderate | BDI  | MADRS-S | 8     | 7     | ITT |  |
|    |             |      | 2) TAU<br>(pharmacotherapy)  |                  |          |      |         |       |       |     |  |
| 96 | Wiles       | 2008 | 1) CBT (ftf) +p  | 45.5 (12.8)      | moderate | BDI  |         | 16    | 12~20 | PP  |  |
|    |             |      | 2) TAU<br>(pharmacotherapy)  | 45.1 (11.1)      |          |      |         |       |       |     |  |
| 97 | Wiles       | 2013 | 1) CBT (ftf) +p  | 49.6 (11.7)      | severe   | BDI  | PHQ-9   | 24    | 12~18 | PP  |  |
|    |             |      | 2) TAU (by general practitioner)                                     |                  |          |      |         |       |       |     |  |
| 98 | Wollersheim | 1991 | 1) gCBT  | 39.4             | moderate | BDI  |         | 11    | 10    | ITT |  |
|    |             |      | 2) TAU (group supportive therapy)                                    |                  |          |      |         |       |       |     |  |
|    |             |      | 3) WLC   |                  |          |      |         |       |       |     |  |
| 99 | Wong        | 2008 | 1) gCBT+p  | 37.4 (9.4)       | moderate | BDI  |         | 10    | 10    | PP  |  |
|    |             |      | 2) TAU<br>(pharmacotherapy)  |                  |          |      |         |       |       |     |  |

(Table S5 continued on the next page)

**Table S5: (continued) Characteristics of included randomized controlled trials**

|     |    |      |                                 |             |          |         |  |    |    |    |  |
|-----|----|------|---------------------------------|-------------|----------|---------|--|----|----|----|--|
| 100 | Zu | 2014 | 1) CBT (ftf)                    | 32.7 (7.4)  | moderate | QIDS-SR |  | 24 | 20 | PP |  |
|     |    |      | 2) CBT (ftf) +p                 | 36.6 (10.6) |          |         |  |    |    |    |  |
|     |    |      | 3) TAU<br>(pharmacotherapy)     | 41.3 (11.5) |          |         |  |    |    |    |  |
|     |    |      | 4) TAU (clinical<br>management) | 43.8 ( 9.1) |          |         |  |    |    |    |  |

Nr. = trial number, Nr.1 and 2, 11 and 12, 13 and 14, 16 and 17, 23 and 24, and 81 to 88 respectively are from the same study.

BA = behavioral activation, BDI = Beck Depression Index, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DSM = Diagnostic and Statistical Manual of Mental Disorder, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, HRSD = Hamilton Rating Scale for Depression, iCBT = computerized- or internet-cognitive behavior therapy, IDS = Inventory of Depressive Symptomatology, IDS-SR = a self-report version of IDS, IPT = interpersonal psychotherapy, ITT = intention-to-treat, MADRS = Montgomery Åsberg Depression Rating Scale, MADRS-S = a self-report version of MADRS, mITT = modified ITT, N/I = not informed, PHQ-9 = Patient Health Questionnaire-9, PP = per-protocol, QIDS = Quick Inventory of Depressive Symptomatology, QIDS-SR = a self-report version of QIDS, SNRI = Serotonin Noradrenaline Reuptake Inhibitor, SSRI = Selective Serotonin Reuptake Inhibitor, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy

**Table S6: Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**

| <b>No.</b> | <b>treatment</b> | <b>n</b> | <b>mean</b> | <b>SD</b> | <b>ROB</b> |
|------------|------------------|----------|-------------|-----------|------------|
| 1          | IPT              | 8        | 4.57        | 3.22      | 1          |
| 1          | TAU              | 11       | 6.29        | 3.41      | 1          |
| 2          | IPT              | 9        | 4.93        | 2.95      | 1          |
| 2          | TAU              | 13       | 6.96        | 3.46      | 1          |
| 3          | iCBT             | 32       | 13.6        | 10.1      | 3          |
| 3          | gCBT             | 33       | 17.9        | 8.8       | 3          |
| 4          | CBT (ftf)        | 105      | 6.6         | 4.98      | 3          |
| 4          | TAU              | 69       | 5.06        | 5.1       | 3          |
| 5          | DYN              | 51       | 14.53       | 8.32      | 1          |
| 5          | TAU              | 55       | 14.2        | 7.62      | 1          |
| 6          | iCBT             | 25       | 17.3        | 10.2      | 3          |
| 6          | WLC              | 26       | 28.5        | 9.4       | 3          |
| 7          | CBT (ftf)        | 29       | 10.62       | 7.37      | 3          |
| 7          | IPT              | 27       | 12.37       | 9.71      | 3          |
| 8          | TAU              | 23       | 11.4        | 7.3       | 3          |
| 8          | CBT (ftf)        | 24       | 10.7        | 7.6       | 3          |
| 9          | IPT              | 34       | 14.7        | 8.1       | 1          |
| 9          | IPT+p            | 33       | 13.8        | 7.7       | 1          |
| 9          | TAU              | 30       | 15.1        | 7.5       | 1          |
| 10         | CBT (ftf) +p     | 19       | 9.81        | 8.21      | 2          |
| 10         | IPT+p            | 18       | 9.34        | 5.82      | 2          |
| 11         | gCBT             | 18       | 8.17        | 6.41      | 3          |
| 11         | TAU              | 22       | 8.5         | 6.39      | 3          |
| 12         | gCBT             | 13       | 6.85        | 3.71      | 3          |
| 12         | TAU              | 14       | 6.07        | 2.65      | 3          |
| 13         | IPT              | 29       | 10.1        | 5.7       | 1          |
| 13         | TAU              | 21       | 8.3         | 6.3       | 1          |
| 14         | IPT              | 52       | 12.9        | 7.3       | 1          |
| 14         | TAU              | 55       | 12.3        | 8.3       | 1          |
| 15         | IPT+p            | 212      | 15          | 10.4      | 3          |
| 15         | IPT              | 178      | 16.8        | 10.6      | 3          |
| 15         | TAU              | 196      | 14.3        | 9.8       | 3          |
| 16         | CBT (ftf)        | 49       | 27.15       | 12.51     | 3          |
| 16         | IPT              | 47       | 26.05       | 14.55     | 3          |
| 17         | CBT (ftf)        | 49       | 23.17       | 14.02     | 3          |
| 17         | IPT              | 55       | 24.81       | 11.94     | 3          |
| 18         | DYN+p            | 35       | 8.9         | 7         | 3          |
| 18         | TAU              | 39       | 9.7         | 7.3       | 3          |
| 19         | gCBT+p           | 17       | 6.82        | 5.73      | 3          |
| 19         | TAU              | 16       | 10          | 4.41      | 3          |
| 20         | gCBT+p           | 30       | 8.77        | 3.99      | 1          |
| 20         | TAU              | 32       | 37.28       | 7.15      | 1          |
| 21         | DYN+p            | 83       | 12.13       | 7.55      | 2          |
| 21         | TAU              | 84       | 15.62       | 7.91      | 2          |
| 22         | IPT+p            | 11       | 4.4         | 5.6       | 3          |
| 22         | TAU              | 13       | 8.1         | 8.8       | 3          |
| 23         | BA               | 13       | 7.92        | 7.68      | 1          |
| 23         | CBT (ftf)        | 16       | 7.19        | 4.09      | 1          |

(Table S6 continued on the next page)

**Table S6: (continued) Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**

|    |              |     |          |          |   |
|----|--------------|-----|----------|----------|---|
| 23 | TAU          | 22  | 8.45     | 5.26     | 1 |
| 24 | BA           | 16  | 7.56     | 6.94     | 1 |
| 24 | CBT (ftf)    | 18  | 10.33    | 7.62     | 1 |
| 24 | TAU          | 27  | 8.63     | 7.19     | 1 |
| 25 | CBT (ftf) +p | 21  | 6.43     | 6.95     | 2 |
| 25 | TAU          | 21  | 9.33     | 7.21     | 2 |
| 26 | CBT (ftf)    | 115 | 8.8      | 7        | 1 |
| 26 | TAU          | 229 | 7.548472 | 5.702393 | 1 |
| 27 | CBT (ftf)    | 10  | 10.8     | 5.5      | 1 |
| 27 | TAU          | 12  | 6.9      | 5.5      | 1 |
| 28 | BA+p         | 16  | 11.93    | 11.84    | 3 |
| 28 | TAU          | 22  | 27.4     | 14.01    | 3 |
| 29 | CBT (ftf)    | 59  | 10.7     | 7.9      | 1 |
| 29 | IPT          | 61  | 9.8      | 7.9      | 1 |
| 29 | TAU          | 57  | 9.8      | 7.8      | 1 |
| 30 | gCBT+p       | 19  | 15.17    | 5.15     | 3 |
| 30 | TAU          | 19  | 32.17    | 8.01     | 3 |
| 31 | DYN+p        | 67  | 16.8     | 6        | 1 |
| 31 | TAU          | 62  | 18.3     | 5.8      | 1 |
| 32 | DYN          | 118 | 16.89    | 4.35     | 1 |
| 32 | CBT (ftf)    | 119 | 16.06    | 4.23     | 1 |
| 33 | gCBT+p       | 17  | 6.13     | 5.11     | 1 |
| 33 | TAU          | 16  | 9.75     | 4.16     | 1 |
| 34 | CBT (ftf) +p | 26  | 9.84     | 5.9      | 3 |
| 34 | BA+p         | 24  | 9.1      | 7.3      | 3 |
| 34 | TAU          | 26  | 17.98    | 6.3      | 3 |
| 35 | iCBT         | 38  | 9.3      | 12       | 3 |
| 35 | TAU          | 39  | 13.4     | 11.9     | 3 |
| 36 | CBT (ftf)    | 25  | 13.3     | 10       | 1 |
| 36 | CBT (ftf) +p | 25  | 10.5     | 10       | 1 |
| 36 | TAU          | 57  | 14.2     | 10       | 1 |
| 37 | CBT (ftf)    | 50  | 10.1     | 9.6      | 3 |
| 37 | BA           | 56  | 9.1      | 7.9      | 3 |
| 38 | CBT (ftf)    | 36  | 10.25    | 8.1      | 2 |
| 38 | TAU          | 36  | 8.64     | 6.42     | 2 |
| 39 | TAU          | 39  | 21.67    | 9.5      | 3 |
| 39 | iCBT         | 70  | 14.88743 | 9.843648 | 3 |
| 40 | iCBT+p       | 27  | 13.6     | 6.1      | 3 |
| 40 | TAU          | 27  | 23.1     | 5.7      | 3 |
| 41 | CBT (ftf) +p | 19  | 11.7     | 1.7      | 1 |
| 41 | TAU          | 19  | 11.3     | 1.7      | 1 |
| 42 | CBT (ftf)    | 173 | 15.1     | 9.075533 | 3 |
| 42 | TAU          | 167 | 14.7     | 9.045994 | 3 |
| 42 | CBT (ftf) +p | 179 | 9.7      | 8.696407 | 3 |
| 43 | CBT (ftf)    | 12  | 9.8      | 7.6      | 3 |
| 43 | TAU          | 12  | 7.4      | 4.9      | 3 |
| 44 | CBT (ftf)    | 58  | 15       | 12.94681 | 3 |
| 44 | TAU          | 72  | 15.59722 | 10.75444 | 3 |
| 45 | CBT (ftf) +p | 174 | 11.29    | 8.3      | 1 |
| 45 | TAU          | 244 | 12.61738 | 8.430957 | 1 |
| 46 | iCBT+p       | 35  | 30.7     | 16.1     | 3 |

(Table S6 continued on the next page)

**Table S6: (continued) Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**

|    |              |     |          |          |   |
|----|--------------|-----|----------|----------|---|
| 46 | CBT (ftf) +p | 30  | 27.1     | 15.7     | 3 |
| 47 | CBT (ftf)    | 76  | 22.6     | 10.45246 | 3 |
| 47 | IPT          | 75  | 20.9     | 9.720693 | 3 |
| 48 | iCBT+p       | 81  | 19.3     | 10.33163 | 3 |
| 48 | TAU          | 83  | 23.3     | 9.063952 | 3 |
| 49 | IPT          | 23  | 12.5     | 5.9      | 1 |
| 49 | IPT+p        | 21  | 9.9      | 6.3      | 1 |
| 49 | TAU          | 50  | 11.056   | 6.542985 | 1 |
| 50 | CBT (ftf)    | 37  | 6.3      | 4.81     | 3 |
| 50 | IPT          | 35  | 8.4      | 6.46     | 3 |
| 50 | TAU          | 30  | 4.7      | 5.32     | 3 |
| 51 | CBT (ftf)    | 28  | 3.57     | 3.2      | 1 |
| 51 | IPT          | 27  | 4.41     | 3.26     | 1 |
| 52 | CBT (ftf)    | 21  | 12.62    | 10.82    | 3 |
| 52 | TAU          | 21  | 10       | 8.63     | 3 |
| 53 | CBT (ftf)    | 33  | 9.52     | 5.53     | 3 |
| 53 | TAU          | 32  | 8.28     | 5.4      | 3 |
| 54 | CBT (ftf)    | 12  | 9.9      | 10.8     | 3 |
| 54 | TAU          | 11  | 8.4      | 5.5      | 3 |
| 55 | IPT          | 143 | 7.8      | 4.9      | 1 |
| 55 | TAU          | 144 | 8.6      | 5.3      | 1 |
| 56 | gCBT+p       | 25  | 14.64    | 8.85     | 3 |
| 56 | TAU          | 32  | 21.16    | 8.16     | 3 |
| 57 | iCBT+p       | 34  | 9.84     | 0.9      | 3 |
| 57 | TAU          | 33  | 12.51    | 0.86     | 3 |
| 58 | CBT (ftf)    | 11  | 2.27     | 2.37     | 3 |
| 58 | TAU          | 23  | 6.698696 | 6.357324 | 3 |
| 59 | CBT (ftf) +p | 40  | 8.2      | 4.7      | 1 |
| 59 | TAU          | 40  | 13.2     | 6.9      | 1 |
| 60 | iCBT+p       | 20  | 9.4      | 5.1      | 1 |
| 60 | TAU          | 20  | 15.5     | 6.3      | 1 |
| 61 | iCBT+p       | 133 | 6.9      | 3.7      | 3 |
| 61 | TAU          | 129 | 7.4      | 3.7      | 3 |
| 62 | CBT (ftf)    | 11  | 10.6     | 7.4      | 3 |
| 62 | TAU          | 18  | 6.5      | 4.6      | 3 |
| 63 | iCBT         | 27  | 17.3     | 9.86     | 3 |
| 63 | TAU          | 17  | 23.33    | 9.29     | 3 |
| 64 | CBT (ftf) +p | 22  | 18.14    | 14.701   | 3 |
| 64 | IPT+p        | 39  | 14.15    | 13.941   | 3 |
| 64 | TAU          | 10  | 23.6     | 14.841   | 3 |
| 65 | CBT (ftf)    | 10  | 9.7      | 2.04     | 1 |
| 65 | WLC          | 11  | 13.72    | 6.08     | 1 |
| 66 | CBT (ftf)    | 45  | 4.07     | 3.76     | 3 |
| 66 | IPT          | 46  | 3.87     | 3.4      | 3 |
| 66 | TAU          | 41  | 2.32     | 2.51     | 3 |
| 67 | CBT (ftf)    | 54  | 8.14     | 6.28     | 3 |
| 67 | TAU          | 50  | 8.19     | 6.08     | 3 |
| 68 | gCBT+p       | 25  | 7.5      | 5.93     | 1 |
| 68 | TAU          | 22  | 7.5      | 5.5      | 1 |
| 69 | iCBT+p       | 65  | 13.75    | 7.52     | 1 |
| 69 | TAU          | 66  | 16.47    | 9.45     | 1 |

(Table S6 continued on the next page)

**Table S6: (continued) Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**

|    |              |     |          |          |   |
|----|--------------|-----|----------|----------|---|
| 70 | CBT (ftf) +p | 190 | 9.41     | 7.04     | 3 |
| 70 | BA+p         | 183 | 9.72     | 6.88     | 3 |
| 71 | CBT (ftf)    | 43  | 17.68    | 10.63    | 3 |
| 71 | TAU          | 42  | 23.38    | 10.78    | 3 |
| 72 | TAU          | 44  | 10.57    | 6.51     | 3 |
| 72 | CBT (ftf)    | 49  | 9.45     | 6.72     | 3 |
| 73 | CBT (ftf)    | 14  | 11.21    | 10.84    | 1 |
| 73 | IPT          | 15  | 18.87    | 11.71    | 1 |
| 74 | CBT (ftf)    | 29  | 23.13    | 8.68     | 3 |
| 74 | TAU          | 30  | 19.67    | 10.35    | 3 |
| 75 | CBT (ftf)    | 29  | 6.7      | 6.1      | 3 |
| 75 | TAU          | 55  | 8.210909 | 7.913584 | 3 |
| 76 | CBT (ftf) +p | 18  | 13.5     | 5.3      | 3 |
| 76 | TAU          | 16  | 16.5     | 6.8      | 3 |
| 77 | CBT (ftf) +p | 80  | 8.7      | 5.3      | 1 |
| 77 | TAU          | 78  | 9.4      | 5.2      | 1 |
| 78 | CBT (ftf)    | 88  | 5.84     | 4.67     | 3 |
| 78 | TAU          | 56  | 6        | 4.83     | 3 |
| 79 | CBT (ftf)    | 40  | 25.6     | 5.1      | 3 |
| 79 | CBT (ftf) +p | 40  | 19.2     | 5.7      | 3 |
| 79 | TAU          | 40  | 23.4     | 4.2      | 3 |
| 80 | DYN          | 12  | 11.4     | 8.6      | 3 |
| 80 | CBT (ftf)    | 12  | 9.7      | 8.2      | 3 |
| 81 | DYN          | 12  | 9.3      | 6.3      | 3 |
| 81 | CBT (ftf)    | 12  | 6.6      | 6.4      | 3 |
| 82 | CBT (ftf)    | 9   | 6.38     | 6.37     | 3 |
| 82 | IPT          | 9   | 7.89     | 7.64     | 3 |
| 83 | CBT (ftf)    | 10  | 8.9      | 8.52     | 3 |
| 83 | IPT          | 10  | 12.39    | 8.89     | 3 |
| 84 | CBT (ftf)    | 10  | 11       | 7.59     | 3 |
| 84 | IPT          | 10  | 15.9     | 7.68     | 3 |
| 85 | CBT (ftf)    | 10  | 8.3      | 7.35     | 3 |
| 85 | IPT          | 10  | 5.9      | 6.59     | 3 |
| 86 | CBT (ftf)    | 9   | 3.11     | 3.95     | 3 |
| 86 | IPT          | 9   | 9.56     | 4.9      | 3 |
| 87 | CBT (ftf)    | 10  | 11.58    | 6.76     | 3 |
| 87 | IPT          | 9   | 12.44    | 9.43     | 3 |
| 88 | iCBT         | 33  | 8.95     | 4.77     | 3 |
| 88 | TAU          | 48  | 13.14    | 4.91     | 3 |
| 89 | IPT+p        | 17  | 12.3     | 7.00928  | 1 |
| 89 | TAU          | 23  | 13.8     | 6.714164 | 1 |
| 90 | gCBT         | 12  | 10.2     | 5.3      | 3 |
| 90 | gCBT+p       | 12  | 6.5      | 6.9      | 3 |
| 91 | iCBT         | 77  | 8.9      | 5.6      | 1 |
| 91 | CBT (ftf)    | 77  | 9.2      | 6.3      | 1 |
| 92 | CBT (ftf)    | 12  | 8.78     | 7.45     | 2 |
| 92 | CBT (ftf) +p | 12  | 4.26     | 5.82     | 2 |
| 92 | TAU          | 23  | 8.26     | 8.46     | 2 |
| 93 | gCBT+p       | 43  | 11.12    | 3.58     | 3 |
| 93 | TAU          | 45  | 13.07    | 2.54     | 3 |
| 94 | iCBT         | 29  | 12.3     | 7.3      | 3 |

(Table S6 continued on the next page)

**Table S6: (continued) Treatment types, outcomes, and overall risk of bias for each randomized controlled trial**

|     |              |     |          |          |   |
|-----|--------------|-----|----------|----------|---|
| 94  | TAU          | 29  | 16.6     | 7.9      | 3 |
| 95  | CBT (ftf) +p | 14  | 13.1     | 11.9     | 3 |
| 95  | TAU          | 9   | 19.3     | 5.3      | 3 |
| 96  | CBT (ftf) +p | 206 | 18.9     | 14.2     | 3 |
| 96  | TAU          | 213 | 24.5     | 13.1     | 3 |
| 97  | gCBT         | 8   | 20       | 13.73    | 3 |
| 97  | TAU          | 8   | 18.38    | 8.96     | 3 |
| 97  | WLC          | 8   | 18.25    | 7.55     | 3 |
| 98  | gCBT+p       | 48  | 13.1     | 11.1     | 3 |
| 98  | TAU          | 48  | 22.4     | 13.3     | 3 |
| 99  | CBT (ftf)    | 12  | 4.2      | 4.1      | 3 |
| 99  | CBT (ftf) +p | 43  | 5.9      | 4.2      | 3 |
| 99  | TAU          | 41  | 6.382927 | 4.406604 | 3 |
| 100 | CBT (ftf)    | 137 | 18.1     | 10.08    | 1 |
| 100 | TAU          | 131 | 21.1     | 9.48     | 1 |

No. = trial number, treatment = type of compared intervention, n = number of participants, mean = mean of post-treatment outcome, SD = standard deviation of post-treatment outcome, ROB = overall risk of bias for individual trial, 1 = low risk of bias, 2 = some concern risk of bias, and 3 = high risk of bias in the ROB column. BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy,

**Table S7: Heterogeneity and inconsistency for all comparisons in Grp1**

| Arm 1     | Arm 2 | k  | n    | prop | I2            | Direct estimate            | Indirect estimate          | Diff    | p-value       |
|-----------|-------|----|------|------|---------------|----------------------------|----------------------------|---------|---------------|
| CBT (ftf) | BA    | 5  | 592  | 0.78 | 0.00%         | 0.0762 [-0.3045; 0.4569]   | 0.8611 [ 0.1520; 1.5702]   | 0.7849  | 0.056         |
|           |       |    |      |      |               |                            |                            |         |               |
| TAU       | BA    | 4  | 166  | 0.52 | <b>76.30%</b> | 0.7029 [ 0.2302; 1.1755]   | 0.1202 [-0.3727; 0.6131]   | -0.5827 | 0.0945        |
| CBT (ftf) | DYN   | 3  | 285  | 0.38 | 0.00%         | -0.2521 [-0.7765; 0.2723]  | 0.0402 [-0.3702; 0.4507]   | -0.2923 | 0.3895        |
| CBT (ftf) | iCBT  | 2  | 219  | 0.18 | 0.00%         | -0.0729 [-0.6367; 0.4909]  | 0.6728 [ 0.4051; 0.9404]   | -0.7457 | <b>0.0192</b> |
| CBT (ftf) | IPT   | 17 | 987  | 0.64 | 22.90%        | -0.1282 [-0.3506; 0.0942]  | -0.1618 [-0.4571; 0.1334]  | 0.0336  | 0.8585        |
| CBT (ftf) | TAU   | 39 | 4380 | 0.8  | 62.10%        | -0.0921 [-0.2274; 0.0431]  | -0.4978 [-0.7711; -0.2245] | 0.4056  | <b>0.0091</b> |
| CBT (ftf) | WLC   | 1  | 21   | 0.28 | .             | -0.8684 [-1.9981; 0.2612]  | -0.2092 [-0.9161; 0.4976]  | -0.6592 | 0.3323        |
| DYN       | TAU   | 4  | 476  | 0.65 | 28.90%        | -0.2021 [-0.5936; 0.1893]  | 0.0902 [-0.4484; 0.6289]   | -0.2923 | 0.3895        |
| gCBT      | iCBT  | 1  | 65   | 0.16 | .             | 0.4544 [-0.3919; 1.3008]   | -0.1099 [-0.4736; 0.2538]  | 0.5643  | 0.2299        |
| gCBT      | TAU   | 11 | 537  | 0.89 | <b>90.50%</b> | -0.8109 [-1.0994; -0.5224] | -0.0453 [-0.8812; 0.7906]  | -0.7657 | 0.0897        |
| gCBT      | WLC   | 1  | 16   | 0.28 | .             | 0.1679 [-1.0305; 1.3664]   | -1.3849 [-2.1298; -0.6401] | 1.5528  | <b>0.031</b>  |
| iCBT      | TAU   | 11 | 1087 | 0.76 | <b>87.30%</b> | -0.7709 [-1.0239; -0.5180] | -0.5047 [-0.9570; -0.0525] | -0.2662 | 0.3139        |
| iCBT      | WLC   | 1  | 51   | 0.44 | .             | -1.1429 [-2.0508; -0.2349] | -0.7659 [-1.5645; 0.0328]  | -0.377  | 0.5411        |
| IPT       | TAU   | 14 | 1645 | 0.61 | 48.90%        | -0.0121 [-0.2413; 0.2170]  | -0.0619 [-0.3491; 0.2252]  | 0.0498  | 0.7905        |
| TAU       | WLC   | 1  | 16   | 0.25 | .             | 0.0125 [-1.1851; 1.2100]   | -0.3000 [-0.9861; 0.3861]  | -0.3125 | 0.6572        |

Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC, k: Number of trials providing direct evidence, n: Number of observation providing direct evidence, I2: I<sup>2</sup> statistics, prop: Direct evidence proportion, Direct estimate: Estimated treatment effect (standardized mean difference: SMD [ standard deviation (SD)]) derived from direct evidence, Indirect estimate: Estimated treatment effect (SMD [SD]) derived from indirect evidence, Diff: Difference between direct and indirect treatment estimates, p-value: p-value of test for disagreement (direct versus indirect) BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy; gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control If the I<sup>2</sup> statistics range from 75% to 100%, heterogeneity may be observed in the comparison (indicated in bold). If the p-value was <0.05, the presence of inconsistencies was determined (indicated in bold)



**Table S8: Heterogeneity and inconsistency for all comparisons in Grp2**

| Arm 1       | Arm 2       | k  | n    | prop | I2            | Direct estimate            | Indirect estimate          | Diff    | p-value       |
|-------------|-------------|----|------|------|---------------|----------------------------|----------------------------|---------|---------------|
| CBT (ftf)   | BA          | 3  | 169  | 0.85 | 0.00%         | 0.1271 [-0.3738; 0.6279]   | 0.1016 [-1.0698; 1.2730]   | -0.0254 | 0.9688        |
| TAU         | BA          | 2  | 78   | 0.52 | 0.00%         | 0.1219 [-0.5255; 0.7694]   | 0.1262 [-0.5473; 0.7996]   | 0.0042  | 0.9929        |
| BA+p        | CBT (ftf)+p | 2  | 423  | 0.72 | 0.00%         | -0.0167 [-0.5450; 0.5117]  | -1.0335 [-1.8817; -0.1854] | 1.0168  | <b>0.0461</b> |
| BA+p        | TAU         | 2  | 88   | 0.51 | 0.00%         | -1.2782 [-1.9219; -0.6345] | -0.2666 [-0.9173; 0.3841]  | -1.0116 | <b>0.0303</b> |
| CBT (ftf)   | CBT (ftf)+p | 5  | 561  | 0.34 | <b>78.30%</b> | 0.5196 [ 0.1493; 0.8900]   | 0.4533 [ 0.1851; 0.7216]   | 0.0663  | 0.7762        |
| CBT (ftf)   | DYN         | 3  | 285  | 0.7  | 0.00%         | -0.2502 [-0.7522; 0.2517]  | -0.0375 [-0.7975; 0.7224]  | -0.2127 | 0.6472        |
| CBT (ftf)   | iCBT        | 1  | 154  | 0.19 | .             | 0.0503 [-0.6664; 0.7671]   | 0.6252 [ 0.2739; 0.9766]   | -0.5749 | 0.1581        |
| CBT (ftf)   | IPT         | 15 | 889  | 0.65 | 26.00%        | -0.1662 [-0.3939; 0.0616]  | -0.0157 [-0.3253; 0.2939]  | -0.1505 | 0.4428        |
| CBT (ftf)   | TAU         | 29 | 2785 | 0.79 | 44.10%        | 0.0647 [-0.0860; 0.2154]   | -0.2495 [-0.5430; 0.0440]  | 0.3142  | 0.062         |
| CBT (ftf)   | WLC         | 1  | 21   | 0.29 | .             | -0.8684 [-1.9713; 0.2344]  | -0.3065 [-1.0128; 0.3999]  | -0.562  | 0.4003        |
| CBT (ftf)+p | iCBT+p      | 1  | 65   | 0.18 | .             | -0.2262 [-1.0344; 0.5821]  | 0.4298 [ 0.0523; 0.8072]   | -0.6559 | 0.1495        |
| CBT (ftf)+p | IPT+p       | 2  | 98   | 0.29 | 0.00%         | 0.1822 [-0.4313; 0.7958]   | -0.3581 [-0.7466; 0.0304]  | 0.5403  | 0.1448        |
| CBT (ftf)+p | TAU         | 15 | 1923 | 0.81 | 56.80%        | -0.4437 [-0.6523; -0.2351] | -0.6223 [-1.0584; -0.1863] | 0.1787  | 0.4689        |
| DYN         | TAU         | 1  | 106  | 0.33 | .             | 0.0414 [-0.7063; 0.7892]   | 0.2541 [-0.2658; 0.7741]   | -0.2127 | 0.6472        |
| DYN+p       | TAU         | 3  | 370  | 1    | 0.00%         | -0.2833 [-0.7118; 0.1452]  | .                          |         |               |
| gCBT        | gCBT+p      | 1  | 24   | 0.23 | .             | 0.6014 [-0.4393; 1.6421]   | 1.1806 [ 0.6088; 1.7524]   | -0.5792 | 0.3391        |
| gCBT        | iCBT        | 1  | 65   | 0.34 | .             | 0.4544 [-0.3558; 1.2647]   | 0.5658 [-0.0154; 1.1471]   | -0.1114 | 0.8267        |
| gCBT        | TAU         | 3  | 83   | 0.57 | 0.00%         | 0.0989 [-0.4799; 0.6776]   | -0.0987 [-0.7611; 0.5637]  | 0.1976  | 0.6598        |
| gCBT        | WLC         | 1  | 16   | 0.33 | .             | 0.1679 [-1.0053; 1.3412]   | -0.7640 [-1.5886; 0.0607]  | 0.9319  | 0.2028        |
| gCBT+p      | TAU         | 8  | 454  | 0.93 | <b>92.10%</b> | -1.0743 [-1.3916; -0.7571] | -0.4951 [-1.6394; 0.6491]  | -0.5792 | 0.3391        |
| iCBT        | TAU         | 5  | 369  | 0.68 | 0.00%         | -0.6200 [-0.9815; -0.2585] | -0.2900 [-0.8179; 0.2379]  | -0.33   | 0.3121        |
| iCBT        | WLC         | 1  | 51   | 0.46 | .             | -1.1429 [-2.0172; -0.2685] | -0.8479 [-1.6560; -0.0398] | -0.295  | 0.6273        |
| iCBT+p      | TAU         | 6  | 718  | 0.87 | <b>93.40%</b> | -0.8761 [-1.2006; -0.5516] | -0.2202 [-1.0511; 0.6107]  | -0.6559 | 0.1495        |
| IPT         | IPT+p       | 3  | 501  | 0.52 | 0.00%         | 0.2175 [-0.2270; 0.6620]   | 0.5661 [ 0.1067; 1.0255]   | -0.3486 | 0.2852        |
| IPT         | TAU         | 11 | 1266 | 0.59 | 50.60%        | 0.1091 [-0.1319; 0.3502]   | 0.1174 [-0.1742; 0.4091]   | -0.0083 | 0.9658        |
| IPT+p       | TAU         | 6  | 655  | 0.74 | 19.40%        | -0.2156 [-0.5590; 0.1278]  | -0.4388 [-1.0190; 0.1413]  | 0.2232  | 0.5163        |
| TAU         | WLC         | 1  | 16   | 0.25 | .             | 0.0125 [-1.1598; 1.1848]   | -0.6330 [-1.3170; 0.0509]  | -0.6455 | 0.3512        |

Grp2: a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately, k: Number of trials providing direct evidence, n: Number of observation providing direct evidence, I2: I<sup>2</sup> statistics, prop: Direct evidence proportion, Direct estimate: Estimated treatment effect (standardized mean difference: SMD [ standard deviation (SD)]) derived from direct evidence, Indirect estimate: Estimated treatment effect (SMD [SD]) derived from indirect evidence, Diff: Difference between direct and indirect treatment estimates, p-value: p-value of test for disagreement (direct versus indirect), BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy If the I<sup>2</sup> statistics range from 75% to 100%, heterogeneity may be observed in the comparison (indicated in bold). If the p-value was <0.05, the presence of inconsistencies was determined (indicated in bold)

**Table S9: Comparison matrix for subgroup analysis among mild depression in Grp 1**

|                                 |                                     |                                       |                              |                              |                                |
|---------------------------------|-------------------------------------|---------------------------------------|------------------------------|------------------------------|--------------------------------|
| <b>CBT (ftf)</b>                | -0.3128 [-0.8997;<br>0.2740]        | .                                     | .                            | -0.3608 [-0.8352;<br>0.1136] | -0.1494 [-0.3721;<br>0.0733]   |
| *-0.3128 **[-0.8997;<br>0.2740] | <b>DYN</b>                          | .                                     | .                            | .                            | .                              |
| 0.5013 [-0.0562;<br>1.0588]     | <b>0.8141 [ 0.0047;<br/>1.6236]</b> | <b>gCBT</b>                           | .                            | .                            | -0.6960 [-1.2129; -<br>0.1791] |
| 0.0005 [-0.3366;<br>0.3377]     | 0.3134 [-0.3634;<br>0.9902]         | -0.5007 [-1.0814;<br>0.0800]          | <b>iCBT</b>                  | .                            | -0.1953 [-0.4599;<br>0.0694]   |
| -0.1549 [-0.4745;<br>0.1647]    | 0.1579 [-0.5103;<br>0.8262]         | <b>-0.6562 [-1.2551;<br/>-0.0572]</b> | -0.1554 [-0.5575;<br>0.2466] | <b>IPT</b>                   | -0.1655 [-0.5362;<br>0.2051]   |
| -0.1947 [-0.4036;<br>0.0141]    | 0.1181 [-0.5048;<br>0.7410]         | <b>-0.6960 [-1.2129;<br/>-0.1791]</b> | -0.1953 [-0.4599;<br>0.0694] | -0.0398 [-0.3425;<br>0.2628] | <b>TAU</b>                     |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI)

Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S10: Comparison matrix for subgroup analysis among moderate depression in Grp 1**

|                                     |                                     |                                       |                                       |                              |                                |                                |
|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|------------------------------|--------------------------------|--------------------------------|
| <b>BA</b>                           | 0.0052 [-0.4207;<br>0.4311]         | .                                     | .                                     | .                            | -0.0936 [-1.0084;<br>0.8212]   | .                              |
| *-0.0080<br>**[-0.4206; 0.4045]     | <b>CBT (ftf)</b>                    | .                                     | .                                     | -0.1216 [-0.3929;<br>0.1498] | -0.0458 [-0.2225;<br>0.1308]   | -0.8684 [-1.9496;<br>0.2127]   |
| 0.2652 [-0.2616;<br>0.7919]         | 0.2732 [-0.0654;<br>0.6119]         | <b>gCBT</b>                           | 0.4544 [-0.3259;<br>1.2348]           | .                            | -0.3496 [-0.6695; -<br>0.0298] | 0.1679 [-0.9849;<br>1.3208]    |
| <b>0.8180 [ 0.3186;<br/>1.3174]</b> | <b>0.8261 [ 0.5319;<br/>1.1203]</b> | <b>0.5529 [ 0.1941;<br/>0.9117]</b>   | <b>iCBT</b>                           | .                            | -0.9035 [-1.1663; -<br>0.6407] | -1.1429 [-1.9897; -<br>0.2961] |
| -0.1524 [-0.6230;<br>0.3182]        | -0.1444 [-0.3773;<br>0.0886]        | <b>-0.4176 [-0.8014;<br/>-0.0337]</b> | <b>-0.9705 [-1.3160;<br/>-0.6249]</b> | <b>IPT</b>                   | 0.1239 [-0.2001;<br>0.4478]    | .                              |
| -0.0755 [-0.5118;<br>0.3608]        | -0.0674 [-0.2338;<br>0.0989]        | <b>-0.3407 [-0.6371;<br/>-0.0443]</b> | <b>-0.8935 [-1.1389;<br/>-0.6482]</b> | 0.0769 [-0.1680;<br>0.3219]  | <b>TAU</b>                     | 0.0125 [-1.1394;<br>1.1644]    |
| -0.3126 [-1.0204;<br>0.3951]        | -0.3046 [-0.8844;<br>0.2752]        | -0.5778 [-1.1911;<br>0.0354]          | <b>-1.1307 [-1.7043;<br/>-0.5570]</b> | -0.1602 [-0.7723;<br>0.4518] | -0.2371 [-0.8062;<br>0.3319]   | <b>WLC</b>                     |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S11: Comparison matrix for subgroup analysis among severe depression in Grp 1**

|  |   |   |   |                              |                              |                                |
|--|---|---|---|------------------------------|------------------------------|--------------------------------|
| <b>BA</b>  | -0.2323 [-0.7989;<br>0.3342]              | .   | .   | .                            | .                            | -0.8907 [-1.3635;<br>-0.4179]  |
| <b>*-0.5598</b><br><b>**[-0.9992;</b><br><b>-0.1204]</b> | <b>CBT (ftf)</b>                          | -0.1935 [-0.7702;<br>0.3832]              | .   | -0.0659 [-0.5273;<br>0.3956] | 0.0094 [-0.3399;<br>0.3587]  | -0.1388 [-0.3089;<br>0.0313]   |
| <b>-0.5654 [-1.0768;</b><br><b>-0.0540]</b>              | -0.0056 [-0.3091;<br>0.2980]              | <b>DYN</b>                                | .   | .                            | .                            | -0.2064 [-0.5248;<br>0.1119]   |
| <b>2.8524 [ 1.9914;</b><br><b>3.7133]</b>                | <b>3.4122 [ 2.6512;</b><br><b>4.1731]</b> | <b>3.4178 [ 2.6219;</b><br><b>4.2137]</b> | <b>gCBT</b>                                 | .                            | .                            | -3.5669 [-4.3115; -<br>2.8223] |
| -0.6257 [-1.2628;<br>0.0115]                             | -0.0659 [-0.5273;<br>0.3956]              | -0.0603 [-0.6126;<br>0.4921]              | <b>-3.4780 [-4.3680;</b><br><b>-2.5881]</b> | <b>iCBT</b>                  | .                            | .                              |
| <b>-0.6300 [-1.1190;</b><br><b>-0.1411]</b>              | -0.0702 [-0.3237;<br>0.1832]              | -0.0646 [-0.4308;<br>0.3016]              | <b>-3.4824 [-4.2661;</b><br><b>-2.6987]</b> | -0.0044 [-0.5308;<br>0.5221] | <b>IPT</b>                   | -0.0348 [-0.3304;<br>0.2609]   |
| <b>-0.7146 [-1.1468;</b><br><b>-0.2824]</b>              | -0.1548 [-0.3117;<br>0.0022]              | -0.1492 [-0.4303;<br>0.1319]              | <b>-3.5669 [-4.3115;</b><br><b>-2.8223]</b> | -0.0889 [-0.5763;<br>0.3985] | -0.0845 [-0.3291;<br>0.1600] | <b>TAU</b>                     |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI)

Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S12: Comparison matrix for subgroup analysis of RCTs using HRSD in Grp 1**

|                                    |                                    |                                    |                                       |                              |                              |                               |                              |
|------------------------------------|------------------------------------|------------------------------------|---------------------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|
| <b>BA</b>                          | -0.1281 [-0.6646;<br>0.4083]       | .                                  | .                                     | .                            | .                            | -0.5599 [-1.0890;<br>-0.0307] | .                            |
| *-0.2862<br>**[-0.7572;<br>0.1849] | <b>CBT (ftf)</b>                   | -0.1935 [-0.9041;<br>0.5172]       | .                                     | 0.0503 [-0.6843;<br>0.7850]  | -0.1455 [-0.4889;<br>0.1979] | -0.0640 [-0.2189;<br>0.0909]  | -0.8684 [-1.9830;<br>0.2461] |
| -0.2583 [-0.8329;<br>0.3164]       | 0.0279 [-0.3260;<br>0.3818]        | <b>DYN</b>                         | .                                     | .                            | .                            | -0.2026 [-0.5831;<br>0.1779]  | .                            |
| 0.3330 [-0.2403;<br>0.9064]        | <b>0.6192 [0.2607;<br/>0.9777]</b> | <b>0.5913 [0.1212;<br/>1.0614]</b> | <b>gCBT</b>                           | .                            | .                            | -0.7305 [-1.0583;<br>-0.4026] | .                            |
| 0.0377 [-0.6147;<br>0.6902]        | 0.3239 [-0.1420;<br>0.7898]        | 0.2960 [-0.2717;<br>0.8637]        | -0.2953 [-0.8608;<br>0.2702]          | <b>iCBT</b>                  | .                            | -0.6083 [-1.1927;<br>-0.0239] | .                            |
| -0.3967 [-0.9087;<br>0.1153]       | -0.1105 [-0.3456;<br>0.1245]       | -0.1384 [-0.5359;<br>0.2590]       | <b>-0.7297 [-1.1232;<br/>-0.3363]</b> | -0.4344 [-0.9390;<br>0.0701] | <b>IPT</b>                   | 0.0113 [-0.2323;<br>0.2550]   | .                            |
| -0.3974 [-0.8678;<br>0.0729]       | -0.1113 [-0.2564;<br>0.0338]       | -0.1392 [-0.4762;<br>0.1978]       | <b>-0.7305 [-1.0583;<br/>-0.4026]</b> | -0.4352 [-0.8960;<br>0.0256] | -0.0007 [-0.2182;<br>0.2168] | <b>TAU</b>                    | .                            |
| -1.1546 [-2.3646;<br>0.0554]       | -0.8684 [-1.9830;<br>0.2461]       | -0.8963 [-2.0657;<br>0.2731]       | <b>-1.4876 [-2.6584;<br/>-0.3168]</b> | -1.1923 [-2.4004;<br>0.0157] | -0.7579 [-1.8970;<br>0.3812] | -0.7572 [-1.8811;<br>0.3668]  | <b>WLC</b>                   |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S13: Comparison matrix for subgroup analysis of RCTs using BDI in Grp 1**

|                                       |                                     |                                     |                                       |                                       |                              |                               |                               |
|---------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|---------------------------------------|------------------------------|-------------------------------|-------------------------------|
| <b>BA</b>                             | -0.1714 [-0.6508;<br>0.3080]        | .                                   | .                                     | .                                     | .                            | -0.5082 [-1.0088;<br>-0.0077] | .                             |
| *-0.2773 **[-0.6838; 0.1291]          | <b>CBT (ftf)</b>                    | -0.3132 [-1.0979;<br>0.4715]        | .                                     | -0.0391 [-0.8650;<br>0.7869]          | -0.1741 [-0.4207;<br>0.0725] | -0.1076 [-0.2841;<br>0.0689]  | -0.4949 [-1.6517;<br>0.6619]  |
| -0.4289 [-1.1270;<br>0.2692]          | -0.1516 [-0.7294;<br>0.4263]        | <b>DYN</b>                          | .                                     | .                                     | .                            | -0.1947 [-1.0327;<br>0.6433]  | .                             |
| 0.4668 [-0.0554;<br>0.9890]           | <b>0.7441 [ 0.3810;<br/>1.1072]</b> | <b>0.8957 [ 0.2310;<br/>1.5603]</b> | <b>gCBT</b>                           | 0.4544 [-0.4538;<br>1.3627]           | .                            | -1.0584 [-1.4086;<br>-0.7083] | 0.1679 [-1.0751;<br>1.4109]   |
| 0.1394 [-0.3689;<br>0.6476]           | <b>0.4167 [ 0.0789;<br/>0.7544]</b> | 0.5682 [-0.0855;<br>1.2220]         | -0.3274 [-0.7464;<br>0.0915]          | <b>iCBT</b>                           | .                            | -0.4788 [-0.8483;<br>-0.1092] | -1.1429 [-2.1088;<br>-0.1769] |
| <b>-0.4763 [-0.9352;<br/>-0.0174]</b> | -0.1990 [-0.4258;<br>0.0278]        | -0.0474 [-0.6634;<br>0.5685]        | <b>-0.9431 [-1.3567;<br/>-0.5295]</b> | <b>-0.6157 [-1.0094;<br/>-0.2220]</b> | <b>IPT</b>                   | 0.0470 [-0.3612;<br>0.4552]   | .                             |
| <b>-0.4392 [-0.8473;<br/>-0.0310]</b> | -0.1619 [-0.3251;<br>0.0014]        | -0.0103 [-0.5896;<br>0.5691]        | <b>-0.9060 [-1.2333;<br/>-0.5786]</b> | <b>-0.5785 [-0.8892;<br/>-0.2678]</b> | 0.0371 [-0.2186;<br>0.2929]  | <b>TAU</b>                    | 0.0125 [-1.2296;<br>1.2546]   |
| -0.5828 [-1.3261;<br>0.1606]          | -0.3054 [-0.9409;<br>0.3300]        | -0.1539 [-1.0033;<br>0.6956]        | <b>-1.0496 [-1.7254;<br/>-0.3737]</b> | <b>-0.7221 [-1.3610;<br/>-0.0832]</b> | -0.1064 [-0.7750;<br>0.5621] | -0.1436 [-0.7728;<br>0.4856]  | <b>WLC</b>                    |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S14: Comparison matrix for subgroup analysis of RCTs with low risk of bias in Grp 1**

|                                     |                                     |                                     |                                       |                              |                              |                               |                              |
|-------------------------------------|-------------------------------------|-------------------------------------|---------------------------------------|------------------------------|------------------------------|-------------------------------|------------------------------|
| <b>BA</b>                           | -0.1363 [-0.8474;<br>0.5748]        | .                                   | .                                     | .                            | .                            | -0.1218 [-0.8075;<br>0.5639]  | .                            |
| *-0.0453 **[-0.6693; 0.5787]        | <b>CBT (ftf)</b>                    | -0.1935 [-0.9556;<br>0.5686]        | .                                     | 0.0503 [-0.7342;<br>0.8349]  | -0.2083 [-0.7257;<br>0.3091] | -0.0759 [-0.3301;<br>0.1783]  | -0.8684 [-2.0165;<br>0.2796] |
| -0.1434 [-0.9070;<br>0.6202]        | -0.0981 [-0.5768;<br>0.3805]        | <b>DYN</b>                          | .                                     | .                            | .                            | -0.1091 [-0.6784;<br>0.4601]  | .                            |
| <b>1.2161 [ 0.3569;<br/>2.0752]</b> | <b>1.2613 [ 0.6258;<br/>1.8969]</b> | <b>1.3595 [ 0.6062;<br/>2.1127]</b> | <b>gCBT</b>                           | .                            | .                            | -1.4154 [-2.0094;<br>-0.8215] | .                            |
| 0.2594 [-0.5218;<br>1.0405]         | 0.3046 [-0.2002;<br>0.8095]         | 0.4028 [-0.2631;<br>1.0687]         | <b>-0.9567 [-1.7285;<br/>-0.1849]</b> | <b>iCBT</b>                  | .                            | -0.6162 [-1.2335;<br>0.0011]  | .                            |
| -0.1522 [-0.8212;<br>0.5168]        | -0.1069 [-0.4245;<br>0.2107]        | -0.0088 [-0.5371;<br>0.5196]        | <b>-1.3682 [-2.0207;<br/>-0.7158]</b> | -0.4115 [-0.9655;<br>0.1424] | <b>IPT</b>                   | -0.0878 [-0.3823;<br>0.2067]  | .                            |
| -0.1994 [-0.8202;<br>0.4214]        | -0.1541 [-0.3802;<br>0.0720]        | -0.0560 [-0.5192;<br>0.4073]        | <b>-1.4154 [-2.0094;<br/>-0.8215]</b> | -0.4587 [-0.9515;<br>0.0340] | -0.0472 [-0.3171;<br>0.2228] | <b>TAU</b>                    | .                            |
| -0.9137 [-2.2204;<br>0.3930]        | -0.8684 [-2.0165;<br>0.2796]        | -0.7703 [-2.0141;<br>0.4735]        | <b>-2.1298 [-3.4420;<br/>-0.8175]</b> | -1.1731 [-2.4272;<br>0.0811] | -0.7615 [-1.9527;<br>0.4296] | -0.7143 [-1.8845;<br>0.4558]  | <b>WLC</b>                   |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, Grp1: a group 1, in which we did not distinguish between psychotherapy alone and psychotherapy combined with medication, and treatment arms were sorted into psychotherapy groups, TAU, and WLC.

**Table S15: Comparison matrix for subgroup analysis among mild depression in Grp 2**

|                                    |                                 |                                 |   |                                 |                                 |                                 |                                 |                                   |
|------------------------------------|---------------------------------|---------------------------------|---|---------------------------------|---------------------------------|---------------------------------|---------------------------------|-----------------------------------|
| CBT (ftf)                          | .                               | -0.3129<br>[-0.9301;<br>0.3042] | .   | .                               | .                               | -0.3654<br>[-0.8589;<br>0.1281] | .                               | .                                 |
| *-0.3402<br>**[-1.0697;<br>0.3893] | <b>CBT (ftf) +p</b>             | .                               | .   | .                               | .                               | .                               | .                               | -0.1480<br>[-0.4442;<br>0.1483]   |
| -0.3129<br>[-0.9301;<br>0.3042]    | 0.0273<br>[-0.9283;<br>0.9828]  | <b>DYN</b>                      | .   | .                               | .                               | .                               | .                               | .                                 |
| 0.2080<br>[-0.6570;<br>1.0729]     | 0.5482<br>[-0.0775;<br>1.1738]  | 0.5209<br>[-0.5416;<br>1.5834]  | <b>gCBT+p</b>   | .                               | .                               | .                               | .                               | -0.6961<br>[-1.2472; -<br>0.1451] |
| -0.1450<br>[-1.0166;<br>0.7265]    | 0.1952<br>[-0.4397;<br>0.8300]  | 0.1679<br>[-0.9001;<br>1.2359]  | -0.3530<br>[-1.1397;<br>0.4337]                       | <b>iCBT</b>                     | .                               | .                               | .                               | -0.3431<br>[-0.9046;<br>0.2184]   |
| -0.3530<br>[-1.1378;<br>0.4318]    | -0.0128<br>[-0.5220;<br>0.4964] | -0.0401<br>[-1.0385;<br>0.9583] | -0.5610<br>[-1.2503;<br>0.1284]                       | -0.2080<br>[-0.9057;<br>0.4897] | <b>iCBT+p</b>                   | .                               | .                               | -0.1351<br>[-0.5493;<br>0.2790]   |
| -0.3654<br>[-0.8589;<br>0.1281]    | -0.0252<br>[-0.5624;<br>0.5120] | -0.0525<br>[-0.8427;<br>0.7378] | -0.5734<br>[-1.2837;<br>0.1369]                       | -0.2204<br>[-0.9388;<br>0.4980] | -0.0124<br>[-0.6226;<br>0.5978] | <b>IPT</b>                      | 0.4101<br>[-0.2726;<br>1.0928]  | -0.1227<br>[-0.5709;<br>0.3254]   |
| -0.1761<br>[-0.9807;<br>0.6286]    | 0.1641<br>[-0.4988;<br>0.8270]  | 0.1368<br>[-0.8772;<br>1.1509]  | -0.3841<br>[-1.1936;<br>0.4255]                       | -0.0311<br>[-0.8477;<br>0.7856] | 0.1769<br>[-0.5464;<br>0.9003]  | 0.1893<br>[-0.4462;<br>0.8248]  | <b>IPT+p</b>                    | -0.1823<br>[-0.7932;<br>0.4285]   |
| -0.4882<br>[-1.1548;<br>0.1785]    | -0.1480<br>[-0.4442;<br>0.1483] | -0.1752<br>[-1.0837;<br>0.7332] | <b>-0.6961</b><br><b>[-1.2472;</b><br><b>-0.1451]</b> | -0.3431<br>[-0.9046;<br>0.2184] | -0.1351<br>[-0.5493;<br>0.2790] | -0.1227<br>[-0.5709;<br>0.3254] | -0.3121<br>[-0.9051;<br>0.2810] | <b>TAU</b>                        |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold. BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication.



**Table S16: Comparison matrix for subgroup analysis among moderate depression in Grp 2**

|  |                                 |  |   |  |   |   |  |                                 |                                 |                                    |                                 |
|--|---------------------------------|--|---|--|---|---|--|---------------------------------|---------------------------------|------------------------------------|---------------------------------|
| BA   |                                 | -0.0250<br>[-0.6101;<br>0.5601]                    |   |  |   |   |  |                                 |                                 | -0.0936<br>[-1.0242;<br>0.8370]    |                                 |
| *0.1989 **<br>[-0.7268;<br>1.1246]                 | BA+p                            |  | 0.0445<br>[-0.6164;<br>0.7054]                        |  |   |   |  |                                 |                                 |                                    |                                 |
| -0.0580<br>[-0.6111;<br>0.4952]                    | -0.2569<br>[-1.0065;<br>0.4927] | CBT (ftf)  | 0.2509<br>[-0.2831;<br>0.7849]                        |  |   |   |  |                                 | -0.2047<br>[-0.5170;<br>0.1075] | 0.0215<br>[-0.1717;<br>0.2146]     | -0.8684<br>[-1.9629;<br>0.2260] |
| 0.2434<br>[-0.4047;<br>0.8916]                     | 0.0445<br>[-0.6164;<br>0.7054]  | 0.3014<br>[-0.0523;<br>0.6552]                     | CBT (ftf) +p  |  |   |   |  |                                 |                                 | 0.1825<br>[-0.4235;<br>0.7885]     | -0.4222<br>[-0.7979;<br>0.0464] |
| -0.1186<br>[-0.8586;<br>0.6214]                    | -0.3175<br>[-1.1971;<br>0.5621] | -0.0606<br>[-0.5669;<br>0.4456]                    | -0.3620<br>[-0.9425;<br>0.2185]                       | gCBT   |   | 0.4544<br>[-0.3444;<br>1.2533]                        |  |                                 |                                 | 0.0985<br>[-0.4747;<br>0.6717]     | 0.1679<br>[-0.9975;<br>1.3333]  |
| 0.4920<br>[-0.2017;<br>1.1857]                     | 0.2931<br>[-0.5471;<br>1.1333]  | <b>0.5500</b><br><b>[0.1134;</b><br><b>0.9866]</b> | 0.2486<br>[-0.2703;<br>0.7674]                        | 0.6106<br>[-0.0099;<br>1.2310]                     | gCBT+p  |   |  |                                 |                                 | -0.5607<br>[-0.9584;<br>0.1630]    |                                 |
| 0.5808<br>[-0.0881;<br>1.2498]                     | 0.3819<br>[-0.4389;<br>1.2028]  | <b>0.6388</b><br><b>[0.2437;</b><br><b>1.0339]</b> | 0.3374<br>[-0.1494;<br>0.8242]                        | <b>0.6994</b><br><b>[0.1902;</b><br><b>1.2087]</b> | 0.0888<br>[-0.4451;<br>0.6228]                        | iCBT  |  |                                 |                                 | -0.6947<br>[-1.0961;<br>0.2932]    | -1.1429<br>[-2.0067;<br>0.2791] |
| <b>1.0143</b><br><b>[0.3400;</b><br><b>1.6886]</b> | 0.8154<br>[-0.0089;<br>1.6396]  | <b>1.0723</b><br><b>[0.6672;</b><br><b>1.4773]</b> | <b>0.7709</b><br><b>[ 0.2783;</b><br><b>1.2634]</b>   | <b>1.1329</b><br><b>[0.5342;</b><br><b>1.7315]</b> | 0.5223<br>[-0.0160;<br>1.0606]                        | 0.4335<br>[-0.0750;<br>0.9419]                        | iCBT+p   |                                 |                                 | -1.0830 [-<br>1.4457; -<br>0.7202] |                                 |
| -0.2476<br>[-0.8535;<br>0.3583]                    | -0.4465<br>[-1.2223;<br>0.3293] | -0.1896<br>[-0.4497;<br>0.0704]                    | <b>-0.4910</b><br><b>[-0.8973;</b><br><b>-0.0848]</b> | -0.1290<br>[-0.6745;<br>0.4165]                    | <b>-0.7396</b><br><b>[-1.2199;</b><br><b>-0.2593]</b> | <b>-0.8284</b><br><b>[-1.2729;</b><br><b>-0.3840]</b> | <b>-1.2619</b><br><b>[-1.7137;</b><br><b>-0.8102]</b>  | IPT                             | 0.1753<br>[-0.4845;<br>0.8352]  | 0.2641<br>[-0.0938;<br>0.6219]     |                                 |
| 0.1772<br>[-0.5261;<br>0.8805]                     | -0.0217<br>[-0.8226;<br>0.7792] | 0.2351<br>[-0.2122;<br>0.6825]                     | -0.0663<br>[-0.5187;<br>0.3862]                       | 0.2958<br>[-0.3446;<br>0.9361]                     | -0.3148<br>[-0.8998;<br>0.2701]                       | -0.4037<br>[-0.9605;<br>0.1532]                       | <b>-0.8371</b><br><b>[-1.3989;</b><br><b>-0.2754]</b>  | 0.4248<br>[-0.0374;<br>0.8869]  | IPT+p                           | -0.1705<br>[-0.7103;<br>0.3693]    |                                 |
| -0.0687<br>[-0.6371;<br>0.4998]                    | -0.2676<br>[-1.0077;<br>0.4725] | -0.0107<br>[-0.1909;<br>0.1695]                    | -0.3121<br>[-0.6453;<br>0.0211]                       | 0.0499<br>[-0.4263;<br>0.5261]                     | <b>-0.5607</b><br><b>[-0.9584;</b><br><b>-0.1630]</b> | <b>-0.6495</b><br><b>[-1.0058;</b><br><b>-0.2932]</b> | <b>-1.0830</b><br><b>[-1.4457; -</b><br><b>0.7202]</b> | 0.1789<br>[-0.0903;<br>0.4482]  | -0.2459<br>[-0.6748;<br>0.1831] | TAU                                | 0.0125<br>[-1.1520;<br>1.1769]  |
| -0.4845<br>[-1.2985;<br>0.3295]                    | -0.6835<br>[-1.6302;<br>0.2633] | -0.4266<br>[-1.0327;<br>0.1796]                    | <b>-0.7280</b><br><b>[-1.4060;</b><br><b>-0.0500]</b> | -0.3660<br>[-1.0512;<br>0.3192]                    | <b>-0.9765</b><br><b>[-1.6922;</b><br><b>-0.2609]</b> | <b>-1.0654</b><br><b>[-1.6634;</b><br><b>-0.4673]</b> | <b>-1.4988</b><br><b>[-2.1957;</b><br><b>-0.8020]</b>  | -0.2369<br>[-0.8816;<br>0.4077] | -0.6617<br>[-1.3919;<br>0.0685] | -0.4159<br>[-1.0109;<br>0.1791]    | WLC                             |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold. BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately

**Table S17: Comparison matrix for subgroup analysis among severe depression in Grp 2**

|   |   |   |   |   |   |   |   |                                 |                                 |                                |                                |                                 |                                   |
|---|---|---|---|---|---|---|---|---------------------------------|---------------------------------|--------------------------------|--------------------------------|---------------------------------|-----------------------------------|
| BA  |   | -0.3818<br>[-1.1362;<br>0.3727]               |   |   |   |   |   |                                 |                                 |                                |                                |                                 | -0.1475<br>[-0.8504;<br>0.5555]   |
| *0.8586<br>**[0.0638<br>; 1.6535]             | <b>BA+p</b>                                     |   | -0.1138<br>[-0.7613;<br>0.5337]                 |   |   |   |   |                                 |                                 |                                |                                |                                 | -1.2824<br>[-1.7938; -<br>0.7711] |
| -0.3097<br>[-0.9572;<br>0.3379]               | <b>-1.1683</b><br><b>[-1.6561;<br/>-0.6806]</b> | <b>CBT (ftf)</b>                              | 0.7882<br>[ 0.4026;<br>1.1737]                  | -0.1935<br>[-0.6133;<br>0.2263]               |   |   |   | 0.0503<br>[-0.4089;<br>0.5096]  |                                 | 0.0137<br>[-0.2658;<br>0.2932] |                                |                                 | 0.1252<br>[-0.0432;<br>0.2936]    |
| 0.3777<br>[-0.2945;<br>1.0499]                | <b>-0.4810</b><br><b>[-0.9591;<br/>-0.0029]</b> | <b>0.6874</b><br><b>[ 0.4521;<br/>0.9226]</b> | <b>CBT (ftf)</b><br><b>+p</b>                   |   |   |   |   |                                 | -0.2262<br>[-0.8181;<br>0.3658] |                                |                                |                                 | -0.5532<br>[-0.7577; -<br>0.3486] |
| -0.3964<br>[-1.1152;<br>0.3224]               | <b>-1.2550</b><br><b>[-1.8280;<br/>-0.6820]</b> | -0.0867<br>[-0.4157;<br>0.2424]               | <b>-0.7740</b><br><b>[-1.1582;<br/>-0.3899]</b> | <b>DYN</b>                                    |   |   |   |                                 |                                 |                                |                                |                                 | 0.0414<br>[-0.4648;<br>0.5477]    |
| 0.0962<br>[-0.6086;<br>0.8011]                | <b>-0.7624</b><br><b>[-1.3087;<br/>-0.2161]</b> | <b>0.4059</b><br><b>[ 0.0829;<br/>0.7289]</b> | -0.2815<br>[-0.6284;<br>0.0655]                 | <b>0.4926</b><br><b>[ 0.0524;<br/>0.9327]</b> | <b>DYN+p</b>                                    |   |   |                                 |                                 |                                |                                |                                 | -0.2958<br>[-0.5808; -<br>0.0109] |
| <b>2.7439</b><br><b>[ 1.4512;<br/>4.0365]</b> | <b>1.8852</b><br><b>[ 0.6717;<br/>3.0987]</b>   | <b>3.0536</b><br><b>[ 1.9229;<br/>4.1843]</b> | <b>2.3662</b><br><b>[ 1.2284;<br/>3.5040]</b>   | <b>3.1402</b><br><b>[ 1.9707;<br/>4.3098]</b> | <b>2.6477</b><br><b>[ 1.4916;<br/>3.8038]</b>   | <b>gCBT</b>                                     | 0.6014<br>[-0.2819;<br>1.4847]                  |                                 |                                 |                                |                                |                                 |                                   |
| <b>3.3453</b><br><b>[ 2.4015;<br/>4.2890]</b> | <b>2.4866</b><br><b>[ 1.6546;<br/>3.3187]</b>   | <b>3.6550</b><br><b>[ 2.9491;<br/>4.3608]</b> | <b>2.9676</b><br><b>[ 2.2505;<br/>3.6847]</b>   | <b>3.7417</b><br><b>[ 2.9751;<br/>4.5082]</b> | <b>3.2491</b><br><b>[ 2.5033;<br/>3.9949]</b>   | <b>gCBT+p</b>                                   | 0.6014<br>[-0.2819;<br>1.4847]                  |                                 |                                 |                                |                                |                                 | -3.5449<br>[-4.2342; -<br>2.8557] |
| -0.2593<br>[-1.0532;<br>0.5345]               | <b>-1.1180</b><br><b>[-1.7879;<br/>-0.4480]</b> | 0.0503<br>[-0.4089;<br>0.5096]                | <b>-0.6370</b><br><b>[-1.1530;<br/>-0.1210]</b> | 0.1370<br>[-0.4279;<br>0.7020]                | -0.3556<br>[-0.9170;<br>0.2059]                 | <b>-3.0032</b><br><b>[-4.2236;<br/>-1.7828]</b> | <b>-3.6046</b><br><b>[-4.4467;<br/>-2.7625]</b> | <b>iCBT</b>                     |                                 |                                |                                |                                 |                                   |
| 0.1515<br>[-0.7442;<br>1.0472]                | -0.7071<br>[-1.4681;<br>0.0538]                 | 0.4612<br>[-0.1758;<br>1.0982]                | -0.2262<br>[-0.8181;<br>0.3658]                 | 0.5479<br>[-0.1578;<br>1.2536]                | 0.0553<br>[-0.6309;<br>0.7415]                  | <b>-2.5924</b><br><b>[-3.8749;<br/>-1.3098]</b> | <b>-3.1938</b><br><b>[-4.1237;<br/>-2.2639]</b> | 0.4108<br>[-0.3744;<br>1.1961]  | <b>iCBT+p</b>                   |                                |                                |                                 |                                   |
| -0.2806<br>[-0.9542;<br>0.3930]               | <b>-1.1393</b><br><b>[-1.6526;<br/>-0.6259]</b> | 0.0291<br>[-0.1908;<br>0.2489]                | <b>-0.6583</b><br><b>[-0.9469;<br/>-0.3697]</b> | 0.1157<br>[-0.2674;<br>0.4989]                | <b>-0.3768</b><br><b>[-0.7355;<br/>-0.0182]</b> | <b>-3.0245</b><br><b>[-4.1659;<br/>-1.8831]</b> | <b>-3.6259</b><br><b>[-4.3488;<br/>-2.9031]</b> | -0.0213<br>[-0.5304;<br>0.4879] |                                 | <b>IPT</b>                     | 0.1156<br>[-0.4681;<br>0.6994] |                                 | 0.0648<br>[-0.2101;<br>0.3397]    |
| 0.0036<br>[-0.7430;<br>0.7502]                | <b>-0.8550</b><br><b>[-1.4562;<br/>-0.2539]</b> | 0.3133<br>[-0.0884;<br>0.7150]                | -0.3741<br>[-0.8015;<br>0.0534]                 | 0.4000<br>[-0.1033;<br>0.9033]                | <b>-0.0926</b><br><b>[-0.5676;<br/>0.3824]</b>  | <b>-2.7403</b><br><b>[-3.9234;<br/>-1.5571]</b> | <b>-3.3417</b><br><b>[-4.1288;<br/>-2.5546]</b> | 0.2629<br>[-0.3472;<br>0.8731]  | -0.1479<br>[-0.8781;<br>0.5823] | 0.2842<br>[-0.1222;<br>0.6906] | <b>IPT+p</b>                   |                                 | -0.2531<br>[-0.6589;<br>0.1527]   |
| -0.1996<br>[-0.8443;<br>0.4450]               | <b>-1.0583</b><br><b>[-1.5244;<br/>-0.5922]</b> | 0.1100<br>[-0.0421;<br>0.2622]                | <b>-0.5773</b><br><b>[-0.7753;<br/>-0.3793]</b> | 0.1967<br>[-0.1388;<br>0.5322]                | <b>-0.2958</b><br><b>[-0.5808;<br/>-0.0109]</b> | <b>-2.9435</b><br><b>[-4.0639;<br/>-1.8231]</b> | <b>-3.5449</b><br><b>[-4.2342;<br/>-2.8557]</b> | 0.0597<br>[-0.4241;<br>0.5435]  | -0.3511<br>[-0.9753;<br>0.2731] | 0.0810<br>[-0.1368;<br>0.2988] |                                | -0.2032<br>[-0.5833;<br>0.1769] | <b>TAU</b>                        |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold. BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, CBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately.

**Table S18: Comparison matrix for subgroup analysis of RCTs using HRSD in Grp 2**

|  |   |  |  |  |  |  |  |                                  |  |                                  |                                 |                                   |                                  |
|--|---|--|--|--|--|--|--|----------------------------------|--|----------------------------------|---------------------------------|-----------------------------------|----------------------------------|
| BA   |   | -0.1382<br>[-0.7886;<br>0.5122]                      |  |  |  |  |  |                                  |  |                                  |                                 | -0.1220<br>[-0.7445;<br>0.5004]   |                                  |
| *0.8137<br>**[-0.1027<br>; 1.7301]                   | BA+p  |  | -0.1138<br>[-0.9254;<br>0.6979]                      |  |  |  |  |                                  |  |                                  |                                 | -1.3653<br>[-2.2053;<br>-0.5253]  |                                  |
| -0.1564<br>[-0.7218;<br>0.4090]                      | <b>-0.9701</b><br>[-1.7082; -<br><b>0.2321]</b> | CBT (ftf)  | 0.5044<br>[0.0589;<br>0.9499]                        | -0.1935<br>[-0.8383;<br>0.4514]                      |  |  |  | 0.0503<br>[-0.6208<br>; 0.7215]  |  | -0.1731<br>[-0.5171<br>; 0.1708] |                                 | 0.0914<br>[-0.0752;<br>0.2580]    | -0.8684<br>[-1.9422<br>; 0.2053] |
| 0.3119<br>[-0.2918;<br>0.9156]                       | -0.5018<br>[-1.2236;<br>0.2199]                 | <b>0.4683</b><br>[ <b>0.2089</b> ;<br><b>0.7277]</b> | CBT (ftf)<br>+p                                      |  |  |  |  |                                  |  |                                  | 0.0657<br>[-0.8098<br>; 0.9412] | -0.4352<br>[-0.6748; -<br>0.1955] |                                  |
| -0.2579<br>[-0.9918;<br>0.4761]                      | <b>-1.0716</b><br>[-1.9408; -<br><b>0.2024]</b> | -0.1014<br>[-0.5823;<br>0.3795]                      | <b>-0.5697</b><br>[-1.0987; -<br><b>0.0407]</b>      | DYN  |  |  |  |                                  |  |                                  |                                 | 0.0414<br>[-0.6627;<br>0.7456]    |                                  |
| 0.1780<br>[-0.5146;<br>0.8706]                       | -0.6357<br>[-1.4644<br>; 0.1930]                | 0.3344<br>[-0.0979;<br>0.7668]                       | -0.1339<br>[-0.5955;<br>0.3278]                      | 0.4359<br>[-0.1932;<br>1.0650]                       | DYN+p  |  |  |                                  |  |                                  |                                 | -0.2847<br>[-0.6876;<br>0.1183]   |                                  |
| -0.0710<br>[-0.8582;<br>0.7161]                      | -0.8847<br>[-1.7940;<br>0.0245]                 | 0.0854<br>[-0.4863;<br>0.6571]                       | -0.3829<br>[-0.9771;<br>0.2113]                      | 0.1868<br>[-0.5451;<br>0.9187]                       | -0.2490<br>[-0.9307;<br>0.4326]                      | gCBT   | 0.6014<br>[-0.4085;<br>1.6113]                 |                                  |  |                                  |                                 | 0.0795<br>[-0.5614;<br>0.7203]    |                                  |
| <b>0.8163</b><br>[ <b>0.1589</b> ;<br><b>1.4737]</b> | 0.0026<br>[-0.7969;<br>0.8021]                  | <b>0.9727</b><br>[ <b>0.5994</b> ;<br><b>1.3460]</b> | <b>0.5044</b><br>[ <b>0.0975</b> ;<br><b>0.9113]</b> | <b>1.0742</b><br>[ <b>0.4841</b> ;<br><b>1.6643]</b> | <b>0.6383</b><br>[ <b>0.1118</b> ;<br><b>1.1648]</b> | <b>0.8873</b><br>[ <b>0.2948</b> ;<br><b>1.4799]</b> | gCBT+p   |                                  |  |                                  |                                 | -0.9580<br>[-1.3113; -<br>0.6047] |                                  |
| -0.1061<br>[-0.9837;<br>0.7715]                      | -0.9198<br>[-1.9174;<br>0.0778]                 | 0.0503<br>[-0.6208;<br>0.7215]                       | -0.4180<br>[-1.1375;<br>0.3016]                      | 0.1518<br>[-0.6739;<br>0.9774]                       | -0.2841<br>[-1.0825;<br>0.5143]                      | -0.0351<br>[-0.9167;<br>0.8466]                      | <b>-0.9224</b><br>[-1.6904;<br><b>-0.1544]</b> | iCBT                             |  |                                  |                                 |                                   |                                  |
| 0.4898<br>[-0.2923;<br>1.2719]                       | -0.3239<br>[-1.2288;<br>0.5810]                 | <b>0.6463</b><br>[ <b>0.0815</b> ;<br><b>1.2110]</b> | 0.1780<br>[-0.4095;<br>0.7654]                       | 0.7477<br>[0.0212;<br>1.4742]                        | 0.3118<br>[-0.3640;<br>0.9876]                       | 0.5608<br>[-0.2116;<br>1.3333]                       | -0.3265<br>[-0.9661;<br>0.3132]                | 0.5959<br>[-0.2812<br>; 1.4731]  | iCBT+p   |                                  |                                 | -0.5965<br>[-1.1391; -<br>0.0540] |                                  |
| -0.2144<br>[-0.8133;<br>0.3845]                      | <b>-1.0281</b><br>[-1.7834; -<br><b>0.2729]</b> | -0.0580<br>[-0.2981;<br>0.1822]                      | -0.5263<br>[-0.8343; -<br>0.2183]                    | 0.0435<br>[-0.4794;<br>0.5663]                       | -0.3924<br>[-0.8511;<br>0.0663]                      | -0.1434<br>[-0.7352;<br>0.4485]                      | <b>-1.0307</b><br>[-1.4343;<br><b>-0.6271]</b> | -0.1083<br>[-0.8212<br>; 0.6046] | <b>-0.7042</b><br>[-1.2894;<br><b>-0.1191]</b> | IPT                              | 0.2487<br>[-0.3153<br>; 0.8127] | 0.0912<br>[-0.1533;<br>0.3357]    |                                  |
| 0.1554<br>[-0.5128;<br>0.8237]                       | -0.6583<br>[-1.4623;<br>0.1457]                 | 0.3119<br>[-0.0766;<br>0.7004]                       | -0.1564<br>[-0.5620;<br>0.2491]                      | 0.4133<br>[-0.1885;<br>1.0151]                       | -0.0226<br>[-0.5647;<br>0.5195]                      | 0.2265<br>[-0.4321;<br>0.8851]                       | <b>-0.6609</b><br>[-1.1572;<br><b>-0.1646]</b> | 0.2615<br>[-0.5140<br>; 1.0370]  | -0.3344<br>[-0.9870;<br>0.3182]                | 0.3698<br>[-0.0232<br>; 0.7629]  | IPT+p                           | -0.2407<br>[-0.6617;<br>0.1803]   |                                  |

(Table S18 continued on the next page)

**Table S18: (continued) Comparison matrix for subgroup analysis of RCTs using HRSD in Grp 2**

|                                 |  |                                 |   |                                 |   |                                 |   |                                  |  |                                  |  |                                 |            |
|---------------------------------|--|---------------------------------|---|---------------------------------|---|---------------------------------|---|----------------------------------|--|----------------------------------|--|---------------------------------|------------|
| -0.1067<br>[-0.6700;<br>0.4566] | <b>-0.9204</b><br>[-1.6446;<br><b>-0.1962</b> ]          | 0.0498<br>[-0.1069;<br>0.2064]  | <b>-0.4185</b><br>[-0.6439;<br><b>-0.1932</b> ] | 0.1512<br>[-0.3320;<br>0.6343]  | -0.2847<br>[-0.6876;<br>0.1183]                 | -0.0357<br>[-0.5854;<br>0.5141] | <b>-0.9230</b><br>[-1.2618;<br><b>-0.5841</b> ] | -0.0006<br>[-0.6898<br>; 0.6886] | <b>-0.5965</b><br>[-1.1391; -<br><b>0.0540</b> ] | 0.1077<br>[-0.1115<br>; 0.3269]  | -0.2621<br>[-0.6247<br>; 0.1005]                 | <b>TAU</b>                      | .          |
| -1.0249<br>[-2.2384;<br>0.1887] | <b>-1.8386</b> [<br><b>-3.1416</b> ;<br><b>-0.5356</b> ] | -0.8684<br>[-1.9422;<br>0.2053] | <b>-1.3367</b><br>[-2.4414;<br><b>-0.2321</b> ] | -0.7670<br>[-1.9436;<br>0.4095] | <b>-1.2029</b><br>[-2.3605;<br><b>-0.0453</b> ] | -0.9539<br>[-2.1703;<br>0.2626] | <b>-1.8412</b><br>[-2.9780;<br><b>-0.7043</b> ] | -0.9188<br>[-2.1851<br>; 0.3475] | <b>-1.5147</b><br>[-2.7279;<br><b>-0.3015</b> ]  | -0.8105<br>[-1.9108<br>; 0.2898] | <b>-1.1803</b><br>[-2.3222<br>; <b>-0.0384</b> ] | -0.9182<br>[-2.0034;<br>0.1670] | <b>WLC</b> |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold.

BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately.

**Table S19: Comparison matrix for subgroup analysis of RCTs using BDI in Grp 2**

|   |  |  |  |   |   |   |  |  |                                 |   |  |     |                                   |                                   |
|---|--|--|--|---|---|---|--|--|---------------------------------|---|--|-----|-----------------------------------|-----------------------------------|
| BA  |  | -0.2269<br>[-0.7328<br>; 0.2790]                       |  |   |   |   |  |  |                                 |   |  |     | 0.2284<br>[-0.4253<br>; 0.8820]   |                                   |
| <b>*0.9505 **</b><br>[ 0.1882;<br>1.7127]           | BA+p   |  | -0.0029<br>[-0.8607<br>; 0.8549]                       |   |   |   |  |  |                                 |   |  |     | -1.2363<br>[-1.8842<br>; -0.5883] |                                   |
| -0.0687<br>[-0.5352;<br>0.3977]                     | <b>-1.0192</b><br>[ <b>-1.6381;</b><br><b>-0.4002]</b> | CBT (ftf)  | 0.6918<br>[ 0.1055;<br>1.2782]                         | -0.3132<br>[-1.0470<br>; 0.4207]                    |   |   |  | -0.0391<br>[-0.7655<br>; 0.6874]                       |                                 | -0.2038<br>[-0.4442<br>; 0.0366]                    |  |     | 0.0740<br>[-0.1141<br>; 0.2622]   | -0.4949<br>[-1.5829<br>; 0.5931]  |
| 0.4461<br>[-0.0867;<br>0.9789]                      | -0.5044<br>[-1.1183;<br>0.1096]                        | <b>0.5148</b><br>[ <b>0.2246;</b><br><b>0.8050]</b>    | CBT (ftf)<br>+p  |   |   |   |  |  |                                 |   | 0.1081<br>[-0.5113<br>; 0.7274]                        |     | -0.4718<br>[-0.7360<br>; -0.2077] |                                   |
| -0.3819<br>[-1.2515;<br>0.4876]                     | <b>-1.3324</b><br>[ <b>-2.2924;</b><br><b>-0.3723]</b> | -0.3132<br>[-1.0470;<br>0.4207]                        | <b>-0.8280</b><br>[ <b>-1.6171;</b><br><b>-0.0389]</b> | DYN   |   |   |  |  |                                 |   |  |     |                                   |                                   |
| 0.1630<br>[-0.7174;<br>1.0434]                      | -0.7875<br>[-1.7379;<br>0.1629]                        | 0.2317<br>[-0.5285;<br>0.9920]                         | -0.2831<br>[-1.0638<br>; 0.4976]                       | 0.5449<br>[-0.5117;<br>1.6015]                      | DYN+p   |   |  |  |                                 |   |  |     | -0.1947<br>[-0.9348<br>; 0.5455]  |                                   |
| 0.0408<br>[-0.6072;<br>0.6889]                      | <b>-0.9096</b><br>[ <b>-1.6525;</b><br><b>-0.1668]</b> | 0.1095<br>[-0.3604;<br>0.5795]                         | -0.4053<br>[-0.9128<br>; 0.1023]                       | 0.4227<br>[-0.4487;<br>1.2941]                      | -0.1222 [ -0.9850;<br>0.7407]                       | gCBT  | 0.2290<br>[-0.8066<br>; 1.2646]                        | 0.4544<br>[-0.3644<br>; 1.2733]                        |                                 |   |  |     | 0.1663<br>[-0.4208<br>; 0.7534]   | 0.1679<br>[-1.0113<br>; 1.3472]   |
| <b>1.3798</b><br>[ <b>0.7790;</b><br><b>1.9806]</b> | 0.4294<br>[-0.2704;<br>1.1291]                         | <b>1.4486</b><br>[ <b>1.0440;</b><br><b>1.8531]</b>    | <b>0.9337</b><br>[ <b>0.4912;</b><br><b>1.3762]</b>    | <b>1.7617</b><br>[ <b>0.9238;</b><br><b>2.5997]</b> | <b>1.2168</b><br>[ <b>0.3910;</b><br><b>2.0427]</b> | <b>1.3390</b><br>[ <b>0.8073;</b><br><b>1.8708]</b> | gCBT+p   |  |                                 |   |  |     | -1.5664<br>[-1.9531<br>; -1.1796] |                                   |
| 0.4313<br>[-0.1382;<br>1.0007]                      | -0.5192<br>[-1.1985;<br>0.1601]                        | <b>0.5000</b><br>[ <b>0.1503;</b><br><b>0.8497]</b>    | -0.0148<br>[-0.4228<br>; 0.3931]                       | <b>0.8132</b><br>[ <b>0.0003;</b><br><b>1.6261]</b> | 0.2683<br>[-0.5406;<br>1.0772]                      | 0.3905<br>[-0.0952;<br>0.8762]                      | <b>-0.9485</b><br>[ <b>-1.4308;</b><br><b>-0.4663]</b> | iCBT   |                                 |   |  |     | -0.5561<br>[-0.9667<br>; -0.1455] | -1.1429<br>[-2.0252<br>; -0.2605] |
| 0.3022<br>[-0.4367;<br>1.0411]                      | -0.6482<br>[-1.4693;<br>0.1728]                        | 0.3709<br>[-0.2197;<br>0.9616]                         | -0.1439<br>[-0.7606<br>; 0.4728]                       | 0.6841<br>[-0.2579;<br>1.6261]                      | 0.1392<br>[-0.7916;<br>1.0701]                      | 0.2614<br>[-0.4565;<br>0.9793]                      | <b>-1.0776</b><br>[ <b>-1.7506;</b><br><b>-0.4046]</b> | -0.1291<br>[-0.7812;<br>0.5231]                        | iCBT+p                          |   |  |     | -0.3339<br>[-0.8984;<br>0.2306]   |                                   |
| -0.2955<br>[-0.8097;<br>0.2186]                     | <b>-1.2460</b><br>[ <b>-1.8956;</b><br><b>-0.5964]</b> | <b>-0.2268</b><br>[ <b>-0.4521;</b><br><b>-0.0014]</b> | <b>-0.7416</b><br>[ <b>-1.0922;</b><br><b>-0.3910]</b> | 0.0864<br>[-0.6813;<br>0.8541]                      | -0.4585<br>[-1.2439;<br>0.3269]                     | -0.3363<br>[-0.8472;<br>0.1745]                     | <b>-1.6753</b><br>[ <b>-2.1256;</b><br><b>-1.2251]</b> | <b>-0.7268</b><br>[ <b>-1.1318;</b><br><b>-0.3218]</b> | -0.5977<br>[-1.2205;<br>0.0250] | IPT   | 0.7888<br>[-0.1004<br>; 1.6779]                        |     | 0.2678<br>[-0.1831;<br>0.7187]    |                                   |
| 0.3529<br>[-0.2793;<br>0.9851]                      | -0.5975<br>[-1.3173;<br>0.1222]                        | 0.4216<br>[-0.0250;<br>0.8683]                         | -0.0932 [ -0.5310<br>; 0.3446]                         | 0.7348<br>[-0.1243;<br>1.5939]                      | 0.1899<br>[-0.6622;<br>1.0421]                      | 0.3121<br>[-0.2996;<br>0.9238]                      | <b>-1.0269</b><br>[ <b>-1.5859;</b><br><b>-0.4679]</b> | -0.0784<br>[-0.6101;<br>0.4534]                        | 0.0507<br>[-0.6543;<br>0.7557]  | <b>0.6484</b><br>[ <b>0.1719;</b><br><b>1.1249]</b> | <b>IPT+p</b>   |     | -0.2899<br>[-0.8071<br>; 0.2272]  |                                   |
| -0.0317<br>[-0.5084;<br>0.4450]                     | <b>-0.9822</b><br>[ <b>-1.5783;</b><br><b>-0.3860]</b> | 0.0370<br>[-0.1366;<br>0.2107]                         | <b>-0.4778</b><br>[ <b>-0.7261;</b><br><b>-0.2294]</b> | 0.3502<br>[-0.4039;<br>1.1043]                      | -0.1947<br>[-0.9348;<br>0.5455]                     | -0.0725<br>[-0.5160;<br>0.3710]                     | <b>-1.4115</b><br>[ <b>-1.7779;</b><br><b>-1.0452]</b> | <b>-0.4630</b><br>[ <b>-0.7895;</b><br><b>-0.1365]</b> | -0.3339<br>[-0.8984;<br>0.2306] | <b>0.2638</b><br>[ <b>0.0009;</b><br><b>0.5267]</b> | -0.3846<br>[-0.8069;<br>0.0377]                        | TAU | 0.0125<br>[-1.1658<br>; 1.1907]   |                                   |
| -0.4206<br>[-1.1737;<br>0.3325]                     | <b>-1.3711</b><br>[ <b>-2.2136;</b><br><b>-0.5286]</b> | -0.3519<br>[-0.9537;<br>0.2498]                        | <b>-0.8667</b><br>[ <b>-1.5102;</b><br><b>-0.2232]</b> | -0.0387<br>[-0.9877;<br>0.9103]                     | -0.5836<br>[-1.5340;<br>0.3667]                     | -0.4614<br>[-1.1407;<br>0.2178]                     | <b>-1.8005</b><br>[ <b>-2.4922;</b><br><b>-1.1087]</b> | <b>-0.8519</b><br>[ <b>-1.4510;</b><br><b>-0.2528]</b> | -0.7228<br>[-1.5439;<br>0.0982] | -0.1251<br>[-0.7620;<br>0.5118]                     | <b>-0.7735</b><br>[ <b>-1.5017;</b><br><b>-0.0454]</b> |     | -0.3889<br>[-0.9851;<br>0.2072]   | WLC                               |

\* = standardized mean difference (SMD), \*\* = 95% confidence interval (95%CI) Left-bottom values are network results, and right-upper values are direct estimates. In the network results, SMD > 0 indicates that the row-defining intervention is more efficacious than the column-defining intervention. If the confidence interval does not cover 0, the estimate is statistically significant. Statistically significant differences are indicated in bold. BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately.

**Table S20: Comparison matrix for subgroup analysis of RCTs with a low ROB in Grp 2**

|   |   |   |   |   |  |                                 |  |                                 |                                 |                                   |            |
|---|---|---|---|---|--|---------------------------------|--|---------------------------------|---------------------------------|-----------------------------------|------------|
| BA  | -0.1356<br>[-0.8736;<br>0.6024]                       | .   | .   | .   | .  | .                               | .  | .                               | .                               | -0.1217<br>[-0.8352;<br>0.5919]   | .          |
| *-0.1109<br>**[-0.7662;<br>0.5445]                    | <b>CBT (ftf)</b>                                      | 0.2800<br>[-0.6698;<br>1.2298]                        | -0.1935<br>[-1.0050;<br>0.6181]                       | .   | 0.0503<br>[-0.7823;<br>0.8830]                           | .                               | -0.2139<br>[-0.7566;<br>0.3289]                          | .                               | 0.0527<br>[-0.2907;<br>0.3961]  | -0.8684<br>[-2.0499;<br>0.3130]   | .          |
| 0.1201<br>[-0.6300;<br>0.8701]                        | 0.2309<br>[-0.2374;<br>0.6992]                        | <b>CBT (ftf) +p</b>                                   | .   | .   | .  | .                               | .  | .                               | .                               | -0.2641<br>[-0.6563;<br>0.1281]   | .          |
| -0.2478<br>[-1.1152;<br>0.6196]                       | -0.1369<br>[-0.7436;<br>0.4697]                       | -0.3679<br>[-1.0831;<br>0.3473]                       | <b>DYN</b>  | .   | .  | .                               | .  | .                               | .                               | 0.0414<br>[-0.8180;<br>0.9009]    | .          |
| 0.1110<br>[-0.9552;<br>1.1772]                        | 0.2219<br>[-0.6743;<br>1.1181]                        | -0.0090<br>[-0.9372;<br>0.9192]                       | 0.3589<br>[-0.6837;<br>1.4014]                        | <b>DYN+p</b>  | .  | .                               | .  | .                               | .                               | -0.2540<br>[-1.0989;<br>0.5908]   | .          |
| <b>1.3001</b><br>[ <b>0.4040</b> ;<br><b>2.1962</b> ] | <b>1.4110</b><br>[ <b>0.7258</b> ;<br><b>2.0961</b> ] | <b>1.1800</b><br>[ <b>0.4535</b> ;<br><b>1.9066</b> ] | <b>1.5479</b><br>[ <b>0.6801</b> ;<br><b>2.4158</b> ] | <b>1.1891</b><br>[ <b>0.1432</b> ;<br><b>2.2349</b> ] | <b>gCBT+p</b>  | .                               | .  | .                               | .                               | -1.4431<br>[-2.0595; -<br>0.8266] | .          |
| -0.0605<br>[-1.1202;<br>0.9991]                       | 0.0503<br>[-0.7823;<br>0.8830]                        | -0.1806<br>[-1.1359;<br>0.7747]                       | 0.1873<br>[-0.8429;<br>1.2175]                        | -0.1716<br>[-1.3949;<br>1.0517]                       | <b>-1.3606</b><br>[ <b>-2.4389</b> ;<br><b>-0.2823</b> ] | <b>iCBT</b>                     | .  | .                               | .                               | .                                 | .          |
| 0.4799<br>[-0.4390;<br>1.3988]                        | 0.5908<br>[-0.1240;<br>1.3055]                        | 0.3598<br>[-0.3946;<br>1.1143]                        | 0.7277<br>[-0.1637;<br>1.6191]                        | 0.3689<br>[-0.6966;<br>1.4343]                        | -0.8202<br>[-1.7154;<br>0.0750]                          | 0.5404<br>[-0.5569;<br>1.6378]  | <b>iCBT+p</b>  | .                               | .                               | -0.6229<br>[-1.2721;<br>0.0263]   | .          |
| -0.1649<br>[-0.8666;<br>0.5368]                       | -0.0540<br>[-0.4214;<br>0.3134]                       | -0.2849<br>[-0.7679;<br>0.1980]                       | 0.0829<br>[-0.5801;<br>0.7460]                        | -0.2759<br>[-1.1724;<br>0.6205]                       | <b>-1.4650</b><br>[ <b>-2.1505</b> ;<br><b>-0.7795</b> ] | -0.1044<br>[-1.0145;<br>0.8058] | -0.6448<br>[-1.3598;<br>0.0702]                          | <b>IPT</b>                      | 0.2526<br>[-0.4110;<br>0.9162]  | -0.0449<br>[-0.3746;<br>0.2847]   | .          |
| 0.0604<br>[-0.7599;<br>0.8807]                        | 0.1713<br>[-0.4038;<br>0.7464]                        | -0.0596<br>[-0.6948;<br>0.5755]                       | 0.3082<br>[-0.4804;<br>1.0969]                        | -0.0506<br>[-1.0360;<br>0.9347]                       | <b>-1.2397</b><br>[ <b>-2.0379</b> ;<br><b>-0.4414</b> ] | 0.1210<br>[-0.8910;<br>1.1329]  | -0.4195<br>[-1.2433;<br>0.4043]                          | 0.2253<br>[-0.3061;<br>0.7568]  | <b>IPT+p</b>                    | -0.1880<br>[-0.7323;<br>0.3563]   | .          |
| -0.1430<br>[-0.7934;<br>0.5074]                       | -0.0321<br>[-0.3312;<br>0.2670]                       | -0.2630<br>[-0.6475;<br>0.1215]                       | 0.1048<br>[-0.5061;<br>0.7157]                        | -0.2540<br>[-1.0989;<br>0.5908]                       | <b>-1.4431</b><br>[ <b>-2.0595</b> ;<br><b>-0.8266</b> ] | -0.0824<br>[-0.9672;<br>0.8023] | -0.6229<br>[-1.2721;<br>0.0263]                          | 0.0219<br>[-0.2778;<br>0.3217]  | -0.2034<br>[-0.7106;<br>0.3038] | <b>TAU</b>                        | .          |
| -0.9793<br>[-2.3304;<br>0.3717]                       | -0.8684<br>[-2.0499;<br>0.3130]                       | -1.0994<br>[-2.3702;<br>0.1715]                       | -0.7315<br>[-2.0596;<br>0.5966]                       | -1.0904<br>[-2.5733;<br>0.3925]                       | <b>-2.2794</b><br>[ <b>-3.6452</b> ;<br><b>-0.9137</b> ] | -0.9188<br>[-2.3642;<br>0.5266] | <b>-1.4592</b><br>[ <b>-2.8401</b> ;<br><b>-0.0784</b> ] | -0.8144<br>[-2.0517;<br>0.4228] | -1.0397<br>[-2.3537;<br>0.2742] | -0.8363<br>[-2.0551;<br>0.3824]   | <b>WLC</b> |

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BA = behavioral activation, CBT (ftf) = individual face-to-face cognitive behavioral therapy, DYN = psychoanalytic/psychodynamic psychotherapy, gCBT = group cognitive behavioral therapy, iCBT = computerized- or internet cognitive behavioral therapy, IPT = interpersonal psychotherapy, TAU = treatment-as-usual, WLC = wait list control, +p = + pharmacotherapy, Grp2 = a group 2, in which psychotherapy arms were sorted into psychotherapy alone and psychotherapy combined with medication separately.