

# Antidepressant Medication or Short-Term Psychodynamic Psychotherapy for Depression? A Systematic Review and Meta-Analysis of Individual Participant Data.

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**BACKGROUND:** Antidepressant medication (ADM) and short-term psychodynamic psychotherapy (STPP) are commonly utilized treatments for depression, but it is unclear which works best for whom. Individual participant data (IPD) meta-analyses can provide more precise effect estimates than conventional meta-analyses and identify patient-level moderators. This IPD meta-analysis examined the efficacy and moderators of ADM versus STPP for depression.

## METHODS:

### Search Strategy

- Systematic literature search
- Extensive search string (synonyms: *Psychodynamic Psychotherapy, Depression*)

### Study Selection

- RCT ADM vs STPP on depressed adults
- $N \geq 10$ ,  $\geq 18$  y/o, unipolar mood disorder of elevated depressive symptoms

### Measures

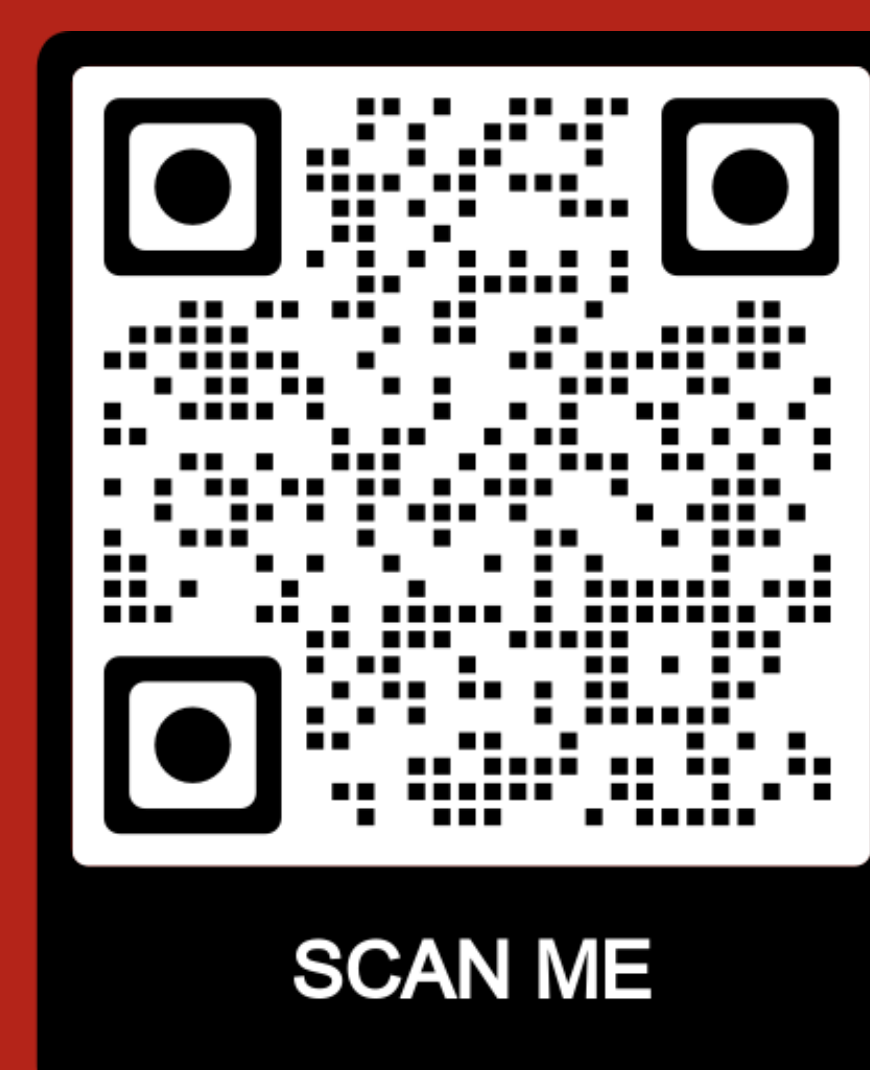
- Outcome:
  - 1<sup>st</sup>: Depression at post-treatment
  - 2<sup>nd</sup>: Any outcome assessed in  $k \geq 2$
- Moderators:
  - Sociodemographic, clinical, or psychological characteristic assessed in  $k \geq 2$ , before treatment

### Data Analysis

- One stage IPD meta-analysis
- Mixed effects models (3-Level: study, participant, time point)
- Treatment outcome models:
  - $y = \beta_0 + \beta_1 time + \beta_2 time \times treatment$
- Moderator models:
  - $y = \beta_0 + \beta_1 time + \beta_2 time \times treatment + \beta_3 time \times moderator + \beta_4 moderator + \beta_5 time \times moderator \times treatment$
- Random intercept (study & participant)
- Fixed slopes

# Antidepressants seem to have a small superiority over short-term psychodynamic psychotherapy in treating adult depression at the end of treatment.

# More severely depressed patients benefit more from antidepressants than STPP in the short term.



## RESULTS:

### Included Studies

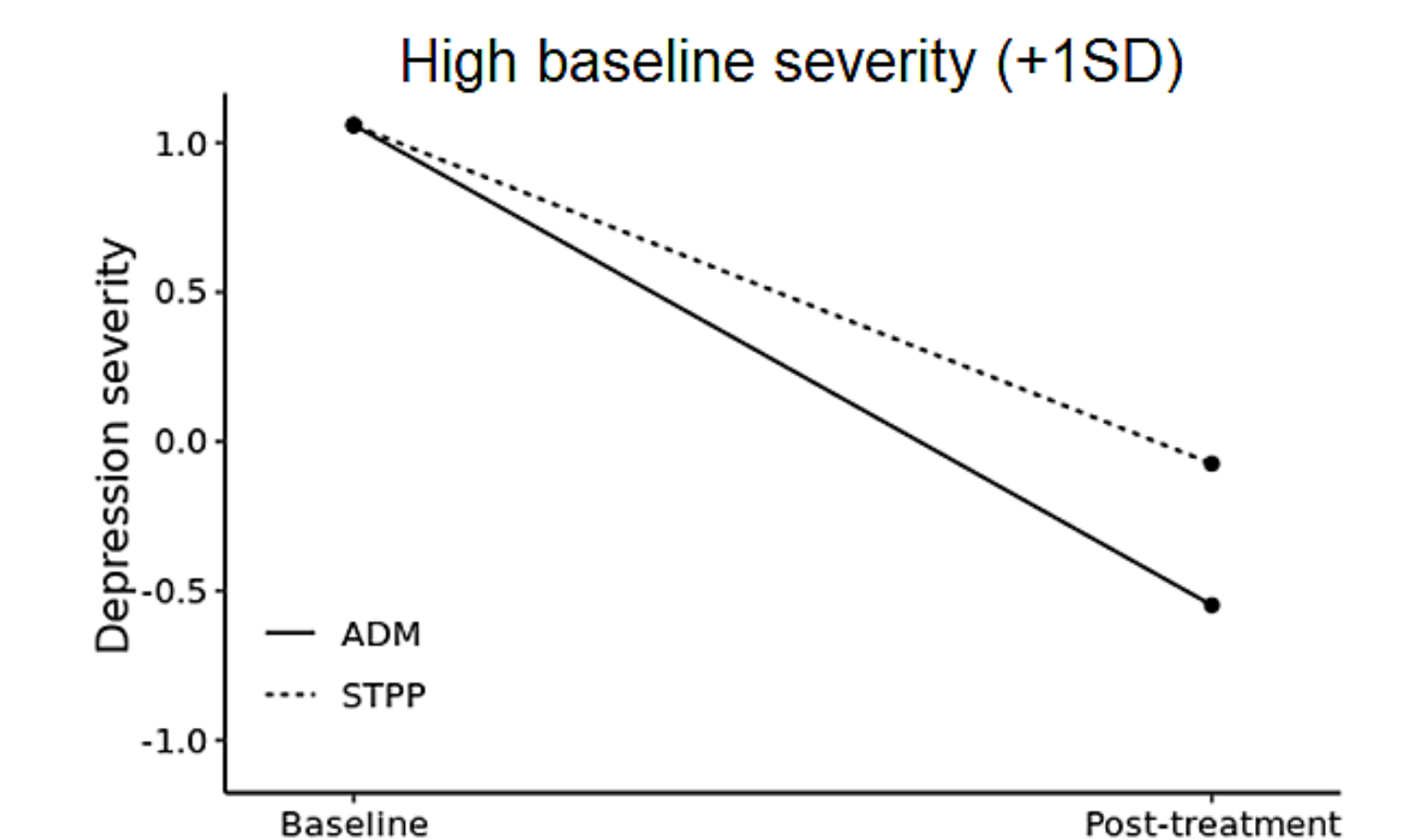
- Obtained IPD  $k = 4/5$  ( $N = 310/394$ )
  - STPP: Luborsky, de Jonghe, Bellak, Malan
  - Antidepressants: SSRIs and SNRIs
  - 8 to 20 sessions of STPP
  - Follow-up assessments 6 to 28 months
  - Age  $M = 37.6$  ( $SD = 10.6$ ), 65.5% female

### Treatment Outcomes

- ADM superior over STPP:
  - Clinician-rated depressive symptoms (post-tx)  $d = 0.28$ , 95% CI [0.03, 0.53],  $p = .031$
- No significant differences:
  - Self-reported depression, anxiety, general psychopathology, physical health (post-tx)
  - Clinician-rated depressive symptoms (FU)

### Moderators

- ADM more efficacious than STPP at post-treatment for participants with more severe baseline depression  $d = 0.24$ , 95% CI [0.08, 0.40],  $p = .004$



## DISCUSSION:

- Treatment outcomes are similar IPD-MA: ADM vs CBT
- Differences between clinician-rated vs self-reported depressive symptoms might be influenced by assessment biases
- Moderator finding in line with current practices and guidelines

## Strengths

- IPD allowed for ITT analyses, standardizing analysis, adjusting for baseline differences
- Examining moderators at participant-level

## Limitations

- Midsized sample
- IPD not obtained from one studies
- Observational nature of moderator findings

## Clinical & Research Implications

- Similar improvements can be expected for most outcomes with ADM & STPP
- Depression severity should be considered when choosing between ADM & STPP
- Further research large-scale RCTs needed including a range of outcome measures and potential moderators