

Table S1. Quality assessment of included studies**a)**

| Study | Age comparability ^a | Gender comparability ^b | ADHD diagnosis ^c | AUD diagnosis ^d | Mood phase ^e |
|---------------------------|--------------------------------|-----------------------------------|-----------------------------|----------------------------|-------------------------|
| Jhanda et al., 2018 | + | - | + | ? | + |
| Karaahmet et al., 2013 | - | - | + | ? | + |
| Koc and Kesebir, 2014 | - | - | + | ? | + |
| McIntyre et al., 2010 | + | - | + | + | ? |
| Nierenberg et al., 2005 | + | - | + | + | - |
| Pattanshetti et al., 2016 | ? | ? | + | - | + |
| Perroud et al., 2014 | - | + | + | + | - |
| Perugi et al., 2013 | - | + | + | + | - |
| Pinna et al., 2019 | - | - | + | - | ? |
| Tamam et al., 2008 | + | + | + | + | + |
| Torres et al., 2015 | - | - | + | + | + |

ADHD = Attention Deficit Hyperactivity Disorder; AUD = Alcohol Use Disorder; ^a difference in mean age ≤ 3 years = +; difference in mean age > 3 years = -; Unclear = ?; ^b difference in gender proportion $\leq 5\%$ = +; difference in gender proportion $> 5\%$ = -; unclear = ? ^c adequate instruments to assess ADHD = +; inadequate instruments to assess ADHD = -; unclear = ?; ^d appropriate diagnostic interviews to assess AUD = +; diagnoses of AUD based on non-structured, clinical evaluations or clinical chart / databases review = -; unclear = ?; ^e ADHD assessment in euthymia or during mood episode remission = +; ADHD assessment without mood state restriction = -; unclear = ?.

b)

| Study | Age comparability (Mean age in the two groups) | Gender comparability (% of males in the two groups) | ADHD diagnosis | AUD diagnosis | Mood phase |
|----------------------------|---|--|--|--|-------------------------|
| Jhanda et al., 2018 | BD + ADHD = 27.4 BD = 29.8 | BD + ADHD = 83.3 % BD = 68.1 % | MINI DSM-IV | Unclear | Euthymia / in remission |
| Karaahmet et al., 2013 | BD + ADHD = 34.3 BD = 37.8 | BD + ADHD = 67.6 % BD = 44.6 % | SCID-I; Turgay's Adult ADD/ADHD Scale; WURS | Unclear | Euthymia / in remission |
| Koc and Kesebir, 2014 | BD + ADHD = 37.3 BD = 44.7 | BD + ADHD = 46.7 % BD = 35.7 % | Adult Attention Deficit and Hyperactivity Rating Scale | Unclear | Euthymia / in remission |
| McIntyre et al., 2010 | BD + ADHD = 36.7 BD = 39.1 | BD + ADHD = 38.7 % BD = 32.6 % | ASRS-1.1; MINI plus 5.0.0; WURS-25 | MINI plus 5.0.0 | Unclear |
| Nierenberg et al., 2005 | BD + ADHD = 37.8 BD = 40.9 | BD + ADHD = 64.4 % BD = 39.2 % | MINI 4.4 | MINI 4.4 | No mood restrictions |
| Pattanashetti et al., 2016 | N/R | N/R | ASRS-1.1; ASRS-1.1 Symptom Checklist | diagnoses based on non-structured, clinical evaluations or clinical chart / databases re-view. | Euthymia / in remission |
| Perroud et al., 2014 | BD + ADHD = 37.2 BD = 43.2 | BD + ADHD = 44.4 % BD = 41.2 % | ASRS-1.1 Symptom Checklist; DIVA | MINI | No mood restrictions |
| Perugi et al., 2013 | BD + ADHD = 38.5 BD = 43.2 | BD + ADHD = 63.2 % BD = 58.4 % | ASRS-1.1 | DSM-IV-TR diagnostic criteria | No mood restrictions |
| Pinna et al., 2019 | BD + ADHD = 39.9 BD = 47.9 | BD + ADHD = 65.9 % BD = 38.3 % | ASRS-1.1; DSM-IV-TR criteria | diagnoses based on non-structured, clinical evaluations or clinical chart / databases re-view. | Unclear |
| Tamam et al., 2008 | BD + ADHD = 33.8 BD = 33.8 | BD + ADHD = 51.2 % BD = 50 % | K-SADS-PL; SCID; WURS-25 | SCID-I | Euthymia / in remission |
| Torres et al., 2015 | BD + ADHD = 39 BD = 43.6 | BD + ADHD = 58.6 % BD = 42.5 % | ASRS-1.1; CAADDID; WURS | SCID-I | Euthymia / in remission |

ADHD = Attention Deficit Hyperactivity Disorder; AUD = Alcohol Use Disorder; ASRS-1.1 = Adult Attention Deficit and Hyperactivity Self-Report Scale, version 1.1; CAADDID = Conners' Adult ADHD Diagnostic Interview for DSM-IV; DIVA = Diagnostic Interview for ADHD in adults; DSM-IV = Diagnostic and Statistical Manual of Mental Disorders, fourth edition; DSM-IV-TR = Diagnostic and Statistical Manual of Mental Disorders, fourth edition, Text Revision; K-SADS-PL = Kiddie Schedule of Affective Disorders and Schizophrenia - Present/Lifetime; MINI = Mini International Neuropsychiatric Interview; MINI 4.4 = Mini International Neuropsychiatric Interview plus, version 4.4; MINI plus 5.0.0 = Mini International Neuropsychiatric Interview plus, version 5.0.0; N/R = Not Rated; SCID = Structured Clinical Interview for DSM-IV; SCID-I = Structured Clinical Interview Axis I Disorders; Turgay's Adult ADD/ADHD Scale = Turgay's Turkish version of Adult ADD/ADHD DSM IV-Based Diagnostic Screening and Rating Scale; WURS = Wender Utah Rating Scale; WURS-25 = Wender Utah Rating Scale - 25-item version.