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References

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1. Messinger JW, et al. Avolition and expressive deficits capture negative symptom phenomenology: implications for DSM-5 and schizophrenia research. *Clin Psychol Rev* 2011; 31:161-168.
2. Foussias G, et al. Dissecting negative symptoms in schizophrenia: opportunities for translation into new treatments. *J Psychopharmacol* 2015; 29:116-126.
3. Strauss GP, et al. Reconsidering the latent structure of negative symptoms in schizophrenia: a review of evidence supporting the 5 consensus domains. *Schizophr Bull* 2019; 45:725-729.
4. Rucci P, et al. The structure stability of negative symptoms: longitudinal network analysis of the Brief Negative Symptom Scale in people with schizophrenia. *BJPsych Open* 2023; 9:e168.
5. Carpenter WT. The treatment of negative symptoms: pharmacological and methodological issues. *Br J Psychiatry* 1996; 168:17-22.
6. Galderisi S, et al. Persistent negative symptoms in first episode patients with schizophrenia: results from the European First Episode Schizophrenia Trial. *Eur Neuropsychopharmacol* 2013; 23:196-204.
7. Buchanan RW. Persistent negative symptoms in schizophrenia: an overview. *Schizophr Bull* 2007; 33:1013-1022.
8. Rabinowitz J, et al. Negative symptoms have greater impact on functioning than positive symptoms in schizophrenia: analysis of CATIE data. *Schizophr Res* 2012; 137:147-150.
9. Barnes TR, et al. How to distinguish between the neuroleptic-induced deficit syndrome, depression and disease-related negative symptoms in schizophrenia. *Int Clin Psychopharmacol* 1995; 10 Suppl 3:115-121.
10. Veerman SRT, et al. Treatment for negative symptoms in schizophrenia: a comprehensive review. *Drugs* 2017; 77:1423-1459.
11. Rammou A, et al. Negative symptoms in first-episode psychosis: clinical correlates and 1--year follow-up outcomes in London Early Intervention Services. *Early Interv Psychiatry* 2019; 13:443-452.
12. Bobes J, et al. Prevalence of negative symptoms in outpatients with schizophrenia spectrum disorders treated with antipsychotics in routine clinical practice: findings from the CLAMORS study. *J Clin Psychiatry* 2010; 71:280-286.
13. Correll CU, et al. Negative symptoms in schizophrenia: a review and clinical guide for recognition, assessment, and treatment. *Neuropsychiatr Dis Treat* 2020; 16:519-534.

14. Buckley PF, et al. Pharmacological treatment of negative symptoms of schizophrenia: therapeutic opportunity or cul-de-sac? *Acta Psychiatr Scand* 2007; 115:93–100.
15. Waddington JL, et al. Sequential cross-sectional and 10-year prospective study of severe negative symptoms in relation to duration of initially untreated psychosis in chronic schizophrenia. *Psychol Med* 1995; 25:849–857.
16. Melle I, et al. Prevention of negative symptom psychopathologies in first-episode schizophrenia: two-year effects of reducing the duration of untreated psychosis. *Arch Gen Psychiatry* 2008; 65:634–640.
17. Perkins DO, et al. Relationship between duration of untreated psychosis and outcome in first-episode schizophrenia: a critical review and meta-analysis. *Am J Psychiatry* 2005; 162:1785–1804.
18. Aleman A, et al. Treatment of negative symptoms: where do we stand, and where do we go? *Schizophr Res* 2017; 186:55–62.
19. Darbà J, et al. Efficacy of second-generation-antipsychotics in the treatment of negative symptoms of schizophrenia: a meta-analysis of randomized clinical trials. *Rev Psiquiatr Salud Ment* 2011; 4:126–143.
20. Leucht S, et al. Second-generation versus first-generation antipsychotic drugs for schizophrenia: a meta-analysis. *Lancet* 2009; 373:31–41.
21. Erhart SM, et al. Treatment of schizophrenia negative symptoms: future prospects. *Schizophr Bull* 2006; 32:234–237.
22. Harvey RC, et al. A systematic review and network meta-analysis to assess the relative efficacy of antipsychotics for the treatment of positive and negative symptoms in early-onset schizophrenia. *CNS Drugs* 2016; 30:27–39.
23. Zhang JP, et al. Efficacy and safety of individual second-generation vs. first-generation antipsychotics in first-episode psychosis: a systematic review and meta-analysis. *Int J Neuropsychopharmacol* 2013; 16:1205–1218.
24. Leucht S, et al. A meta-analysis of head-to-head comparisons of second-generation antipsychotics in the treatment of schizophrenia. *Am J Psychiatry* 2009; 166:152–163.
25. Fusar-Poli P, et al. Treatments of negative symptoms in schizophrenia: meta-analysis of 168 randomized placebo-controlled trials. *Schizophr Bull* 2015; 41:892–899.
26. Németh G, et al. Cariprazine versus risperidone monotherapy for treatment of predominant negative symptoms in patients with schizophrenia: a randomised, double-blind, controlled trial. *Lancet* 2017; 389:1103–1113.
27. Ivanov SV, et al. Early clinical effects of novel partial D3/D2 agonist cariprazine in schizophrenia patients with predominantly negative symptoms (open-label, non-controlled study). *Front Psychiatry* 2021; 12:770592.
28. Németh G, et al. Addressing negative symptoms of schizophrenia pharmacologically with cariprazine: evidence from clinical trials, a real-world study, and clinical cases. *Expert Opin Pharmacother* 2022; 23:1467–1468.
29. Speller JC, et al. One-year, low-dose neuroleptic study of in-patients with chronic schizophrenia characterised by persistent negative symptoms: amisulpride v. haloperidol. *Br J Psychiatry* 1997; 171:564–568.
30. Krause M, et al. Antipsychotic drugs for patients with schizophrenia and predominant or prominent negative symptoms: a systematic review and meta-analysis. *Eur Arch Psychiatry Clin Neurosci* 2018; 268:625–639.

31. Danion JM, et al. Improvement of schizophrenic patients with primary negative symptoms treated with amisulpride. Amisulpride Study Group. *Am J Psychiatry* 1999; 156:610–616.
 32. Leucht S, et al. Amisulpride, an unusual ‘atypical’ antipsychotic: a meta-analysis of randomized controlled trials. *Am J Psychiatry* 2002; 159:180–190.
 33. Liang Y, et al. Effectiveness of amisulpride in Chinese patients with predominantly negative symptoms of schizophrenia: a subanalysis of the ESCAPE study. *Neuropsychiatr Dis Treat* 2017; 13:1703–1712.
 34. Zheng W, et al. Efficacy and safety of adjunctive aripiprazole in schizophrenia: meta-analysis of randomized controlled trials. *J Clin Psychopharmacol* 2016; 36:628–636.
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35. Galling B, et al. Antipsychotic augmentation vs. monotherapy in schizophrenia: systematic review, meta-analysis and meta-regression analysis. *World Psychiatry* 2017; 16:77–89.
 36. Earley W, et al. Efficacy of cariprazine on negative symptoms in patients with acute schizophrenia: a post hoc analysis of pooled data. *Schizophr Res* 2019; 204:282–288.
 37. Brasso C, et al. Efficacy of serotonin and dopamine activity modulators in the treatment of negative symptoms in schizophrenia: a rapid review. *Biomedicines* 2023; 11:921.
 38. Howes O, et al. Treating negative symptoms of schizophrenia: current approaches and future perspectives. *Br J Psychiatry* 2023; 223:332–335.
 39. Siskind D, et al. Clozapine v. first- and second-generation antipsychotics in treatment-refractory schizophrenia: systematic review and meta-analysis. *Br J Psychiatry* 2016; 209:385–392.
 40. Souza JS, et al. Efficacy of olanzapine in comparison with clozapine for treatment-resistant schizophrenia: evidence from a systematic review and meta-analyses. *CNS Spectr* 2013; 18:82–89.
 41. Asenjo Lobos C, et al. Clozapine versus other atypical antipsychotics for schizophrenia. *Cochrane Database Syst Rev* 2010; (11):CD006633.
 42. Oloyede E, et al. Clozapine augmentation with cariprazine for negative symptoms: a case series and literature review. *Ther Adv Psychopharmacol* 2022; 12:20451253211066642.
 43. Siwek M, et al. Cariprazine augmentation of clozapine in schizophrenia: a retrospective chart review. *Front Pharmacol* 2023; 14:1321112.
 44. Kishi T, et al. Memantine add-on to antipsychotic treatment for residual negative and cognitive symptoms of schizophrenia: a meta-analysis. *Psychopharmacology (Berl)* 2017; 234:2113–2125.
 45. Zheng W, et al. Adjunctive memantine for schizophrenia: a meta-analysis of randomized, double-blind, placebo-controlled trials. *Psychol Med* 2018; 48:72–81.
 46. Etchecopar-Etchart D, et al. Comprehensive evaluation of 45 augmentation drugs for schizophrenia: a network meta-analysis. *EClinicalMedicine* 2024; 69:102473.
 47. Tiihonen J, et al. The efficacy of lamotrigine in clozapine-resistant schizophrenia: a systematic review and meta-analysis. *Schizophr Res* 2009; 109:10–14.
 48. Veerman SR, et al. Clozapine augmented with glutamate modulators in refractory schizophrenia: a review and metaanalysis. *Pharmacopsychiatry* 2014; 47:185–194.
 49. Oya K, et al. Efficacy and tolerability of minocycline augmentation therapy in schizophrenia: a systematic review and meta-analysis of randomized controlled trials. *Hum Psychopharmacol* 2014; 29:483–491.
 50. Xiang YQ, et al. Adjunctive minocycline for schizophrenia: a meta-analysis of randomized controlled trials. *Eur Neuropsychopharmacol* 2017; 27:8–18.
 51. Weiser M, et al. The effect of minocycline on symptoms in schizophrenia: results from a randomized controlled trial. *Schizophr Res* 2019; 206:325–332.
 52. Afshar H, et al. Topiramate add-on treatment in schizophrenia: a randomised, double-blind, placebo-controlled clinical trial. *J Psychopharmacol* 2009; 23:157–162.
 53. Rummel C, et al. Antidepressants for the negative symptoms of schizophrenia. *Cochrane Database Syst Rev* 2006; (3):CD005581.
 54. Kishi T, et al. Meta-analysis of noradrenergic and specific serotonergic antidepressant use in schizophrenia. *Int J Neuropsychopharmacol* 2014; 17:343–354.
 55. Sepehry

AA, et al. Selective serotonin reuptake inhibitor (SSRI) add-on therapy for the negative symptoms of schizophrenia: a meta-analysis. *J Clin Psychiatry* 2007; 68:604–610. 56. Singh SP, et al. Efficacy of antidepressants in treating the negative symptoms of chronic schizophrenia: meta-analysis. *Br J Psychiatry* 2010; 197:174–179. 57. Barnes TR, et al. Antidepressant Controlled Trial For Negative Symptoms In Schizophrenia (ACTIONS): a double-blind, placebo-controlled, randomised clinical trial. *Health Technol Assess* 2016; 20:1–46. 58. Galling B, et al. Efficacy and safety of antidepressant augmentation of continued antipsychotic treatment in patients with schizophrenia. *Acta Psychiatr Scand* 2018; 137:187–205. 59. Helfer B, et al. Efficacy and safety of antidepressants added to antipsychotics for schizophrenia: a systematic review and meta-analysis. *Am J Psychiatry* 2016; 173:876–886. 60. Zheng W, et al. Adjunctive reboxetine for schizophrenia: meta-analysis of randomized double-blind, placebo-controlled trials. *Pharmacopsychiatry* 2020; 53:5–13. 61. Karbalaee M, et al. Efficacy and safety of adjunctive therapy with fingolimod in patients with schizophrenia: a randomized, double-blind, placebo-controlled clinical trial. *Schizophr Res* 2023; 254:92–98. 62. Correll CU, et al. Efficacy of 42 pharmacologic cotreatment strategies added to antipsychotic monotherapy in schizophrenia: systematic overview and quality appraisal of the meta-analytic evidence. *JAMA Psychiatry* 2017; 74:675–684. 63. Singh V, et al. Review and meta-analysis of usage of ginkgo as an adjunct therapy in chronic schizophrenia. *Int J Neuropsychopharmacol* 2010; 13:257–271. 64. Sommer IE, et al. Nonsteroidal anti-inflammatory drugs in schizophrenia: ready for practice or a good start? A meta-analysis. *J Clin Psychiatry* 2012; 73:414–419. 65. Amiri A, et al. Efficacy of selegiline add on therapy to risperidone in the treatment of the negative symptoms of schizophrenia: a double-blind randomized placebo-controlled study. *Hum Psychopharmacol* 2008; 23:79–86. 66. Bodkin JA, et al. Double-blind, placebo-controlled, multicenter trial of selegiline augmentation of antipsychotic medication to treat negative symptoms in outpatients with schizophrenia. *Am J Psychiatry* 2005; 162:388–390.

Schizophrenia and related psychoses CHAPTER 1 67. Kelleher JP, et al. Pilot randomized, controlled trial of pramipexole to augment antipsychotic treatment. *Eur Neuropsychopharmacol* 2012; 22:415–418. 68. Ko YH, et al. Short-term testosterone augmentation in male schizophrenics: a randomized, double-blind, placebo-controlled trial. *J Clin Psychopharmacol* 2008; 28:375–383. 69. Zhang ZJ, et al. Beneficial effects of ondansetron as an adjunct to haloperidol for chronic, treatment-resistant schizophrenia: a double-blind, randomized, placebo-controlled study. *Schizophr Res* 2006; 88:102–110. 70. Khodaie-Ardakani MR, et al. Granisetron as an add-on to risperidone for treatment of negative symptoms in patients with stable schizophrenia: randomized double-blind placebo-controlled study. *J Psychiatr Res* 2013; 47:472–478. 71. Salehi A, et al. Adjuvant palmitoylethanolamide therapy with risperidone improves negative symptoms in patients with schizophrenia: a randomized, double-blinded, placebo-controlled trial. *Psychiatry Res* 2022; 316:114737. 72. Bugarski-Kirola D, et al. Pimavanserin for negative symptoms of schizophrenia: results from the ADVANCE phase 2 randomised, placebo- controlled trial in North America and Europe. *Lancet Psychiatry* 2022; 9:46–58. 73. Davis J, et al. Evaluating pimavanserin as a treatment for psychiatric disorders: a pharmacological property in search of an indication. *Expert Opin Pharmacother* 2021; 22:1651–1660. 74. Davidson M, et al. Efficacy and safety of roluperidone for the treatment of negative symptoms of schizophrenia. *Schizophr Bull* 2022; 48:609–619. 75. Romeo B, et al. Efficacy of 5-HT_{2A} antagonists on negative symptoms in patients with schizophrenia: a meta-analysis. *Psychiatry Res* 2023; 321:115104. 76. Ritsner MS, et al. Pregnenolone treatment reduces severity of negative symptoms in recent-onset schizophrenia: an 8-week, double-blind, randomized add-on two-center trial. *Psychiatry Clin Neurosci* 2014; 68:432–440. 77. Brand BA, et al. The direct and long-term effects of raloxifene as adjunctive

treatment for schizophrenia-spectrum disorders: a double-blind, randomized clinical trial. *Schizophr Bull* 2023; 49:1579–1590. 78. Behdani F, et al. Can levetiracetam improve clinical symptoms in schizophrenic patients? A randomized placebo-controlled clinical trial. *Int Clin Psychopharmacol* 2022; 37:159–165. 79. Kruiper C, et al. Clonidine augmentation in patients with schizophrenia: a double-blind, randomized placebo-controlled trial. *Schizophr Res* 2023; 255:148–154. 80. Hosseinasab M, et al. Nanocurcumin as an add-on to antipsychotic drugs for treatment of negative symptoms in patients with chronic schizophrenia: a randomized, double-blind, placebo-controlled study. *J Clin Psychopharmacol* 2021; 41:25–30. 81. Kaul I, et al. Efficacy and safety of the muscarinic receptor agonist KarXT (xanomeline-trospium) in schizophrenia (EMERGENT-2) in the USA: results from a randomised, double-blind, placebo-controlled, flexible-dose phase 3 trial. *Lancet* 2024; 403:160–170. 82. Li M, et al. Improvement of adjunctive berberine treatment on negative symptoms in patients with schizophrenia. *Eur Arch Psychiatry Clin Neurosci* 2022; 272:633–642. 83. Yi S, et al. Efficacy of repetitive transcranial magnetic stimulation (rTMS) on negative symptoms and cognitive functioning in schizophrenia: an umbrella review of systematic reviews and meta-analyses. *Psychiatry Res* 2024; 333:115728. 84. Mondino M, et al. Transcranial direct current stimulation for the treatment of refractory symptoms of schizophrenia. Current evidence and future directions. *Curr Pharm Des* 2015; 21:3373–3383. 85. Kim J, et al. A meta-analysis of transcranial direct current stimulation for schizophrenia: ‘is more better?’ *J Psychiatr Res* 2019; 110:117–126. 86. Galderisi S, et al. EPA guidance on treatment of negative symptoms in schizophrenia. *Eur Psychiatry* 2021; 64:e21. 87. Valiengo L, et al. Efficacy and safety of transcranial direct current stimulation for treating negative symptoms in schizophrenia: a randomized clinical trial. *JAMA Psychiatry* 2020; 77:121–129. 88. Potvin S, et al. A meta-analysis of negative symptoms in dual diagnosis schizophrenia. *Psychol Med* 2006; 36:431–440. 89. Arndt S, et al. Comorbidity of substance abuse and schizophrenia: the role of pre-morbid adjustment. *Psychol Med* 1992; 22:379–388. 90. Leeson VC, et al. The effect of cannabis use and cognitive reserve on age at onset and psychosis outcomes in first-episode schizophrenia. *Schizophr Bull* 2012; 38:873–880. 91. Barnes T, et al. Evidence-based guidelines for the pharmacological treatment of schizophrenia: updated recommendations from the British Association for Psychopharmacology. *J Psychopharm* 2020; 34:3–78.

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