Supplementary Figure 1 PRISMA Flow Diagram

Records identified through database searching

(PubMed 3201, CINAHL 1620, Embase 5533, PsycINFO 3020, Cochrane 492

(n = 13866)

Additional records identified through other sources  
(n = 0)

Full-text articles assessed for eligibility  
(n = 212)

Records screened at title and abstract level  
(n = 8273)

Studies included in meta-analysis  
(n = 12)

Records excluded  
(n = 8061)

Records combined with duplicates removed  
(n = 8273)

## Included

## Eligibility

## Screening

## Identification

Full-text articles excluded, with reasons  
(n = 200)

Not cohort study (n=5)

Insufficient data (n=32)

Unable to source full text (n=9)

Inappropriate primary outcome (n=82)

Inappropriate population (n=40)

Inappropriate intervention (n=19)

Same dataset as included study (n=13)

Supplementary Table 1 – PubMed Search Terms

|  |  |
| --- | --- |
| Area | PubMed Search Terms |
| Schizophrenia | Schizophrenia[tw] OR psychosis[tw] OR schizophrenic[tw] OR psychotic[tw])) OR "Psychotic Disorders"[Mesh]) OR "Schizophrenia"[Mesh] |
| AND | |
| Treatment Resistant | refractory OR refractoriness OR "treatment resistant" OR "treatment resistance" OR treatment-resistant OR treatment-resistance OR recover\* OR "clinical remission" OR "symptomatic remission" OR "clinical response" OR clozapine |
| AND | |
| First Episode | first[tw] OR "Age at onset" |

Supplementary Table 2 – Meta Regression

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  |  |  |  | **Test of Model** | |
|  | **Co-efficient** | **Standard Error** | **2 sided P value** | **Q** | **Degrees of Freedom** |
| **Duration of Follow Up** | 0.0013 | 0.0032 | 0.6733 | 0.18 | 1 |
| **Percentage Dropout** | -0.0008 | 0.0067 | 0.9059 | 0.01 | 1 |

Supplementary Table 3 – Publication Bias

|  |  |  |  |
| --- | --- | --- | --- |
|  |  | tau | 2 tailed p value |
| Kendall’s tau with continuity correction |  | -0.0758 | 0.732 |
|  | Intercept | Standard error | 2 tailed p value |
| Egger’s regression intercept | 0.676 | 1.469 | 0.6553 |

Supplementary Table 4 Modified Newcastle Ottawa Scale

|  |  |  |
| --- | --- | --- |
| **Modified Newcastle-ottawa scoring guide**  *Originally used in:* Mata DA, Ramos MA, Bansal N, et al. Prevalence of depression and depressive  symptoms among resident physicians: a systematic review and meta-analysis. *JAMA*.  doi:10.1001/jama.2015.15845 | | |
|  | **1 point** | 1. **points** |
| **(1) Representativeness** | *Sample could be considered reasonably representative of a community population or was not based on a sharded medical condition* | *obvious sources of bias in sample selection and/or recruitment* |
| **(2) Sample size** | *sample size was greater than 200 participants. The sample in this instance is the number of schizophrenia patients at baseline entry to the study* | *sample size was less than 200 participants* |
| **(3) Loss to Follow Up** | *response rate was reasonably high and/or characteristics of non-respondents explored, non-informative loss to follow up (those lost over the course of the study without information or explanation) was minimal* | *low response rate, no description of non-responder characteristics, high proportion loss to follow up* |
| **(4) Ascertainment of diagnosis** | *Diagnosis of Schizophrenia/psychotic disorder mapped to a validated measurement tool such as ICD/ DSM* | *Non-validated measurement tool* |
| **(5) Quality of descriptive statistics reporting** | *reported descriptive statistics to describe the population and sample characteristics with proper measures of dispersion. Prevalance measures provided with measures of variance. Ie; mean age, diagnosis type,mortality cause with standard deviations* | *Descriptive statistics not reported or incomplete.* |
| **Legend:** This scale, the scoring of which ranges from 0 to 5, assesses quality in several domains: sample representativeness and size, comparability between respondents and non-respondents, ascertainment of depressive symptoms, and statistical quality | | |

**Supplementary Table 5. Assessment of Quality of Included Studies**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Author (Year)** | **(1) Representativeness** | **(2) Sample size** | **(3) Loss to Follow Up** | **(4) Ascertainment of diagnosis** | **(5) Quality of descriptive statistics reporting** | **Total Score** |
| Agid 2011 | 0 | 1 | 0 | 1 | 1 | 3 |
| Demjaha 2017 | 1 | 1 | 0 | 1 | 1 | 4 |
| Doyle 2017 | 1 | 0 | 1 | 1 | 1 | 4 |
| Johnson 2012 | 1 | 0 | 0 | 1 | 1 | 3 |
| Kahn 2018 | 1 | 1 | 0 | 1 | 1 | 4 |
| Lally 2016 | 1 | 1 | 0 | 1 | 1 | 4 |
| Lieberman 1993 | 0 | 0 | 0 | 1 | 1 | 2 |
| Malla 2006 | 0 | 0 | 1 | 1 | 1 | 3 |
| Smart 2019 | 1 | 1 | 1 | 1 | 1 | 5 |
| Ucok 2016 | 0 | 0 | 0 | 1 | 1 | 2 |
| Wimberley 2018 | 1 | 1 | 1 | 1 | 1 | 5 |
| Yoshimura 2019 | 0 | 0 | 1 | 1 | 1 | 3 |

**Supplementary table 6** Table of Excluded Studies

|  |  |  |
| --- | --- | --- |
| **Author Year** | **Reason for Exclusion** | **Reference** |
| Agid 2019 | Insufficient data | (1) |
| Ajnakina 2018 | Insufficient data | (2) |
| Ajnakina 2020 | Inappropriate intervention | (3) |
| Albert 2011 | Insufficient data (treatment poorly defined) | (4) |
| Alvarez-Jimenez 2011 | Insufficient data | (5) |
| Arango 2019 | Same data-set as other included study – Kahn 2018 | (6) |
| Arsalan 2019 | Inappropriate population (co-morbid substance use) | (7) |
| Austin 2013 | Insufficient data (treatment poorly defined) | (8) |
| Ayessa-Arriola 2019 | Insufficient data | (9) |
| Bachmann 2008 | Inappropriate intervention (doesn’t meet definition of adequate trial) | (10) |
| Ballesteros 2020 | Inappropriate primary outcome | (11) |
| Belvederi 2020 | Inappropriate primary outcome | (12) |
| Berg 1983 | Inappropriate primary outcome | (13) |
| Berge 2016 | Inappropriate population | (14) |
| Bergink 2011 | Inappropriate population | (15) |
| Berze 2019 | Inappropriate intervention | (16) |
| Bernard 2006 | Inappropriate primary outcome | (17) |
| Bertelsen 2009 | Inappropriate primary outcome | (18) |
| Birchwood 1998 | Not cohort study | (19) |
| Bobes 2003 | Inappropriate primary outcome | (20) |
| Boden 2009 | Inappropriate primary outcome | (21) |
| Boden 2014 | Inappropriate primary outcome | (22) |
| Bowtell 2018 | Inappropriate population | (23) |
| Browne 2019 | Inappropriate primary outcome | (24) |
| Brugnolli 2008 | Inappropriate population | (25) |
| Buckley 2020 | Not cohort study | (26) |
| Bugarski-Kirola 2019 | Inappropriate primary outcome | (27) |
| Calkins 2020 | Inappropriate primary outcome | (28) |
| Cao 2020 | Inappropriate primary outcome | (29) |
| Chakos 1996 | Inappropriate primary outcome | (30) |
| Chan 2019 | Inappropriate primary outcome | (31) |
| Chan 2020 | Insufficient data | (32) |
| Chang 2019 | Insufficient data | (33) |
| Chang 2016 | Insufficient data (treatment poorly defined) | (34) |
| Chang 2018 | Inappropriate population | (35) |
| Chang 2016 | Inappropriate population and outcome | (36) |
| Chang 2013 | Inappropriate primary outcome | (37) |
| Chang 2012 | Insufficient data (treatment not described) | (38) |
| Chen 2000 | Inappropriate primary outcome | (39) |
| Chiliza 2015 | Inappropriate intervention | (40) |
| Chiliza 2016 | Inappropriate intervention | (41) |
| Cichocki 2015 | Inappropriate population | (42) |
| Clarke 2017 | Inappropriate population | (43) |
| Coentre 2019 | Inappropriate primary outcome | (44) |
| Comacchio 2020 | Inappropriate primary outcome | (45) |
| Conus 2007 | Inappropriate primary outcome | (46) |
| Conus 2006 | Inappropriate population | (47) |
| Conus 2017 | Insufficient data | (48) |
| Craig 1999 | Insufficient data (unable to locate full text) | (49) |
| Crespo-Facorro 2013 | Inappropriate primary outcome | (50) |
| Crespo-Facorro 2011 | Inappropriate primary outcome | (51) |
| Cullberg 2002 | Inappropriate population (includes non-SCZ) | (52) |
| Dai 2020 | Inappropriate primary outcome – excluded TRS | (53) |
| Dazzan 2020 | Same data-set as other included study | (54) |
| De Haan L 2008 | Inappropriate primary outcome | (55) |
| DeLisi L. E. 1998 | Inappropriate primary outcome | (56) |
| Diaz 2013 | Inappropriate intervention (single antipsychotic randomisation) and outcome (response to 1 antipsychotic) | (57) |
| Downs 2019 | Inappropriate population (CYMHS) | (58) |
| Drake 2020 | Inappropriate primary outcome | (59) |
| Edwards 1998 | Inappropriate population | (60) |
| Eisenstadt 2012 | Inappropriate population | (61) |
| Emsley 2006 | Inappropriate intervention (not 2 trials) | (62) |
| Emsley 2009 | Inappropriate primary outcome | (63) |
| Emsley 2013 | Inappropriate intervention (single antipsychotic) | (64) |
| Evensen 2012 | Inappropriate population and primary outcome | (65) |
| Faber 2012 | Inappropriate primary outcome | (66) |
| Farrell 2019 | Inappropriate primary outcome | (67) |
| Fraguas 2014 | Inappropriate population | (68) |
| Gade 2013 | Inappropriate intervention (monotherapy) | (69) |
| Gaebel, W. 2014 | Inappropriate intervention | (70) |
| Gasse 2019 | Same data-set as other included study – Wimberley 2016 | (71) |
| Gee 2016 | Inappropriate primary outcome | (72) |
| Girgis 2011 | Inappropriate intervention | (73) |
| Hall 2019 | Inappropriate primary outcome | (74) |
| Hamilton 2019 | Inappropriate primary outcome | (75) |
| Haro 2006 | Inappropriate population | (76) |
| Hatta 2003 | Inappropriate intervention | (77) |
| Hatzimanolis 2020 | Inappropriate primary outcome | (78) |
| Harrison 2008 | Inappropriate primary outcome | (79) |
| Hegelstad 2012 | Insufficient data | (80) |
| Henry 2010 | Insufficient data | (81) |
| Henry 1994 | Insufficient data (unable to locate full text) | (82) |
| Ho 2011 | Inappropriate primary outcome | (83) |
| Hodgekins 2015 | Inappropriate primary outcome | (84) |
| Horsdal 2017 | Smaller data-set and subset as included study – Wimberley 2016 | (85) |
| Horsdal 2018 | Smaller data-set and subset as included study – Wimberley 2016 | (86) |
| Iasevoli 2020 | Inappropriate population | (87) |
| Jaracz 2012 | Inappropriate primary outcome | (88) |
| Jaracz 2015 | Insufficient data – author did not reply with further details | (89) |
| Jonsson 2019 | Inappropriate population (includes children 13+) | (90) |
| Jauhar 2019 | Inappropriate primary outcome | (91) |
| Jauhar 2018 | Inappropriate primary outcome | (92) |
| Kaminga 2018 | Insufficient data | (93) |
| Kanahara 2018 | Insufficient data | (94) |
| Kayo 2012 | Inappropriate population | (95) |
| Kim 2017 | Inappropriate primary outcome | (96) |
| Killackey E. 2017 | Not cohort study - Correspondence | (97) |
| Kontaxakis 2005 | Insufficient data (unable to locate full text) | (98) |
| Kravariti 2019 | Same data-set as other included study but inappropriate primary outcome | (99) |
| Kravariti 2018 | Inappropriate primary outcome | (100) |
| Kurihara 2011 | Insufficient data | (101) |
| Lange 2019 | Inappropriate population (65+ only) | (102) |
| Langevald 2014 | Inappropriate primary outcome | (103) |
| Lee 2020 | Inappropriate population (not FEP, TRS on Clozapine) | (104) |
| Lee 2008 | Inappropriate primary outcome | (105) |
| Legge 2019 | Inappropriate primary outcome | (106) |
| Lewis 2006 | Inappropriate population | (107) |
| Li 2004 | Insufficient data (unable to locate full text) | (108) |
| Li 2020 | Insufficient data – proposal for trial, no results yet | (109) |
| Lieberman 1992 | Same dataset as other included study – Lieberman 1993 | (110) |
| Lieberman 1996 | Same dataset as other included study – Lieberman 1993 | (111) |
| Liffick 2010 | Not cohort study - review of multiple papers | (112) |
| Lisshammar 2019 | Inappropriate primary outcome | (113) |
| Luisa 2020 | Inappropriate primary outcome | (114) |
| Maddigan 2018 | Insufficient data | (115) |
| Maddigan 2011 | Inappropriate primary outcome | (116) |
| Malla 2001 | Insufficient data | (117) |
| Malla 2002 | Same dataset as other included study – Malla 2006 | (118) |
| Marchesi 2014 | Insufficient data | (119) |
| Marchesi 2015 | Inappropriate primary outcome | (120) |
| Meltzer 1997 | Inappropriate population | (121) |
| Menezes 2009 | Inappropriate primary outcome | (122) |
| Miller 2008 | Insufficient data (unable to locate full text) | (123) |
| Monteleone 2004 | Inappropriate population | (124) |
| Morgan 2014 | Inappropriate primary outcome | (125) |
| Mufic 2009 | Insufficient data (unable to locate full text) | (126) |
| Nasrallah 2019 | Inappropriate intervention | (127) |
| Nugent 2012 | Not cohort study | (128) |
| Nielsen 2010 | Insufficient data | (129) |
| O’Donoghue 2019 | Inappropriate primary outcome | (130) |
| O’Keeffe 2019 | Inappropriate primary outcome | (131) |
| Oh 2016 | Inappropriate primary outcome | (132) |
| Olivet 2019 | Inappropriate primary outcome | (133) |
| Oluwoye 2019 | Inappropriate primary outcome | (134) |
| Opjordsmoen 2010 | Insufficient data | (135) |
| Ortiz 2017 | Inappropriate population (separate FES and TRS cohorts, not followed up) | (136) |
| Parikh 2003 | Inappropriate primary outcome | (137) |
| Patel 2015 | Inappropriate population | (138) |
| Patel 2016 | Inappropriate population | (139) |
| Pedros 2009 | Insufficient data | (140) |
| Pelayo-Teran 2017 | Inappropriate primary outcome | (141) |
| Perkins 2004 | Inappropriate intervention | (142) |
| Petersen 2008 | Inappropriate primary outcome | (143) |
| Phahladira 2020 | Inappropriate intervention (flupenthixol only) | (144) |
| Privat 2015 | Insufficient data (unable to locate full text) | (145) |
| Raghavan 2017 | Inappropriate primary outcome | (146) |
| Raghavan 2019 | Inappropriate primary outcome | (147) |
| Revier 2015 | Same data set as other included study – Demjaha 2017 | (148) |
| Robinson 2020 | Inappropriate primary outcome | (149) |
| Robinson 2018 | Insufficient data | (150) |
| Robinson 2004 | Inappropriate primary outcome | (151) |
| Rohde 2020 | Inappropriate primary outcome | (152) |
| Roosens 2019 | Inappropriate primary outcome | (153) |
| Rowntree 2020 | Insufficient data | (154) |
| Rubio 2019 | Inappropriate population (not first episode cohort) | (155) |
| Saiz-Masvidal 2020 | Inappropriate primary outcome | (156) |
| Santonja 2020 | Inappropriate primary outcome | (157) |
| Schimmelmann 2012 | Inappropriate population | (158) |
| Sen 2020 | Inappropriate primary outcome | (159) |
| Shah 2020 | Inappropriate population (not first episode cohort) | (160) |
| Shah 2017 | Inappropriate population | (161) |
| Shrivastava 2011 | Inappropriate primary outcome | (162) |
| Shrivastava 2010 | Inappropriate primary outcome | (163) |
| Simonsen 2019 | Inappropriate primary outcome | (164) |
| Simonsen 2018 | Inappropriate primary outcome | (165) |
| Simonsen 2010 | Inappropriate population | (166) |
| Sorensen 2014 | Same data set as other included study – Wimberley 2016 | (167) |
| Spangaro 2020 | Inappropriate population (not first episode cohort) | (168) |
| Srivastava 2009 | Insufficient data | (169) |
| Stalker 1939 | Inappropriate primary outcome | (170) |
| Stokes 2020 | Inappropriate intervention (focus on positive symptoms as indicator of TRS) | (171) |
| Stralin 2019 | Insufficient data | (172) |
| Suarez 2002 | Insufficient data – treatment resistance and treatment received not clearly defined | (173) |
| Szentgyorgyi 2019 | Insufficient data (unable to locate full text) | (174) |
| Szymanski 1995 | Insufficient data (unable to locate full text) | (175) |
| Takeuchi 2019 | Inappropriate intervention | (176) |
| Tang 2016 | Inappropriate population | (177) |
| Taylor 2020 | Inappropriate population (CYMHS) | (178) |
| Ten Velden Hegelstad 2013 | Inappropriate primary outcome | (179) |
| Thara 2004 | Inappropriate primary outcome | (180) |
| Thorup 2014 | Inappropriate primary outcome | (181) |
| Tocco 2019 | Inappropriate primary outcome (Lurasidone only) | (182) |
| Tohen 2000 | Inappropriate population | (183) |
| Tonsig 2019 | Insufficient data (poster) | (184) |
| Torgalsboen 2014 | Inappropriate primary outcome | (185) |
| Toto 2019 | Inappropriate population (not first episode cohort) | (186) |
| Tsoi 1993 | Inappropriate primary outcome | (187) |
| Turner 2009 | Insufficient data | (188) |
| Valencia 2012 | Inappropriate primary outcome | (189) |
| Ventura 2011 | Inappropriate intervention | (190) |
| Verma 2012 | Inappropriate primary outcome | (191) |
| Wade 2006 | Inappropriate population | (192) |
| Westfall 2020 | Inappropriate primary outcome | (193) |
| Wheeler 2014 | Inappropriate primary outcome | (194) |
| Winton-Brown 2017 | Inappropriate primary outcome | (195) |
| Wimberley 2016 (#6983) | Same data set as other included study – Wimberley 2016 (#6984) | (196) |
| Yildizhan 2015 | Inappropriate population | (197) |
| Yoshimura 2019 (#7162) | Same data set as other included study – Yoshimura 2019 (#7161) | (198) |
| Zhang 2016 | Inappropriate intervention (monotherapy) | (199) |
| Zhu 2020 | Insufficient data | (200) |

1. Agid O, Zipursky R, Pardis P, Panda R, Takeuchi H, Foussias G, et al. Treatment-resistant schizophrenia (TRS): Subtypes and trajectories of response to clozapine. 2019;44:332-3.

2. Ajnakina O, Trotta A, Forti MD, Stilo SA, Kolliakou A, Gardner-Sood P, et al. Different types of childhood adversity and 5-year outcomes in a longitudinal cohort of first-episode psychosis patients. 2018;269:199-206.

3. Ajnakina O, Agbedjro D, Lally J, Forti MD, Trotta A, Mondelli V, et al. Predicting onset of early- and late-treatment resistance in first-episode schizophrenia patients using advanced shrinkage statistical methods in a small sample. 2020;294.

4. Albert N, Bertelsen M, Thorup A, Petersen L, Jeppesen P, Le Quack P, et al. Predictors of recovery from psychosis Analyses of clinical and social factors associated with recovery among patients with first-episode psychosis after 5 years. 2011;125(2):257-66.

5. Alvarez-Jimenez M, Gleeson JF, Henry LP, Harrigan SM, Harris MG, Amminger GP, et al. Prediction of a single psychotic episode: a 7.5-year, prospective study in first-episode psychosis. 2011;125(2):236-46.

6. Arango C. The optimise study: Amisulpride and olanzapine followed by openlabel treatment with clozapine in first-episode schizophrenia. 2019;45:S115.

7. Arsalan A, Iqbal Z, Tariq M, Ayonrinde O, Vincent JB, Ayub M. Association of smoked cannabis with treatment resistance in schizophrenia. 2019;278:242-7.

8. Austin SF, Mors O, Secher RG, Hjorthoj CR, Albert N, Bertelsen M, et al. Predictors of recovery in first episode psychosis: the OPUS cohort at 10 year follow-up. 2013;150(1):163-8.

9. Ayesa-Arriola R, Pelayo Terán JM, Setién-Suero E, Neergaard K, Ochoa S, Ramírez-Bonilla M, et al. Patterns of recovery course in early intervention for FIRST episode non-affective psychosis patients: The role of timing. 2019;209:245-54.

10. Bachmann S, Bottmer C, Schröder J. One-year outcome and its prediction in first-episode schizophrenia - A naturalistic study. 2008;41(2):115-23.

11. Ballesteros A, Sánchez Torres AM, López-Ilundáin J, Mezquida G, Lobo A, González-Pinto A, et al. The longitudinal effect of antipsychotic burden on psychosocial functioning in first-episode psychosis patients: the role of verbal memory. 2020:1-10.

12. Belvederi Murri M, Bertelli R, Carozza P, Berardi L, Cantarelli L, Croce E, et al. First-episode psychosis in the Ferrara Mental Health Department: Incidence and clinical course within the first 2 years. 2020.

13. Berg E, Lindelius R, Petterson U, Salum I. Schizoaffective psychoses. A long-term follow-up. 1983;67(6):389-98.

14. Berge D, Mane A, Salgado P, Cortizo R, Garnier C, Gomez L, et al. Predictors of Relapse and Functioning in First-Episode Psychosis: A Two-Year Follow-Up Study. 2016;67(2):227-33.

15. Bergink V, Lambregtse-van den Berg MP, Koorengevel KM, Kupka R, Kushner SA. First-onset psychosis occurring in the postpartum period: a prospective cohort study. 2011;72(11):1531-7.

16. Berze L, Civcisa S, Krone I, Kvartalovs D, Kikuste S, Sapele I, et al. Implementing the Latvian Early Intervention Program (LAT-EIP) for Patients With Schizophrenia Spectrum First-Episode Psychosis: Study Protocol. 2019;10.

17. Bernard M, Jackson C, Jones C. Written emotional disclosure following first-episode psychosis: effects on symptoms of post-traumatic stress disorder. 2006;45:403-15.

18. Bertelsen M, Jeppesen P, Petersen L, Thorup A, Øhlenschlæger J, Le Quach P, et al. Course of illness in a sample of 265 patients with first-episode psychosis—Five-year follow-up of the Danish OPUS trial. 2009;107(2):173-8.

19. Birchwood M, Todd P, Jackson C. Early intervention in psychosis: The critical-period hypothesis. 1998;13:S31-S40.

20. Bobes J, Gibert J, Ciudad A, Alvarez E, Canas F, Carrasco JL, et al. Safety and effectiveness of olanzapine versus conventional antipsychotics in the acute treatment of first-episode schizophrenic inpatients. 2003;27(3):473-81.

21. Boden R, Sundstrom J, Lindstrom E, Lindstrom L. Association between symptomatic remission and functional outcome in first-episode schizophrenia. 2009;107(2):232-7.

22. Boden R, Abrahamsson T, Holm G, Borg J. Psychomotor and cognitive deficits as predictors of 5-year outcome in first-episode schizophrenia. 2014;68(4):282-8.

23. Bowtell M, Eaton S, Thien K, Bardell-Williams M, Downey L, Ratheesh A, et al. Rates and predictors of relapse following discontinuation of antipsychotic medication after a first episode of psychosis. 2018;195:231-6.

24. Browne J, Mueser KT, Meyer-Kalos P, Gottlieb JD, Estroff SE, Penn DL. The therapeutic alliance in individual resiliency training for first episode psychosis: Relationship with treatment outcomes and therapy participation. 2019;87(8):734-44.

25. Brugnoli R, Novick D, Haro JM, Suarez D, Rossi A, Frediani S. Incidenza e caratteristiche della remissione nei pazienti schizofrenici: analisi dei risultati a tre anni nei pazienti italiani dello studio SOHO (Schizophrenia Outpatients Health Outcomes). [Incidence and characteristics of remission in schizophrenic patients: Analysis of the results of the three-year SOHO study in Italy (Schizophrenia Outpatients Health Outcomes).]. 2008;14(3):243-51.

26. Buckley PF. Treatment-resistant schizophrenia. 2020;18(4):364-7.

27. Bugarski-Kirola D, Bitter I, Potkin SG, Liu C, Abbs B, Stankovic S. ENHANCE: A phase 3, randomized, double-blind, placebo-controlled study of adjunctive pimavanserin for treatment of schizophrenia in patients with an inadequate response to antipsychotic treatment. 2019;44:164-5.

28. Calkins M, Westfall M, Hurford I. Pennsylvania first-episode program evaluation of coordinated specialty care: Six-and 12-month outcomes. 2020;46:S228-S9.

29. Cao H, Meng Y, Li X, Ma X, Deng W, Guo W, et al. The metabolic effects of antipsychotics in the early stage of treatment in first-episode patients with schizophrenia: A real-world study in a naturalistic setting. 2020;129:265-71.

30. Chakos MH, Alvir JMJ, Woerner MG, Koreen A, Geisler S, Mayerhoff D, et al. Incidence and correlates of tardive dyskinesia in first episode of schizophrenia. 1996;53(4):313-9.

31. Chan SKW, Hui CLM, Chang WC, Lee EHM, Chen EYH. Ten-year follow up of patients with first-episode schizophrenia spectrum disorder from an early intervention service: Predictors of clinical remission and functional recovery. 2019;204:65-71.

32. Chan SKW, Chan HYV, Honer WG, Bastiampillai T, Suen YN, Yeung WS, et al. Predictors of Treatment-Resistant and Clozapine-Resistant Schizophrenia: A 12-Year Follow-up Study of First-Episode Schizophrenia-Spectrum Disorders. 2020.

33. Chang WC, Ho RWH, Tang JYM, Wong CSM, Hui CLM, Chan SKW, et al. Early-Stage Negative Symptom Trajectories and Relationships With 13-Year Outcomes in First-Episode Nonaffective Psychosis. 2019;45(3):610-9.

34. Chang WC, Kwong VW, Chan GH, Jim OT, Lau ES, Hui CL, et al. Prediction of functional remission in first-episode psychosis: 12-month follow-up of the randomized-controlled trial on extended early intervention in Hong Kong. 2016;173(1):79-83.

35. Chang WC, Kwong VWY, Or Chi Fai P, Lau ESK, Chan GHK, Jim OTT, et al. Motivational impairment predicts functional remission in first-episode psychosis: 3-Year follow-up of the randomized controlled trial on extended early intervention. 2018:4867418758918.

36. Chang WC, Lau ES, Chiu SS, Hui CL, Chan SK, Lee EH, et al. Three-year clinical and functional outcome comparison between first-episode mania with psychotic features and first-episode schizophrenia. 2016;200:1-5.

37. Chang WC, Ming Hui CL, Yan Wong GH, Wa Chan SK, Ming Lee EH, Hai Chen EY. Symptomatic remission and cognitive impairment in first-episode schizophrenia: a prospective 3-year follow-up study. 2013;74(11):e1046-53.

38. Chang WC, Tang JY, Hui CL, Lam MM, Chan SK, Wong GH, et al. Prediction of remission and recovery in young people presenting with first-episode psychosis in Hong Kong: a 3-year follow-up study. 2012;46(2):100-8.

39. Chen RY, Chen E, Ho WY. A five-year longitudinal study of the regional cerebral metabolic changes of a schizophrenic patient from the first episode using Tc-99m HMPAO SPECT. 2000;250(2):69-72.

40. Chiliza B, Asmal L, Kilian S, Phahladira L, Emsley R. Rate and predictors of non-response to first-line antipsychotic treatment in first-episode schizophrenia. 2015;30(3):173-82.

41. Chiliza B, Ojagbemi A, Esan O, Asmal L, Oosthuizen P, Kidd M, et al. Combining depot antipsychotic with an assertive monitoring programme for treating first-episode schizophrenia in a resource-constrained setting. 2016;10(1):54-62.

42. Cichocki L, Cechnicki A, Franczyk-Glita J, Bladzinski P, Kalisz A, Wronski K. Quality of life in a 20-year follow-up study of people suffering from schizophrenia. 2015;56:133-40.

43. Clarke AM, McLaughlin P, Staunton J, Kerins K, Power B, Kearney K, et al. Retrospective study of first episode psychosis in the Dublin Southwest Mental Health Service: demographics, clinical profile and service evaluation of treatment. 2017:1-10.

44. Coentre R, Mendes T, Rebelo A, Fonseca A, Levy P. PROFIP: A Portuguese early intervention programme for first-episode psychosis in Lisbon. 2019;13(6):1525-9.

45. Comacchio C, Lasalvia A, Bonetto C, Cristofalo D, Miglietta E, Petterlini S, et al. Gender and 5-years course of psychosis patients: focus on clinical and social variables. 2020;23(1):63-70.

46. Conus P, Cotton S, Schimmelmann BG, McGorry PD, Lambert M. The First-Episode Psychosis Outcome Study: Premorbid and baseline characteristics of an epidemiological cohort of 661 first-episode psychosis patients. 2007;1(2):191-200.

47. Conus P, Cotton S, Abdel-Baki A, Lambert M, Berk M, McGorry PD. Symptomatic and functional outcome 12 months after a first episode of psychotic mania: barriers to recovery in a catchment area sample. 2006;8(3):221-31.

48. Conus P, Cotton S, Schimmelmann BG, McGorry PD, Lambert M. Rates and predictors of 18-months remission in an epidemiological cohort of 661 patients with first-episode psychosis. 2017;52(9):1089-99.

49. Craig T, Fennig S, Tanenberg-Karant M, Bromet EJ. Six-month clinical status as a predictor of 24-month clinical outcome in first-admission patients with schizophrenia. 1999;11(4):197-203.

50. Crespo-Facorro B, de la Foz VO, Ayesa-Arriola R, Perez-Iglesias R, Mata I, Suarez-Pinilla P, et al. Prediction of acute clinical response following a first episode of non affective psychosis: results of a cohort of 375 patients from the Spanish PAFIP study. 2013;44:162-7.

51. Crespo-Facorro B, Perez-Iglesias R, Mata I, Caseiro O, Martinez-Garcia O, Pardo G, et al. Relapse prevention and remission attainment in first-episode non-affective psychosis. A randomized, controlled 1-year follow-up comparison of haloperidol, risperidone and olanzapine. 2011;45(6):763-9.

52. Cullberg J, Levander S, Holmqvist R, Mattsson M, Wieselgren IM. One-year outcome in first episode psychosis patients in the Swedish Parachute project. 2002;106(4):276-85.

53. Dai M, Wu Y, Tang Y, Yue W, Yan H, Zhang Y, et al. Longitudinal trajectory analysis of antipsychotic response in patients with schizophrenia: 6-week, randomised, open-label, multicentre clinical trial. 2020;6(6).

54. Dazzan P, Lappin JM, Heslin M, Donoghue K, Lomas B, Reininghaus U, et al. Symptom remission at 12-weeks strongly predicts long-term recovery from the first episode of psychosis. 2020;50(9):1452-62.

55. de Haan L, Nimwegen L, Amelsvoort T, Dingemans P, Linszen D. Improvement of subjective well-being and enduring symptomatic remission, a 5-year follow-up of first episode schizophrenia. 2008;41(4):125-8.

56. DeLisi LE, Sakuma M, Ge S, Kushner M. Association of brain structural change with the heterogeneous course of schizophrenia from early childhood through five years subsequent to a first hospitalization. 1998;84(2):75-88.

57. Diaz I, Pelayo-Teran JM, Perez-Iglesias R, Mata I, Tabares-Seisdedos R, Suarez-Pinilla P, et al. Predictors of clinical remission following a first episode of non-affective psychosis: sociodemographics, premorbid and clinical variables. 2013;206(2):181-7.

58. Downs J, Dean H, Lechler S, Sears N, Patel R, Shetty H, et al. Negative Symptoms in Early-Onset Psychosis and Their Association With Antipsychotic Treatment Failure. 2019;45(1):69-79.

59. Drake RJ, Husain N, Marshall M, Lewis SW, Tomenson B, Chaudhry IB, et al. Effect of delaying treatment of first-episode psychosis on symptoms and social outcomes: a longitudinal analysis and modelling study. 2020;7(7):602-10.

60. Edwards J, Maude D, McGorry PD, Harrigan SM, Cocks JT. Prolonged recovery in first-episode psychosis. 1998;172(33):107-16.

61. Eisenstadt P, Monteiro VB, Diniz MJ, Chaves AC. Experience of recovery from a first-episode psychosis. 2012;6(4):476-80.

62. Emsley R, Rabinowitz J, Medori R. Time course for antipsychotic treatment response in first-episode schizophrenia. 2006;163(4):743-5.

63. Emsley R. Early response to treatment predicts remission and recovery at 3 years in people with schizophrenia. 2009;12(2):43-.

64. Emsley R, Oosthuizen P, Koen L, Niehaus D, Martinez L. Comparison of treatment response in second-episode versus first-episode schizophrenia. 2013;33(1):80-3.

65. Evensen J, Rossberg JI, Barder H, Haahr U, Hegelstad WT, Joa I, et al. Flat affect and social functioning: a 10 year follow-up study of first episode psychosis patients. 2012;139(1):99-104.

66. Faber G, Smid HG, Van Gool AR, Wunderink L, van den Bosch RJ, Wiersma D. Continued cannabis use and outcome in first-episode psychosis: data from a randomized, open-label, controlled trial. 2012;73(5):632-8.

67. Farrell M, Lichtenstein M, Crowley J, Filmyer DM, Lazaro-Munoz G, Shaughnessy RA, et al. S87 GENETIC DIFFERENTIAL DIAGNOSIS IN ULTRA TREATMENT RESISTANT SCHIZOPHRENIA. 2019;29:S158-S9.

68. Fraguas D, Del Rey-Mejias A, Moreno C, Castro-Fornieles J, Graell M, Otero S, et al. Duration of untreated psychosis predicts functional and clinical outcome in children and adolescents with first-episode psychosis: a 2-year longitudinal study. 2014;152(1):130-8.

69. Gade K, Kohler J, Klein P, Falkai P, Wobrock T. Predictors of symptomatic remission in first-episode psychosis outpatients treated with quetiapine: a naturalistic study. 2013;17(2):148-53.

70. Gaebel W, Riesbeck M, Wolwer W, Klimke A, Eickhoff M, von Wilmsdorff M, et al. Rates and predictors of remission in first-episode schizophrenia within 1 year of antipsychotic maintenance treatment. Results of a randomized controlled trial within the German Research Network on Schizophrenia. 2014;152(2):478-86.

71. Gasse C, Wimberley T, Wang Y, Mors O, Børglum A, Als TD, et al. Schizophrenia polygenic risk scores, urbanicity and treatment-resistant schizophrenia. 2019;212:79-85.

72. Gee B, Hodgekins J, Fowler D, Marshall M, Everard L, Lester H, et al. The course of negative symptom in first episode psychosis and the relationship with social recovery. 2016;174(1):165-71.

73. Girgis RR, Phillips MR, Li X, Li K, Jiang H, Wu C, et al. Clozapine v. chlorpromazine in treatment-naive, first-episode schizophrenia: 9-year outcomes of a randomised clinical trial. 2011;199(4):281-8.

74. Hall MH, Holton KM, Öngür D, Montrose D, Keshavan MS. Longitudinal trajectory of early functional recovery in patients with first episode psychosis. 2019;209:234-44.

75. Hamilton JE, Srivastava D, Womack D, Brown A, Schulz B, Macakanja A, et al. Treatment Retention Among Patients Participating in Coordinated Specialty Care for First-Episode Psychosis: a Mixed-Methods Analysis. 2019;46(3):415-33.

76. Haro JM, Novick D, Suarez D, Alonso J, Lépine JP, Ratcliffe M, et al. Remission and relapse in the outpatient care of schizophrenia: Three-year results from the schizophrenia outpatient health outcomes study. 2006;26(6):571-8.

77. Hatta K, Nakamura H, Matsuzaki I. Acute-phase treatment in general hospitals: clinical psychopharmacologic evaluation in first-episode schizophrenia patients. 2003;25(1):39-45.

78. Hatzimanolis A, Stefanatou P, Kattoulas E, Ralli I, Dimitrakopoulos S, Foteli S, et al. Familial and socioeconomic contributions to premorbid functioning in psychosis: Impact on age at onset and treatment response. 2020;63(1).

79. Harrison I, Joyce EM, Mutsatsa SH, Hutton SB, Huddy V, Kapasi M, et al. Naturalistic follow-up of co-morbid substance use in schizophrenia: the West London first-episode study. 2008;38(1):79-88.

80. Hegelstad WT, Larsen TK, Auestad B, Evensen J, Haahr U, Joa I, et al. Long-term follow-up of the TIPS early detection in psychosis study: effects on 10-year outcome. 2012;169(4):374-80.

81. Henry LP, Amminger GP, Harris MG, Yuen HP, Harrigan SM, Prosser AL, et al. The EPPIC follow-up study of first-episode psychosis: longer-term clinical and functional outcome 7 years after index admission. 2010;71(6):716-28.

82. Henry AD. Predicting psychosocial functioning and symptomatic recovery of adolescents and young adults with a first psychotic episode: A six-month follow-up study. US: ProQuest Information & Learning; 1994.

83. Ho BC, Andreasen NC, Ziebell S, Pierson R, Magnotta V. Long-term antipsychotic treatment and brain volumes: A longitudinal study of first-episode schizophrenia. 2011;68(2):128-37.

84. Hodgekins J, Birchwood M, Christopher R, Marshall M, Coker S, Everard L, et al. Investigating trajectories of social recovery in individuals with first-episode psychosis: a latent class growth analysis. 2015;207(6):536-43.

85. Horsdal HT, Wimberley T, Benros ME, Gasse C. C‐reactive protein levels and treatment resistance in schizophrenia—A Danish population‐based cohort study. 2017;32(6):1-4.

86. Horsdal HT, Wimberley T, Kohler-Forsberg O, Baandrup L, Gasse C. Association between global functioning at first schizophrenia diagnosis and treatment resistance. 2018;12(6):1198-202.

87. Iasevoli F, Razzino E, Altavilla B, Avagliano C, Barone A, Ciccarelli M, et al. Relationships between age at onset of psychotic symptoms and poor response to antipsychotics in a sample of TRS/non-TRS patients. 2020;46:S22.

88. Jaracz K, Górna K, Jaracz J, Kiejda J, Wilkiewicz M, Rybakowski J. Long-term evaluation of mental status in schizophrenic patients after a first psychiatric hospitalization according to symptomatic remission criteria. 2012;7(1):1-6.

89. Jaracz K, Gorna K, Kiejda J, Grabowska-Fudala B, Jaracz J, Suwalska A, et al. Psychosocial functioning in relation to symptomatic remission: A longitudinal study of first episode schizophrenia. 2015;30(8):907-13.

90. Jonsson L, Simonsen J, Brain C, Kymes S, Watson L. Identifying and characterizing treatment-resistant schizophrenia in observational database studies. 2019:e1778.

91. Jauhar S, Veronese M, Nour MM, Rogdaki M, Hathway P, Turkheimer FE, et al. Determinants of treatment response in first-episode psychosis: an 18F-DOPA PET study. 2019;24(10):1502-12.

92. Jauhar S, Veronese M, Nour MM, Rogdaki M, Hathway P, Turkheimer FE, et al. Determinants of treatment response in first-episode psychosis: an (18)F-DOPA PET study. 2018.

93. Kaminga AC, Dai W, Liu A, Myaba J, Banda R, Wen SW, et al. Rate of and time to symptomatic remission in first-episode psychosis in Northern Malawi: A STROBE-compliant article. 2018;97(45):e13078.

94. Kanahara N, Yamanaka H, Suzuki T, Takase M, Iyo M. First-episode psychosis in treatment-resistant schizophrenia: a cross-sectional study of a long-term follow-up cohort. 2018;18(1):274.

95. Kayo M, Tassell I, Hiroce V, Menezes A, Elkis H. Does lack of improvement in the first two weeks predict treatment resistance in recent-onset psychosis? 2012;67(12):1479-82.

96. Kim JS, Park CM, Choi JA, Park E, Tchoe HJ, Choi M, et al. The association between season of birth, age at onset, and clozapine use in schizophrenia. 2017;136(5):445-54.

97. Killackey E. Dose reduction, relapse and functional recovery in first episode psychosis. 2017;51(6):638-9.

98. Kontaxakis VP, Christodoulou GN. Therapeutic interventions in patients with first-episode psychosis. [Therapeutic interventions in patients with first-episode psychosis.]. 2005;16(2):102-3.

99. Kravariti E, Demjaha A, Zanelli J, Ibrahim F, Wise C, MacCabe JH, et al. Neuropsychological function at first episode in treatment-resistant psychosis: findings from the ÆSOP-10 study. 2019;49(12):2100-10.

100. Kravariti E, Demjaha A, Zanelli J, Ibrahim F, Wise C, MacCabe JH, et al. Neuropsychological function at first episode in treatment-resistant psychosis: findings from the AESOP-10 study. 2018:1-11.

101. Kurihara T, Kato M, Reverger R, Tirta IG. Seventeen-year clinical outcome of schizophrenia in Bali. 2011;26(5):333-8.

102. Lange SMM, Meesters PD, Stek ML, Wunderink L, Penninx BWJH, Rhebergen D. Course and predictors of symptomatic remission in late-life schizophrenia: A 5-year follow-up study in a dutch psychiatric catchment area. 2019:No Pagination Specified-No Pagination Specified.

103. Langeveld J, Bjørkly S, Auestad B, Barder H, Evensen J, Ten Velden Hegelstad W, et al. Treatment and violent behavior in persons with first episode psychosis during a 10-year prospective follow-up study. 2014;156(2):272-6.

104. Lee J, Yee JY, See YM, Tang C, Ng BT, Chowbay B, et al. Factors associated with clozapine response and resistance in schizophrenia. 2020;46:S217-S8.

105. Lee J, Poon LY, Chong SA. Spontaneous dyskinesia in first-episode psychosis in a Southeast Asian population. 2008;28(5):536-9.

106. Legge SE, Dennison CA, Pardinas AF, Rees E, Lynham AJ, Hopkins L, et al. Clinical indicators of treatment-resistant psychosis. 2019:1-8.

107. Lewis SW, Davies L, Jones PB, Barnes TR, Murray RM, Kerwin R, et al. Randomised controlled trials of conventional antipsychotic versus new atypical drugs, and new atypical drugs versus clozapine, in people with schizophrenia responding poorly to, or intolerant of, current drug treatment. 2006;10(17):iii-iv, ix-xi, 1-165.

108. Li YE, Li XY, Zeng ZX. One-year follow-up study of systematic early intervention to first episode schizophrene. 2004;8(36):8178-9.

109. Li X, Guo X, Fan X, Feng T, Wang C, Yao Z, et al. Sequential Multiple-Assignment Randomized Trials to Compare Antipsychotic Treatments (SMART-CAT) in first-episode schizophrenia patients: Rationale and trial design. 2020.

110. Lieberman JA, Alvir JMJ, Woerner M, Degreef G, Bilder RM, Ashtari M, et al. Prospective study of psychobiology in first-episode schizophrenia at Hillside Hospital. 1992;18(3):351-71.

111. Lieberman JA. Pharmacotherapy for patients with first-episode, acute, and refractory schizophrenia. 1996;26(8):515-8.

112. Liffick E, Breier A. Pharmacotherapy of first-episode schizophrenia. E. Liffick, Clinical Psychiatry, Department of Psychiatry, Midtown Community Mental Health Center, 1001 W. 10th Street, BU-44, Indianapolis, IN 46202, United States2010 2010 %J Psychopharm Rev. 41-8 p.

113. Lisshammar J, Blackman G, Carter B, Zafar R, Stewart R, Pritchard M, et al. The immunomodulatory effect of clozapine in patients with treatment resistant schizophrenia: A retrospective cohort study. 2019;90:A18-A9.

114. Luisa L, Sawa A. The role of ace as possible biomarker for treatment resistance to antipsychotics in first episode of psychosis. 2020;46:S37.

115. Maddigan J, LeDrew K, Hogan K, Le Navenec CL. Challenges to recovery following early psychosis: Nursing implications of recovery rate and timing. 2018;32(6):836-44.

116. Maddigan WJ. A Mixed Methods Study of Recovery Among Individuals in an Early Psychosis Program: Implications for Psychiatric/Mental Health Nurses: University of Calgary (Canada); 2011.

117. Malla AK, Norman RMG, McLean TS, McIntosh E. Impact of phase-specific treatment of first episode of psychosis on Wisconsin Quality of Life Index (client version). 2001;103(5):355-61.

118. Malla AK, Norman RM, Manchanda R, McLean TS, Harricharan R, Cortese L, et al. Status of patients with first-episode psychosis after one year of phase-specific community-oriented treatment. 2002;53(4):458-63.

119. Marchesi C, Affaticati A, Monici A, De Panfilis C, Ossola P, Tonna M. Predictors of symptomatic remission in patients with first-episode schizophrenia: a 16years follow-up study. 2014;55(4):778-84.

120. Marchesi C, Affaticati A, Monici A, De Panfilis C, Ossola P, Ottoni R, et al. Decrease of functioning in remitted and non-remitted patients 16 years after a first-episode schizophrenia. 2015;203(6):406-11.

121. Meltzer HY, Rabinowitz J, Lee MA, Cola PA, Ranjan R, Findling RL, et al. Age at onset and gender of schizophrenic patients in relation to neuroleptic resistance. 1997;154(4):475-82.

122. Menezes NM, Malla AM, Norman RM, Archie S, Roy P, Zipursky RB. A multi-site Canadian perspective: examining the functional outcome from first-episode psychosis. 2009;120(2):138-46.

123. Miller R, McCormack J, Sevy S. An integrated treatment program for first-episode schizophrenia. Miller, Rachel: National Institute of Mental Health, Child Psychiatry Branch, Building 10 (Room 3B24), 10 Center Drive, Bethesda, MD, US, 20892, mrachel@mail.nih.gov New York, NY, US: Routledge/Taylor & Francis Group; 2008 2008 %J Psychotherapies for the psychoses: Theoretical, cultural and clinical integration. 151-66 p.

124. Monteleone P, Fabrazzo M, Serra M, Tortorella A, Pisu MG, Biggio G, et al. Long-term treatment with clozapine does not affect morning circulating levels of allopregnanolone and THDOC in patients with schizophrenia: a preliminary study. 2004;24(4):437-40.

125. Morgan C, Lappin J, Heslin M, Donoghue K, Lomas B, Reininghaus U, et al. Reappraising the long-term course and outcome of psychotic disorders: the AESOP-10 study. 2014;44(13):2713-26.

126. Mufić AK, Karlović D, Jagodić T, Kostanjšak L, Katinić K, Vidrih B. Substance abuse in patients hospitalized with first-episode psychosis. 2009;45(1):17-25.

127. Nasrallah H, Morton L, Morton R. Successful treatment of clozapine-nonresponsive refractory hallucinations and delusions with a serotonin 5HT-2A receptor inverse agonist: Pimavanserin as an alternative to clozapine. 2019;44:486.

128. Nugent KL. Risk factors for schizophrenia subtypes: An investigation utilizing Danish registries and latent variable modeling. US: ProQuest Information & Learning; 2012.

129. Nielsen J, Le Quach P, Emborg C, Foldager L, Correll CU. 10-Year trends in the treatment and outcomes of patients with first-episode schizophrenia. 2010;122(5):356-66.

130. O'Donoghue B, Francey SM, Nelson B, Ratheesh A, Allott K, Graham J, et al. Staged treatment and acceptability guidelines in early psychosis study (STAGES): A randomized placebo controlled trial of intensive psychosocial treatment plus or minus antipsychotic medication for first-episode psychosis with low-risk of self-harm or aggression. Study protocol and baseline characteristics of participants. 2019;13(4):953-60.

131. O'Keeffe D, Hannigan A, Doyle R, Kinsella A, Sheridan A, Kelly A, et al. The iHOPE-20 study: Relationships between and prospective predictors of remission, clinical recovery, personal recovery and resilience 20 years on from a first episode psychosis. 2019:4867419827648.

132. Oh N, See YM, Remington G, Lee J. Association between weight gain and remission status at 3 months in first-episode schizophrenia. 2016;36(4):403-5.

133. Olivet J, Haselden M, Piscitelli S, Kenney R, Shulman A, Medoff D, et al. Results from a pilot study of a computer-based role-playing game for young people with psychosis. 2019;13(4):767-72.

134. Oluwoye O, Monroe-DeVita M, Burduli E, Chwastiak L, McPherson S, McClellan JM, et al. Impact of tobacco, alcohol and cannabis use on treatment outcomes among patients experiencing first episode psychosis: Data from the national RAISE-ETP study. 2019;13(1):142-6.

135. Opjordsmoen S, Friis S, Melle I, Haahr U, Johannessen JO, Larsen TK, et al. A 2-year follow-up of involuntary admission's influence upon adherence and outcome in first-episode psychosis. 2010;121(5):371-6.

136. Ortiz BB, Eden FD, de Souza AS, Teciano CA, de Lima DM, Noto C, et al. New evidence in support of staging approaches in schizophrenia: Differences in clinical profiles between first episode, early stage, and late stage. 2017;73:93-6.

137. Parikh V, Evans DR, Khan MM, Mahadik SP. Nerve growth factor in never-medicated first-episode psychotic and medicated chronic schizophrenic patients: Possible implications for treatment outcome. 2003;60(2):117-23.

138. Patel R, Wilson R, Jackson R, Ball M, Shetty H, Broadbent M, et al. Cannabis use and treatment resistance in first episode psychosis: a natural language processing study. 2015;385:S79.

139. Patel R, Wilson R, Jackson R, Ball M, Shetty H, Broadbent M, et al. Association of cannabis use with hospital admission and antipsychotic treatment failure in first episode psychosis: an observational study. 2016;6(3):e009888.

140. Pedros A, Marti J, Gutierrez G, Tenias JM, Ruescas S. [Two-year diagnostic stability and prognosis in acute psychotic episodes]. 2009;37(5):245-51.

141. Pelayo-Teran JM, Gajardo Galan VG, de la Ortiz-Garcia de la Foz V, Martinez-Garcia O, Tabares-Seisdedos R, Crespo-Facorro B, et al. Rates and predictors of relapse in first-episode non-affective psychosis: a 3-year longitudinal study in a specialized intervention program (PAFIP). 2017;267(4):315-23.

142. Perkins D, Lieberman J, Gu H, Tohen M, McEvoy J, Green A, et al. Predictors of antipsychotic treatment response in patients with first-episode schizophrenia, schizoaffective and schizophreniform disorders. 2004;185:18-24.

143. Petersen L, Thorup A, Oqhlenschlaeger J, Christensen TO, Jeppesen P, Krarup G, et al. Predictors of remission and recovery in a first-episode schizophrenia spectrum disorder sample: 2-year follow-up of the OPUS trial. 2008;53(10):660-70.

144. Phahladira L, Luckhoff HK, Asmal L, Kilian S, Scheffler F, Plessis SD, et al. Early recovery in the first 24 months of treatment in first-episode schizophrenia-spectrum disorders. 2020;6(1):2.

145. Privat AT, Baquero DB, Santacana AM, Solà VP. Decreased incidence of readmissions in first episode psychosis in treatment with long - Acting injectable antipsychotics. 2015;4(1):52-7.

146. Raghavan V, Ramamurthy M, Rangaswamy T. Social functioning in individuals with first episode psychosis: One-year follow-up study. 2017;30:124-6.

147. Raghavan V, Mohan G, Gopal S, Ramamurthy M, Rangaswamy T. Medication adherence in first-episode psychosis and its association with psychopathology. 2019;61(4):342-6.

148. Revier CJ, Reininghaus U, Dutta R, Fearon P, Murray RM, Doody GA, et al. Ten-Year Outcomes of First-Episode Psychoses in the MRC AESOP-10 Study. 2015;203(5):379-86.

149. Robinson D, Schooler N, Kane J. LONG TERM EFFECTS OF EARLY INTERVENTION SERVICES FOR FIRST EPISODE PSYCHOSIS: OUTCOMES OVER FIVE YEARS FROM THE RECOVERY AFTER AÂ 1ST EPISODE OF SCHIZOPHRENIA-EARLY TREATMENT PROGRAM (RAISE-ETP)....Schizophrenia International Research Society (SIRS) 2020 Congress. 2020;46:S10-S1.

150. Robinson DG, Schooler NR, Correll CU, John M, Kurian BT, Marcy P, et al. Psychopharmacological Treatment in the RAISE-ETP Study: Outcomes of a Manual and Computer Decision Support System Based Intervention. 2018;175(2):169-79.

151. Robinson DG, Woerner MG, McMeniman M, Mendelowitz A, Bilder RM. Symptomatic and functional recovery from a first episode of schizophrenia or schizoaffective disorder. 2004;161(3):473-9.

152. Rohde C, Siskind D, de Leon J, Nielsen J. Antipsychotic medication exposure, clozapine, and pneumonia: results from a self-controlled study. 2020;142(2):78-86.

153. Roosens L, Neels HM, Sabbe BG. Therapeutic drug monitoring of second-generation antipsychotics for the estimation of early drug effect in first-episode psychosis. 2019;41(2):252-3.

154. Rowntree R, Murray S, Fanning F, Keating D, Szigeti A, Doyle R, et al. Clozapine use – has practice changed? 2020;34(5):567-73.

155. Rubio J, Taipale H, Correll CU, Tanskanen A, Kane J, Tiihonen J. O5.5. PSYCHOTIC RELAPSE DURING MAINTENANCE ANTIPSYCHOTIC TREATMENT: A NATIONWIDE STUDY...2019 Congress of the Schizophrenia International Research Society, 10-14 April 2019, Orlando, Florida. 2019;45:S174-S5.

156. Saiz-Masvidal C, Soriano-Mas C, Contreras F, Mezquida G, Lobo A, Gonzalez-Pinto A, et al. Structural covariance predictors of clinical improvement at 2-year follow-up in first-episode psychosis. 2020;46:S37.

157. Santonja J, Pina-Camacho L, Martínez K, Díaz-Caneja C, Arango C, Bernardo Arroyo M, et al. THE RELATIONSHIP BETWEEN AGE AT FIRST-EPISODE AND LONGITUDINAL CORTICAL CHANGES IN FIRST-EPISODE PSYCHOSIS: AÂ TWO-YEAR LONGITUDINAL STUDY IN AN ADOLESCENT AND ADULT-ONSET COHORT...Schizophrenia International Research Society (SIRS) 2020 Congress. 2020;46:S240-S1.

158. Schimmelmann BG, Conus P, Cotton S, Kupferschmid S, McGorry PD, Lambert M. Prevalence and impact of cannabis use disorders in adolescents with early onset first episode psychosis. 2012;27(6):463-9.

159. Sen MS, Nehra R, Grover S. Social cognition in patients with first episode of psychosis in remission. 2020;62(5):544-54.

160. Shah P, Iwata Y, Brown EE, Kim J, Sanches M, Takeuchi H, et al. Clozapine response trajectories and predictors of non-response in treatment-resistant schizophrenia: a chart review study. 2020;270(1):11-22.

161. Shah D, Chand P, Bandawar M, Benegal V, Murthy P. Cannabis induced psychosis and subsequent psychiatric disorders. 2017;30:180-4.

162. Shrivastava A, Johnston M, Thakar M, Stitt L, Shah N. Social outcome in clinically recovered first-episode schizophrenia in a naturalistic, ten-year, follow-up study in India. 2011;5(2):95-101.

163. Shrivastava A, Shah N, Johnston M, Stitt L, Thakar M. Predictors of long-term outcome of first-episode schizophrenia: A ten-year follow-up study. 2010;52(4):320-6.

164. Simonsen C, Aminoff SR, Vaskinn A, Barrett EA, Faerden A, Ueland T, et al. Perceived and experienced stigma in first-episode psychosis: A 1-year follow-up study. 2019;95:N.PAG-N.PAG.

165. Simonsen C, Faerden A, Ueland T, Vaskinn A, Bjella T, Andreassen O, et al. Self-rated disability in first treated episode of psychosis: A 1-year follow-up study. 2018;85:48-54.

166. Simonsen E, Friis S, Opjordsmoen S, Mortensen EL, Haahr U, Melle I, et al. Early identification of non-remission in first-episode psychosis in a two-year outcome study. 2010;122(5):375-83.

167. Sorensen HJ, Foldager L, Roge R, Pristed SG, Andreasen JT, Nielsen J. An association between autumn birth and clozapine treatment in patients with schizophrenia: a population-based analysis. 2014;68(6):428-32.

168. Spangaro M, Bosia M, Bechi M, Buonocore M, Martini F, Cavallaro R. Treatment-resistance affects long-term cognitive trajectories in schizophrenia: A longitudinal study. 2020;46:S59.

169. Srivastava AK, Stitt L, Thakar M, Shah N, Chinnasamy G. The abilities of improved schizophrenia patients to work and live independently in the community: a 10-year long-term outcome study from Mumbai, India. 2009;8:24.

170. Stalker H. The prognosis in schizophrenia. 1939;85:1224-40.

171. Stokes I, Siân Lowri G, Jones R, Everard L, Jones PB, Fowler D, et al. Prevalence of treatment resistance and clozapine use in early intervention services. 2020;6(5).

172. Stralin P, Skott M, Cullberg J. Early recovery and employment outcome 13 years after first episode psychosis. 2019;271:374-80.

173. Suarez E. Prognosis and outcome of first-episode psychoses in Hawai'i: Results of the 15-year follow-up of the Honolulu cohort of the WHO international study of schizophrenia. US: ProQuest Information & Learning; 2002.

174. Szentgyorgyi T, Vanes L, Mouchlianitis E, Patel K, Wong K, Barry E, et al. T81. DOES COGNITIVE CONTROL PERFORMANCE PREDICT TREATMENT RESPONSE IN PSYCHOSIS?...2019 Congress of the Schizophrenia International Research Society, 10-14 April 2019, Orlando, Florida. 2019;45:S234-S5.

175. Szymanski S, Lieberman JA, Alvir JM, Mayerhoff D, Loebel A, Geisler S, et al. Gender differences in onset of illness, treatment response, course, and biologic indexes in first-episode schizophrenic patients. 1995;152(5):698-703.

176. Takeuchi H, Siu C, Remington G, Fervaha G, Zipursky RB, Foussias G, et al. Does relapse contribute to treatment resistance? Antipsychotic response in first- vs. second-episode schizophrenia. 2019;44(6):1036-42.

177. Tang C, Subramaniam M, Ng BT, Abdin E, Poon LY, Verma SK. Clozapine Use in First-Episode Psychosis: The Singapore Early Psychosis Intervention Programme (EPIP) Perspective. 2016;77(11):e1447-e53.

178. Taylor JH, Appel S, Eli M, Alexander-Bloch A, Maayan L, Gur RE, et al. Time to Clinical Response in the Treatment of Early Onset Schizophrenia Spectrum Disorders Study. 2020.

179. Ten Velden Hegelstad W, Haahr U, Larsen TK, Auestad B, Barder H, Evensen J, et al. Early detection, early symptom progression and symptomatic remission after ten years in a first episode of psychosis study. 2013;143(2):337-43.

180. Thara R. Twenty-year course of schizophrenia: the Madras Longitudinal Study. 2004;49(8):564-9.

181. Thorup A, Albert N, Bertelsen M, Petersen L, Jeppesen P, Le Quack P, et al. Gender differences in first-episode psychosis at 5-year follow-up--two different courses of disease? Results from the OPUS study at 5-year follow-up. 2014;29(1):44-51.

182. Tocco M, Pikalov AA, Deng L, Goldman RS. 5.28 LURASIDONE IN ADOLESCENTS WITH SCHIZOPHRENIA: REMISSION AND RECOVERY DURING 2 YEARS OF OPEN-LABEL TREATMENT. 2019;58(10):S254.

183. What is recovery?...Tohen M, et al. 'Two-year syndromal and functional recovery in 219 cases of first-episode major affective disorder with psychotic features,' American Journal of Psychiatry (February 2000): Vol. 157, No. 2, 220-28. 2000;17(3):6-7.

184. Tonsig G, Haguiara B, Coutinho L, Ortiz B, Noto C, Belangeiro S, et al. F69. SYMPTOM PREDICTORS OF TREATMENT-RESISTANCE IN FIRST-EPISODE PATIENTS...2019 Congress of the Schizophrenia International Research Society, 10-14 April 2019, Orlando, Florida. 2019;45:S281-S.

185. Torgalsboen AK, Mohn C, Rishovd Rund B. Neurocognitive predictors of remission of symptoms and social and role functioning in the early course of first-episode schizophrenia. 2014;216(1):1-5.

186. Toto S, Grohmann R, Bleich S, Frieling H, Maier HB, Greil W, et al. Psychopharmacological Treatment of Schizophrenia Over Time in 30 908 Inpatients: Data From the AMSP Study. 2019;22(9):560-73.

187. Tsoi WF. First admission schizophrenia: clinical manifestation and subtypes. 1993;34(5):399-402.

188. Turner MA, Boden JM, Smith-Hamel C, Mulder RT. Outcomes for 236 patients from a 2-year early intervention in psychosis service. 2009;120(2):129-37.

189. Valencia M, Juarez F, Ortega H. Integrated treatment to achieve functional recovery for first-episode psychosis. 2012;2012:962371.

190. Ventura J, Subotnik KL, Guzik LH, Hellemann GS, Gitlin MJ, Wood RC, et al. Remission and recovery during the first outpatient year of the early course of schizophrenia. 2011;132(1):18-23.

191. Verma S, Subramaniam M, Abdin E, Poon LY, Chong SA. Symptomatic and functional remission in patients with first-episode psychosis. 2012;126(4):282-9.

192. Wade D, Harrigan S, Edwards J, Burgess PM, Whelan G, McGorry PD. Substance misuse in first-episode psychosis: 15-month prospective follow-up study. 2006;189:229-34.

193. Westfall MBE, Kohler CG, Hurford I, Abegunde C, Agosti D, Brinen A, et al. Pennsylvania coordinated specialty care programs for first-episode psychosis: 6- and 12-month outcomes. 2020.

194. Wheeler AJ, Feetam CL, Harrison J. Pathway to clozapine use: a comparison between a patient cohort from New Zealand and a cohort from the United Kingdom. 2014;34(3):203-11.

195. Winton-Brown TT, Elanjithara T, Power P, Coentre R, Blanco-Polaina P, McGuire P. Five-fold increased risk of relapse following breaks in antipsychotic treatment of first episode psychosis. 2017;179:50-6.

196. Wimberley T, Pedersen CB, MacCabe JH, Stovring H, Astrup A, Sorensen HJ, et al. Inverse association between urbanicity and treatment resistance in schizophrenia. 2016;174(1):150-5.

197. Yildizhan E, Turkcan A, Inan S, Erenkus Z, Yalcin O, Erdogan A. [First Episode Psychosis: Relationship of Symptoms, Initial Treatment and Clinical Response]. 2015;26(2):77-86.

198. Yoshimura B, Sato K, Takaki M, Yamada N. Algorithm-based pharmacotherapy for first-episode schizophrenia involuntarily hospitalized: A retrospective analysis of real-world practice. 2019;13(1):39-46.

199. Zhang C, Chen MJ, Wu GJ, Wang ZW, Rao SZ, Zhang Y, et al. Effectiveness of Antipsychotic Drugs for 24-Month Maintenance Treatment in First-Episode Schizophrenia: Evidence From a Community-Based "Real-World" Study. 2016;77(11):e1460-e6.

200. Zhu M, Ferrara M, Tan W, Shang X, Syed S, Zhang L, et al. Drug-naïve first-episode schizophrenia spectrum disorders: Pharmacological treatment practices in inpatient units in Hunan Province, China. 2020.