**SUPPLEMENTARY MATERIAL**

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**This supplementary material has been provided by the authors to give readers additional information about their work.**

 **eTable I: Prisma statement and checklist**(Moher et al. 2009)

| **Section/topic**  | **#**  | **Checklist item**  | **Section** |
| --- | --- | --- | --- |
| **TITLE**  |  |
| Title  | 1  | Identify the report as a systematic review, meta-analysis, or both.  | Title |
| **ABSTRACT**  |  |
| Structured summary  | 2  | Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.  | Abstract |
| **INTRODUCTION**  |  |
| Rationale  | 3  | Describe the rationale for the review in the context of what is already known.  | Introduction |
| Objectives  | 4  | Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).  | Introduction |
| **METHODS**  |  |
| Protocol and registration  | 5  | Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.  | Methods |
| Eligibility criteria  | 6  | Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.  | Methods |
| Information sources  | 7  | Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.  | Methods |
| Search  | 8  | Present full electronic search strategy for at least a database, including limits used, such that it could be repeated.  | Methods |
| Study selection  | 9  | State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).  | Methods |
| Data collection process  | 10  | Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.  | Methods |
| Data items  | 11  | List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.  | Methods |
| Risk of bias in individual studies  | 12  | Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.  | eMethods II |
| Summary measures  | 13  | State the principal summary measures . | Methods |
| Risk of bias across studies  | 15  | Specify any assessment of risk of bias (i.e. Newcastle-Ottawa Scale (NOS), that may affect the cumulative evidence.  | eMethods II |
| Additional analyses  | 16  | Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.  | Methods |
| **RESULTS**  |   |  |  |
| Study selection  | 17  | Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.  | Results, Figure 1 |
| Study characteristics  | 18  | For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.  | eTable III |
| Risk of bias within studies  | 19  | Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).  | Results, eTable III |
| Results of individual studies  | 20  | For all outcomes considered (benefits or harms), present, for each study a summary data for each group  | Results |
| Synthesis of results  | 21  | Present results of study analyzed | Results, Table 1-2 |
| Risk of bias across studies  | 22  | Present results of any assessment of risk of bias across studies (see Item 15).  | Results  |
| Additional analysis  | 23  | Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression). | Results |
| **DISCUSSION**  |   |  |  |
| Summary of evidence  | 24  | Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).  | Discussion |
| Limitations  | 25  | Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).  | Discussion |
| Conclusions  | 26  | Provide a general interpretation of the results in the context of other evidence, and implications for future research.  | Conclusions |
| **FUNDING**  |   |  |  |
| Funding  | 27  | Describe sources of funding for the systematic review and other support; role of funders for the systematic review.  | Funding |

**eTable II: Moose checklist**(Stroup et al. 2000)

| **Criteria** | **Brief description of how the criteria were handled in the meta-analysis** |
| --- | --- |
| **Reporting of background should include** |  |
| √ | Problem definition | Duration of untreated psychosis (DUP) has been associated with poor mental health outcomes and its important to make active efforts to intervene earlier and see if those efforts have been effective. |
| √ | Hypothesis statement | We hypothesized that DUP would still be long compared to the guidelines’ recommendations. |
| √ | Description of study outcomes | Study outcomes have been defined and different operationalization’s considered. |
| √ | Type of exposure or intervention used | DUP is operationalized in eMethods 1. |
| √ | Type of study designs used | Both observational studies (cross-sectional or longitudinal) and clinical trials. |
| √ | Study population | Subjects with a Fist Episode of Psychosis. |
| **Reporting of search strategy should include** |  |
| √ | Qualifications of searchers | The first page includes the qualifications of all the researchers.The credentials of the investigators are indicated in the author list and in the acknowledgements. |
| √ | Search strategy, including time period included in the synthesis and keywords | We performed a multi-step literature search (keywords in the methods section) from inception until 1st November y 2020. |
| √ | Databases and registries searched | PubMed, PsychInfo, SciElo Citation Index and KCI Korean Journal databases were searched. |
| √ | Use of hand searching | We hand-searched bibliographies of retrieved papers for additional references. |
| √ | List of citations located and those excluded, including justifications | Details of the literature search process can be found in the results section and PRISMA flowchart.   |
| √ | Method of addressing articles published in languages other than English | Articles in any language were selected. We contacted native speakers to extract information in other languages. |
| √ | Method of handling abstracts and unpublished studies | Original individual studies were included. Reviews, clinical cases, abstracts, conference proceedings, and study protocols were excluded. |
| √ | Description of any contact with authors | We contacted corresponding authors to the email provided in the studies to gather additional data. |
| **Reporting of methods should include** |  |
| √ | Description of relevance or appropriateness of studies.to be tested | Detailed inclusion and exclusion criteria were described in the methods section.  |
| √ | Rationale for the selection and coding of data | Data extracted from each of the studies were relevant to the population characteristics, study design and studies outcomes. |
| √ | Assessment of confounding | We conducted meta-analytical regressions whenever four or more studies were available to estimate the association between efficacy of the intervention on each of the outcomes and (i) continent (ii) % affective psychosis (iii) mean age (iv) sex (v) sample size (vi) year of publication (vii) % white, (viii) % single, (ix) % married, (x) % living alone (xi) study design and (xii) quality of the study. |
| √ | Assessment of study quality | We assessed the quality of the studies using the “Newcastle-Ottawa Scale for cohort studies. |
| √ | Assessment of heterogeneity | Heterogeneity was assessed with the Q statistics. The proportion of the total variability in the effect size estimates was evaluated with the I2 index. |
| √ | Description of statistical methods in sufficient detail to be replicated | The effect size was estimated by calculating the mean±SD. A random-effects meta-analysis was used. More details are described in the methods section. |
| √ | Provision of appropriate tables and graphics | We provided several tables and graphs in the main text and supplementary section to describe the literature search and its results.  |
| **Reporting of results should include** |  |
| √ | Table summarizing individual study estimates and overall estimate | We summarized individual study estimates and overall estimates in the text. |
| √ | Table giving descriptive information for each study included | We presented descriptive information for each study in the tables and as supplementary material. |
| √ | Results of sensitivity testing | Additional analyses were conducted as specified in the manuscript. |
| √ | Indication of statistical uncertainty of findings | We reported in the results section the 95% CI and the prediction interval. |
| **Reporting of discussion should include** |  |
| √ | Quantitative assessment of bias | Publication bias was assessed by inspecting the funnel plot and conducting Egger’s test. |
| √ | Justification for exclusion | We excluded studies based on the rationale of the meta-analysis as stated in the manuscript. |
| √ | Assessment of quality of included studies | The quality of the studies was assessed as detailed in the main and supplementary section of the manuscript. |
| **Reporting of conclusions should include** |  |
| √ | Consideration of alternative explanations for observed results | Alternative explanations for observed results were considered. |
| √ | Generalization of the conclusions | This point has been addressed in the discussion section. |
| √ | Guidelines for future research | Guidelines for future research are provided in the text. |
| √ | Disclosure of funding source | This point has been addressed at the end of the manuscript.  |

**eTable III**: **Main characteristics of included studies**

| **Author, year**a | **Country** | **Design** | **Sample size** | **Mean age** | **% males** | **NOS score** | **DUP definition** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| (Abdin et al. 2017) | Singapore | Longitudinal | 1724 | 27.7 | 50.8 | 8 | Time between onset of psychotic symptoms and the time when a definitive diagnosis and treatment were established. |
| (Addington et al. 2010) | Canada | Cross-sectional | 606 | 25.9 | 65.3 | 7 | The number of weeks from the onset of any symptom that could be rated as 4 or more on the PANSS. |
| (Ajnakina et al. 2017) | United Kingdom | Cross-sectional | 283 | 27.9 | 56.2 | 6 | Time between the date of an appearance of first symptoms of psychosis and date of start of first treatment with antipsychotic medications. |
| (Alameda et al. 2015) | Switzerland | Longitudinal | 225 | 23.9 | 70.3 | 9 | Not reported. |
| (AlbertMelauJensenEmborg et al. 2017) | Denmark | Clinical trial | 400 | 25.5 | 48.5 | 9 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (AlbertMelauJensenHastrup et al. 2017) | Denmark | Clinical trial | 296 | 25.1 | 50.3 | 9 | Time from onset of psychotic symptoms until treatment start. |
| (Altamura et al. 2001) | Italy | Cross-sectional | 67 | 24.2 | 70 | 6 | The interval between the onset of the illness and the implementation of the first antipsychotic treatment. |
| (Anderson et al. 2015) | Canada | Longitudinal | 171 | N.a. | 66.6 | 7 | Time from the onset of delusions, hallucinations, or thought disorder to contact with an Early Intervention Service. |
| (Austin et al. 2019) | Denmark | Longitudinal | 59 | 21 | 71 | 8 | Time from emergence of the first positive psychotic symptoms to the start of the first adequate treatment of psychosis. |
| (Ayer et al. 2016) | Turkey | Cross-sectional | 56 | 26.7 | 64.3 | 5 | Not reported. |
| (Barrigón et al. 2010) | Spain  | Cross-sectional | 102 | N.a. | 59 | 7 | Period of time in weeks from reported onset of psychotic symptoms till the date on which antipsychotic treatment was started. |
| (Beiser et al. 1993) | Canada | Cross-sectional | 141 | N.a. | 65.8 | 5 | Time between prodromal period and treatment lag time. |
| (Belvederi Murri et al. 2021) | Italy | Longitudinal | 86 | 23.0  | 76.0 | 7 | Time elapsing between psychosis onset and initiation of treatment. |
| (Bergé et al. 2022) | USA | Cross-sectional | 124 | 19.8  | 72.6 | 8 | The time from onset of psychotic symptoms (based on medical records and retrospective clinical interview with the patient or relatives) to the initiation of treatment. |
| (Berger et al. 2018) | Germany | Longitudinal | 28 | 33 | 53.6 | 7 | Not reported. |
| (Berkhout et al. 2019) | Canada | Longitudinal | 9 | 27.5 | 44.4 | 6 | Length of time from onset of psychotic symptoms to pharmacological treatment |
| (Bernardo et al. 2020) | Spain | Longitudinal | 233 | 25.9  | 68.0 | 7 | Not reported. |
| (Bertani et al. 2012) | Italy | Cross-sectional | 397 | 32 | 54 | 7 | Time from onset of first psychotic symptom as reported by patients to first contact with mental health services. |
| (Bertelsen et al. 2007) | Denmark | Clinical trial | 547 | 26 | 59 | 9 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (Bianchini et al. 2015) | Italy | Longitudinal | 57 | 24.9 | 49.1 | 8 | The interval between the onset of psychotic symptoms and the first appropriate treatment. |
| (Bioque et al. 2018) | Spain | Longitudinal | 335 | 23.6 | 67.2 | 7 | Not reported. |
| (Birchwood et al. 2013) | United Kingdom | Cross-sectional | 343 | 21.6 | 73 | 7 | Treatment delay following a first episode of psychosis. |
| (Birnbaum et al. 2017) | USA | Cross-sectional | 214 | 23.9 | 74.5 | 7 | Duration from the date at onset of the initial hallucinations and/or delusions to the date of first hospital admission. |
| (Bojesen et al. 2021) | Denmark | Cross-sectional | 56 | 22.7  | 42.9 | 8 | Not reported. |
| (Boonstra et al. 2012) | Netherlands | Cross-sectional | 182 | 22 | 76.9 | 5 | Time from manifestation of the first psychotic symptoms to initiation of appropriate treatment. |
| (Bratlien et al. 2013) | Norway | Cross-sectional | 166 | 27.8 | 63 | 7 | From onset psychotic symptoms (defined as the first week with scores of four or more on the PANSS items P1, P3, P5, P6 or G9) until start of first adequate treatment. |
| (Burns et al. 2011) | South Africa | Cross-sectional | 54 | 25.8 | 70 | 4 | Period between the first appearance of positive psychotic symptoms and the initiation of treatment in hospital.  |
| (Canal-Rivero et al. 2019) | Spain | Longitudinal | 65 | 26.2 | 67.7 | 7 | Period of time in days from the first psychotic symptom to the start of antipsychotic treatment. |
| (Carr et al. 2009) | Canada | Cross-sectional | 376 | 23.4 | 89 | 7 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (Carrà et al. 2018) | United Kingdom | Cross-sectional | 122 | 24.2 | 67.2 | 7 | Interval between onset of the prodrome and the start of antipsychotic medication. |
| (Casey et al. 2016) | United Kingdom | Longitudinal | 103 | 23 | 70.9 | 7 | Time period from first psychotic symptom to treatment compliance. |
| (Cassidy et al. 2008) | Canada | Clinical trial | 293 | 25.1 | 74.4 | 9 | Period between the time of first onset of psychotic symptoms to time of adequate treatment with antipsychotics. |
| (Cavalcante et al. 2020) | Brazil | Longitudinal | 145 | 25.1 | 67.6 | 8 | Period between the onset of the first psychotic symptoms and the first effective antipsychotic treatment. |
| (Cerqueira et al. 2022) | Brazil | Longitudinal | 265 | 21.4  | 70.9 | 5 | Period between the onset of the disorder and the beginning of adequate treatment. |
| (Ceskova et al. 2011) | Czech | Longitudinal | 44 | 22.2 | 100 | 5 | Time from onset of positive symptoms to adequate treatment. |
| (Chan et al. 2015) | China | Longitudinal | 157 | 24.4 | 47.8 | 8 | Not reported. |
| (Chan et al. 2018) | China | Cross-sectional | 601 | 36.3 | 43.1 | 5 | Time interval between the first appearance of psychotic symptoms and the initiation of treatment. |
| (Chang et al. 2009) | Hong Kong | Longitudinal | 166 | 19.8 | 53.6 | 8 | Not reported. |
| (Chang et al. 2016) | China | Cross-sectional | 355 | 38.3 | 43.9 | 6 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (Cheung et al. 2014) | Canada | Longitudinal | 50 | 22.2 | 82 | 7 | Interval between the onset of positive symptoms and the onset of appropriate pharmacotherapy. |
| (Chiliza et al. 2016) | South Africa | Longitudinal | 207 | 25.9 | 66 | 8 | Period from the onset of continuous positive psychotic symptoms to initiation of adequate treatment. |
| (Chiu et al. 2018) | China | Cross-sectional | 19 | 29.1 | 57.9 | 5 | Not reported. |
| (Choi et al. 2009) | South Korea | Cross-sectional | 63 | 24.7 | 60.3 | 6 | Not reported. |
| (Chong et al. 2018) | China | Longitudinal | 269 | 34.2 | 35.5 | 8 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (Chou et al. 2014) | Japan | Cross-sectional | 62 | 28.6 | 52 | 4 | Time from the first manifestations of psychotic symptoms to the beginning of antipsychotic treatment. |
| (Chou et al. 2017) | Taiwan | Cross-sectional | 28 | 30.1 | 39.3 | 6 | Not reported. |
| (Chung et al. 2016) | Korea | Clinical trial | 75 | 30.8 | 54.7 | 8 | Not reported. |
| (Clarke et al. 2006) | Ireland | Longitudinal | 166 | 28.5 | 58 | 8 | Interval between first noted symptoms and presentation to the psychiatric services for initiation of adequate treatment. |
| (Cocchi et al. 2014) | Italy | Cross-sectional | 152 | 23 | 77 | 7 | Time elapsed from the onset of key symptoms (hallucinations, delusions or bizarre behavior) to the beginning of treatment prescribed by a psychiatrist. |
| (Coentre et al. 2016) | Portugal | Cross-sectional | 32 | 29.6 | 59.4 | 5 | Not reported. |
| (Coentre et al. 2019) | Portugal | Cross-sectional | 39 | 25.2 | 66.7 | 5 | Period from first psychotic symptom to the start of anti-psychotics with 75% adherence to medication. |
| (Coentre et al. 2021) | Portugal | Longitudinal | 118 | 26.1  | 76.3 | 7 | Period from first psychotic symptom to the start of anti-psychotics. |
| (Compton et al. 2014) | USA | Cross-sectional | 200 | 23.6 | 72.5 | 6 | Time from prodrome onset to initiation of adequate treatment. |
| (Corsi-Zuelli et al. 2021) | Brazil | Cross-sectional | 153 | 30.5  | 64.1 | 7 | Time between the onset of psychotic symptoms and the initiation of treatment with antipsychotic medication. |
| (Cougnard et al. 2004) | France | Cross-sectional | 86 | 27.8 | 63.9 | 5 | The delay between 1first psychotic symptom and first antipsychotic medication. |
| (Crespo-Facorro et al. 2013) | Spain | Longitudinal | 353 | 29.8 | 57.6 | 8 | Time from the first continuous psychotic symptom to initiation of adequate antipsychotic drug treatment. |
| (Daneault et al. 2019) | Canada | Cross-sectional | 603 | 23.7 | 69.8 | 6 | Time between the onset of psychotic symptoms and the start of adequate treatment. |
| (de Haan et al. 2002) | Netherlands | Cross-sectional | 56 | 19.9 | 85.7 | 5 | Time between the onset of a first psychotic episode and first psychiatric treatment. |
| (de Haan et al. 2003) | Netherlands | Longitudinal | 88 | N.a. | 77 | 5 | Time between onset of psychotic symptoms and the start of treatment with antipsychotic medication. |
| (Del Vecchio et al. 2015) | Italy | Cross-sectional | 34 | 26.0 | 64.7 | 6 | Period between the onset of symptoms and the start of adequate treatment. |
| (Del-Ben et al. 2019) | Brazil | Longitudinal | 588 | 32 | 54.1 | 8 | Difference, in weeks, between the date of onset of clinically significant positive or catatonic psychotic symptoms, which last at least 1 week, and the start date of effective pharmacological treatment. |
| (Deng et al. 2022) | China | Longitudinal | 75 | 22.3 | 41.33 | 8 | Not reported. |
| (Di Capite et al. 2018) | UK | Longitudinal | 61 | N.a. | 73 | 6 | Period between first appearance of psychotic symptoms and the onset of criterion treatment (defined as antipsychotic treatment for more than 2 weeks). |
| (Dimitrakopoulos et al. 2022) | Greece | Longitudinal | 223 | 23  | 67.1 | 8 | Measured by NOS-DUP scale. |
| (Domínguez-Martínez et al. 2017) | Spain | Cross-sectional | 40 | 24.1 | 62.5 | 5 | Time between onset of first positive psychotic symptom and treatment |
| (Drake et al. 2007) | United Kingdom | Longitudinal | 257 | N.a. | 69 | 7 | Not reported. |
| (Ebdrup et al. 2016) | Denmark | Longitudinal | 38 | 25.9 | 74 | 7 | Time between a continuous invasive deterioration of functioning due to psychosis-related symptoms. |
| (Ehmann et al. 2014) | Canada | Longitudinal | 104 | 20.9 | 67 | 9 | Time from date of first positive symptom to the date of antipsychotic start. |
| (Emsley et al. 2007) | South Africa | Clinical trial | 462 | 25.3 | 72.1 | 9 | Time from the onset of overt hallucinations or delusions until initiation of medical treatment. |
| (Emsley et al. 2006) | South Africa | Longitudinal | 57 | 28 | 49 | 6 | Time from the onset of overt hallucinations or delusions. |
| (Ergül et al. 2015) | Turkey | Longitudinal | 105 | 23 | 61.9 | 9 | Time from the onset of positive symptoms until the date of adequate antipsychotic treatment. |
| (Fan et al. 2019) | China | Cross-sectional | 203 | 24.7 | 46.8 | 7 | Not reported. |
| (Fan et al. 2022) | China | Cross-sectional | 75 | 24.4  | 41.3 | 7 | Not reported. |
| (Fannon et al. 2003) | United Kingdom | Cross-sectional | 33 | 24.8 | 70.3 | 6 | Not reported. |
| (Farhang et al. 2022) | Iran | Longitudinal | 500 | 32.3  | 74.0 | 6 | Time from date of the first sign or symptom of psychosis to start of treatment. |
| (Fedyszyn et al. 2012) | Australia | Cross-sectional | 180 | 19.6 | 56.1 | 7 | Number of days between emergence of a prominent positive symptom and commencement of continuous treatment, with the latter being the date of assessment at entry to the EIP. |
| (Fekih-Romdhane et al. 2022) | Tunis | Cross-sectional | 55 | 27.2  | 52.7 | 8 | Not reported. |
| (Ferrara et al. 2019) | Italy | Clinical trial | 100 | 25.4 | 71 | 7 | Time between the emergence of psychotic symptoms and initiation of appropriate clinical treatment. |
| (Ferrara et al. 2021) | USA | Cross-sectional | 168 | 22.4  | 70.0 | 9 | Interval between the onset of psychosis to admission to the EIP. |
| (Fisher et al. 2017) | United Kingdom | Longitudinal | 149 | 24 | 71 | 8 | Number of days between the ‘transition to psychosis’ (unremitting psychotic symptoms for 1 week) and the commencement of antipsychotic medication (>50% adherence for at least 1 month). |
| (Flora et al. 2017) | Canada | Longitudinal | 171 | 22.7 | 66.7 | 7 | Time between the onset of psychotic symptoms and the initiation of treatment. |
| (Flyckt et al. 2006) | Sweden | Longitudinal | 153 | 28.8 | 52.9 | 7 | Period between the first psychotic symptom and the first contact with psychiatry. |
| (Fond et al. 2019) | France | Longitudinal | 549 | 32.6 | 76 | 9 | Not reported. |
| (Fresán et al. 2003) | Mexico | Longitudinal | 77 | 27.8 | 51.9 | 7 | Time from onset of psychotic symptoms and onset of specific treatment with antipsychotics. |
| (Friis et al. 2004) | Norway | Cross-sectional | 397 | 28.6 | 57 | 7 | Time from the first onset of positive psychotic symptoms [the first week with PANSS score of four or more on positive scale items 1, 3, 5, 6 or general scale item 9] to the start of first adequate treatment of psychosis (i.e. admission to the study). |
| (Fu et al. 2018) | Norway | Longitudinal | 28 | 21 | 60.7 | 6 | Not reported. |
| (Fuchs et al. 2004) | Germany | Cross-sectional | 66 | N.a. | 59 | 4 | Time between onset of positive symptoms to first treatment contact |
| (Galderisi et al. 2009) | Multicountry | Longitudinal | 454 | 25.9 | 60.1 | 9 | Not reported. |
| (Galińska et al. 2009) | Poland | Cross-sectional | 30 | 22.5 | 66.7 | 5 | Period from the onset of psychosis to the beginning of adequate antipsychotic treatment. |
| (García-Andrade et al. 2015) | Spain | Longitudinal | 75 | 27.6 | 39.1 | 7 | Interval between first psychotic symptom and first treatment. |
| (García-Fernández et al. 2019) | Spain | Clinical trial | 86 | 25.5 | 68.6 | 7 | Not reported. |
| (Gardner et al. 2019) | Autralia | Cross-sectional | 146 | 20.5 | 69.2 | 7 | Not reported. |
| (Gay et al. 2013) | France | Cross-sectional | 44 | 26 | 72.7 | 6 | Not reported. |
| (Giné-Servén et al. 2022) | Spain | Longitudinal | 95 | 35.0  | 58.9 | 8 | Difference in time between the onset of the first positive psychotic symptom and the start of antipsychotic treatment. |
| (Goff et al. 2019) | USA | Longitudinal | 87 | 23.4 | 63.2 | 8 | Time elapsed since the onset of at least one persistent psychotic symptom of moderate or greater severity prior to initiation of antipsychotic medication. |
| (González-Valderrama et al. 2017) | Chile | Longitudinal | 55 | 20.2 | 78.2 | 8 | Symptom Onset Schizophrenia Inventory. |
| (Górna et al. 2008) | Poland | Longitudinal | 74 | 24.7 | 62 | 7 | Not reported. |
| (Greenfield et al. 2018) | United Kingdom | Longitudinal | 72 | 45.5 | 51.4 | 7 | Time between the appearance of the first positive psychotic symptom and date of referral to EIS. |
| (Griffiths et al. 2019) | United Kingdom | Clinical trial | 36 | 30.6 | 63 | 7 | Not reported. |
| (Gumley et al. 2014) | United Kingdom | Longitudinal | 79 | 24.6 | 68.4 | 8 | Time between onset of symptomatology and treatment. |
| (Gunduz-Bruce et al. 2005) | USA | Longitudinal | 118 | 25.1 | 50.1 | 9 | Not reported. |
| (Guo et al. 2014) | China | Cross-sectional | 49 | 22.7 | 61.2 | 5 | Not reported. |
| (Gutiérrez-Galve et al. 2010) | United Kingdom | Longitudinal | 37 | 26.8 | 67.6 | 6 | Symptom Onset in Schizophrenia Inventory. |
| (Haley et al. 2003) | United Kingdom | Longitudinal | 50 | 29.1 | 68.3 | 6 | Interval between first positive psychotic symptom and initiation of treatment. |
| (Han et al. 2021) | China | Longitudinal | 50 | 25.7  | 0 | 6 | Interval between the manifestation of the first psychotic symptom and the first antipsychotic treatment. |
| (Hann et al. 2018) | USA | Cross-sectional | 60 | N.a. | 89.9 | 3 | The mean duration of DUP defined as FPS to administration of scheduled (non-PRN) neuroleptic medications. |
| (Harrington et al. 2013) | United Kingdom | Longitudinal | 155 | N.a. | 70 | 6 | Not reported. |
| (Henderson et al. 2015) | Australia | Cross-sectional | 10 | N.a. | 70 | 4 | Time between the onset of symptoms and receiving treatment. |
| (Henry et al. 2007) | Australia | Longitudinal | 723 | 21.9 | 69.4 | 8 | Time between the onset of sustained psychotic symptoms and initiation of treatment. |
| (Heuser et al. 2011) | Germany | Cross-sectional | 102 | 27.2 | 62.7 | 6 | Not reported. |
| (Ho et al. 2003) | US | Longitudinal | 156 | 22.7 | 62.2 | 7 | Time between onset of full positive syndrome to initiation of antipsychotic treatment. |
| (Hochstrasser et al. 2018) | Germany | Longitudinal | 202 | 29.6 | 64.4 | 8 | Not reported. |
| (Hodgins et al. 2011) | UK | Cross-sectional | 162 | 30.6 | 55.8 | 5 | Not reported. |
| (Hoff et al. 2000) | USA | Cross-sectional | 50 | 27.4 | 64 | 7 | Time between onset of delusions, hallucinations, or FTD and treatment. |
| (Honer et al. 2005) | Canada | Cross-sectional | 532 | N.a. | 71 | 7 | From the date of onset of first psychotic symptoms to the date of the initial study visit, when symptom assessments were completed. |
| (Horan et al. 2012) | US | Longitudinal | 55 | 22.3 | 76.4 | 6 | Interval between psychotic symptoms onset and treatment onset. |
| (Horton et al. 2015) | USA | Longitudinal | 164 | 28 | 62 | 9 | Period from the age at first psychotic symptom to the age at consent. |
| (Huang et al. 2021) | China | Cross-sectional | 92 | 22.4  | 46.7 | 7 | Not reported. |
| (Huh et al. 2019) | Korea | Clinical trial | 28 | 31.1 | 23.8 | 8 | Not reported. |
| (Huang et al. 2020) | China | Cross-sectional | 65 | 25.8 | 39 | 6 | Not reported. |
| (Huber et al. 2012) | Germany | Longitudinal | 152 | 24.5 | 73.7 | 8 | Not reported. |
| (Hui et al. 2013) | Hong Kong | Longitudinal | 1400 | 21.2 | 51.4 | 8 | Period between first appearance of psychotic symptoms and use of effective psychiatric treatment as assessed by clinicians. |
| (Hui et al. 2019) | China | Clinical trial | 178 | 24.5 | 65 | 9 | Not reported. |
| (Humphries et al. 2017) | Vietnam | Longitudinal | 79 | 26.6 | 62 | 7 | Not reported. |
| (Hýža et al. 2016) | Czech republic | Longitudinal | 58 | 23.4 | 100 | 6 | Time between the onset of psychosis (estimated using all information available, including the reports of closed relatives or partners of the patients, patients themselves, and medical records) and the admission into hospital. |
| (Ikeda et al. 2008) | Japan | Longitudinal | 120 | 31.2 | 48.3 | 8 | Period from onset of psychotic symptoms to first APS exposure. |
| (Ihler et al. 2021) | Norway | Longitudinal | 460 | 26.9  | 36.5 | 7 | Time from the first psychotic episode until first adequate treatment (number of weeks with a PANSS score ≥ 4 on subitem P1, P3, P5, P6 or G9). |
| (Inchausti et al. 2022) | Spain | Longitudinal | 23 | 16.2  | 56.5 | 6 | Not reported. |
| (Ito et al. 2015) | Japan | Longitudinal | 156 | 28.6 | 46.8 | 8 | Interval between the onset of psychotic symptoms and the first prescription of neuroleptics for psychosis. |
| (Iyer et al. 2011) | India | Cross-sectional | 68 | 28.8 | 44.1 | 4 | Period form onset of presenting psychotic episode to commencement of continuous AP treatment. |
| (Jensen et al. 2004) | USA | Cross-sectional | 15 | 22.5 | 86.6 | 4 | Period since onset of psychotic symptoms |
| (Jensen et al. 2019) | Denmark | Clinical trial | 113 | 15.7 | 30 | 9 | Not reported. |
| (Jorquera et al. 2015) | Chile | Cross-sectional | 29 | 21.9 | 79.3 | 5 | Time between start of the first depressive, positive, and/or negative symptoms and diagnosis of episode. |
| (Judge et al. 2005) | USA | Cross-sectional | 20 | 19.8 | 75 | 4 | Time from onset of psychosis to administration of medication. |
| (Kahn et al. 2018) | Multisite | Clinical trial | 446 | 26 | 70 | 8 | Not reported. |
| (Kaleda et al. 2009) | Russia | Cross-sectional | 67 | 21.2 | N.a | 4 | Not reported. |
| (Kanahara et al. 2018) | Japan | Cross-sectional | 261 | 43.2 | 55.6 | 6 | Not reported. |
| (Kang et al. 2016) | South Korea | Clinical trial | 75 | 30.8 | 54.7 | 8 | Not reported. |
| (Kapila et al. 2019) | United Kingdom | Longitudinal | 1014 | 23.3 | 52 | 8 | Period between the appearance of the first positive psychotic symptom and the date of antipsychotic onset. |
| (Karanikas et al. 2016) | Greece | Cross-sectional | 25 | 25.5 | 100 | 5 | Not reported. |
| (Karanikas et al. 2017) | Greece | Cross-sectional | 25 | 25.5 | 100 | 4 | Not reported. |
| (Kéri et al. 2017) | Hungary | Cross-sectional | 42 | 26.1 | 69 | 5 | Not reported. |
| (Kim et al. 2020) | Korea | Cross-sectional | 340 | 27.9 | 45 | 7 | Time from the appearance of the first psychotic symptoms that last more than several days to the time of antipsychotic treatment or a psychiatric hospitalization. |
| (Kim et al. 2018) | Korea | Cross-sectional | 121 | N.a. | 39.7 | 5 | Time between the appearance of the first psychotic symptoms and the start of appropriate antipsychotic treatment. |
| (Koike et al. 2016) | Japan | Longitudinal | 31 | 24.4 | 54.8 | 8 | Not reported. |
| (Køster et al. 2008) | Denmark | Longitudinal | 269 | 24 | 67 | 9 | Not reported. |
| (Kotov et al. 2017) | USA | Longitudinal | 373 | N.a. | 59.5 | 7 | Not reported. |
| (Krukow et al. 2019) | Poland | Cross-sectional | 35 | 21.1 | 42.9 | 5 | Not reported. |
| (Kular et al. 2019) | United Kingdom | Cross-sectional | 89 | 23.2 | 72 | 5 | Period from first psychotic symptom to treatment compliance. |
| (Kurihara et al. 2011) | Indonesia | Longitudinal | 43 | 26.5 | 58.1 | 7 | Time between onset of first psychotic symptom and onset of treatment. |
| (Kvig et al. 2017) | Norway | Cross-sectional | 62 | 23.6 | 71 | 5 | Nottingham Onset Schedule – DUP version. |
| (Labad et al. 2018) | Spain | Cross-sectional | 34 | 23.9 | 70.6 | 4 | Not reported. |
| (Lalevic et al. 2019) | Ireland | Cross-sectional | 139 | 30 | 64 | 6 | Not reported. |
| (Lally et al. 2016) | United Kingdom | Longitudinal | 246 | 27.7 | 67.5 | 9 | Difference between the date of onset of psychotic symptoms to the date of treatment with antipsychotic medications |
| (Larsen et al. 1998) | Norway | Cross-sectional | 34 | 27.4 | 70.6 | 5 | Not reported. |
| (Larsen et al. 2000) | Norway | Longitudinal | 43 | 28.4 | 65 | 7 | Time interval between onset of psychotic symptoms and hospitalization for psychosis or initiation of adequate treatment. |
| (Larsen et al. 2001) | Norway | Cross-sectional | 43 | 25.4 | 61.4 | 6 | Time between the onset of psychosis and initiation of adequate treatment as rated by research team consensus after consideration of all available information. |
| (Lasalvia et al. 2017) | Italy | Clinical trial | 444 | 30.1 | 58.5 | 9 | Nottingham Onset Schedule – DUP version. |
| (Lawoyin et al. 2007) | Ireland | Cross-sectional | 27 | 27.7 | 81.5 | 5 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (AMH Lee et al. 2018) | Malaysia | Longitudinal | 174 | 42.3 | 64.9 | 7 | Not reported. |
| (Lee et al. 2019) | Hong-Kong | Longitudinal | 160 | 31.2 | 39.4 | 8 | Not reported. |
| (SW Lee et al. 2018) | South Korea | Cross-sectional | 95 | 33.5 | 32.6 | 6 | Time between the onset of full-blown psychotic symptoms and the first administration of antipsychotic medications. |
| (Lee et al. 2021)  | Singapore | Longitudinal | 99 | N.a. | 47.5 | 7 | Not reported. |
| (Leeson et al. 2011) | United Kingdom | Longitudinal | 129 | 25.8 | N.a | 7 | Nothingham Onset Schedule – DUP version. |
| (Lennox et al. 2017) | United Kingdom | Longitudinal | 228 | 24.3 | 62 | 8 | Not reported. |
| (Lester et al. 2009) | United Kingdom | Clinical trial | 123 | 22.1 | 64.5 | 7 | Time between the onset of psychotic symptoms and receipt of treatment. |
| (Li et al. 2018) | China | Cross-sectional | 56 | 25.9 | 39.3 | 5 | Not reported. |
| (Li et al. 2019) | China | Cross-sectional | 39 | 15.5 | 57.1 | 5 | Not reported. |
| (Li et al. 2022) | China | Cross-sectional | 343 | 23.8  | 49.6 | 6 | Not reported. |
| (Liemburg et al. 2014) | Netherlands | Cross-sectional | 790 | 28.4 | 70.9 | 7 | Not reported. |
| (Lihong et al. 2012) | Japan | Longitudinal | 108 | 30.1 | 47 | 7 | Period between first psychotic symptom to antipsychotic medication. |
| (Lin et al. 2016) | Italy | Cross-sectional | 88 | N.a. | 489 | 6 | Period between the onset of psychosis and the onset of criteria treatment. |
| (Lindgren et al. 2006) | Sweden | Cross-sectional | 56 | 26.1 | 41.1 | 8 | Not reported. |
| (Liu et al. 2019) | Singapore | Cross-sectional | 97 | 30.5 | 59.8 | 6 | Not reported. |
| (Liu et al. 2022) | Taiwan | Longitudinal | 28 | 27.2  | 35.7 | 7 | Not reported. |
| (Lopez-Garcia et al. 2019) | USA | Cross-sectional | 449 | 19.6 | 73.5 | 7 | Time between the onset of psychotic symptoms and onset of appropriate treatment. |
| (Lovretić et al. 2022) | Croatia | Cross-sectional | 105 | 27.0  | 60.0 | 7 | Timeframe between the appearance of psychotic symptoms and the initiation of adequate treatment. |
| (Lucas et al. 2009) | Australia | Cross-sectional | 92 | 18.8 | N.a | 6 | Not reported. |
| (Lyne et al. 2013) | Ireland | Longitudinal | 437 | 32.2 | 60.1 | 9 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (Lyne et al. 2014) | Ireland | Cross-sectional | 373 | 32.4 | 59 | 7 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (Malinowski et al. 2020) | Brazil | Longitudinal | 100 | 26.3 | 59 | 8 | Not reported. |
| (Malla et al. 2020) | Multicountry | Longitudinal | 333 | 25.4 | 57.7 | 9 | Circumstances of Onset and Relapse Schedule (CORS). |
| (Malmqvist et al. 2019) | Sweden | Cross-sectional | 42 | 28 | 63.4 | 5 | Not reported. |
| (Manivannan et al. 2019) | USA | Cross-sectional | 37 | 22.2 | 68 | 5 | Time from the emergence of psychotic symptoms to the initiation of treatment with antipsychotic drugs or the date of scanning for treatment-naïve individuals. |
| (Marchesi et al. 2015) | Italy | Longitudinal | 48 | 21.8 | 60.3 | 7 | Not reported. |
| (Marchira et al. 2016) | Indonesia | Cross-sectional | 100 | 22.4 | 61 | 6 | Time from when caregivers observed behavioral changes representing psychotic symptoms until the patient reveived adequate medical treatment. |
| (Martins-De-Souza et al. 2010) | Germany | Cross-sectional | 17 | 30.9 | 64.7 | 5 | Period from the onset of diagnostic/characteristic positive symptoms. |
| (Mathis et al. 2022) | USA | Longitudinal | 156 | 21.6  | 72.4 | 8 | Interval between onset of psychosis and initiation of treatment. |
| (Matsuda et al. 2014) | Japan | Longitudinal | 26 | 26.0 | N.a. | 7 | Time period from the onset of psychotic symptoms to the onset of adequate treatment with antipsychotic drugs. |
| (Maximo et al. 2021) | USA | Cross-sectional | 70 | 24.0  | 62.9 | 7 | Not reported. |
| (McFarland et al. 2013) | Ireland | Cross-sectional | 32 | 27.8 | 71.9 | 5 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (McKenna et al. 2022) | UK | Cross-sectional | 155 | 24.7  | 63.2 | 7 | Not reported. |
| (McWhinney et al. 2021) | Czech Republic | Cross-sectional | 183 | 29.3  | 55.7 | 5 | Not reported. |
| (Melicher et al. 2015) | Czech Republic | Cross-sectional | 77 | 31.1 | 44 | 5 | Not reported. |
| (Meneghelli et al. 2011) | Italy | Cross-sectional | 129 | 22.4 | 81.8 | 6 | The time interval between the onset of symptoms of psychosis and the first effective treatment. |
| (Menezes et al. 2009) | Canada  | Longitudinal | 200 | 24.3 | 78 | 8 | Not reported. |
| (Mhalla et al. 2017) | Tunisia | Cross-sectional | 61 | 28.9 | 86.9 | 5 | Not reported. |
| (Mishra et al. 2021) | India | Cross-sectional | 60 | 30.5  | 50.0 | 6 | Time from onset of symptoms to first consultation. |
| (Misiak et al. 2016) | Poland | Cross-sectional | 135 | 27.2 | 55.6 | 6 | Time from appearance of first prodromal symptoms to initiation of antipsychotic treatment. |
| (Missonnier et al. 2017) | Switzerland | Cross-sectional | 15 | 21.9 | 80 | 5 | Not reported. |
| (Moe et al. 2021) | USA | Longitudinal | 54 | 21.7  | 74 | 7 | Not reported. |
| (Molina et al. 2014) | Spain | Clinical trial | 31 | 24.9 | 71 | 7 | Not reported. |
| (Møller et al. 2000) | Norway | Cross-sectional | 18 | 22.4 | 61.1 | 5 | Not reported. |
| (Morgan et al. 2006) | United Kingdom | Longitudinal | 590 | 33.3 | 58.6 | 8 | Period in weeks from the onset of psychosis to the first contact with statuatory mental health services. |
| (Moriya et al. 2010) | Japan | Longitudinal | 19 | 29.9 | 47.4 | 7 | Time from the day several emerging symptoms of psychosis occurred to the day when the examination was performed. |
| (Morrison et al. 2018) | United Kingdom | Clinical trial | 75 | 23.6 | 57.4 | 8 | Not reported. |
| (Murray et al. 2019) | Ireland | Cross-sectional | 40 | 33.4 | 55 | 6 | Time from manifestation of the first psychotic symptom to the initiation of adequate treatment. |
| (Mustafa et al. 2018) | Canada | Longitudinal | 390 | 23.4 | 72 | 9 | Time interval between the onset of the first thresholdlevel psychotic symptom and the start of adequate treatment with an antipsychotic for 1 month or until remission of psychotic symptoms, whichever comes first, was determined using the Circumstances of Onset and Relapse Schedule (CORS) |
| (Myaba et al. 2021) | Malawi | Cross-sectional | 140 | 31.0  | 60.0 | 5 | Time from the appearance of first psychotic symptoms to initiation of adequate antipsychotic treatment. |
| (Nerhus et al. 2015) | Norway | Cross-sectional | 71 | 27.3 | 64.8 | 6 | Not reported. |
| (Ninomiya et al. 2014) | Japan | Longitudinal | 23 | 26.9 | 56.5 | 7 | Not reported. |
| (Nishida et al. 2018) | Japan | Clinical trial | 77 | 23.1 | 55.8 | 8 | Not reported. |
| (Nishii et al. 2010) | Japan | Cross-sectional | 150 | N.a. | 52 | 5 | First psychotic symptoms to antipsychotic treatment. |
| (Nishimura et al. 2014) | Japan | Longitudinal | 16 | 29 | 50 | 7 | Time from the day of emergence of several symptoms of psychosis to the day when baseline MR examination was performed. |
| (Nishiyama et al. 2022) | Japan | Cross-sectional | 76 | 27.8  | 61.8 | 7 | Not reported. |
| (Nkire et al. 2021) | Ireland | Cross-sectional | 163 | 32.9  | 57.1 | 8 | Interval between appearance of first noticeable psychotic symptoms and initiation of [antipsychotic](https://www.sciencedirect.com/topics/medicine-and-dentistry/typical-antipsychotic) treatment |
| (Nordentoft et al. 2008) | Denmark | Cross-sectional | 552 | N.a. | N.a. | 5 | Instrument for Retrospective Assess-ment of Onset of Psychosis. |
| (Noto et al. 2015) | Brazil | Cross-sectional | 51 | 25.4 | 68.6 | 6 | Time between the onset of the first psychotic symptom and hospital admission. |
| (O'Donoghue et al. 2021) | Australia | Cross-sectional | 345 | 31.0  | 56.4 | 8 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (Oh et al. 2016) | Singapore | Longitudinal | 31 | 30.7 | 48.3 | 7 | Not reported. |
| (Ojagbemi et al. 2018) | Multicountry | Cross-sectional | 207 | 25.9 | 66.2 | 7 | Period from the onset of psychotic phenomena to first presentation to the psychiatric units. |
| (Oliveira et al. 2010) | Brazil | Cross-sectional | 200 | 32.3 | 47.5 | 7 | Onset of psychotic symptoms to first contact with health services. |
| (Ong et al. 2020) | Singapore | Longitudinal | 212 | N.a. | 50.7 | 8 | Time in months between the onset of psychotic symptoms and the time when the patient was formally diagnosed and started receiving treatment. |
| (Orhan et al. 2018) | Sweden | Cross-sectional | 37 | 29.2 | 61 | 5 | Not reported. |
| (Ota et al. 2014) | Brazil | Cross-sectional | 51 | 25.4 | 62.7 | 6 | Not reported. |
| (Padilla et al. 2015) | Argentina | Clinical trial | 53 | 30.7 | 67.9 | 6 | Time that elapses between the appearance of psychotic symptoms and the initiation of an adequate pharmacological treatment. |
| (Pagsberg et al. 2017) | Denmark | Clinical trial | 113 | 15.8 | 30 | 8 | Not reported. |
| (Palaniyappan et al. 2013) | United Kingdom | Longitudinal | 80 | 28 | 72.5 | 7 | Interval between first onset of psychotic symptoms and first contact with psychiatric services. |
| (Pan et al. 2021) | Canada | Cross-sectional | 40 | 23.0  | 77.5 | 7 | Not reported. |
| (Pardo et al. 2021) | Spain | Cross-sectional | 90 | 16.3  | 61.2 | 7 | Not reported. |
| (Parellada et al. 2011) | Spain | Longitudinal | 110 | 15.5 | 67,3 | 7 | Time elapsed between the first positive, negaive or disorganized symptom recalled and the baseline assessment. |
| (Park et al. 2014) | Korea | Clinical trial | 59 | 30 | 45,8 | 7 | Not reported. |
| (Paruk et al. 2015) | South Africa | Cross-sectional | 45 | 15.9 | 69 | 4 | Time from onset of first psychotic symptoms to time of presen-tation for treatment. |
| (Pawełczyk et al. 2017) | Poland | Clinical trial | 71 | 23.2 | 59,2 | 7 | Not reported. |
| (Peebo et al. 2022) | Estonia | Longitudinal | 169 | 28.4 | 45.7 | 6 | Not reported. |
| (Pelizza et al. 2021) | Italy | Cross-sectional | 170 | 23.0 | 66.5 | 7 | Period of treatment delay between the onset of psychotic symptoms and pharmacotheraphy prescription. |
| (Pelizza et al. 2019) | Italy | Cross-sectional | 126 | 23.1 | 66,7 | 6 | Period of treatment delay between the onset of psychotic symptoms and pharmacotheraphy prescription. |
| (Penn et al. 2011) | USA | Clinical trial | 46 | 22.2 | 60,9 | 7 | Duration of time between onset of full syndrome and date of first treatment |
| (Penttilä et al. 2013) | Finland | Longitudinal | 89 | 21.9 | 66 | 7 | Period between the onset of first psychotic symptoms and the commencement of treatment. |
| (Peña et al. 2012) | Spain | Longitudinal | 95 | 28.4 | 81 | 6 | Not reported. |
| (Peralta et al. 2010) | Spain | Cross-sectional | 200 | 29.8 | 66,5 | 6 | Symptom Onset in Schizophrenia (SOS) scale. |
| (Peritogiannis et al. 2013) | Greece | Cross-sectional | 132 | 30.6 | 69,2 | 6 | Symptom Onset in Schizophrenia (SOS) scale. |
| (Petrikis et al. 2015) | Greece | Cross-sectional | 40 | 32.4 | 67,5 | 5 | Not reported. |
| (Petrikis et al. 2022) | Greece | Longitudinal | 40 | 32  | 60.0 | 6 | Not reported. |
| (Phahladira et al. 2022) | South Africa | Longitudinal | 126 | 24.1  | 74.0 | 7 | Time from the onset of continuous psychotic symptoms to the initiation of treatment. |
| (Pignon et al. 2019) | Australia | Longitudinal | 527 | 19.5 | 62 | 9 | Not reported. |
| (Pillai et al. 2010) | India | Cross-sectional | 34 | 31.8 | 44,1 | 4 | Not reported. |
| (Plitman et al. 2016) | Multicountry | Cross-sectional | 60 | 24.7 | 61,6 | 5 | Not reported. |
| (Pousa et al. 2022) | Spain | Cross-sectional | 190 | 27.9  | 67.9 | 6 | Not reported. |
| (Pu et al. 2019) | China | Cross-sectional | 449 | 25.5 | 46,8 | 7 | Not reported. |
| (Qin et al. 2014) | China | Longitudinal | 43 | 36.7 | 34,8 | 7 | Time interval until beginning of systematic treatment with antipsychotic medication. |
| (Qiu et al. 2019) | China | Cross-sectional | 216 | 25.1 | 53,2 | 6 | Time that elapses between the appearance of psychotic symptoms and the initiation of an adequate pharmacological therapy. |
| (Ramain et al. 2022) | Switzerland | Cross-sectional | 330 | 24.5  | 64.2 | 8 | Time elapsed from the onset of psychosis until admission to the EIP. |
| (Ramirez et al. 2010) | Spain | Longitudinal | 133 | 25.3 | 72,9 | 8 | Time with untreated psychotic symptoms. |
| (Ramsay et al. 2012) | United States | Cross-sectional | 181 | 23.3 | 74 | 7 | Time fromonset of delusions or hallucinations to initial hospitalization. |
| (Rangaswamy et al. 2012) | India | Longitudinal | 47 | 29.7 | 29,8 | 6 | Not reported. |
| (Rapp et al. 2013) | Switzerland | Cross-sectional | 60 | 30.1 | 66,7 | 5 | Time period between the appearance of the first positive psychotic symptoms and first contact with early detection services. |
| (Reichert et al. 2018) | United Kingdom | Longitudinal | 887 | 26.7 | 65,6 | 7 | Time from the first onset of psychotic symptoms to the initiation of treatment. |
| (Reilly et al. 2006) | United States | Clinical trial | 25 | 24.6 | 72 | 7 | Not reported. |
| (Reis Marques et al. 2014) | United Kingdom | Longitudinal | 63 | 37.7 | 63.5 | 7 | Interval between first psychotic symptoms and first contact with psychiatric services. |
| (Reynolds et al. 2019) | Australia | Cross-sectional | 707 | 19.3 | 60.1 | 6 | Not reported. |
| (Ricci et al. 2021) | Italy | Cross-sectional | 62 | 22.9 | 48.39 | 7 | Time between the first-episode psychosis and the initiation of antipsychotic treatment. |
| (Rigucci et al. 2016) | Italy | Cross-sectional | 34 | 23.4 | 76 | 6 | Time from the first continuous (present most of the time) psychotic symptom to initiation of adequate antipsychotic treatment. |
| (Rizos et al. 2014) | Greece | Longitudinal | 14 | 29.7 | 57.1 | 7 | Not reported. |
| (Rizos et al. 2010) | Greece | Cross-sectional | 37 | 26.8 | 43.2 | 6 | Interval between the manifestation of the first psychotic symptom and the first antipsychotic treatment. |
| (Roche et al. 2016) | Ireland | Cross-sectional | 108 | 35.6 | 57.4 | 6 | Beiser scale (time from the onset of prominent psychotic symptoms to treatment start). |
| (Romero-Ferreiro et al. 2022) | Spain | Cross-sectional | 78 | 26.2  | 70.5 | 7 | Not reported. |
| (Röpcke et al. 2005) | Germany | Longitudinal | 39 | 16.9 | 51.3 | 6 | Period from the onset of first psychotic symptoms until the beginning of the first antipsychotic treatment. |
| (Rosen et al. 2012) | USA | Cross-sectional | 49 | 23.1 | 73.5 | 5 | Not reported. |
| (Ruiz-Veguilla et al. 2012) | Spain | Cross-sectional | 97 | 30.7 | 56 | 6 | Period of time from the date of onset of psychosis till the date on which antipsychotic treatment started. |
| (Rydkjær et al. 2017) | Denmark | Cross-sectional | 27 | 16.1 | 29.6 | 4 | From the estimated beginning of the psychotic illness to the first day of antipsychotic treatment. |
| (Sadath et al. 2017) | India | Cross-sectional | 71 | 24.1 | 62 | 4 | Not reported. |
| (San et al. 2012) | Spain | Clinical trial | 114 | 25.6 | 74.6 | 8 | time from onset of the first psychotic symptom until initiation of the randomized antipsychotic treatment. |
| (Sanchez-Gistau et al. 2013) | Spain | Longitudinal | 110 | 15.5 | 66.4 | 7 | Interval of days between the first noted psychotic symptom and start of treatment at the mental health service. |
| (Sanchez-Gistau et al. 2020) | Spain | Cross-sectional | 133 | 22.1 | 67.7 | 6 | Not reported. |
| (Saravanan et al. 2010) | India | Longitudinal | 131 | 29.5 | 55 | 7 | Occurrence of prominent psychotic symptoms to first contact with treatment |
| (Sarpal et al. 2017) | USA | Cross-sectional | 83 | 21.6 | 71.7 | 5 | Time psychotic symptoms exist prior to treatment with antipsychotic drugs. |
| (Sarpal et al. 2016) | USA | Cross-sectional | 41 | 21.5 | N.a. | 4 | Not reported. |
| (Schennach-Wolff et al. 2010) | Germany | Longitudinal | 244 | 30.1 | 59 | 9 | Not reported. |
| (Schultz et al. 2010) | Germany | Cross-sectional | 54 | 26.4 | 74.1 | 5 | Time from onset of first definite psychotic symptom to beginning of adeuate treatment. |
| (Schultze-Lutter et al. 2010) | Germany | Longitudinal | 126 | 30.1 | N.a | 7 | Difference between date of admission and month of onset of the respective earliest symptom. |
| (Scott et al. 2018) | Australia | Cross-sectional | 113 | 26.2 | 58.4 | 6 | Not reported. |
| (Seddon et al. 2016) | United Kingdom | Longitudinal | 1027 | 23 | 69 | 9 | Time between the onset of psychosis and the onset of treatment and was calculated using a combination of retrospective assessment of PANSS, a semi-structured interview (pathways to care) and patient records. |
| (Segarra et al. 2011) | Spain | Longitudinal | 41 | 27.8 | 68.3 | 6 | Time between the first psychotic symptom and the date antipsychotic treatment was started. |
| (Segarra et al. 2021) | Spain | Longitudinal | 48 | 35.1  | 70.8 | 7 | Not reported. |
| (Serfaty et al. 2021) | Israel | Longitudinal | 60 | 21.4  | 100.0 | 8 | Time interval between the onset of psychotic symptoms and the beginning of appropriate treatment. |
| (Serpa et al. 2017) | Brazil | Cross-sectional | 25 | 26.5 | 64 | 6 | Not reported. |
| (Setién-Suero et al. 2017) | Spain | Longitudinal | 536 | 30.1 | 56.6 | 9 | Time from the first continuous psychotic symptoms (present most of the time) to initiation of adequate antipsychotic drug treatment. |
| (Shen et al. 2022) | China | Cross-sectional | 152 | 24.6  | 63.2 | 8 | Not reported. |
| (Shrivastava et al. 2010) | India | Longitudinal | 101 | 28.9 | 73.3 | 7 | Period from onset of positive, negative and cognitive symptoms to onset of treatment. |
| (Si et al. 2015) | China | Clinical trial | 306 | 30 | 50 | 8 | Not reported. |
| (Simonsen et al. 2007) | Multicountry | Longitudinal | 301 | 27.8 | 58.5 | 9 | Time from onset of psychosis until the start of adequate treatment. |
| (Şimşek et al. 2016) | Turkey | Cross-sectional | 30 | 14.7 | 43.3 | 4 | Not reported. |
| (Singh et al. 2017) | UK | Clinical trial | 126 | 22.8 | 67 | 9 | Time between emergence of first psychotic symptom to start of antipsychotic medication. |
| (Singh et al. 2020) | India | Cross-sectional | 50 | 30.7  | 82.0 | 9 | Not reported. |
| (Skubby et al. 2015) | USA | Cross-sectional | 11 | N.a. | 27.3 | 3 | Time from the month when parents reported their son or daughter first experienced positive symptoms of psychosis (i.e., delusions, hallucinations, and/or disorganized thought processes) to the month that their child was enrolled in the local EIS program. |
| (Śmierciak et al. 2021) | Poland | Longitudinal | 25 | 18.9  | 40.0 | 5 | Not reported. |
| (Smith et al. 2009) | Canada | Longitudinal | 115 | 20.5 | 69.6 | 9 | Not reported. |
| (Smith et al. 2020) | UK | Cross-sectional | 46 | 24.5  | 71.7 | 7 | Not reported. |
| (Sobizack et al. 1999) | Germany | Longitudinal | 66 | 30.8 | 56 | 7 | Not reported. |
| (Soldatos et al. 2022) | Greece | Longitudinal | 51 | 25.8  | 67.0 | 6 | Not reported. |
| (Song et al. 2015) | China | Cross-sectional | 45 | 22.1 | 60 | 6 | Not reported. |
| (Souaiby et al. 2019) | France | Cross-sectional | 33 | 21.8 | 81.8 | 5 | Months between the onset of positive symptoms and treatment initiation |
| (Srihari et al. 2015) | USA | Clinical trial | 120 | 22.5 | 81.5 | 7 | Time in months between onset of psychosis defined by the Symptom Onset in Schizophrenia (23) scale and initiation of antipsychotic treatment. |
| (Stain et al. 2012) | Norway | Cross-sectional | 31 | 24.8 | 61.3 | 6 | Not reported. |
| (Sterk et al. 2010) | Netherlands | Cross-sectional | 134 | 20.9 | 80 | 5 | Time between the onset of psychotic symptoms continuous with the presenting episode and the onset of continuous [antipsychotic](https://www.sciencedirect.com/topics/medicine-and-dentistry/typical-antipsychotic) medication (30 days or less if symptoms remitted). |
| (Stilo et al. 2013) | UK | Longitudinal | 215 | 28 | 63.7 | 8 | Time from onset of psychosis to first contact with statutory mental health services. |
| (Stouten et al. 2019) | Netherlands | Longitudinal | 162 | 27.5 | 71 | 7 | Calculated by subtracting the (estimated) date of the first positive symptom (as estimated by the patient) from the date of first contact with our department and dividing the number of days by 7. |
| (Stürup et al. 2022) | Denmark | Clinical Trial | 29 | 25.1  | 58.6 | 7 | Not reported. |
| (Sun et al. 2013) | Germany | Cross-sectional | 15 | 25.5 | 66.6 | 5 | Not reported. |
| (Suzuki et al. 2006) | Japan | Cross-sectional | 7 | 23.6 | 71.4 | 4 | Time from the first psychotic episode prior to the first administration of nuroleptics. |
| (Suzuki et al. 2018) | Japan | Cross-sectional | 86 | 29.3 | N.a | 4 | Period between the onset of psychotic symptoms and the first prescription of neuroleptics. |
| (Tang et al. 2016) | Singapore | Longitudinal | 1603 | 27.6 | 51.3 | 9 | Not reported. |
| (Tarricone et al. 2012) | Italy | Longitudinal | 152 | 31.1 | 56.4 | 8 | Not reported. |
| (Tarricone et al. 2021) | Italy | Longitudinal | 109 | 32.8  | 45.0 | 8 | Not reported. |
| (Tarrier et al. 2007) | UK | Cross-sectional | 35 | 24.9 | 71 | 6 | The duration of delusions, hallucinations or psychotically disorganised behaviour (whichever was longer). |
| (Takizawa et al. 2021) | Thailand | Cross-sectional | 302 | 33 | 66 | 7 | number of weeks since the first manifestation of positive psychoticsymptoms until the time of visiting a mental health care service to seek treatment for psychosis. |
| (Thomas et al. 2009) | UK | Cross-sectional | 74 | N.a. | 68.9 | 4 | Time from manifestation of first psychotic symptom to initiation of antipsychotic treatment. |
| (Thomas et al. 2017) | Nigeria | Clinical trial | 192 | 33.7 | 46 | 9 | Difference between the age atpresentation for FEP treatment and the age at onset of psychosis. |
| (Thomson et al. 2019) | Scotland | Longitudinal | 91 | 16.3 | 56.7 | 7 | Date from the onset of psychosis to the onset of treatment. |
| (Tibber et al. 2018) | UK | Cross-sectional | 330 | N.a. | 65.5 | 8 | Not reported. |
| (Tikka et al. 2014) | India | Cross-sectional | 37 | 25.3 | 100 | 5 | Not reported. |
| (Tohen et al. 2016) | USA | Longitudinal | 114 | 31 | 67.5 | 8 | Not reported. |
| (Toll et al. 2020) | Spain | Cross-sectional | 70 | N.a. | 60 | 6 | Not reported. |
| (Tsoporis et al. 2022) | Greece | Longitudinal | 11 | 24.5 | 54.5 | 6 | Nottingham onset schedule: modified DUP version. |
| (Turkington et al. 2016) | Ireland | Longitudinal | 178 | 33.3 | 60.1 | 9 | Not reported. |
| (Üçok et al. 2011) | Turkey | Longitudinal | 94 | 21 | 52.1 | 7 | Time from onset of first positive symptoms to the first hospitalization. |
| (Ucok et al. 2021) | Turkey | Longitudinal | 160 | 22.7  | 52.5 | 8 | Time from the first onset of positive symptoms to the time of treatment. |
| (Upthegrove et al. 2010) | UK | Longitudinal | 92 | 22.5 | 75 | 7 | Interval between onset of psychosis and onset of criterion treatment. |
| (Verdoux et al. 2002) | France | Cross-sectional | 35 | 32.1 | 57.1 | 6 | The delay between 1st psychotic symptom and first antipsychotic medication. |
| (Vila-Badia et al. 2022) | Spain | Cross-sectional | 132 | 28.5 | 65.9 | 8 | Time between the onset of full-blown psychotic symptoms and the start of antipsychotic medication. |
| (Vohs et al. 2015) | USA | Cross-sectional | 40 | 23.9 | 80 | 5 | Not reported. |
| (Wang et al. 2016) | Singapore | Cross-sectional | 81 | 30.4 | 58 | 5 | Time period between the presentation of the first psychotic symptom to the initiation of adequate treatment. |
| (Wang et al. 2021) | China | Longitudinal | 127 | 24.6 | 49.6 | 5 | Not reported. |
| (Weiss et al. 2022) | USA | Longitudinal | 50 | N.a. | 76.0 | 7 | Time between onset of psychosis symptoms and initiation of antipsychotic treatment. |
| (Westfall et al. 2021) | USA | Longitudinal | 697 | 21.4  | 65.0 | 6 | Nothingham Onset Schedule – DUP version. |
| (Whale et al. 2016) | UK | Cross-sectional | 384 | N.a. | 65.1 | 6 | Time from date of psychotic symptom onset to the date of medication commencement. |
| (White et al. 2006) | US | Cross-sectional | 188 | N.a. | 58.9 | 5 | Not reported. |
| (White et al. 2009) | United Kingdom | Longitudinal | 109 | 27.4 | 71 | 9 | Time between onset of first positive psychotic symptoms and index admission. |
| (Whitty et al. 2006) | Ireland | Longitudinal | 242 | 27.5 | 62 | 9 | Date to the nearest week of onset of first psychotic symptom experienced |
| (Winton-Brown et al. 2017) | United Kingdom | Longitudinal | 125 | 24 | 73 | 8 | Time from onset of the first expression of frank psychotic symptoms to the point at which antipsychotic medication was commenced and complied with for at least 50%. |
| (Wobrock et al. 2010) | Germany | Cross-sectional | 29 | 29.8 | 72.4 | 5 | From the onset of diagnostic/characteristic positive symptoms |
| (Wong et al. 2020) | Singapore | Cross-sectional | 300 | 27.2  | 49.3 | 7 | Not reported. |
| (Wunderink et al. 2009) | Netherlands  | Longitudinal | 125 | 26.4 | 68.8 | 7 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses. |
| (Xenaki et al. 2022) | Greece | Longitudinal | 171 | 25.9  | 64.0 | 7 | Not reported. |
| (Yamazawa et al. 2004) | Japan | Cross-sectional | 83 | 29.8 | 42.2 | 4 | First psychotic symptom to AP |
| (C Yang et al. 2015) | China | Cross-sectional | 30 | 21.4 | 50 | 5 | Not reported. |
| (Z Yang et al. 2015) | China | Cross-sectional | 22 | 26.1 | 40.9 | 5 | Not reported. |
| (Yang et al. 2021) | China | Cross-sectional | 65 | 32.7  | 58.5 | 5 | Not reported. |
| (Yao et al. 2008) | Sweden | Cross-sectional | 30 | 27 | 73.3 | 5 | Interview for the Retrospective Assessment of the Onset and Course of Schizophrenia and Other Psychoses |
| (Yoshimura et al. 2019) | Japan | Cross-sectional | 146 | 31.3 | 40 | 6 | Not reported. |
| (Zanetti et al. 2018) | Brazil | Cross-sectional | 71 | 32 | 65 | 6 | Not reported. |
| (Zhang et al. 2014) | China | Clinical trial | 398 | 27.8 | 47.2 | 9 | Time between the psychotic episode onset and the point patients began to receive antipsychotics systematically and adequately. |
| (Zhang et al. 2021) | China | Longitudinal | 35 | 22.3  | 54.3 | 8 | Period between the onset of the first frank psychotic symptoms and the receipt of AP treatment specific to this study. |
| (Zhao et al. 2017) | China | Cross-sectional | 50 | 23.8 | 72 | 5 | Not reported. |
| (Zhong et al. 2021) | China | Cross-sectional | 88 | 24.6 | 61.36 | 7 | Time between the first ever onset of any psychiatric symptoms to the time of antipsychotic treatments. |
| (Zhou et al. 2014) | China | Clinical trial | 55 | 25.6 | 60 | 7 | Not reported. |
| (Zimbrón et al. 2013) | United Kingdom | Longitudinal | 30 | 22 | 60 | 6 | Time from first psychotic like experiences to first contact with health services. |
| (Zipparo et al. 2008) | Australia | Longitudinal | 52 | 19.2 | 69.2 | 7 | Not reported. |

 aNote overlapping studies may be included if one of them provides mean DUP and the other median DUP.

**eTable IV: Subanalysis mean duration of untreated psychosis (weeks)**

**A/ Overall sub-analyses**

| **Group**, subgroup | **No. of****Studies** | **Sample size** | **Effect size** | **Z Score** | **P** | **Test for Heterogeneity** | **Within subgroup heterogeneity** |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Mean**  | **95% CI** | **Q** | **I2** | **P** | **Tau2** | **Q** | **P** |
| **Publication decade** | **13.9** | **0.003** |
| 1991-2000 | 5 | 286 | 58.5 | 33.4 | 83.5 | 4.6 | <0.001 | 20.9 | 80.9 | <0.001 |  590.4 |  |  |
| 2001-2010 | 62 | 8,889 | 42.8 | 39.1 | 46.6 | 22.6 | <0.001 | 1613.3 | 96.2 | <0.001 | 160.5 |
| 2011-2020 | 169 | 25,835 | 44.5 | 41.6 | 47.4 | 30.1 | <0.001 | 9074.7 | 98.2 | <0.001 | 279.5 |
| 2021-2022 | 47 | 6,664 | 35.4 | 31.1 | 39.7 | 16.2 | <0.001 | 1925.8 | 97.6 | <0.001 | 187.1 |
| **Continent**  | **42.7** | **<0.001** |
| Africa | 11 | 1,508 | 70.0 | 51.6 | 88.4 | 7.5 | <0.001 | 237.7 | 95.8 | <0.001 | 219.2 |  |  |
| Asia | 73 | 12,223 | 48.8 | 43.8 | 53.9 | 18.9 | <0.001 | 4042.9 | 98.2 | <0.001 | 407.8 |
| North America | 36 | 5,838 | 48.7 | 43.0 | 54.4 | 16.7 | <0.001 | 992.5 | 96.5 | <0.001 | 832.8 |
| Europe | 145 | 19,389 | 38.6 | 36.0 | 41.3 | 28.4 | <0.001 | 7085.5 | 98.0 | <0.001 | 205.2 |
| South America | 11 | 1,159 | 34.9 | 23.0 | 46.9 | 5.7 | <0.001 | 89.7 | 94.4 | <0.001 | 100.4 |
| Australia | 6 | 1,203 | 28.0 | 20.9 | 35.0 | 7.7 | <0.001 | 83.9 | 88.1 | <0.001 | 94.4 |
| **Income** | **5.8** | **0.016** |
| High income countries | 222 | 35,685 | 41.2 | 39.0 | 43.4 | 37.0 | <0.001 | 9330.7 | 97.6 | <0.001 | 210.7 |  |  |
| Middle-low income countries | 58 | 5,635 | 48.4 | 43.0 | 53.8 | 17.5 | <0.001 | 3118.9 | 98.2 | <0.001 | 371.9 |
| **FEP diagnosis** | 2.3 | 0.125 |
| Structured | 158 | 21,984 | 44.7 | 42.1 | 47.4 | 32.8 | <0.001 | 6418.4 | 97.5 | <0.001 | 231.3 |  |  |
| Clinical | 109 | 15,086 | 41.3 | 37.9 | 44.8 | 23.7 | <0.001 | 5336.9 | 98.0 | <0.001 | 260.0 |
| **DUP definition** | 1.1 | 0.295 |
| From first psychotic symptom to intervention | 124 | 20,637 | 47.0 | 43.5 | 50.6 | 25.8 | <0.001 | 6329.5 | 98.0 | <0.001 | 321.3 |  |  |
| Other definition | 30 | 5,939 | 43.6 | 38.3 | 49.0 | 16.0 | <0.001 | 1348.6 | 97.8 | <0.001 | 173.4 |
| **Exclusion of FEP with substance use disorders** | 1.8 | 0.179 |
| Reporting lack of exclusion | 79 | 8,756 | 43.9 | 40.2 | 47.6 | 23.4 | <0.001 | 2071.5 | 96.2 | <0.001 | 218.0 |  |  |
| Reporting exclusion | 88 | 16,456 | 40.4 | 36.7 | 44.0 | 21.8 | <0.001 | 5642.0 | 98.5 | <0.001 | 243.1 |
| **Exclusion of FEP with affective psychosis** | **16.7** | **<0.001** |
| Only non-affective psychosis | 168  | 18,212 | 46.7 | 44.0 | 49.4 | 34.2 | <0.001 | 5177.6 | 96.8 | <0.001 | 237.9 |  |  |
| Affective psychosis included | 96 | 18,086 | 37.7 | 34.2 | 41.1 | 21.6 | <0.001 | 5530.6 | 98.3 | <0.001 | 240.8 |
| **Exclusion long DUP**  | **13.8** | **0.001** |
| DUP over a threshold (as per author’s definition) excluded  | 7 | 920 | 23.4 | 11.9 | 35.6 | 3.8 | <0.001 | 504.5 | 99.0 | <0.001 | 219.0 |  |  |
| Long DUP not excluded/ not mentioned | 276 | 40,757 | 43.0 | 40.9 | 45.0 | 40.9 | <0.001 | 11118.4 | 97.6 | <0.001 | 228.3 |
| **Setting** | 3.3 | 0.067 |
| FEP program | 35 | 6,013 | 47.9 | 41.8 | 54.1 | 15.3 | <0.001 | 11323.9 | 97.8 | <0.001 | 194.9 |  |  |
| Othesr/not reported | 248 | 35,664 | 41.9 | 39.7 | 44.1 | 37.6 | <0.001 | 1266.2 | 97.9 | <0.001 | 241.3 |  |  |

**B/ Sub-analyses by continent, stratified by decade**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Group**, subgroup | **No. of****Studies** | **Effect size** | **Z Score** | **P** | **Test for Heterogeneity** | **Within subgroup heterogeneity** |
| **Mean** | **95% CI** | **Q** | **I2** | **P** | **Tau2** | **Q** | **P** |
| **Europe** | 143 | 38.6 | 36.0 | 41.3 | 28.4 | <0.001 | 7085.5 | 98.0 | <0.001 | 205.2 | 32.3 | <0.001 |
| 1991-2000 | 3 | 88.0 | 18.5 | 157.6 | 2.4 | 0.013 | 19.5 | 89.7 | <0.001 | 3297.9 |
| 2001-2010 | 34 | 39.0 | 34.4 | 43.6 | 16.6 | <0.001 | 744.4 | 95.6 | <0.001 | 124.7 |
| 2011-2020 | 85 | 42.5 | 38.6 | 46.4 | 21.2 | <0.001 | 5265.3 | 98.4 | <0.001 | 276.2 |
| 2021-2022 | 21 | 23.8 | 18.2 | 29.3 | 8.4 | <0.001 | 893.9 | 97.8 | <0.001 | 143.6 |
| **Asia** | 73 | 48.8 | 43.8 | 53.9 | 18.9 | <0.001 | 4042.9 | 98.2 | <0.001 | 407.8 | 1.1 | 0.574 |
| 2001-2010 | 11 | 45.0 | 32.9 | 57.0 | 7.3 | <0.001 | 266.6 | 96.2 | <0.001 | 372.1 |
| 2011-2020 | 48 | 51.5 | 43.9 | 59.3 | 13.1 | <0.001 | 3040.8 | 98.4 | <0.001 | 429.0 |
| 2021-2022 | 14 | 46.2 | 35.7 | 56.8 | 8.6 | <0.001 | 590.2 | 97.8 | <0.001 | 202.2 |
| **North America** | 36 | 48.7 | 43.0 | 54.4 | 16.7 | <0.001 | 992.5 | 96.5 | <0.001 | 832.8 | 2.2 | 0.524 |
| 1991-2000 | 2 | 39.6 | 26.8 | 52.4 | 6.1 | <0.001 | 0.8 | 0.0 | <0.001 | 0.0 |
| 2001-2010 | 8 | 60.0 | 30.5 | 89.5 | 4.0 | <0.001 | 303.2 | 97.7 | <0.001 | 1715.5 |
| 2011-2020 | 20 | 47.8 | 40.0 | 55.7 | 12.0 | <0.001 | 376.5 | 94.9 | <0.001 | 232.0 |
| 2021-2022 | 6 | 42.9 | 30.3 | 55.5 | 6.7 | <0.001 | 48.6 | 89.7 | <0.001 | 161.1 |

**eTable V: Sub-analysis duration of untreated psychosis (weeks)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Group**, subgroup | **No. of****Studies** | **Sample size** | **Effect size** | **Kruskal Wallis** |
| **Median** | **95% CI**  | **Range**  | **H statistic**  | **P value** |
| **Publication decade**  | 0.0069 | 0.99 |
| 1991-2000 | 6 | 541 | 16.0 | 8.0 | 18.0 | 1.4-54 |
| 2001-2010 | 63 | 11,383 | 13.0 | 8.4 | 26.0 | 2.8-104 |
| 2011-2020 | 130 | 24,662 | 15.5 | 8.7 | 32.7 | 0.6-110 |
| 2021-2022 | 7 | 629 | 11.0 | 8.6  | 21.7 | 3.7-28 |
| **Continent** | 9.5 | 0.049 |
| Africa | 10 | 1,211 | 22.5 | 6.0 | 110.0 | 6-110 |
| North America | 37 | 7,390 | 20.8 | 9.1 | 35.0 | 0.6-52.1 |
| Asia | 43 | 8,689 | 17.1 | 12.0 | 28.9 | 1.7-52 |
| Europe | 102 | 16,500 | 12.0 | 8.2 | 27.0 | 0.7-104 |
| South America | 6 | 1,055 | 10.0 | 8.7 | 14.0 | 4.0-28 |
| Australia | 8 | 2,370 | 8.0 | 6.0 | 13.0 | 4.3-40.8 |
| **FEP diagnosis** | 0.85 | 0.357 |
| Structured | 118 | 22,562 | 17.6 | 9.0 | 35.0 | 0.7-110 |
| Clinical | 68 | 11,613 | 12.0 | 8.0 | 20.0 | 0.6-52 |
| **Exclusion of FEP with substance use disorders** | 0.075 | 0.784 |
| Reporting lack of exclusion | 18 | 2,125 | 20.0 | 16.2 | 33.3 | 0.6-104 |
| Reporting exclusion | 51 | 11,014 | 12.3 | 8.0 | 22.0 | 0.7-65 |
| **Exclusion of FEP with affective psychosis** | 0.076 | 0.378 |
| Only non-affective psychosis | 115 | 16,684 | 16.7 | 9.2 | 31.0 | 0.6-110 |
| Affective psychosis included | 80 | 19,569 | 12.0 | 8.0 | 28.0 | 0.7-104 |

**eTable VI: Sub-analysis duration of untreated psychosis (weeks) by country**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Country** | **No. of****Studies** | **Sample size** | **Effect size** | **Z Score** | **P** | **Test for Heterogeneity** |
| **Mean** | **95% CI** | **Q** | **I2** | **P** | **Tau2** |
| Japan | 17 | 1447 | 50.6 | 40.8 | 60.4 | 10.1 | <0.001 | 131.4 | 87.8 | <0.001 | 337.9 |
| Canada | 10 | 2519 | 48.7 | 33.9 | 63.5 | 6.5 | <0.001 | 354.7 | 97.5 | <0.001 | 466.6 |
| USA | 26 | 3383 | 47.2 | 41.4 | 53.0 | 15.9 | <0.001 | 395.7 | 93.7 | <0.001 | 147.8 |
| China | 25 | 3036 | 47.1 | 40.0 | 54.2 | 13.0 | <0.001 | 688.4 | 96.2 | <0.001 | 305.1 |
| UK | 25 | 4643 | 32.6 | 27.3 | 38.0 | 11.0 | <0.001 | 588.9 | 95.8 | <0.001 | 146.5 |
| Italy  | 16 | 2193 | 31.0 | 25.9 | 36.0 | 12.0 | <0.001 | 268.4 | 94.1 | <0.001 | 88.3 |
| Spain | 23 | 3063 | 27.5 | 22.0 | 33.0 | 9.8 | <0.001 | 864.6 | 97.5 | <0.001 | 131.8 |

**eMethods I: Definitions duration of untreated psychosis**

The following definitions were considered within fist psychotic symptom to intervention:

* Interval between the onset of the first psychotic symptom to the first psychiatric hospitalization
* Interval between the onset of the first psychotic symptom to the first treatment with antipsychotic medication
* Interval between the start first psychotic symptom of any kind and the first (adequate) treatment
* Interval from the illness to antipsychotic treatment
* Interval between the onset of the first psychotic symptom to the definite diagnosis and treatment
* Time from the first onset of positive symptoms to the time of first day of adequate antipsychotic treatment for at least 15 days
* Time between onset of full positive syndrome to initiation of antipsychotic treatment
* Time from the ‘transition to psychosis’ (unremitting psychotic symptoms for 1 week) to the commencement on antipsychotic medication (greater than 50% treatment adherence for a mini- than 50% treatment adherence for a minimum of 1 month).

The following definitions were considered as other definitions:

* Interval between the start first psychiatric symptom of any kind and the first treatment375
* Interval between the onset of the first psychotic symptom and the first effective treatment 376
* Interval between the onset of the first psychotic symptom and first contact with a mental health care provider373
* Interval between the onset of the first psychotic symptom to the first effective psychiatric treatment
* Interval between Interval between the first abnormal behaviour to the first treatment with antipsychotic medication.
* Time from the described onset/symptom to the study/consent
* Time from the prodromal period
* Interval between Interval between the first abnormal behaviour to the first adequate treatment.
* Interval from first psychotic symptom to start of anti-psychotics with 50/75% adherence, 100% compliance, Nottingham Onset Schedule

**eMethods II: Quality assessment**

**SELECTION**

**1) Representativeness of the Exposed Cohort**

This item assesses the representativeness of exposed individuals in the community, not the representativeness of the sample of women from some general population. For example, subjects derived from groups likely to contain middle class, better educated, and health oriented women are likely to be representative of postmenopausal estrogen users, while they are not representative of all women (e.g. members of a health maintenance organisation (HMO) will be a representative sample of estrogen users). While the HMO may have an under-representation of ethnic groups, the poor, and poorly educated, these excluded groups are not the predominant users of estrogen). Allocation of stars as per rating sheet.

**2) Selection of the Non-Exposed Cohort**

Allocation of stars as per rating sheet.

**3) Ascertainment of Exposure**

Allocation of stars as per rating sheet.

**4) Demonstration That The Outcome of Interest Was Not Present at Start of Study**

In the case of mortality studies, the outcome of interest is still the presence of a disease/ incident disease, rather than death. That is to say that a statement of no history of disease or incident disease earns a star.

**COMPARABILITY**

**1) Comparability of Cohorts on the Basis of the Design or Analysis**

A maximum of 2 stars can be allotted in this category. Either exposed and non-exposed individuals must be matched in the design and/or confounders must be adjusted for in the analysis. Statements of no differences between groups or that differences were not statistically significant are not sufficient for establishing comparability. Note: If the relative risk for the exposure of interest is adjusted for the confounders listed, then the groups will be considered to be comparable on each variable used in the adjustment. There may be multiple ratings for this item for different categories of exposure (e.g. ever vs. never, current vs. previous or never) Age = , Other controlled factors =

**OUTCOME**

**1) Assessment of Outcome**

For some outcomes (e.g. fractured hip), reference to the medical record is sufficient to satisfy the requirement for confirmation of the fracture. This would not be adequate for vertebral fracture outcomes where reference to x-rays would be required. a) Independent or blind assessment stated in the paper, or confirmation of the outcome by reference to secure records (x-rays, medical records, etc.) b) Record linkage (e.g. identified through ICD codes on database records) c) Self-report (i.e. no reference to original medical records or x-rays to confirm the outcome) d) No description.

**2) Was Follow-Up Long Enough for the Outcomes to Occur**

An acceptable length of time should be decided before quality assessment begins (e.g. 5 yrs. for exposure to breast implants).

**3) Adequacy of Follow Up of Cohorts**

This item assesses the follow-up of the exposed and non-exposed cohorts to ensure that losses are not related to either the exposure or the outcome. Allocation of stars as per rating sheet.

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