Long acting injectable antipsychotics guidelines

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Long-acting injectable drugs (LAI) are unique tools used in a psychiatric pharmacy to help improve patient outcomes. They offer a number of benefits over oral therapy, including confirmed patient compliance, consistent drug delivery, predictable bioavailability and prevention of antipsychotic overdoses. LAIs are commonly used with the notion that they will improve adherence to drugs, but the data are limited in regards to their ability to reduce relapse. The following questions should be answered to use the safe and efficient use of LAIs. Which antipsychotic drugs are available as long-acting injections (LAIs)?1-3 How are they presused? Do they require oral overlap? If so, how long? How do the new LAIs compare to each other?4-6Who LAI formulations antipsychotic compare with their oral formulations regarding efficacy, commitment and prevention of relapses?7-15What is the role of LY in preventing drug failure and relapse?16-19 How do patients and providers feel about using LAI? 20-22Are patients ever on both LAIs and oral formulations?23What are the restrictions on the use of LAI olanzapine?24-25Many LAIs expensive where I can find roosity data?26-28 LinksPocket Guide to LAIs. It is distributed as part of the long-term action of injectable antipsychotic drugs; Updated in 2019: Changing landscape use of the LAI Symposium proposed at the 2014 CPNP Annual Meeting. (Web link). Provides recommendations on the parameters of the dosing; Delivery, storage and processing injectable techniques and considerations to succeed. Nelson L.A. Antipsychotic Long-Acting Injection Drugs: Potential Benefits and Obstacles to Appropriate and Effective Use. Presented at the CPNP's annual meeting (2016). (Web link). Presentation reviews of the benefits of long-acting injectable (LAI) antipsychotic drugs, outlines the benefits of LAI versus oral formulations in the first episode of psychosis, key factors to consider when choosing a second-generation antipsychotic (SGA) LAI for an individual patient and barriers to using SGA LAI therapy and potential strategies to overcome these barriers in clinical practice. Preskorn SH. Moving from oral to depot formulation of medication: Clinically appropriate pharmacokinetic concepts and considerations. J Psychiatric Pract. 2017;23(3):200-209. DOI: 10.1097/PRA.0000000000000236. PubMed PMID: 28492458.Schreiner A, Bergmans., Cherubin., Keim S, Llorca P-M, Kosar B. et al. Paliperidone palmitat in non-sleep patients with schizophrenia previously unsuccessfully treated with long-term risperidone or often used conventional depot J Psychopharmacole. 2015;29(8):910-22. DOI: 10.1177/0269881115586284. PubMed PMID: 25999398; PubMed Central PMCID: PMC4512527. Citrom L. New long-acting second-generation injectable antipsychotics for the treatment of schizophrenia. Rev Rev Expert 2013;13(7):767-83. DOI: 10.1586/14737175.2013.811984. PubMed PMID: 23898849.Jann MW, Penzak SR. Long-term injectable second-generation antipsychotic: an update and comparison between agents. CNS Drugs. 2018;32(3):241-257. DOI: 10.1007/s40263-018-0508-6. PubMed PMID: 29569082.Macfadden W, Ma U, Thomas Haskins J, et al. Prospective study comparing the long-term effectiveness of injectable risperidone long-term acting therapy and oral aripiprazole in patients with schizophrenia. Psychiatry (Edgemont) 2010; 7(11): 23-31. (Pubmed) No, no, no, no, Leucht C, Heres S, Kane JM, Kissling W, Davis JM, Leucht S. Oral vs. Depot antipsychotic drugs for schizophrenia - a critical systematic review and meta-analysis of randomized long-term trials. Schizophrenia Res. 2011;127 (1-3):83-92. DOI: 10.1016/j.schres.2010.11.020. PubMed PMID: 21257294.Gaebel W, Schreiner A, Bergmans P, et al. Prevention of Relapses in Schizophrenia and Schizoaffective Disorder with Long-Acting Risperidon Injectable Against quetiapine: results of a long-term, open designation of randomized clinical trials. Neuropsyhopharmacology 2010; 35(12) : 2367-2377. (Pubmed) No, no, no, no, Weiden PJ, Schoolboy NR, Weedon JC, Elmouchtari A, Sunakawa A, Goldfinger SM. A randomized controlled trial of long-acting injectable risperidone against continuing on oral atypical antipsychotics for patients with schizophrenia of the first episode: the initial result of joining. J. Klein. Psychiatry. 2009;70(10):1397-406. DOI: 10.4088/JCP.09m05284yel. PubMed PMID: 19906343.Ju, Asher-Svanum, Shi et al. Time to discontinue depot and oral first-generation antipsychotic drugs in conventional care for schizophrenia. Serv Psychiatry 2008; 59(3) : 3 :15-3 :17. (Pubmed) No, no, no, no, Shea L, Usher-Swanum H, Ju B, Faries D, Montgomery W, Marder SR. Characteristics and use models of patients taking first-generation depot antipsychotics or oral antipsychotics for schizophrenia. PS. 2007;58(4):482-8. DOI: 10.1176/ps.2007.58.4.482. PubMed PMID: 17412849.Rosenheck RA, Crystal JH, Lew R, Barnett PG, Fiore L, Valley D, et al. Long-term action of risperidone and oral antipsychotic drugs in unstable schizophrenia. N Engl J Med. 2011;364(9):842-51. DOI: 10.1056/NEJMoa1005987. PubMed PMID: 21366475.Kishimoto T, Hagi K, Nitta M, Leucht S, Olfson M, Kane JM, et al. Long-acting injectable effectiveness against oral antipsychotic drugs in patients with schizophrenia: Meta-analysis of prospective and retrospective cohort studies. Schizophrenic Bull. 2018;44(3):603-619. DOI: 10.1093/schbul/sbx090. PubMed PMID: 29868849; PubMed Central PMCID: PMC5890463. Buckley PF, Schoolboy NR, Goff DC, Kopelowicz A, Lauriello J, Manschreck TC, et al. Comparison of injectable and oral antipsychotic drugs in in a pragmatic 30-month study to prevent the recurrence of schizophrenia. PS. 2016;67(12):1370-1372. DOI: 10.1176/appi.ps.201500466. PubMed PMID: 27476806.Weiden P, Rapkin B, Sigmunt A, et al. from oral to depot neuroleptic mode. Serv Psychiatry 1995; 45 (10) : 1049-1054. (Pubmed) No, no, no, no, Agid O, Foussias G, Remington G. Prolonged action of injectable antipsychotic drugs in the treatment of schizophrenia: their role in the prevention of relapses. Expert Opin Pharmacoter. 2010;11(14):2301-17. DOI: 10.1517/14656566.2010.499125. PubMed PMID: 20586707.West JC, Marcus SC, Wilk J, Graffis LM, Regier DA, Olfson M. Use of depo antipsychotic drugs to treat neo-leeps in schizophrenia. Bulletin on schizophrenia. 2008;34(5):995-1001. DOI: 10.1093/schbul/sbm137. PubMed PMID: 18093962; PubMed Central PMCID: PMC2518642. Nasrallah HA Triple benefits of injecting long active antipsychotic drugs of the second generation: prevention of relapses, neuroprotective and lower mortality. Schizophr Res. 2018 March 3. pii: S0920-9964(18)30053-7. (PubMed) Patel MX, Haddad PM, Chaudhry IB, McLaughlin S, Hussain N, David AS. The use of psychiatrists, knowledge and attitude to antipsychotic injections of long-acting first and second generation: comparisons for 5 years. J Psychopharmacole. 2010;24(10):1473-82. DOI: 10.1177/0269881109104882. PubMed PMID: 19477883.Heres S, Schmitz FS, Leucht S, Pajonk F-G. The attitude of patients to the antipsychotic treatment depot. It's Wedge Psychopharmacole. 2007;22(5):275-82. DOI: 10.1097/YIC.0b013e3280c28424. PubMed PMID: 17690596.Kirschner M, Theodoridu A., Fusar-Paull P, Kaiser S, Jaeger M. Patients and Clinicians attitude to long-acting depot antipsychotics in subjects with the first episode of psychosis. Ther Adv Psychopharmacole. 2013;3(2):89-99. DOI: 10.1177/2045125312464106. PubMed PMID: 24167680; PubMed Central PMCID: PMC3805393. Aggarwal NK, Serniak MJ, Rosenbek RA. Prevalence of comoral oral antipsychotic drugs among patients treated with long-term action, intramuscular, antipsychotic drugs. J Wedge Psychopharmacole. 2012;32(3):323-8. DOI: 10.1097/JCP.0b013e31825244f6. PubMed PMID: 22544006.Detke HC, McDonnell DP, Brunner E, zhao F, Sorsaburu S, Stefaniak VJ, et al. Postincub delirium/sedation syndrome in patients with schizophrenia are treated with ulanzapine long-term injection, I: case analysis. Bmc Psychiatry. 2010;10:43. DOI: 10.1186/1471-244X-10-43. PubMed PMID: 20537128; PubMed Central PMCID: PMC2895589. McDonnell DP, Detke HC, Bergstrom RF, Kothare P, Johnson J, Stickelmeyer M, et al. Post-injecting delirium/sedation syndrome in patients with schizophrenia, treatment of olanzapine long-term injection, II: study mechanism. Bmc Psychiatry Psychiatry. 2010;10:45. DOI: 10.1186/1471-244X-10-45. PubMed PMID: 20537130; PubMed Central PMCID: PMC2895590. Oilvares J, Rodriguez-Martinez A, Buron J, et al. Profitable analysis of the switching of antipsychotic drugs to long-acting injectable risperidone in patients with schizophrenia: 12 and follow-up treatment from the e-STAR database in Spain. Apple Apple Econ Health Policy 2008; 6(1): 41-53. (Pubmed) No, no, no, no, Collins CM, Aebi ME, Levin JB, Tatsuoka C, Cassidy CA, Sajatovic M. Post-Special Analysis of Two Clinical Trials Examining Individual Joining Enhancement Plus Long Acting Injectable Antipsychotic (CAE-L) in High Risk Persons with Serious Mental Illness. Schizophrenia Res. 2018;202:433-434. DOI: 10.1016/j.schres.2018.07.024. PubMed PMID: 30032936.Joshi K, Muser E, Xu Y, Schwab P, Datar M, Suehs B. Compliance and economic impact of paliperidone palmitate compared to oral atypical antipsychotics in the Medicare population. J Comp Eff Res. 2018;7(8):723-735. DOI: 10.2217/cer-2018-0003. PubMed PMID: 29722547. Long-term injectable (LAI) formulations are not widely used in normal practice, even if they offer benefits in terms of relapse prevention. As part of the process of improving the quality of care, the French Association of Biological Psychiatry and Neuropsychopharmacology (AFPBN) has developed guidelines for the use and management of antipsychotic warehouses in clinical practice. On the basis of the literature review, a written survey was prepared, which proposed some 539 options in 32 specific clinical situations relating to 3 areas: target population, prescription and use, as well as specific population groups. We contacted 53 national experts, 42 of whom (79%) completed the survey. Options were scored using a 9-point scale from Rand Corporation and UCLA in the United States. According to the replies, each option is given a categorical title (first line/preferred choice, second line/alternative choice, third line/usually inappropriate). The first-line option was defined as a 7-9 (extremely relevant) strategy by at least 50% of the experts. The following results summarize the main recommendations contained in the guidelines after analysing the data and interpreting the results of the survey conducted by the scientific committee. LAI antipsychotics are shown in patients with schizophrenia, schizoaffective disorder, delusional disorder and bipolar disorder. Second-generation LAI antipsychotics are recommended as supportive treatments after the first episode of schizophrenia. LAI first generation antipsychotics is not recommended at the beginning of the development of schizophrenia and is usually not suitable for bipolar disorder. LAI antipsychotic drugs have long been considered as a treatment that should only be used for a small subset of non-compliance patients, frequent relapses or who pose a risk to others. The panel believes that LAI antipsychotic drugs should be treated and systematically offered to all patients identified antipsychotic treatment. Recommendations for drug management when switching oral antipsychotic drugs to LY antipsychotics are offered. Recommendations are also given on the use of LAI in specific populations. Evidence-based clinical approach by psychiatrists, psychiatrists, joint decision-making should systematically suggest most patients who require long-term antipsychotic LAI antipsychotic treatment as a first line of treatment. Keywords: Guidelines, long-acting injectable, depot formulations, antipsychotic, schizophrenia, bipolar disorder, treatment of schizophrenia and bipolar disorder are examples of some chronic diseases for which there is a high risk of relapse associated with major functional consequences. The pharmacological strategy can be seen as a cornerstone of treatment for these patients. Compliance is often mediocre with detrimental consequences. For example, most patients with schizophrenia (84%) discontinue their index of antipsychotics over the subsequent period, and in the long term, 40 to 50% appear to be incompatible, with no real difference in terms of compliance between first generation antipsychotics (FGA) and second-generation antipsychotic drugs (SGA). Long-acting injectable (LAI) antipsychotics have been part of the pharmacopeia for over 40 years. Various meta-analyses underline their interest as a strategy to prevent relapses in schizophrenia. As for non-compliance, most guidelines and algorithms (except PORT 2009) will state that depot antipsychotics are an effective approach (8-10), with some guidelines actually recommending that switching antipsychotic language from oral to depot should be considered in a maintenance treatment. However, depot formulations are still poorly used in general in normal practice, with prescription rates in different countries generally no more than 25% (12.13). However, the use of depot forms varies by country. Recipe rates are higher in France (23.5%) and the United Kingdom (29%) compared to other European countries. Several factors have been identified that deter psychiatrists from using depot forms arising from erroneous beliefs about good commitment, patient failure, perceived coercion, or perceived risk of reduced tolerance. On a practical level, psychiatrists need to be confident and competent in representing patients with enough information to allow them to make informed choices about whether to take oral or LAI medications or not. We believe that developing and distributing specific guidelines on all aspects of the use of LY antipsychotic drugs will increase the competence of physicians. It will also help increase the percentage of patients to whom LAI antipsychotics will be offered by psychiatrists as a therapeutic option. The purpose of these guidelines is to offer a prescription framework for physicians to use formulation of antipsychotic drugs (LAI) in various therapeutic indications and specific clinical situations. The aim is to allow doctors to offer the most appropriate pharmaceutical pharmaceuticals for patients and to facilitate the use of LAI antipsychotic drugs in clinical practice. The recommendations presented here on the basis of the methodology of consensus-based guidelines (Official Consensus Guidelines) are based on scientific evidence and the consensus of the panel of experts. Initially, we analyzed and reviewed literature on the indications and use of LAI antipsychotic drugs. Finding literature using keywords antipsychotic, neuroleptic, antipsychotic first generation, atypical antipsychotic, second generation antipsychotic, long-acting injectable, depot, depot neuroleptic was performed in PubMed and EMBASE to find all relevant studies published. Additional references were identified from and from all of these sources were discussed and a review of current evidence was evaluated and summarized using the French National Health Authority (IA) levels of evidence criteria. Following this first step, the Scientific Committee (PML, LS, MA, PC, SG, SL) created a questionnaire consisting of 32 questions that covered 539 therapeutic options. 32 issues were regrouped in 3 areas that were summarized as necessary: Target Population: Description of the various indications of antipsychotic LY drugs and the most appropriate period of illness for the introduction of treatment. Recipe and Use: Molecule selection, injection techniques, specific strategies depending on mental disorder or co-morbidity, and monitoring treatment. Specific population: The use of antipsychotic LAI drugs in pregnant women, elderly patients, unstable subjects and subjects need treatment in a prison facility. The questionnaire was developed to be filled by a panel of experts. The time required to administer it was estimated at about 3 hours. At the time of development, all LAI anti-psychotic drugs available in France were offered as therapeutic options (table 1). They were regrouped into two categories: LAI antipsychotics available in France (when the survey was completed)LAI second generation antipsychotic microsphere Olanzapine pamoateLAI first generation antipsychoticsHal Decanoate'clopenthixol decanoateFlupentixol decanoateFluphenazine decanoatePipotiazine palmitateLong-acting injectable first-generation antipsychotics (LAI FGA). Long-acting second-generation antipsychotic injection drugs (LAI SGA). This FGA/SGA artificial separation is not consensual because of their heterogeneous efficiency and tolerability profiles (especially for SGA) (17.18). However, we have retained both of these categories to facilitate the development, reading and understanding of this guide. Experts were able to their consent or disagreement on each issue. Rules that on the one hand, an agreement (or disagreement) was predetermined, and on the other hand, the degree of convergence of expert opinions was predetermined. Each expert answered each question with a graded scale of 0 to 9 (0 means complete disagreement or official contraindication and 9 with a full agreement or official indication) (Figure 1). This scale derives from a variation of the Nominal Group method developed by Rand Corporation and the University of California in the United States (RAND/UCLA Compliance Assessment Method). The advantage of this scale is that it is well standardized, used in medicine and published. The Scientific Committee (Annex 1) selected 53 French psychiatrists considered by experts in the use of antipsychotic drugs LAI. The selection criteria were: Clinical activity in the field of schizophrenia or bipolar disorder. Publication (s) or communication (s) research work on antipsychotics LAI at national or international congresses. Each expert was consulted individually to gain his or her experience using the questionnaire provided. Follow-up assistance has been set up to ensure the substantive direction and return of these documents. A reminder of the expert's mission was made. A written commitment from each expert was requested. No payment was paid to the experts involved in the project. The answers to each question or proposal were quantified (number of answers, median, average, standard deviation, minimum, maximum) (table 2). Percentage of responses in areas 01-34-67-9;20% -lt; 50% ≥ 50% → First Line Treatment/Strategy; 20% of the lt; 50% of the ≥ 50% and zlt; 100% → Second-line treatment/strategy; 20%-lt; 50% → third-line treatment/strategy≥ 50% ---→ ContraindicationFirst-line treatment/strategy was determined if at least 50% of the answers to this question were in the 7-9 zone or less than 20% were in zone 0. Treatment/strategy selection was maintained if at least 50% of experts rated it 9.The second line of treatment/strategy was determined if less than 50% of the answers to the question were in the 7-9 zone, at least 50% were in ditch zones 7-9 and 4-6, and less than 20% were in the 0.Third line of treatment/strategy was determined if less than 50% of the answers to the question were in cumulated zones 7-9 and 4-6, and less than 20% were in the 0.Contraindication zone was determined if at least 50% of the responses were in zone 0.For all other cases the question was considered as non-consensual. Here's an example in Figure 2. The results were interpreted by the scientific committee and allowed the recommendations to be developed. The Independent Commission (Annex 1) has approved the final version of the recommendations (EH, CL, PT). The final document (LP, PML) was developed by two members of the scientific committee. Next sections key recommendations in the guidelines after analysing the data and interpreting the results of the survey conducted by the scientific committee. A complete database (with questions and answers) is available on the website. However, a few examples of questions, with expert responses, are presented here to facilitate understanding of the results section. The questionnaire (annex 2) was completed by 42 experts, which is 79% of those who were contacted. The reasons for not participating in the remaining 11 experts were that they were either working too hard as consultants or were not well placed to respond on time. The socio-demographic data and professional activities of the expert group are presented in Table 3.Social-Demographic Data and Professional Activities of the Expert Group (N No. 42 Experts) Age (Years)N42Mean ± SD46.81 ± 9.82Min; Max31; 63 Median46Years PracticeN41Mean ± SD17.29 ± 10.20min; Max2; 37 Median16 Treatment of outpatientsN41Mean ± SD68.90 ± 22.43Min; Max25; 100 Median75 Patient Treatment at HospitalN41Mean ± SD31.10 ± 22.43Min; Max0; 75 Median25During over the past 5 years, in the field of LAI FGA/LAI SGAN42Clinical activity42 (100.0%)Research projects18 (42.9%) Publications12 (28.6%) (61.1%) Indicators for the use of LAI FGA and LAI SGA are summarized in table 4.LAI FGA and LAI SGA readings according to DSM-IV-TR criteriaLAI FGALAI SGA1 st line treatment SchizophreniaDelusional disorderSzoaffective disorder2 nd line treatmentizSchophreniaBipolar disorderDelusional disorderpersonal disorderSzoaffective DisorderPersonal disorderThe relevant question from the survey with expert responses is given in Figure 2.LAI SGA recommended (in monotherapy or combination): as the 1st line of treatment of schizophrenia, delusional disorder and schizophrenia disorder.as They are contraindicated in organic mental disorders with behavioral disorders (Alzheimer's disease, Alzheimer's disease, vascular dementia). LAI FGA is recommended (in monotherapy or combination): as the 2nd line of treatment for schizophrenia, delusional disorder, schizoaffective disorder and personality disorder. They are not suitable for recurrent depressive disorder and organic mental disorders with behavioral disorders. The most appropriate period for the introduction of LAI FGA and SGA is summarized Table 5.The use of LAI FGA and LAI SGA depending on the period of FGALAI SGASchizophreniaLAI FGA is not recommended at the initial stage of the disorder. A very early introduction of LAI SGA is recommended (eventually from the 1st psychotic episode). LAI FGA can be used during supportive treatment in case of oral effectiveness and when deemed satisfactory. It is recommended that LAI SGA be administered from the 1st recurrent psychotic episode (unless the patient is treated with LAI antipsychotic). Bipolar disorder is not recommended. LAI SGA is not recommended in the initial phase of bipolar disorder. Only LAI SGA is considered as a therapeutic option at the initial stage of schizophrenia: They are recommended from the first psychotic episode. Their introduction from the first recurrent psychotic episode is also recommended (unless the patient has been treated with antipsychotic LAI). LAI FGA is not recommended at the beginning of a course of schizophrenia (i.e. in a patient who was recently diagnosed with schizophrenia and who had no previous antipsychotic treatment). They should be used as supportive treatment for long-term disease development if the appropriate oral language is effective and when the benefit-risk ratio is considered satisfactory. Various clinical criteria for the use of LAI FGA and SGA are presented in Table 6.Indications of LAI FGA and LAI SGA according to the clinical characteristics of the diseaseSchizophreniaBipolar disorder1st line FGA OR LAI SGAFrequent relapses Non-compliance (partial/full) Risk risk for other Low Understanding Patient Preference Positive Depot experienced 1st line GA 2 nd lineLAI FGA or SGAPositive Symptoms2th Line BD I Manic Polarity Fast Cycler Risk for Other Low Understanding LAI SGANegative Symptoms Suicidal Risk Preferred Choice Criteria for LAI Formulation (as 1st Line Of Treatment) in Patients With Schizophrenia are: Patients present frequent relapses or LAI FGA or LAI SGA are recommended as a treatment 1 line. In the case of poor compliance, LAI SGA is treated as a treatment of choice. Patients presenting dangerous behavior. LAI FGA and LAI SGA are recommended as a 1st line treatment. Patients who give a low level of understanding of the disease and the need for treatment. LAI FGA and LAI SGA are recommended as a 1st line treatment. Patients wishing treatment for antipsychotic LAI and/or having a history of effective treatment are LAI FGA or LAI SGA. LAI FGA or LAI SGA are recommended as a 1st line treatment. Patients who inoculate cognitive impairment have an effect on their functioning. LAI SGA is recommended as a 1st line treatment. LAI FGA is not recommended. Socially and family isolated patients. LAI SGA as the 1st Line of Treatment (LAI FGA as the 2nd Line of Treatment) is recommended for patients with poor social and family support. Patients receiving outpatient care without consent. When a compulsory outpatient treatment program is planned, LAI SGA as a 1st Line Treatment (LAI FGA as 2nd Line Recommended. Experts were unable to reach a favourable consensus on the preferential use of the wording of LAI (as a first-line treatment) for the following groups. They simply specified the LAI (FGA or SGA) preferential category for these groups. Patients present in the prevailing clinical dimension. The prevalence of positive or negative symptoms is not a specific factor in the choice of use of the treatment depot. If the treatment depot is selected: LAI SGA and LAI FGA are recommended (as a second-line treatment) for clinical forms where positive symptoms predominate. Patients who present a high level of suicide intention. Only LAI SGA is considered (as a second-line treatment) for patients presenting suicidal behavior during acute episodes. Patients who give a high level of understanding of their disease. A high level of understanding about the disease may be a sign for offering LAI SGA as a 2nd line of treatment. LAI FGA is not recommended in cases of high level of understanding of the disease. The criteria of preferential choice for the formulation of LAI (as a 1st line treatment) in bipolar patients: Patients present poor compliance with non-acceptance of long-term oral treatment. LAI SGA is recommended as a 1st line treatment (in monotherapy or in combination). Patients wishing treatment for LAI SGA and/or having a history of effective treatment with LAI SGA for bipolar disorder symptoms. Regardless of the clinical situation, LAI FGA is never recommended as a supporting treatment for bipolar disorder. Experts failed to reach a favourable consensus on the preferential use of the LAI (first line treatment) for the following groups. They simply specified the LAI (FGA or SGA) preferential category for these groups. Patient presenting specific clinical characteristics. Because of the drugs currently available, LAI SGA is recommended (as a 2nd line of treatment) in patients, presenting type I bipolar disorder and/or predominant male polarity and/or fast cycles. Patients presenting dangerous behavior or a history of impulsive behavior. LAI SGA is recommended as a second line treatment. Patients who give a low level of understanding the need for treatment. LAI SGA is recommended as a second line treatment. In patients with schizophrenia, the benefit-risk ratio for each formulation of LAI in preventive treatment for psychotic relapse is presented in Table 7. The relevant question from the survey with expert responses is given in figure 3.Benefit/risk ratio for LAI FGA and LAI SGA in schizophrenia Prevention of psychotic relapse1 st line treatmentRisperidone LAI2 nd line treatmentOlanzapine pamoateHaloperidol decanoate'uclopenixol decanoateFlentiupxol decanofluide associated with the level of tolerance for each LAI antipsychotic. LAI SGA is recommended as the 1st line of treatment, except for olanzapine pamoate. In patients with bipolar disorder, only two LAI SGAs are recommended as second-line treatments: microsphere risperidone and pamoma olanzapine (table 8). FGA LAI is contraindicated as supporting bipolar disorder treatment. Benefit/risk ratio for LAI FGA and LAI SGA in bipolar disorder Prevention Recurrence of Depressive RelapsePrevention Of Depressive Relapse1 st-line treatment--2 nd-line treatmentIn monotherapy or in combination with mood stabilizerAlways in combination with mood stabilizerRisperidone LAIRisperidone LAIOl anzapin pamoateOlanzapine pamoateSwitch from oral form antipsychotic (FGA or SGA) to form LAI First Line strategy is to start with antipsychotic oral form over time, necessary to obtain an effective dose and good tolerance before switching to LAI form. Note. Only risperidone microspheres have pharmacokinetic characteristics that necessarily require an initial oral supplement. The LAI SGA recipe should be tailored to the pharmacokinetic characteristics of each product. The dose of the LAI injected will correspond to the equivalent of the oral dose used (choice strategy). The transition from LAI antipsychotic (FGA or SGA) to another LAI antipsychotic First Line strategy is to introduce a new LAI antipsychotic after discontinuation of the current LAI FGA or LAI SGA (when the time since the last injection corresponds to the interval between 2 injections). In the 2nd line of strategy, the transition from the current LAI FGA or LAI SGA to the new LAI SGA is recommended immediately after being given oral doses of the test recently administered by SGA LAI in order to eliminate any hypersensitivity. The initial dose for oral form or for the new LAI SGA will correspond (if possible) to the equivalent dose of the previous LAI FGA or LAI SGA (1st Line Strategy). In order to help with the adoption and understanding of the benefits of LAI treatment, experts unanimously recommend (the strategy of choice) to convey to the patient specific information concerning both the benefits and inconveniences of FGA and SGA LAI, which are considered, in joint decision-making. During the introduction of treatment, initiating the LAI form is recommended until the end of full hospitalization for an acute episode (strategy of choice). The introduction of antipsychotic LAI drugs can also be considered during outpatient treatment (as a line 2 strategy). The 1st line of the injection strategy while maintaining treatment in outpatient settings is to coordinate subsequent psychiatric consultations with injection dates. Injections can also be performed by a nurse in the hospital's day care unit or at home (in These injection procedures do not apply to olanzapine pamot as this treatment requires specific post-injection monitoring in the hospital. In order to improve patient satisfaction, it is recommended that the following reminder methods be put in place: a 1st line strategy using phone reminders and agendas given to the patient (following the diary).2nd line strategy, by mail or eventually texting. Prevention of local complications requires injections that need to be performed: deep intramuscular (buttock or deltoid muscle) (strategy of choice)., changing the injection site each time (as a 1st line strategy)., offering local transdermal anesthesia (cream or patch) before injection to reduce pain at the injection site (as a 2nd line strategy). Specific therapeutic strategies in accordance with mental disorder or its co-morbidityNorth Therapeutic Adaptation are recommended as a 1st line strategy: Optimizing the current LAI antipsychotic. Stopping the current LAI antipsychotic and switching to oral antipsychotic in the acute phase is recommended only as a 2nd line strategy. It is recommended to continue as a supportive treatment therapeutic strategy that has allowed to reduce symptoms and stabilize the episode (strategy of choice). In the case of transition to oral antipsychotic treatment during the acute phase, switching to the LAI formula as a supporting treatment is recommended as a line 1 strategy. In the case of a combination of oral antipsychotic and LAI antipsychotic in the acute phase, optimization of the dose of LAI antipsychotic and gradually discontinuation of oral antipsychotic when monitoring the clinical condition is recommended as a line 1 strategy. Consistently recommended: in the 1st line strategy: optimize treatment of LAI FGA or LAI SGA. by optimizing the dose of the current LAI antipsychotic by increasing the dose while monitoring tolerance. injections.in the strategy of the 2nd line. Bipolar Disorder- In the acute phaseIf monotherapy continues, it is consistently recommended: in the 1st line of strategy: combine the current LAI SGA with an oral anti-manic mood stabilizer (without recommending a specific medication). SGA and switch to oral anti-manic mood stabilizer (without recommending a specific medication). If bitherapy continues (LAI SGA - lithium or anti-cosvusive drug), it is recommended: in the strategy of the 1st line: to optimize the dose of oral antimanic mood stabilizer.in strategy of the 2nd line. LAI SGA with another oral anti-manic mood stabilizer (without recommendation of a specific medication) or optimize the dose of the current LAI SGA by increasing the dose while monitoring tolerance. anti-manic mood stabilizers (without recommendation of a specific medication) or to continue the current treatment and combination with the 2nd oral anti-manal mood stabilizer (without recommendation of a specific medication) or to continue the current treatment and electroconvulsive therapy (EST) introduction. It is recommended to continue as a supportive treatment therapeutic strategy that has allowed to reduce symptoms and stabilize the episode (without accuracy in duration) (strategy of choice). The depressive bipolar episode with LAI SGAIf monotherapy continues, consistently recommended: in the 1st line of strategy: combine the current LAI SGA with an oral mood stabilizer with an antidepressant effect (i.e. lamotrigin, quetiapine, lithium).in the strategy of the 2nd line. and switch to an oral mood stabilizer with an antidepressant effect. If bitherapy continues (LAI SGA - antidepressant), then consistently recommended: in the 1st line of strategy. with an antidepressant and a combination with a mood stabilizer with an antidepressant effect.in the 2nd line strategy. dose while monitoring tolerance. or discontinue the current LAI SGA and switch to oral mood stabilizer bitherapy and oral antidepressants. In the 1st Line strategy, it is recommended to continue as a supportive treatment therapeutic strategy that has reduced symptoms and stabilized the clinical condition (without the accuracy of duration). In the strategy of the 2nd line, in the case of combining oral antidepressant with LAI SGA in the acute phase, it is recommended to optimize the dose of LAI SGA and gradually stop the oral antidepressant, clinical condition. Anxiety (structured or not structured) is recommended in the treatment of the first line to associate oral benzodiazepine, and in the treatment of the second line to combine antidepressant (as treatment of the first line, SSRI or SNRI). Treatment of LAI SGA or LAI FGA can be continued. Prescription opiate substitutes (buprenorphine or methadone) (1st line strategy) or disulfiram, acamprosate or naltrexone (2nd line strategy) depending on dependence, possibly with LAI antipsychotics. Follow-up procedures and monitoringA strategy of the 1st line, it is recommended to systematically look for the following clinical elements: Personal and family history of the disease (diabetes, dyslipidemia). Healthy lifestyle (eating habits, physical activity, substance use, smoking). Weight, calculation of body mass index, umbilical cord circumference. Blood pressure. The following paraclinical examinations are recommended: 1st line of paraclinical examinations: full blood test, blood electrolyte (urea, creatinine, fasting glucose). Tests of liver function. Lipid profile. Beta hCG.Electrocardiogram. Paraclinic exams depending on the patient's clinical condition (as the 2nd line): Thyroid function test. Prolactinaemia.Electroencephalogram.All experts recommended informing the patient and family about the risks of adverse events (metabolic, neurological ...), as well as providing hygiene and diet advice (balanced diet, regular physical activity, decrease or help in stopping the use of psychoactive substances ...) (choice strategy). Clinical and paraclinical monitoring of antipsychotic LAI drugs is the same as for oral antipsychotic drugsSPecific frequency of monitoring will depend on the risk factors found in the patient, and on the clinical signs that appear during treatment (strategy 1st line). In the case of a planned pregnancy in a woman, treatment with LAI antipsychotic experts failed to reach a favorable consensus for a 1st line strategy in this clinical situation. As a 2nd line strategy, it is recommended to discontinue the current LAI antipsychotic and switch to oral form (at a minimum effective dose). In the first/2/3rd trimester: experts could not reach consensus on the strategy of the 1st line. As a second-line strategy, it is recommended to continue antipsychotic LAI or switch to oral form (FGA or SGA at a minimum effective dose). The relevant question from the survey with expert responses is given in the figure 5.In elderly patients over 65 years of age, the use of antipsychotic SLA is possible. Some precautions are recommended as a 1st line strategy when prescribing LAI treatment: Dosage adjustments depending on weight, liver or renal function tests. More credits than those of with a lower target dose. Close medical supervision (strategy of choice). Closer tolerance monitoring than adults (strategy (strategy only a psychiatrist. In subject situations, the use of LAI SGA is recommended as the 1st line of treatment (LAI FGA as the 2nd line of treatment). With incarcerated patients, the use of LAI antipsychotic can be considered. This recipe does not differ depending on the length or place of imprisonment. Psychiatric indications are the same as for non-prisoners, with the difference that LAI SGA appears as the treatment of choice for schizophrenics and delusional disorders. The presence of the following clinical characteristics (aggressiveness, previous risk history for others) directs the therapeutic choice in favor of LAI FGA or LAI SGA in schizophrenic or to LAI SGA in bipolar disorders (line 1 strategy). The main interest of our work is to help physicians choose to use antipsychotic LAI in specific clinical circumstances, using the Consensus Consensus Guidelines Methodology (CBG). Most guidelines for the treatment of mental disorders are evidence-based guidelines (EBG) (11.20). However, recommendations cannot be established if there is no evidence available, in which case the KBG methodology can be used. The French National Health Agency recommends a method of formal consensus when two of the following conditions are met: No or insufficient evidence pertaining to the issue. The ability to dismiss a topic in easily identifiable clinical situations. Strategies that were deemed appropriate by an independent group should be identified and selected from several alternatives. This method is very close to the methodology of the Expert Consensus Guide and applies to various mental disorders (4.21-27). Combining EBG and CBG methodologies can help physicians have real evidence-based clinical practice, including both clinical expertise and scientific evidence. In the area of antipsychotic use and management of LAI, the KBG methodology seems particularly appropriate. Evidence concerning antipsychotic efficacy and tolerability of LAI exists, but they are lacking in many areas (i.e. readings or preferential patient profiles, the ranking system between LY antipsychotics, the injection stage, the switching process, the management of medicines, specific populations...). CBGs allow clinicians to be led by recommendations that carry a closer relationship to patient characteristics then in clinical practice than to restrictive inclusion criteria of randomized controlled trials. According to our panel experts, LAI antipsychotics are recommended as a first line of treatment for a variety of mental disorders: Schizophrenia.Schizoaffective Disorder. Delusional disorder. But also as a second line in: Bipolar disorder. Personality disorder. If their use in schizophrenia is common and is supported by evidence (5-7.28), their use in disorder is less obvious. However, several placebo-controlled studies on relapse prevention have shown the effectiveness of the risperidone microsphere as monotherapy or as an additional therapy for lithium or valproate in bipolar I patients. In September 2011, and based on these data, the Food and Drug Service Approved Microsphere Risperidone as a long-term treatment for bipolar disorder I. Scientific literature is now limited to the microsphere of risperidone, but the development of new drugs should allow further research from LAI SGA as a supporting treatment for bipolar disorder. The use of LAI antipsychotic drugs in other indications (schizoaffective disorder, delusional disorder, personality disorder) is not based on evidence for these populations, but is instead based on the clinical experience of a group of our experts. If scientific evidence is required, the sharing of this experience can be seen as a real support for the clinical use of these compounds. In recent years, interest in the use of LAI SGA in the early stages of schizophrenia has increased because the duration of untreated psychosis is associated with the prognosis of the disease. Recent studies have highlighted the fact that their use, already in the first psychotic episode, offers many benefits in terms of effectiveness, tolerance and improved adherence (31-33). Available literature presents a weak level of evidence (open label, post-special analysis and a small sample) and placebo-controlled studies are required. The formalized consensus of our expert group is consistent with these preliminary results and recommends LAI SGA after the first schizophrenic episode. The dissemination of this data to the first masculine episode of bipolar disorder could be assumed, but, to date, there has been no evidence that compares the effect of early oral or LAI antipsychotic drugs on the course of the disease. This is probably the reason why the experts panel did not recommend SGA LAI in the earliest course of bipolar disorder as maintenance treatment. Our expert group believes that LAI antipsychotic drugs should be used in patients with schizophrenia, for whom antipsychotic treatment is indicated. This is consistent with a survey conducted among psychiatrists from Europe, the Middle East and Africa, in which doctors viewed the switch to the antipsychotic drug LAI or the addition of it as a preferential pharmacological approach to address the problems of joining. LAI antipsychotic drugs have long been considered as a treatment that can only be used for a small subset of non-compliance patients, frequent relapses or who pose a risk to others. Analysis of French and German studies, a survey of psychiatrists about patient attributes that potentially affect their qualifications for depot treatment, identified two clusters of patients (35.36). Cluster I I to the classic patient profile, which uses depot forms (in the past, the history of relapse and poor correspondence to oral forms). Cluster II was more unexpected and included patients with a high level of understanding and therapeutic alliance. The usefulness of depot formulation compared to oral treatment in terms of prevention of relapses is not demonstrated in this population (35.36). However, even limited gaps in treatment with oral formulation (11-30 days per year) are enough to increase the risk of recurrence by 2.81 in patients with schizophrenia. The definition of these two groups, replicated in many countries, is consistent with the recommendation of our expert group. Given the risks associated with non-compliance in bipolar patients (38.39), the expert panel recommends LAI antipsychotics as a second line of treatment for bipolar disorder. If the superiority of LAI antipsychotic drugs compared to placebo, in terms of relapse prevention, has been demonstrated to be .5.28 for schizophrenia, no study compares LAI SGA vs. LAI FGA. We can only extrapolate the results of studies on oral antipsychotics. Some individual oral SGA (amisulpride, clozapine, olanzapine, risperidone) were better at overall efficacy in patients with schizophrenia than oral FGA. Other oral SGA were no more effective, even for negative symptoms. However, a meta-analysis that treated all oral SGA as a single group showed that they were associated with fewer relapses, fewer treatment failures and fewer hospitalizations in long-term schizophrenia treatment. Oral SGA induced fewer extrapyramidal side effects than oral FGA, but some SGA induced more weight or metabolic side effects than oral FGA (41.42). Oral SGA tolerance profiles are more mixed and require that the characteristics of each molecule be taken into account on a case-by-case basis. In a one-year observational study, including 1,859 patients diagnosed with schizophrenia, an adjusted analysis of Poisson's regression showed that the use of risperidone microsphere was associated with lower hospitalization rates compared to other LAI FGA. Thus, without any evidence, the panel of experts recommended that the doctor's decision-making process take into account the benefits/risk balance and priorities of the LAI SGA (except for ulansapine pamoate, due probably due to the risk of post-injection syndrome) over LAI FGA, according to patient tolerance. Managing LAI antipsychotic drugs in clinical practice can sometimes be difficult for clinicians and there are limited data or recommendations in the literature. Our guidelines try to offer practical recommendations to facilitate the introduction, switching and management of LAI antipsychotics in phases of schizophrenia or bipolar disorder. Indeed, the current EBG for the biological treatment of schizophrenia and bipolar bipolar 8-10,45-53 offers several recommendations regarding antipsychotic drugs LAI. Most of them recommend the use of antipsychotic drugs LAI only for patients with non-compliance, frequent relapse or who prefer this formulation. Terms of use and management are not described or only briefly described. LAI antipsychotics are presented separately from oral treatment strategies (except for CANMAT guidelines for bipolar disorder). The main reasons for explaining the limited number of recommendations for LAI antipsychotic drugs are related to the lack of long-term studies and the lack of high-quality evidence comparing LAI SGA with oral SGA. Perhaps the subsequent period lasting a year or less may have been too short to reveal the long-term benefits of depot treatment versus oral form. However, in our view, the current criteria for the level of evidence are probably not adapted to studies on LAI antipsychotics. Indeed, randomized controlled trials have a serious selection bias and cannot assess the potential benefits of joining LAI language (incompatible patients are not involved in the study, and those who agree to be included are the most compatible). Thus, it can be difficult to demonstrate the benefit of LAI antipsychotics compared to oral antipsychotic drugs. Future studies with LAI antipsychotics should combine the strengths of different study designs (randomized controlled trials, mirror studies or cohort studies). In addition to these EBG, there are some CBG focusing on the use and management of LAI formulations to treat schizophrenia (4,27,54-57). The first guidelines, published in 1998, had already recommended that the LAI FGA be considered for any patients with schizophrenia for whom long-term treatment is indicated. However, with the advent of oral SGA in subsequent years, which is better tolerated than the FGA, most of the guidelines were in favor of the use of oral language. Following market approval (2002) of the first LAI SGA (risperidon microsphere), two other specific guidelines on LAI antipsychotic drugs (27.57) were proposed. These guidelines recommended LAI SGA as a first-line treatment for patients who ask for long-acting formulations. Their use after the first schizophrenic episode or for patients who are stable with oral antipsychotic has been discussed. In 2009, Velligan et al. published guidelines for expert consensus on the problems of joining patients with serious mental illness. The use of LAI antipsychotic drugs was a personal choice for patients with frequent relapsed because they stopped taking medication, or because they expressed a preference for LAI formulations. The Association of Medical Psychiatrists of quebec (AMP) has also recently developed guidelines on LAI LAI with a decision-making algorithm that puts the wording of the depot at each stage of treatment as soon as possible. The evolution of the therapeutic arsenal for schizophrenia and bipolar disorder,

with the development of LAI FGA, the oral SGA, and finally the LAI SGA will probably explain the difficulty in changing prescribing practices for physicians. Some clinicians consider LAI antipsychotics to be coercive, stigmatized, unacceptable to patients or impossible to stop immediately when side effects occur .4,13,15 The negative attitude of psychiatrists towards LY antipsychotics means that they require a high level of evidence that the formulation of the depot clearly outperforms the treatment of peroral antipsychotic drugs. Negative beliefs regarding depot wording can be reduced by using, as recommended, joint decision-making and minimize the patient's experience of coercion. The current and future availability of more LAI SGA (aripiprazole, paliperidone, olanzapine, risperidone) should allow doctors to take depot treatments more easily. If interest in LY treatment has been shown in terms of reducing the risk of recurrence in patients with schizophrenia, research is still needed that are adapted, from a methodological point of view, to the evaluation of antipsychotic LY drugs, especially after the first psychotic episode. In an evidence-based clinical approach, psychiatrists should be systematically offering to all patients that require long-term antipsychotic treatment, through shared decision-making, an LAI antipsychotic as a first-line treatment (key points are summarized in Appendix 3).•French Association of Biological Psychiatry and Neuropsychopharmacology (Association Française de Psychiatrie Biologique et Neuropsychopharmacologie - AFPBN -).•Professor Pierre-Michel Llorca/Doctor Ludovic Samalin.•Doctor Mocrane Abbar.•Professor Philippe Courtet.•Professor Pierre-Michel Llorca.•Doctor Sebastien Guillaume.•Doctor Ludovic Samalin.•Sylvie Lancrenon.•Professor Emmanuel Haffen.•Professor Christophe Lançon.•Professor Pierre Thomas.ALAMOME Isabelle, ATTAL Jérôme, BARTOLI Jean-Luc, BEAUFILS Béatrice, BELZEAUX Raoul, BILLARD Stéphane, BOTTAI Thierry, CANCEIL Olivier, CAPDEVIELLE Delphine, CHARLES Eric, CHEREAU-BOUDET Isabelle, COUSIN François-Régis, De BEAUREPAIRE Renaud, DELAMILLIEURE Pascal, DELAUNAY Vincent, DUFUMIER Emmanuel, FREMONT Patrick, GIORDANA Bruno, GIORDANA Jean-Yves, GIRAUD-BARO Elizabeth , GUILYOME AGNES, HODE Yann, LACAMBRE Mathieu, LOMBERTI Emil-Roger, MARON Michel, MEARY Alexander, MISDRAHI David, MONIE Jacques, MURRY Pierre, NoURRY Patrick, NuBUKPO Philippe, PAULET Catherine, PETIT Marion, PICARD Valerie, PRETER PHILIPPE, PROSPERI Antoine, SAUTEREAU injectable (LAI) antipsychotics are shown in patients with schizophrenia, schizoaffective disorder, delusional disorder and bipolar disorder.2. LAI second generation antipsychotics (SGA) is recommended as a supportive treatment after the first episode of schizophrenia. LAI first-generation antipsychotics (FGA) (depot of neuroleptics) is not recommended in the early course of schizophrenia and should be avoided in bipolar disorder.3. LAI antipsychotic drugs have long been considered as a treatment that can only be used for a small subset of non-compliance patients, frequent relapses or who pose a risk to others. The panel believes that LAI antipsychotic drugs should be treated and systematically offered to all patients who are prescribed antipsychotic treatment.4 In accordance with their effectiveness and tolerance: LAI SGA is recommended as a first line and LAI FGA as a second line in maintaining the treatment of schizophrenia. In order to improve the acceptance and understanding of the benefits of antipsychotic drugs, it is recommended that each patient be given specific information about the benefits and inconveniences of LY language in joint decision-making.6 The process of switching to antipsychotic LAI. Two main situations have been identified: Transition from oral antipsychotic: Assign oral formulation of antipsychotic to establish tolerance/efficiency. oral formulation of antipsychotic LAI if the patient has never taken this medication before (to rule out hypersensitivity). Drug Administration: Reminders of the date of injections should be used to improve compliance. psychiatrist, GP, i. . . . . He said, he said, he said, he said. FGA: First-generation antipsychotic drugs; SGA: Second-generation antipsychotic drugs; LAI: Long-term injectable; ECT: Electroconvulsive CBG: Consensus-based guidelines; EBG: Evidence-based guidelines. Pr Llorca, Pr Courtet and Dr. Abbar have received grants and served as consultants or speakers for the following organizations: Astrazeneca, Bristol-Myers Squibb, Elle Lilly, Janssen-Chilag, Lundbeck, Otsuka, Sanofi-Aventis and Servier. Dr. Samalin received grants and acted as a speaker for the following organizations: Astrazeneca, Bristol-Myers Squibb, Elle Lilly, Lundbeck, Otsuka and Sanofi-Aventis. Dr. Guillaume has no conflict of interest. THE PML and LS were involved in the writing of the manuscript. SL has made a significant contribution to data collection and analysis. All authors have made significant contributions to the concept, development and interpretation of the data, participated in the revision of the manuscript critically for important intellectual content and gave final approval to the version to be published. Velligan DI, Weiden PJ, Sajatovic M, Scott J, Carpenter D, Ross R, Docherty JP. Strategies to address the problems of joining patients with serious and persistent mental illness: recommendations of expert consensus guidelines. J Psychiatry Pract. 2010;13:306–324. doi: 10.1097/01.pra.0000388626.98662.a0. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kreyenbuhl J, Slade EP, Medoff DR, Brown CH, Ehrenreich B, Afful J, Dixon LB. The time of termination of the first and second generation of antipsychotic drugs in the treatment of schizophrenia. Schizophr Res. 2011;13:127-132. doi: 10.1016/j.schres.2011.04.028. (Free PMC article) (PubMed) (CrossRef) No, no, no. (Google Fellow) Lacro JP, Dunn LB, Dolder CR, Leckband SG, Jeste DV. Prevalence and risk factors for drug incaherence in patients with schizophrenia: a comprehensive review of recent literature. J Wedge Psychiatry. 2002;13:892–909. doi: 10.4088/JCP.v63n1007. PubMed (CrossFef) Google ScholarVelligan DI, Weiden PJ, Sajatovic M, Scott J, Carpenter D, Ross R, Docherty JP. A series of expert consensus guidelines: problems with joining patients with serious and persistent mental illness. J Wedge Psychiatry. 2009;13 (Supple 4):1-46. 47-48. (PubMed) (Google Fellow) Adams CE, Fenton MK, Kuraishi S, David AS. A systematic meta-review of depot antipsychotic drugs for people with schizophrenia. Br J Psychiatry. 2001;13:290–299. doi: 10.1192/bjp.179.4.290. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kishimoto T, Robenzadeh A, Leucht C, Leucht S, Watanabe K, Mimura M, Borenstein M, J Kane, Correll CU. Long-term injection action against oral antipsychotic drugs to prevent relapses in schizophrenia: a meta-analysis of randomized trials. Schizophrenic Bull. 2013. PMC Free Article PubMedLeucht C, Heres S, Kane JM, Kissling W, Davis JM, Leucht S. Oral vs. Depot antipsychotic drugs for schizophrenia - critical systematic and a meta-analysis of randomized long-term trials. Schizophr Res. 2011;13:83-92. doi: 10.1016/j.schres.2010.11.020. 10.1016/j.schres.2010.11.020. (CrossRef) No, no, no. (Google Fellow) Canadian Psychiatric Association. Clinical practice guidelines. Treatment of schizophrenia. Maybe J Psychiatry. 2005;13:7S-57S. PubMed (Google Scholar) Schizophrenia. The main interventions in the treatment and treatment of schizophrenia in primary and secondary care (update) - RW, Kreyenbuhl J, Kelly DL, Noel JM, Boggs DL, Fisher BA, Himelhoch S, 6, Peterson E, Aquino PR, Keller W. 2009 Schizophrenia PORT psychopharmacological treatment recommendations and brief statements. Schizophrenic Bull. 2010;13:71–93. doi: 10.1093/schbul/sbp116. (Free PMC article) (PubMed) (CrossRef) No, no, no. (Google Fellow) Takeuchi H, Suzuki T, Uchida H, Watanabe K, Mimura M. Antipsychotic Treatment for Schizophrenia at the Maintenance Phase: a systematic review of guidelines and algorithms. Schizophr Res. 2012;13:219-225. doi: 10.1016/j.schres.2011.11.021. (PubMed) (CrossRef) No, no, no. (Google Fellow) Barnes TR, Shingleton-Smith A, Paton C. Antipsychotic Long Injection: Appointment Practice in the UK. Br J Psychiatry Suppl. 2009;13:S37-S42. (PubMed) (Google Fellow) Patel MX, David A. Why do antipsychotics are prescribed more often and what can be done about it? Adv Psychiatry Treatment. 2011;13:203–213. (Google Fellow) Fourier A., Gasquet I, MP of ATA Allicar, Buhasira M,Lepin JP, Begaud B. Prescription Patterns of Neuroleptic Drugs: a national cross-examination of a random sample of French psychiatrists. Br J Wedge Pharmacol. 2000;13:80–86. (Free PMC article) (PubMed) (Google Fellow) Heres S, Hamann J, Kissling W, Leucht S. The attitude of psychiatrists to antipsychotic depot drugs. J Wedge Psychiatry. 2006;13:1948–1953. doi: 10.4088/JCP.v67n1216. PubMed (CrossRef) Google Scholar Haute Autorite de Sant' Guide de la litt'reature et gradation des recommandations. (Leucht S, Korves C, Arbter D, Engel RR, Lee C, Davis JM. Second generation vs. first generation of antipsychotic drugs for schizophrenia: meta-analysis. Lancet. 2009;13:31–41. doi: 10.1016/S0140-6736(08)61764-X. «PubMed» (CrossRef) (Google Scholar) Leucht S, Komossa K, Rummel-Kluge C, Corves C, Hunger H, Schmid F, Asenjo Lobos C, Schwarz S, Davis JM. A meta-analysis of head-to-head comparisons of second-generation antipsychotic drugs in the treatment of schizophrenia. Am J Psychiatry. 2009;13:152–163. doi: 10.1176/appi.ajp.2008.08030368. (PubMed) (CrossRef) No, no, no. (Google Fellow) Upper authoritarian de Sante Design de recommandations de Bonn pratique. Myutod Recommandations par consensus formalis 2011. (Samaline L, Guillaume S, Jacket P, Abbar M, Lancrenon S, PM. Методологический Методологический between pharmacological guidelines for the treatment of bipolar disorder: what to do for clinicians? Psychiatry Compr. 2013;13:309–320. doi: 10.1016/j.comppsych.2012.10.001. (PubMed) (CrossRef) No, no, no. (Google Fellow) Llorca PM, Jacket P, Martin P, Abbar M, Gay C, Maynard JA, Bayle F, Hamon M, Lancon C, Thibaut F, Thomas P, Lancrenon S, Guillaume S, Samalin L. Screening and Bipolar Disorder Management: Methodology. Encephalon. 2010;13 (Suppl 4):S76-S85. (PubMed) (Google Fellow) Llorca PM, Jacket P, Martin P, Abbar M, Gay C, Maynard JA, Bayle F, Hammon M, Lancon C, Thibaut F, Thomas P, Lancrenon S, Guillaume S, Samalin L. Screening and Bipolar Disorder Management: Results. Encephalon. 2010;13 (Suppl 4):S86-S102. (PubMed) (Google Fellow) Alexopoulos GS, Jeste DV, Chung H, Carpenter D, Ross R, Docherty JP. A series of expert consensus guidelines. Treatment of dementia and its behavioral disorders. Introduction: methods, comments and resumes. Postgrad Med. 2005;13:6-22. (PubMed) (Google Fellow) Alexopoulos GS, Katz IK, Reynolds CF 3, Carpenter D, Docherty JP. A series of expert consensus guidelines. Pharmacotherapy of depressive disorders in elderly patients. Postgrad Med. 2001;13:1-86. (PubMed) (Google Fellow) Allen MH, Currier GW, Carpenter D, Ross RW, Docherty JP. A series of expert consensus guidelines. Behavioral Emergencies Treatment 2005. J Psychiatry Pract. 2005;13 (Supple 1): 5-108. 110-102. (PubMed) (Google Fellow) Kahn DA, Sachs GS, Printz DJ, Carpenter D, Docherty JP, Ross R. Medication For The Treatment of Bipolar Disorder 2000: A summary of expert consensus guidelines. J Psychiatry Pract. 2000;13:197–211. doi: 10.1097/00131746-200007000-00003. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kane JM, Leucht S, Carpenter D, Docherty JP. A series of expert consensus guidelines. Optimization of pharmacological treatment of psychotic disorders. Introduction: methods, comments and resumes. J Wedge Psychiatry. 2003;13 (Supple 12): 5-19. (PubMed) (Google Fellow) WW Fleishaker. Second-generation long-acting antipsychotic injections: a systematic review. Br J Psychiatry Suppl. 2009;13:S29-S36. (PubMed) (Google Fellow) Samaline L, Nurry A, Sharpeo T, Llorca. What is the evidence of the use of second-generation antipsychotic long-acting injections as a supportive treatment for bipolar disorder? North Jay Psychiatry. 2013. PubMedLambert M, De Marinis T, Pfeil J, Naber D, Schreiner A. Creating remission and good clinical functioning in schizophrenia: predictors of the best result with long-term risperidone long-term injection treatment. Evr Psychiatry. 2010;13:220–229. (PubMed) (Google Fellow) Emsley R, Oosthuizen P, Koen L, Niehaus DJ, Medori R, Rabinowitz J. Oral vs. Injectable Antipsychotic Therapy Early psychosis: after a special comparison of the two studies. Wedge Tr. 2008;13:2378–2386. doi: 10.1016/j.clinthera.2008.12.020. (PubMed) (CrossRef) No, no, no. No. Scholar'Emsley R, Oosthuizen P, Koen L, Niehaus DJ, Medori R, Rabinowitz J. Remission in patients with schizophrenia of the first episode, receiving guaranteed antipsychotic drugs: a study with risperidone long-term injection. It's Wedge Psychopharmacole. 2008;13:325–331. doi: 10.1097/YIC.0b013e32830c2042. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kim B, Lee SH, Choi TK, Su S, Kim YW, Lee E, Yook KH. The effectiveness of risperidone long-acting injections in the first episode of schizophrenia: in a naturalistic setting. Prog Neuropsychofarmak Biol Psychiatry. 2008;13:1231–1235. doi: 10.1016/j.pnpbp.2008.03.012. (PubMed) (CrossRef) No, no, no. (Google Fellow) Olivares JM, Alptekin K, Azorin JM, Canas F, Dubois V, Emsley R, Gorwood P, Haddad PM, Naber D, Papageorgiou G, Roca M, Thomas P, Martinez G, Schreiner A. Psychiatrists are aware of the commitment of antipsychotic drugs in patients with schizophrenia: results conducted across Europe. The patient prefers compliance. 2013;13:121–132. (Free PMC article) (PubMed) (Google Fellow) Samaline L, Charpeaud T, Blanc O, Heres S, Llorca. Clinics attitude to the use of long-acting injectable antipsychotic drugs. J Nerv Ment Dis. 2013;13(7):553-559. doi: 10.1097/NMD.0b013e31829829c4. (PubMed) (CrossRef) No, no, no. (Google Fellow) Heres S, Hamann J, Mendel R, Wickelmaier F, Pajonk FG, Leucht S, Kissling W. Determining the profile of optimal candidates for antipsychotic therapy depot cluster analysis. Prog Neuropsychofarmak Biol Psychiatry. 2008;13:1987–1993. doi: 10.1016/j.pnpbp.2008.09.025. (PubMed) (CrossRef) No, no, no. (Google Fellow) Weiden PJ, Kozma C, Grogg A, Locklear J. Partial compliance and risk of resostitalization among California Medicaid patients with schizophrenia. Serv Psychiatry. 2004;13:886-891. doi: 10.1176/appi.ps.55.8.886. (PubMed) (CrossRef) No, no, no. (Google Fellow) Gutierrez-Rojas L, Jurado D, Martinez-Ortega JM, Gurpegui M. Poor adherence to treatment associated with high relapse in bipolar disorder outpatient sample. J affects Disord. 2010;13:77–83. doi: 10.1016/j.jad.2010.05.021. (PubMed) (CrossRef) No, no, no. (Google Fellow) Hassan M., Lage MJ. The risk of rehospsitalization among patients with bipolar disorder who do not approach antipsychotic therapy after discharge from the hospital. Am J Health Syst Pharm. 2009;13:358-365. doi: 10.2146/ajhp080374. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kishimoto T, Agarwal V, Kishi T, Leucht S, Kane JM, Correll CU. Prevention of relapses in schizophrenia: a systematic review and meta-analysis of second-generation antipsychotics compared to the first generation of antipsychotics. Mole Psychiatry. 2013;13:53–66. doi: 10.1038/mp.2011.143. (Free PMC article) (PubMed) (CrossRef) No, no, no. (Google Fellow) Rummel-Kluge C, Komossa K, Schwarz S, H, Schmid F, Kissling W, Davis JM, Leucht S. Second-generation antipsychotic drugs and extrapyramidal side effects: systematic review and and from head to head comparison. Schizophrenic Bull. 2012;13:167–177. doi: 10.1093/schbul/sbq042. (Free PMC article) (PubMed) (CrossRef) No, no, no. (Google Fellow) Rummel-Kluge C, Komossa K, Schwarz S, Hunger H, Schmid F, Lobos CA, Kissling W, Davis JM, Leucht S. Head-to-head comparison of metabolic side effects of second-generation antipsychotic drugs in the treatment of schizophrenia: systematic review and meta-analysis. Schizophr Res. 2010;13:225-233. doi: 10.1016/j.schres.2010.07.012. (Free PMC article) (PubMed) (CrossRef) No, no, no. (Google Fellow) Grimaldi-Bensuda L, Ruilon F, Astroc B, Rossignol M, Benigno D, Falishard B, Limosin F, Bofis B, Vaiva G, Verdu H, et al Lee long-acting injectable risperidon make a difference in real-life treatment of schizophrenia? The results of the cohort of the general study of schizophrenia (CGS) Schizophr Res. 2012;13:187-194. doi: 10.1016/j.schres.2011.10.022. (PubMed) (CrossRef) No, no, no. (Google Fellow) Detke HC, McDonnell DP, Brunner E, zhao F, Sorsaburu S, Stefaniak VJ, Coria SA. Post-injectable delirium/sedation syndrome in patients with schizophrenia treatment with long-acting injections. I: Case analysis. BMC Psychiatry. 2010;13:43. (Free PMC article) (PubMed) (Google Fellow) Barnes TR. Evidence based on guidelines for pharmacological treatment of schizophrenia: recommendations of the British Association of Psychopharmacology. J Psychopharmacole. 2011;13:567–620. doi: 10.1177/0269881110391123. (PubMed) (CrossRef) No, no, no. (Google Fellow) Hassan A, Falcay P, Wobrock T, Lieberman J, Glentoge B, Gattaz WF, Thibault F, Moller HJ. World Federation of Societies of Biological Psychiatry (WFSBP) Guidelines for Biological Treatment of Schizophrenia, Part 2: Update 2012 on Long-Term Treatment of Schizophrenia and Management of Antipsychotic Induced Side Effects. World Biol Psychiatry. 2013;13:2–44. doi: 10.3109/15622975.2012.739708. (PubMed) (CrossRef) No, no, no. (Google Fellow) Moore TA, Buchanan RW, Buckley PF, Chilis JA, Conley RR, Crismon ML, Essock SM, Finnerty M, Marder SR, Miller DD, McEvoy JP, Robinson DG, Schoolboy NR, Sean JV, Stroup TS, Miller AL. Texas Algorithm Antipsychotic Algorithm for Schizophrenia: 2006 Update. J Wedge Psychiatry. 2007;13:1751–1762. doi: 10.4088/JCP.v68n1115. PubMed (CrossRef) Google Scholar: National Institute of Health and Clinical Excellence. Manage bipolar disorder in adults, children and adolescents in primary and secondary care. Alden Press UK. Edn. London: British Psychological Society and the Royal College of Psychiatrists; 2006. «Google Scholar»Goodwin GM. Evidence-based guidelines for the treatment of bipolar disorder: a revised second edition is the recommendation of the British Association of Psychopharmacology. J Psychopharmacole. doi: 10.1177/0269881109102919. (PubMed) (КроссРеф) Нет, нет, нет. (Google) - GS, D, L, L, M, O'Connor N, Newton LA, Walter G, Taylor A, Porter R, Mulder RT, Burke M. Clinical Practice Recommendations for Bipolar Disorder. Acta Psychiatry Scand Suppl. 2009;13:27-46. (PubMed) (Google Fellow) Fry M.A., Ha K, Kanba S, Kato T, McElroy SL, Ozerdem A, Vazquez G, Vieta E. International Consensus Group on The Prevention of Depression in Bipolar Disorder. J Wedge Psychiatry. 2011;13:1295–1310. doi: 10.4088/JCP.10123co1c. (PubMed) (CrossRef) No, no, no. (Google Fellow) Yatam LN, Kennedy SH, Parikh SV, Shaffer A, Beaulieu S, Alda M, O'Donovan C, Macqueen G, McIntyre RS, Sharma V, Ravindran A, Young LT, Milev R, Bond DJ, Frey BN, Goldstein BI, Lafer B, Birmaher B, Ha K, Nolen WA, Berk M. Canadian Mood and Anxiety Treatment Network (CANMAT) and international society of bipolar disorders (ISB) 2013;13:1–44. (PubMed) (Google Fellow) Grunze H, Vieta E, Goodwin GM, Bowden C, Licht RW, Moller HJ, Casper S. Guidelines of the World Federation of Biological Psychiatry Societies (WFSBP) on biological treatment of bipolar disorders: 2012 update on long-term treatment of bipolar disorder. World Biol Psychiatry. 2013;13:154–219. doi: 10.3109/15622975.2013.770551. (PubMed) (CrossRef) No, no, no. (Google Fellow) Kane JM, Aguglia E, Altamura AC, Auso Gutierrez JL, Brunello N, Fleischhacker WW, Gaebel W, Gerlach J, Guelfi JD, Kissling W Lapierre YD, Lindstrom E, Mendlevich J, Racagni G, Karulla LS, Schooler NR. The guidelines of the depot antipsychotic treatment for schizophrenia. European Conference on Neuropsyhopharmacology Consensus in Siena, Italy. Eur Neuropsyhorac. 1998;13:55–66. doi: 10.1016/S0924-977X (97)00045-X. PubMed (Google Scholar) Kane JM, Garcia-Ribera C. Clinical recommendations for long-acting antipsychotic injection. Br J Psychiatry Suppl. 2009;13:S63-S67. (PubMed) (Google Fellow) Stip E, Abdel-Baki A, Bloom D, Grignon S, Roy MA. Long-term action of injectable antipsychotic drugs: expert opinion of the Association of Psychiatrists-Psychiatrists of quebec. Maybe J Psychiatry. 2011;13:367–376. (PubMed) (Google Fellow) Keith SJ, Kane JM, Turner M, Conley RR, Nasrallah HA. Academic highlights: guidelines for the use of long-acting injectable atypical antipsychotic drugs. J Wedge Psychiatry. 2004;13:120–131. (PubMed) (Google Fellow) Hamann J, Mendel R, Ers S, Leucht S, Kiss W. How much more effective depot antipsychotics should be compared to oral antipsychotic drugs before they are prescribed? Eur Neuropsyhorac. 2010;13:276–279. doi: 10.1016/j.euroneuro.2010.01.001. (PubMed) (CrossRef) No, no, no. (Google Fellows) Fellows guidelines for the use of long-acting injectable atypical antipsychotics

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