

Guidance for Missed Maintenance Doses for Long-Acting Injectable Antipsychotics

This document provides suggestions and guidance on the administration of Long-Acting Injectable Antipsychotics (LAIs) for patients who miss their LAI on the specified administration date. It was adapted with permission from the Nevada Division of Public and Behavioral Health, courtesy of Leon Ravin, MD. The information was reviewed by the SMI Adviser LAI Center of Excellence.

Guidance for specific LAIs:

1. Abilify Maintena (aripiprazole monohydrate monthly LAI):

- Abilify Maintena doses should be administered not earlier than 26 days after the last injection.
- If the second or third doses are missed, Abilify Maintena should be administered not later than 5 weeks after the last injection.
- If the fourth or subsequent doses are missed, Abilify Maintena should be administered not later than 6 weeks after the last injection.
- References: Lexicomp; Prescribers Digital Reference

2. Aristada (aripiprazole lauroxil monthly, every 6 week, or 2-month LAI):

- The recommended ARISTADA dosing interval is monthly for the 441 mg, 662 mg and 882 mg doses, every 6 weeks for the 882 mg dose, or every 2 months for the 1064 mg dose and should be maintained.
- In the event of early dosing, an Aristada injection should not be given earlier than 14 days after the previous injection.
 - o Reference: Aristada Prescribing Information
- In the event of missed dose, an Aristada injection should be administered not later than the following:
 - o Monthly 441 mg not later than 6 weeks after the last injection;
 - o Monthly 662mg or 882 mg not later than 8 weeks after the last injection;
 - o 882 mg every 6 weeks, not later than 8 weeks after the last injection;
 - o 1064 mg every 2 months, not later than 10 weeks after the last injection.
 - o References: Aristada USPI; Lexicomp; Prescribers Digital Reference

3. Haldol Decanoate (haloperidol monthly LAI):

- If the second or third doses are missed, Haldol Decanoate should be administered not later than 5 weeks after the last injection.
- If the fourth or subsequent doses are missed, Haldol Decanoate should be administered not later than 8 weeks after the last injection.
- References:
 - o American Psychiatric Association. (2021). <u>The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia</u>. 3rd edition.



o Lexicomp; Prescribers Digital Reference

4. Invega Hafyera (paliperidone palmitate 6-month LAI):

- Timing of Missed Maintenance Dose
 - o Patients can be given up to 2 weeks before or 3 weeks after the scheduled 6-month dose.
 - O Missed dose more than 6 months and 3 weeks, up to but Less than 8 months since last dose, do not administer the next dose of Invega Hafyera, instead use a re-initiation regimen.
 - If the last dose of Invega Hafyera was 1,092 mg, give Invega Sustenna 156 mg in the deltoid muscle on day 1 and than administer Invega Hafyera 1,092 mg into gluteal muscle one month after day 1.
 - o If the last dose of Invega Hafyera was 1,560 mg, give Invega Sustenna 234 mg in the deltoid muscle on day 1 and then administer Invega Hafyera 1,560 mg into gluteal muscle one month after day 1.
 - Missed dose 8 months but up to and including 11 months since last dose, do not administer the next dose of Invega Hafyera, instead use a reinitiation regimen.
 - If the last dose of Invega Hafyera was 1,092 mg, give Invega
 Sustenna 156 mg in the deltoid muscle on day 1, Invega Sutenna
 156 mg in the deltoid muscle on day 8, and then administer Invega
 Hafyera 1,092 mg into the gluteal muscle one month after day 8.
 - If the last dose of Invega Hafyera was 1,560 mg, give Invega
 Sustenna 156 mg in the deltoid muscle on day 1, Invega Sustenna
 156 mg in the deltoid muscle on day 8, and then administer Invega
 Hafyera 1,560 mg into the gluteal muscle one month after day 8.
 - o Missed dose more than 11 months since last dose
 - Re-initiate treatment with Invega Sustenna as described in the prescribing information for Invega Sustenna. Invega Hafyera can then be resumed after Invega Sustenna has been administered for at least 4 months
- Reference: Invega Hafyera USPI

5. Invega Sustenna (paliperidone palmitate monthly LAI):

- Timing of Missed Maintenance Dose
 - 4-6 weeks since last injection resume regular monthly dosing as soon as possible with the patient's previously stabilized dose
 - o More than 6 weeks to 6 months since last injection resume the same dose the patient was stabilized on with a deltoid injection as soon as possible, then administer the same dose one week after at the same dose (deltoid injection). One month after the second injection, resume the previously stabilized dose via the deltoid or gluteal muscle. *Of note, if



- the patient was previously stabilized on 234 mg, the first two injections described above should be given at 156 mg.
- o More than 6 months restart with recommended initiation of 234 mg on Day 1 (deltoid), then 156 mg one week later (deltoid). Then, continue maintenance doses in the deltoid or gluteal muscle one month after the second loading dose.

References:

- o Invega Sustenna USPI
- o Invega Sustenna Prescribing Information
- o What should I do if a patient misses a scheduled dose of, or experiences a gap in their long-acting injectable (LAI) treatment?
- o Lexicomp; Prescribers Digital Reference

6. Invega Trinza (paliperidone palmitate 3-month LAI):

- Time of Missed Maintenance Doses
 - o Patients can be given the injection 2 weeks before or after the 3-month time point.
 - Missed dose 3.5 to 4 months since the last injection dose should be administered as soon as possible, then continue with the 3-month injections after this dose.
 - o 4 months to 9 months since last injection:
 - o If last Trinza dose was 273 mg, give Invega Sustenna 78 mg on day 1, and 78 mg on day 8 (both deltoid), then administer Trinza 273 mg one month after day 8 (gluteal or deltoid).
 - o If last Trinza dose was 410 mg, give Invega Sustenna 117 mg on day 1, and 117 mg on day 8 (both deltoid), then administer Trinza 410 mg one month after day 8 (gluteal or deltoid).
 - o If last Trinza dose was 546 mg, give Invega Sustenna 156 mg on day 1, and 156 mg on day 8 (both deltoid), then administer Trinza 546 mg one month after day 8 (gluteal or deltoid).
 - If last Trinza dose was 819 mg, give Invega Sustenna 156 mg on day 1, and 156 mg on day 8 (both deltoid), then administer Trinza 819 mg one month after day 8 (gluteal or deltoid).
 - > 9 months since last injection re-initiate treatment with 1-month paliperidone palmitate injection, then resume Trinza after the patient has been treated with 1-month paliperidone palmitate for at least four months.
- References: Invega Trinza USPI; <u>Invega Trinza Prescribing</u> <u>Information</u>; <u>Lexicomp</u>; <u>Prescribers Digital Reference</u>

7. Perseris (risperidone monthly LAI):

- Perseris may be administered not earlier than week 4 and not later than week 6 after the last injection.
- Reference: Perseris UPSI



8. Prolixin Decanoate (fluphenazine 2-4 week LAI):

- For those patients who are scheduled to receive Prolixin Decanoate injections every 4 weeks and who have received at least two previous injections as scheduled, the next dose should be administered not later than 8 weeks after the last injection.
- For those patients who are scheduled to receive Prolixin Decanoate injections every 2 or 3 weeks, medical staff should be consulted for any missed doses.
- References:
 - o American Psychiatric Association. (2021). <u>The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia</u>. 3rd edition
 - o Lexicomp; Prescribers Digital Reference

9. Risperdal Consta (risperidone 2-week LAI):

- Timing of missed maintenance doses depends on whether steady-state plasma concentrations have been reached. Steady state concentration is generally reached after 4 injections.
 - o Steady state plasma concentration achieved
 - 3-6 weeks since last injection give next dose of Risperdal Consta as soon as possible. Monitor for symptom recurrence.
 - > 6 weeks since last injection give next dose of Risperdal Consta as soon as possible with 3 weeks coverage with an oral antipsychotic (such as risperidone).
 - Steady-state plasma concentration not achieved given next dose of Risperdal Consta as soon as possible and provide oral antipsychotic (risperidone) coverage for 3 weeks.

References:

- o American Psychiatric Association. (2021). <u>The American Psychiatric Association practice guideline for the treatment of patients with schizophrenia</u>. 3rd edition.
- o Risperdal Consta USPI; <u>Risperdal Consta Prescribing</u> Information; Lexicomp; Prescribers Digital Reference

10. Zyprexa Relprevv (olanzapine LAI):

- Earliest time to next dose: no recommendations in the package insert; therapeutic level of the medication are still present 2 to 4 weeks after an injection and clinically relevant plasma concentrations may be present 2 to 3 months after the last injection.
- There are no recommendations on missed maintenance doses in the package insert, suggested approach to missed maintenance doses are offered below based on the clinical pharmacokinetics and current literature:
 - If a maintenance dose is missed and steady state has not reached (<3 months of therapy), administer the recommended loading dose for 8 weeks



o If a maintenance dose is missed, steady state has been reached (>3 months of therapy) and it has been <2 months since the last injection, administer the missed dose as soon as possible

• References:

- o Zyprexa Relprevv USPI
- o Carpenter J, Wong K. Long-acting injectable antipsychotics: What to do about missed doses. Current Psychiatry 2018;17(7):11-20.
- o Detke HC, Zhao F, Garhyan P, et al. Dose correspondence between olanzapine long-acting injection and oral olanzapine: recommendations for switching. Int Clin Psychopharmacol 2011;26(1):35-42.
- o Heres S, Kraemer S, Bergstrom RF, et al. Pharmacokinetics of olanzapine long-acting injection: the clinical perspective. Int Clin Psychopharmacol 2014;29(6):299-312.

Patients who have missed doses of their LAI and present outside the window of administration as described in this policy will require consultation with Medical Staff. Please refer to the References section for additional resources.