

Fact Sheet: Comparison of Long-Acting Injectable Antipsychotics

DRUG	VEHICLE	DOSAGE	T _{MAX} (DAYS)	T _{1/2} (DAYS)	LOADABLE
Fluphenazine decanoate	sesame oil	12.5 - 100 mg/2 weeks	0.3 - 1.5	14	yes
Haloperidol decanoate	sesame oil	25 - 400 mg/4 weeks	3 - 9	21	yes
Risperidone microspheres (Risperdal Consta®)	water	12.5 - 50 mg/2 weeks	21	3 - 6	no (21 - 28 days PO overlap)
Risperidone microspheres (Rykindo®)	water	25 - 50 mg/2 weeks	14 - 17	3 - 6	no (7 days PO overlap)
Risperidone subcutaneous (Perseris®)	water	90 - 120 mg/4 weeks max: 120mg/4 weeks	7 - 8	15 - 21	n/a (not necessary)
Risperidone subcutaneous (Uzedy®)	water	50 - 125 mg/4 weeks or 100 - 250 mg/8 weeks max: 125 mg/4 weeks or 250 mg/8 weeks	8 - 14	15 - 21	n/a (not necessary)
Aripiprazole monohydrate (Abilify Maintena®)	water	300 - 400 mg/4 weeks max: 400 mg/4 weeks	6.5 - 7.1	29.9 - 46.5	yes
Aripiprazole monohydrate (2-month - Asimtufii®)	water	720 - 960 mg/4 weeks max: 960 mg/4 weeks	28	???	no (14 days PO overlap)
Aripiprazole lauroxil (Aristada®)	water	441, 662, 882 mg/4 weeks; 882 mg/6 weeks; 1064 mg/8 weeks max: 882 mg/4 weeks	41 (single dose) 24.4 - 35.2 (repeated dosing)	53.9 - 57.2	No (start AL 675 mg IM + 30 mg PO OR 21 days oral overlap)
Aripiprazole lauroxil nanocrystal (Aristada Initio®)	water	675 mg once	27 (range: 16 - 35)	15 - 18 (single dose)	-
Paliperidone palmitate / monthly (Invega Sustenna®)	water	39 - 234 mg/4 weeks max: 234 mg/4 weeks	13	25 - 49	yes

Funding for SMI CalAdviser was made possible by the State of California Department of State Hospitals (DSH) (the Department), but does not necessarily represent the views of the Department or any of its employees except to the extent, if any, that it has formally been approved by the Department.

DRUG	VEHICLE	DOSAGE	T _{MAX} (DAYS)	T _{1/2} (DAYS)	LOADABLE
Paliperidone palmitate / 3-month (Invega Trinza®)	water	273 - 819 mg/4 weeks max: 819 mg/4 weeks	84 - 95 (deltoid) 118 - 139 (gluteal)	30 - 33	no
Paliperidone palmitate / monthly (Invega Hafyera®)	water	1092 - 1560 mg/4 weeks max: 1560 mg/4 weeks	148 - 159 (gluteal)	29-32	no

Table 1. Kinetic properties for the depot antipsychotics typically used in DSH. (adapted from Meyer JM Converting oral to long-acting injectable antipsychotics: a guide for the perplexed. CNS Spectrums (2017), 22, 17-27.)

DRUG	VEHICLE	DOSAGE	T _{MAX} (DAYS)	T _{1/2} (DAYS)	LOADABLE
Olanzapine pamoate (Zyprexa Relprevv®)	water	150 - 300 mg/2 weeks 300 - 405 mg/4 weeks max: 300 mg/2 weeks	7	30	yes
Paliperidone palmitate (Erzofri®)	water	39 - 351 mg/4 weeks max: 234 mg/2 weeks	3-9	21	yes

Table 2. Olanzapine pamoate and paliperidone palmitate (Erzofri)

Dopamine antagonist LAIs which should be loaded:

- haloperidol decanoate
- fluphenazine decanoate
- olanzapine pamoate
 - Approximately 2% of patients in the clinical trials for Relprevv® experienced severe sedation often requiring hospitalization within 30 minutes to 5 hours after receiving the injection.
 - The package insert outlines a mandatory 3-hr observation period for post-injection sedation or delirium.
 - The risk for death associated with Relprevv® is 1 in 1,000.
 - Olanzapine pamoate is not available within the California Department of State Hospitals.
- paliperidone palmitate (Invega Sustenna® and Erzofri®)
 - Aside from an initial loading dose of 351 mg IM into the deltoid, maintenance dosing of Erzofri® is the same as that for Invega Sustenna®.

The initial dosage of ERZOFRI is 351 mg on treatment Day 1 administered in the deltoid muscle. Following the initial dose, monthly dose can be administered in either the deltoid or gluteal muscle [see Clinical Pharmacology (12.3)].

Table 1: Dosage Recommendations for ERZOFRI

Indication	Initial Dose (deltoid) Day 1	Monthly Dosage* (deltoid or gluteal)	Maximum Monthly Dosage
Schizophrenia	351 mg	39 mg to 234 mg ^b	234 mg
Schizoaffective disorder	351 mg	78 mg to 234 mg ^c	234 mg

Dopamine partial agonist LAIs which can be loaded:

- aripiprazole monohydrate (Abilify Maintena®) – for loading and maintenance
- aripiprazole lauroxil nanocrystal (Aristada Initio®) – for loading only as a single dose of 675 mg (**NOT** for repeated dosing)

Comparison of D₂-blocking LAIs: Consta®/Sustenna® vs. Haldol/Prolixin Decanoate

Risperdal Consta®/Invega Sustenna®

- Pros
 - Saline-based (less painful, less likely to cause sterile abscess at injection site)
- Cons
 - maximum LAI dose is *half* of max oral dose
 - Inadequate D₂ blockade → decompensation
 - P-glycoprotein pump (PGP) substrate
 - ↑ prolactin levels → problems associated with hyperprolactinemia (galactorrhea, etc.)
 - costs \$\$\$

Haldol decanoate/Prolixin decanoate

- Cons
 - Sesame oil base (more painful and may cause sterile abscess at injection site)
- Pros
 - LAI dose can achieve oral dose strength
 - greater opportunity for D₂ blockade → better control of positive psychotic symptoms
 - Risk for hyperprolactinemia is less than Consta / Invega Sustenna
 - costs \$

References

1. DSH Psychotropic Medication Operational Procedures, Chapter 9. Depot Antipsychotic Medications.
2. Meyer JM Converting oral to long-acting injectable antipsychotics: a guide for the perplexed. CNS Spectrums (2017), 22, 17-27.
3. Meyer JM Stahl's Handbooks: The Clinical Use of Antipsychotic Plasma Levels; <https://doi.org/10.1017/9781009002103>