

## Depot or long-acting antipsychotic medication

For our patients, missing medication is likely to result in deterioration in mental state with increased risk to themselves and others. This can be extremely damaging and is also likely to affect their ability to comply with precautions around reducing Covid-19 transmission and spread.

We are also mindful of the concerns staff may have in administering such medication given the close contact involved. Consider depot administration as a high transmission risk situation.

Please see the advice below regarding depot prescription and administration:

- Increase the dosing interval of the depot where possible, e.g. instead of weekly or two weekly dosing, increase to four-weekly dosing.
- Remember that a longer dosing interval does not diminish the effectiveness of the drug as long as the overall dose remains the same.
- For paliperidone monthly patients consider switching to paliperidone 3-monthly long-acting depot, where possible. This will reduce the number of close contacts between staff and patients.
- Consider that all patients and staff are at risk of being carriers or have Covid-19 and close contact situations such as depot administration should be done only using personal protective equipment. Explain what you are doing and why and do this before meeting the patient so as not to alarm them.
- For patients with suspected or confirmed Covid-19, the depot should be given at home by someone wearing protective clothing using barrier nursing techniques.
- Please see attached tables for information about depot medications. This will help you make your prescribing decisions about dose frequency and what to do about missed doses.
- Note the following about the meaning of “return to monthly schedule”. So, if a person receives their depot dose on the 1<sup>st</sup> of every month and the depot is given late, i.e. instead of receiving it on 1<sup>st</sup> March, they receive it on 7<sup>th</sup> March, then the next dose is still due on the 1<sup>st</sup> April. That is, for monthly injections, ensure that even if you are late giving the injections, patients should still receive 12 injections a year.

**Table 1 Official guidance on depot dose and interval**

<b>Drug</b>	<b>UK Trade Name</b>	<b>Licensed injection site</b>	<b>Test dose (mg)</b>	<b>Dose range (mg/week)</b>	<b>Dosing interval (weeks)</b>
Aripiprazole	(Abilify Maintena)	Deltoid or gluteal	Not required**	300-400mg monthly	Monthly
Flupentixol Decanoate	(Depixol)	Buttock or thigh	20	50mg every 4 weeks to 400mg a week	2-4
Haloperidol Decanoate	(Haldol)	Gluteal region	25*	50-300mg every 4 weeks	4
Olanzapine pamoate	(ZypAdhera)	Gluteal	Not required**	150mg every 4 weeks to 300mg every 2 weeks	2-4
Paliperidone palmitate (monthly)	(Xeplion)	Deltoid or gluteal	Not required**	50-150mg monthly	Monthly
Paliperidone palmitate (monthly)	(Trevicta)	Deltoid or gluteal	Not required**	175-525mg every 3 months	3-monthly
Pipothiazine Palmitate	(Piportil)	Gluteal region	25	50-200mg every 4 weeks	4
Risperidone microspheres	(Risperidal Consta)	Deltoid or gluteal	Not required**	25-50mg every 2 weeks	2
Zuclopenthixol Decanoate	(Clopixol)	Buttock or thigh	100	200mg every 3 weeks to 600mg a week	2-4

\*No test dose specified by manufacturer

\*\*Prior use of oral drug desirable (essential for aripiprazole and risperidone) to assess tolerability and effectiveness

\*\*\*Prior use of monthly paliperidone required

#### Notes

- *Pipothiazine palmitate is not licensed in the UK. The strength of the unlicensed formulation approved for use in the Trust is 100mg in 4mL. The maximum volume for injection per site is 4mL. Therefore, any doses above 100mg should be administered in 2 separate injection sites (two buttocks).*
- *The licensed maximum single dose to be given at any one time for zuclopenthixol decanoate is 600mg and for flupentixol decanoate 400mg.*
- *When extending the interval of a depot consider the volume of injection required, the dose required and the possibility that adverse effects may worsen (e.g. EPSEs, postural hypotension, sedation).*

*Please contact Medicines Information (020 3228 2317) for further advice.*

**Table 2 Official guidance on missed doses of long acting injections (depots)**

**Aripiprazole LAI (Abilify Maintena®)<sup>1</sup>**

<b>If 2<sup>nd</sup> or 3<sup>rd</sup> dose is missed and time since last injection is:</b>	<b>Action</b>
> 4 weeks and < 5 weeks	The injection should be administered as soon as possible and then resume monthly injection schedule.
> 5 weeks	Concomitant oral aripiprazole should be restarted for 14 days with next administered injection and then resume monthly injection schedule.
<b>If 4<sup>th</sup> or subsequent doses are missed (i.e., after attainment of steady state) and time since last injection is:</b>	<b>Action</b>
> 4 weeks and < 6 weeks	The injection should be administered as soon as possible and then resume monthly injection schedule.
> 6 weeks	Concomitant oral aripiprazole should be restarted for 14 days with next administered injection and then resume monthly injection schedule.

**Paliperidone 1-monthly LAI (Xeplion®)<sup>2</sup>**

<b>2<sup>nd</sup> initiation dose (100mg) and time since last injection is:</b>	<b>Action</b>
< 4 weeks	100mg should be injected into the deltoid muscle as soon as possible. <b>A third paliperidone injection of 75 mg (deltoid or gluteal) should be administered 5 weeks after the first injection (regardless of the timing of the second injection).</b> The normal monthly cycle of injections in either the deltoid or gluteal muscle of 50mg to 150mg based on patient tolerability and/or efficacy should be followed thereafter.
> 4 weeks and < 7 weeks	Day 1 - 100mg deltoid injection asap Day 8 - 100mg deltoid injection Day 36 - resume the normal monthly cycle of injections (deltoid or gluteal) based on patient tolerability and/or efficacy.
> 7 weeks	Day 1 - 50mg deltoid injection asap Day 8 - 100mg deltoid injection Day 36 - Resume the normal monthly cycle of injections (deltoid or gluteal) based on patient tolerability and/or efficacy.
<b>Monthly maintenance dose and time since last injection is:</b>	<b>Action</b>
< 6 weeks	Administer depot as soon as possible
> 6 weeks and < 6 months	<b>50mg – 100mg:</b> Day 1 - <i>deltoid</i> injection at same dose patient was previously stabilised on asap Day 8 - another <i>deltoid</i> injection (same dose) Day 36 - resume the normal monthly cycle of injections (deltoid or gluteal) based on individual patient tolerability and /or efficacy. <b>150mg:</b> Day 1 - 100mg <i>deltoid</i> injection asap Day 8 - 100mg <i>deltoid</i> injection Day 36 - resume the normal monthly cycle of injections (deltoid or gluteal) based on individual patient tolerability and/or efficacy.
> 6 months	Day 1 - 150mg deltoid injection asap Day 8 - 100mg deltoid injection Day 36 - resume the normal monthly cycle of injections (deltoid or gluteal) based on individual patient tolerability and / or efficacy.

### Paliperidone 3-monthly LAI (Trevicta®)<sup>3</sup>

#### Missed doses

If scheduled dose is missed and the time since last injection is :	Action
> 3½ months up to 4 months	The injection should be administered as soon as possible and then resume the 3-monthly injection schedule.
4 months to 9 months	<b>Use the recommended re-initiation regimen shown in the table below.</b>
> 9 months	Re-initiate treatment with 1-monthly paliperidone palmitate injectable as described in the prescribing information for that product. TREVICTA can then be resumed after the patient has been adequately treated with 1-monthly paliperidone palmitate injectable preferably for four months or more.

#### Recommended re-initiation regimen after missing 4 months to 9 months of TREVICTA

If the last dose of TREVICTA was:	Administer 1-monthly paliperidone palmitate injectable, two doses one week apart (into deltoid muscle)		Then administer TREVICTA (into deltoid or gluteal muscle)
	Day 1	Day 8	1 month after day 8
175mg	50mg	50mg	175mg
263mg	75mg	75mg	263mg
350mg	100mg	100mg	350mg
525mg	100mg	100mg	525mg

### Risperidone LAI (Risperidone Consta®)<sup>4</sup>

Time since last injection	What happens to risperidone plasma levels	Plan
2-6 weeks	Therapeutic risperidone plasma levels remain	Administer depot asap
> 6 weeks but < 7 weeks	Risperidone plasma level starts to decrease and may become sub-therapeutic after a further 1-3 weeks.	Administer depot as usual but monitor mental state closely and, if necessary, give oral risperidone
> 8-9 weeks	All risperidone will have been eliminated from the body.	Administer depot asap and give oral risperidone for at least 3 weeks until plasma level becomes therapeutic again

### Olanzapine LAI (Zypadhera®)<sup>5</sup>

The absorption half-life for OLAI is 30 days. Therefore, each injection releases measurable olanzapine for 5–6 months.

Target oral olanzapine dose	Recommended starting dose of ZYPADHERA	Maintenance dose after 2 months of ZYPADHERA treatment
10mg /day	210mg /2weeks or 405mg /4 weeks	150mg /2weeks or 300mg /4weeks
15mg /day	300mg /2weeks	210mg/ 2weeks or 405mg /4weeks
20mg /day	300mg /2weeks	300mg /2weeks

The manufacturer of Zypadhera® does not provide advice on missed doses.

## References

1. Medicines.org.uk. (2016). Abilify Maintena 300mg & 400mg powder and solvent for prolonged-release suspension for injection and suspension for injection in pre-filled syringe- Summary of Product Characteristics (SPC) -(eMC). [online] Available at: <http://www.medicines.org.uk/emc/medicine/31386> [Accessed 09/12/2016].
2. Medicines.org.uk. (2016). Xeplion 25 mg, 50 mg, 75 mg, 100 mg and 150 mg prolonged-release suspension for injection- Summary of Product Characteristics (SPC) -(eMC). [online] Available at: <http://www.medicines.org.uk/emc/medicine/31329> [Accessed 09/12/2016].
3. Medicines.org.uk. (2016). TREVICTA 175mg, 263mg, 350mg, 525mg prolonged release suspension for injection – Summary of Product Characteristics (SPC)- (eMC). [online] Available at: <http://www.medicines.org.uk/emc/medicine/32050> [Accessed 09/12/2016].
4. Medicines.org.uk. (2016). RISPERDAL CONSTA 37.5 mg powder and solvent for prolonged-release suspension for intramuscular injection – Summary of Product Characteristics (SPC) -(eMC). [online] Available at: <http://www.medicines.org.uk/emc/medicine/30449> [Accessed 09/12/2016].
5. Medicines.org.uk. (2016). ZYPADHERA 210 mg, 300 mg and 405 mg, powder and solvent for prolonged release suspension for injection – Summary of Product Characteristics (SPC) -(eMC). [online] Available at: <http://www.medicines.org.uk/emc/medicine/21361> [Accessed 09/12/2016].
6. Heres S, Kraemer S, Bergstrom RF and Detke HC (2014). Pharmacokinetics of olanzapine long-acting injection: the clinical perspective. International Clinical Psychopharmacology 2014, 29:299–312

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