71 - Differences between LAIs

Differences between LAIs

76 The Maudsley® Prescribing Guidelines in Psychiatry CHAPTER 1 ■ ■Adjust doses only after an adequate period of assessment Attainment of peak plasma levels, therapeutic effect and steady--state plasma levels are all delayed with LAI antipsychotic medications, compared with oral antipsychotics. Doses may be reduced if adverse effects occur but should only be increased after careful assessment over at least 1 month, and preferably longer. Note that with most LAI antipsychotic preparations, at the start of treatment, plasma drug levels increase over several weeks to months without any increase in the dosage. This is due to accumulation: steady state is only achieved after at least 6–8 weeks. Dose increases during this initial period are therefore illogical and impossible to evaluate properly. With continued LAI antipsychotic treatment, the monitoring and recording of therapeutic efficacy, adverse effects and any impact on physical health are recommended, although in clinical practice there seems to be a relatively low frequency of assessment of adverse effects.42 Table 1.8 gives doses and frequencies for LAI antipsychotic medications for adults. ■ ■Adding an oral antipsychotic medication risks a high-dose prescription The regular prescription of an oral antipsychotic medication in addition to an LAI antipsychotic preparation was once common with LAI FGAs.22,43 While this may be a possible strategy for the control of breakthrough symptoms and may offer greater flexibility in dosage titration, the safety and tolerability of such a combination are uncertain, particularly over the longer term.44 The co--prescription of an LAI and oral antipsychotic medication may well result in a possibly inadvertent high-dose prescription, with an increased adverse effect burden and implications for physical health monitoring.10,23 Differences between LAIs A 2021 network meta-analysis of 86 RCTs45 comparing LAIs with each other, with placebo or with oral antipsychotic medication concluded that the LAI formulations of paliperidone (3-month formulation), aripiprazole, olanzapine and paliperidone (1-month formulation) had the largest effect sizes and greater certainty of evidence for both relapse prevention and acceptability. The LAI SGAs, aripiprazole, paliperidone, risperidone and olanzapine, have generally been reported to have comparable efficacy, although they vary in their liability for particular adverse effects, such as weight gain, metabolic effects, EPS and raised plasma prolactin.46–49 For example, LAI paliperidone is associated with substantial increases in serum prolactin48 and LAI olanzapine can cause significant weight gain and is associated with a post- injection delirium/sedation syndrome, assumed to be caused by unintended partial intravascular injection or blood vessel injury.50,51 Details on dosing of individual SGAs are given elsewhere in this chapter.

Table 1.8 Long-acting injectable antipsychotic medications – doses and frequencies.* Drug UK trade name Licensed injection site Test dose (mg) Dose range (mg/day or week or month) Dosing interval (weeks) Comments Aripiprazole Abilify Maintena Buttock Not required** 300–400mg monthly Monthly Does not increase prolactin Aripiprazole Abilify Asimtufil Gluteal Not required** 720–960mg every 2 months Can be started after oral loading or as continuation of monthly injections Aripiprazole Aristada Initio Deltoid or gluteal Not required** 675mg Single dose, not for repeat dosing Given together with 30mg dose of oral aripiprazole. The first Aristata injection can be given on the same day or up to 10 days after Aristada Initio. Aripiprazole Aristada Deltoid† or gluteal Not required** 441mg, 662mg monthly, 882mg every 4–6 weeks and 1062mg every 2 months 4–8 Can be given with 30mg dose of oral aripiprazole and 675mg Aristada Initio or continue with oral aripiprazole for 21 consecutive days Flupentixol decanoate Depixol Buttock or thigh 50mg every 4 weeks to 400mg a week 2–4 Maximum licensed dose is high relative to other LAIs Fluphenazine decanoate Modecate Gluteal region 12.5 12.5mg every 2 weeks to 100mg every 2 weeks 2–5 High risk of EPS Haloperidol decanoate Haldol Gluteal region 25†† 50–300mg every 4 weeks High risk of EPS Olanzapine pamoate ZypAdhera Gluteal Not required** 150mg every 4 weeks to 300mg every 2 weeks 2–4 Risk of post-injection syndrome Paliperidone palmitate (monthly) Xeplion Deltoid or gluteal Not required** 50–150mg monthly Monthly Loading dose required at treatment initiation Paliperidone palmitate (3-monthly) Trevicta Deltoid or gluteal Not required‡ 175–525mg every 3 months 3 months Not suitable for acutely agitated patients Paliperidone palmitate (6-monthly) Byannli Gluteal region Not required§ 700–1000mg every 6 months 6 months Contraindicated in mild renal impairment (creatinine clearance ≥50 to ≤80 mL/minute) (Continued)

Table 1.8 (Continued) Drug UK trade name Licensed injection site Test dose (mg) Dose range (mg/day or week or month) Dosing interval (weeks) Comments Pipothiazine palmitate Piportil Gluteal region 50–200mg every 4 weeks Lower incidence of EPS (relative to other FGAs) Risperidone microspheres Risperidal Consta Deltoid or gluteal Not required** 25–50mg every 2 weeks Drug release delayed for 2–3 weeks – oral therapy required Risperidone Perseris Abdomen Not required** 90–120mg every month Given subcutaneously in the abdomen Risperidone Okedi Deltoid or gluteal Not required** 75–100mg every 28 days Loading dose not required at treatment initiation Zuclopenthixol decanoate Clopixol Buttock or thigh 200mg every 3 weeks to 600mg/week 2–4 High risk of EPS * Refer to manufacturer's official documentation for full details. ** Tolerability and response to the oral preparation should be established before administering the LAI. With respect to paliperidone LAI, oral risperidone can be used for this purpose. † Aripiprazole 441mg dose only. †† Test dose not stated by manufacturer. ‡ May not be started until the completion of 4 months' treatment with monthly LAI. § For patients stabilised on 100mg or 150mg of monthly LAI for at least 4 months or for patients given at least one injection of 350mg or 525mg of 3-monthly LAI. EPS, extrapyramidal symptoms; FGA, first-generation antipsychotic; LAI, long-acting injection. Notes: The doses in this table are for adults. Check formal labelling for appropriate doses in the elderly. After a test dose, wait 4–10 days then titrate to maintenance dose according to response (see product information for individual drugs). Avoid using shorter dose intervals than those recommended except in exceptional circumstances (e.g. long interval necessitates high volume [>3–4 mL?] injection). Maximum licensed single dose overrides longer intervals and lower volumes. For example, zuclopenthixol 500mg every week is licensed whereas 1000mg every 2 weeks is not (more than the licensed maximum of 600mg is administered). Always check official manufacturer's information.

Revision #1
Created 2026-01-04 20:13:54 UTC by Omar Ayman
Updated 2026-01-04 20:13:54 UTC by Omar Ayman