BNSSG Shared Care Guidance

Section 1: Drug Information

Drug

Typical depot antipsychotics

Antipsychotic	Brand	Excipients
Flupentixol decanoate	Depixol Conc® 100 mg/ml solution for injection ampoules	Thin vegetable oil 'Viscoleo' (fractionated coconut oil).
	Depixol Low Volume® 200 mg/ml solution for injection ampoules	
	Depixol® 20 mg/ml solution for injection	
	Psytixol® 100 mg/ml injection	Triglycerides, medium chain
	Psytixol® 20 mg/ml injection	
	Psytixol® 200 mg/ml injection	
Haloperidol decanoate	Haldol Decanoate® 50 mg/ml solution for injection ampoules	Benzyl alcohol Sesame oil.
	Haldol Decanoate® 100 mg/ml solution for injection ampoules	
Zuclopenthixol decanoate	Clopixol® 200 mg/ml solution for injection ampoules	Thin vegetable oil (fractionated coconut oil)
	Clopixol Conc® 500 mg/ml solution for injection ampoules	

Amber ***one month***

Indication

For the maintenance treatment in adult patients already stabilised on oral therapy, as follows:

Flupentixol decanoate	Haloperidol decanoate	Zuclopenthixol decanoate
Schizophrenia and other psychoses	Schizophrenia and schizoaffective disorder	Schizophrenia and paranoid psychoses

Section 2: Treatment Schedule

Usual dose and frequency of administration
(Please indicate if this is licensed or unlicensed and any relevant dosing information)

The licensed doses for these neuroleptics are as follows:

Depot neuroleptic	Usual Dose	Elderly/frail patients[1]	Maximum dose (weekly equivalent)	Maximum dose that can be administered at once[2]	Frequency of dose
Flupentixol decanoate	50-300 mg	¼ - ½ initial starting dose & 40mg/ 2 weeks maximum	400 mg	400 mg	every 2-4 weeks
Haloperidol decanoate	50-200 mg, but see SmPC	12.5 to 25 mg initial dose – 25-75mg likely	75 mg	300 mg	every 4 weeks (adjustable based on response)
Zuclopenthixol decanoate	200-500 mg	¼ - ½ initial starting dose & 200mg/ 2 weeks maximum	600 mg	600 mg	1-4 weeks

[1] Maximum doses in elderly taken from individual SmPCs and best practice in the Maudsley Guidelines

[2] The maximum dose that can be administered at once often dictates the frequency as which the depot can be prescribed. For example, zuclopenthixol 500mg weekly could not be given fortnightly as 1000mg exceeds the maximum that can be administered at once.

Doses of 2-3 mL often require administration at two sites – consult SmPC for full details.

Dose Adjustments

With all IM Injections

With concurrent use of potent inducers/inhibitors of CYP3A4 and/or CYP2D6, see drug interactions and product SmPC for further details.

Hepatic impairment

Manufacturer's advice caution – often with lower recommended starting doses. See SmPCs for further details.

Renal impairment

Manufacturer's advice caution – often with lower recommended starting doses. See SmPCs for further details.

Gender

No dosage adjustment is required for gender.

<table>
<tr><td></td><td>Smoking status
No dosage adjustment is required for smokers.
Ethnicity
No dosage adjustment is required for different ethnic groups.</td></tr>
<tr><td>Route and formulation</td><td>
<table>
<tr><th>Flupentixol decanoate</th><th>Haloperidol decanoate</th><th>Zuclopenthixol decanoate</th></tr>
<tr><td>Deep intramuscular injection into the upper outer buttock or lateral thigh, as solution for injection[1]</td><td>Alternate deep intramuscular injection in the gluteal region, as solution for injection[1]</td><td>Deep intramuscular injection into the upper outer buttock or lateral thigh, as solution for injection[1]</td></tr>
</table>
[1] As with all oil-based injections it is important to ensure, by aspiration before injection, that inadvertent intravascular entry does not occur.
</td></tr>
<tr><td>Duration of treatment</td><td>If discontinuation is sought, antipsychotics should be tapered slowly - seek the advice of the secondary care specialist.
BNF: As for all antipsychotic drugs, there is a high risk of relapse if medication is stopped after 1–2 years. Withdrawal of antipsychotic drugs after long-term therapy should always be gradual and closely monitored to avoid the risk of acute withdrawal syndromes or rapid relapse. Patients should be monitored for 2 years after withdrawal of antipsychotic medication for signs and symptoms of relapse.</td></tr>
</table>

Section 3: Monitoring

Please give details of any tests that are required before or during treatment, including frequency, responsibilities (please state whether they will be undertaken in primary or secondary care), cause for adjustment and when it is required to refer back to the specialist.

Baseline tests - where appropriate

Baseline Tests (normally completed by secondary care):

Monitoring	Frequency
Prolactin concentration	Initiation
Weight (plotted on a chart), waist circumference and BMI	Initiation
Blood pressure and pulse	Initiation + weekly for 6 weeks
HbA1c and/or fasting blood glucose (for patients with diabetes continue as per NICE guidance)	Initiation
LFTs, U&Es, FBC and fasting lipid profile (cholesterol, HDL and triglycerides)	Initiation
Creatinine phosphokinase (CPK)	Initiation + if clinically indicated (i.e. Neuroleptic Malignant Syndrome (NMS) suspected)
ECG	Specialist to perform CV risk assessment and undertake ECG at initiation, in the following circumstances: • Use of haloperidol decanoate • personal history, or family history of cardiovascular disease • hypertension • co-prescribed medicines known to cause ECG changes • Prescribed high-dose antipsychotic therapy (HDAT, where the combined doses of neuroleptics would exceed the equivalent licensed maximum dose).

Subsequent tests - where appropriate *(Please indicate who takes responsibility for taking bloods and interpreting results)*

Test	Frequency	Who by	Interpreted by
Weight/BMI and waist circumference	At 3 months.	2º care	2º care
	Annually.	1º care	1º care - Plotted on chart.
BP and pulse	At 3 months.	2º care	2º care
	Annually.	1º care	1º care
Lipids	At 3 months.	2º care	2º care
	Annually.	1º care	1º care. Can be repeated again if there are concerns. (inc. cholesterol and triglycerides).
HbA1c	At 3 months.	2º care	2º care
	Annually.	1º care	1º care. 3-6 monthly for those with a higher baseline risk of developing diabetes or if concerns present.
Side-effect monitoring	At 3 months.	2º care	2º care
	Annually.	1º care	1º care. Including (but not limited to) assessment of movement disorders, enquiries about sexual side effects and menstrual changes (if applicable).
Prolactin (**Only in symptomatic[1] individuals** (or sooner where indicated).	At 3 months.	1º Care	1º Care. A baseline of >1000 mIU/L would require further investigation and possible referral to endocrinology. Calcium and vitamin D Rx should be considered and started by the GP.
U&Es	Annually.	1º Care	1º Care. Increased cerebral sensitivity to antipsychotics noted in severe renal impairment. Hypokalaemia or hypomagnesia can predispose to ECG abnormalities.
LFTs	Annually.	1º Care	1º Care.
FBC	Annually.	1º Care	1º Care.
ECG	Annually, or sooner if CV risk assessment changes, or after each dose change in high-risk patients	1º Care	1º Care. Consult cardiology/AWP specialist if abnormalities detected

[1] Raised prolactin (above threshold) - Symptoms in women include amenorrhoea, menstrual disorders, galactorrhoea and reduced libido and in men, reduced libido, impotence and gynaecomastia. The longer the patient is exposed to hyperprolactinaemia, the greater the risk of reduced bone density and hypogonadism.

Section 4: Side Effects

Please list only the most pertinent side effects and management. Please provide guidance on when the GP should refer back to the specialist. For everything else, please see BNF or SPC.

Side effects and management

The majority of adverse drug reactions (ADRs) are dose dependent. Their frequency and severity decline during continued treatment. A summary of typical ADRs for antipsychotics are presented below. A complete list of these can be found for the individual medicines at the eMC.

N.b. Older people require close supervision because they are especially prone to experience ADRs such as sedation, hypotension, confusion and hyperthermia.

ADR	Action/management
Very common/common	
Akathisia, parkinsonism and Dystonia	These extrapyramidal side-effects (EPSE) may develop, especially in the early phase of treatment – to manage the dose can be reduced, anticholinergic medicines such as procyclidine can be used for dystonias and parkinsonisms, while a short course of benzodiazepines can be used for akathisia. Seek specialist advice for management.
Increased appetite and weight gain.	An increase of ≥ 5% above baseline after a month of treatment. Offer a combined healthy eating and physical activity programme. Manage in line with NG246 obesity prevention.
Insomnia and agitation (Flupentixol).	Advice patient not to drive or operate heavy machinery. Seek specialist advice is problematic.
Sedation (Haloperidol and zuclopenthixol)	Advice patient not to drive or operate heavy machinery. Seek specialist advice is problematic.
Visual disturbance	If affected, do not drive or use machinery until (likely) ADR wears off.
Constipation	Recommend a high fibre diet. Consider adding a bulk-forming and / or stimulant laxative.
Uncommon/Rare	
Hyperglycaemia and hyperlipidaemia.	Measure raised blood glucose or HbA1c from upper threshold. Manage in line with NG238 - Lipid modification and PH38 - Type 2 diabetes: prevention in people at high risk. Monitor closely. Refer concerns to a psychiatrist.
Abnormal ECG, including arrhythmias such as QTc prolongation.	Consult AWP Specialist or cardiologist for advice. Causes of QTc prolongation include medicines* (see *Interactions* below), hypokalaemia, hypomagnesia, genetic predisposition, and a history of cardiac disease. Use with caution in dementia and patients with risk factors for stroke.

<table>
<tr><td></td><td>
<table>
<tr><td>Raised prolactin.</td><td>Presents in women as amenorrhoea, menstrual disorders, galactorrhoea and reduced libido. Presents in men as reduced libido, impotence and gynaecomastia.

Prolonged hyperprolactinaemia can cause osteoporosis and hypogonadism - treat with calcium and vitamin D as appropriate.

Refer to specialist for advice on management.</td></tr>
<tr><td>Tardive dyskinesia (TD)</td><td>A wide variety of movements can occur such as: lip smacking or chewing, tongue protrusion (‘fly catching’), choreiform hand movements and pelvic thrusting. Can lead to difficulty in speaking, eating or breathing. Can be worse under stress. Dystonias occur early on in treatment, while TD is more common following chronic use.

If this EPSE* develops, promptly discuss with a psychiatrist. Do not treat with procyclidine or antimuscarinics.</td></tr>
<tr><td colspan="2">Very rare/Unknown</td></tr>
<tr><td>Neuroleptic malignant syndrome (NMS)</td><td>NMS symptoms include fever, sweating, rigidity, confusion, fluctuating blood pressure or oculogyric crisis (see special warnings in SPC). Patients with pre-existing organic brain syndrome, mental retardation, and opiate and alcohol abuse are overrepresented among fatal cases. If NMS is suspected, stop the antipsychotic immediately and call for ambulance. Inform AWP specialist.</td></tr>
</table>
Haloperidol decanoate contains sesame oil and benzyl alcohol; zuclopenthixol decanoate and flupentixol decanoate contain fractionated coconut oil – these may rarely cause severe allergic reactions – check patients allergy status prior to prescribing or administration.
</td></tr>
<tr><td>Referral back to specialist</td><td>

Persistent side effects unresolved by reducing dose, or which are intolerable to the patient or are of concern.
Tardive dyskinesia
Hyperprolactinaemia - Reduce dose or alternative oral antipsychotic may be necessary. Refer to specialist team for advice.

</td></tr>
</table>

Section 5: Other Issues

(e.g. Drug Interactions, Contra-indications, Cautions, Special Recommendations)

Please list only the most pertinent action for GP to take (For full list please see BNF or SPC)

Issues

1) Prescribing.

When prescribing, dispensing, or administering, check that the correct preparation is used—the preparation usually used in hospital for the rapid control of an *acute episode* should **not be confused with depot preparations**, which are used in the community or clinics for *maintenance treatment*. Zuclopenthixol **decanoate** has been confused with zuclopenthixol **acetate** – care must be taken to ensure that the correct medication is prescribed and dispensed. Depots should be prescribed as the medicine NOT the brand; Clopixol® and Depixol® are frequently confused leading to incidents.

2) Suicidal ideation

The occurrence of suicidal behaviour is inherent in psychotic illnesses and in some cases has been reported early after initiation or switch of antipsychotic therapy. Patients and their caregivers should be asked to monitor for any clinical worsening, suicidal behaviour or thoughts and unusual changes in behaviour and to seek medical advice immediately if these symptoms present, - particularly in patients <25 years of age. Symptoms may continue early after discontinuation.

A summary of typical contraindications, cautions and interactions for antipsychotics are presented below. A complete list of these can be found at the eMC.

3) Contraindications – specific antipsychotics

Medicine	Contra-indication
Flupentixol decanoate	Circulatory collapse, depressed level of consciousness due to any cause (e.g. intoxication with alcohol, barbiturates or opiates), coma. Not recommended for excitable or agitated patients.
Haloperidol decanoate	• Comatose state. • Central nervous system (CNS) depression. • Parkinson's disease. • Recent acute myocardial infarction. • Dementia with Lewy bodies. • Progressive supranuclear palsy. • Uncorrected hypokalaemia. • Uncompensated heart failure. • Concomitant treatment with medicinal products that prolong the QT interval. • Known QTc interval prolongation or congenital long QT syndrome. • History of ventricular arrhythmia or torsade de pointes.
Zuclopenthixol decanoate	Circulatory collapse, depressed level of consciousness due to any cause (e.g. intoxication with alcohol, barbiturates or opiates), coma.

4) Cautions (specific)

Caution	Flupentixol decanoate	Haloperidol decanoate	Zuclopenthixol decanoate
Cardiovascular disease	✓	✓	✓
Cerebrovascular disease risk (including use in dementia)	✓	✓	✓
Glaucoma (narrow angle)	✓		✓
Hyper/hypothyroidism	✓	✓	✓
Myasthenia gravis	✓		✓
Parkinson's disease	✓	✓	✓
Phaeochromocytoma	✓		✓
Prostatic hypertrophy	✓		✓
Respiratory disease (severe)	✓		✓
Seizures	✓	✓	✓
VTE[1]	✓	✓	✓

[1]Since patients treated with antipsychotics often present with acquired risk factors for VTE, all possible risk factors for VTE should be identified before and during treatment with antipsychotics and preventive measures undertaken.

5) Elderly

Prescription potentially inappropriate (STOPP criteria):

- for all antipsychotics (other than quetiapine and clozapine) in patients with parkinsonism or Lewy Body Disease (risk of severe extrapyramidal symptoms)
- in patients prone to falls (may cause gait dyspraxia and/or parkinsonism). Consider a lower starting dose with e.g. elderly or debilitated patients.

6) Pregnancy

Refer to Best Use of Medicines in Pregnancy (BUMPs) and consult the specialist.

7) Breast-feeding

Seek specialist perinatal support.

8) Fertility

Hyperprolactinaemia, galactorrhoea, amenorrhoea, decreased libido, erectile dysfunction and ejaculation failure have been reported – consider a dose reduction if appropriate, to reverse the effects.

9) Interacting medicines.

Interacting medicine	Effect
Anticoagulants	Enhanced effect of anticoagulant, but dose adjustment not normally required.
Anticholinergics	The anticholinergic effects of e.g. atropine will be enhanced.
Antihypertensives	Vasodilator such as hydralazine, α-blockers (e.g. doxazosin), or methyl-dopa may be enhanced.
Antipsychotics	E.g. piperazine - May increase the risk of extrapyramidal effects such as tardive dyskinesia.
Diuretics	E.g. bendroflumethiazide - may cause hypokalaemia, potentiating QTc prolongation and malignant arrythmias.
CNS depressants	Enhances the effects of alcohol, barbiturates, other CNS depressants and anticoagulants.
Corticosteroids	Enhanced absorption possible.
Digoxin	Enhanced absorption possible.
CYP2D6 enzyme inhibitors	Likely to increase plasma levels of e.g. alprazolam, fluoxetine, St John's wort, venlafaxine, carbamazepine, phenytoin, rifampicin, itraconazole, indinavir, promethazine and verapamil. See below for advice.
Lithium.	May increase the risk of neurotoxicity.
Metoclopramide or antiparkinson medicines.	May increase the risk of extrapyramidal effects such as tardive dyskinesia; reduced effect of levodopa.
QTc prolongators	Increased risk of QTc prolongation when administered with typical depots. See credible meds for a list of other QT prolonging medicines.
Quinidine	Enhanced cardiac depressant effects possible.

Potent *inhibitors* of CYP2D6 and/or CYP3A4 e.g. may increase levels of antipsychotic, requiring a dose reduction of antipsychotic of about half.

Upon discontinuation of the CYP2D6 or CYP3A4 inhibitor, the dosage of antipsychotic should be increased to the level prior to the initiation of the concomitant therapy.

Potent *inducers* of CYP2D6 and/or CYP3A4 are likely to reduce levels of antipsychotic - dose of Antipsychotic should usually be increased, to about double.

Upon discontinuation of potent CYP3A4 *inducers*, the dosage of antipsychotic should be reduced to the level prior to the initiation of the concomitant therapy.

10) Disengagement

If a practice is unable to make contact with a patient, having made reasonable attempts, and the patient has missed one or more depot injections, refer them to secondary care.

11) Missed doses

If a patient misses the date of their depot, it can be rearranged and administered within the following timeframes:

Depot/LAI	Usual administration frequency	Variance (days)
Haloperidol decanoate	Weekly	± 2
	Every 2 weeks	+ 6
	Every 3 weeks	+ 7
	Every 4 weeks	+14
Zuclopenthixol decanoate	Weekly	± 2
	Every 2 weeks	± 2
	Every 3 weeks	+ 7
	Every 4 weeks	+ 7
Flupentixol decanoate	Weekly	± 2
	Every 2 weeks	± 2
	Every 3 weeks	+7
	Every 4 weeks	+7

If the variance is exceeded, contact secondary care for urgent advice

Reminder to ask patient about specific problems

1) Current medication being taken, including POM, P, GSL and herbal medicines.
2) Intention to become pregnant (risk assess benefits and risks – safety unestablished; neonatal adverse effects reported (see SmPC).
3) Development of any side effects which may be attributable to the injection

Section 6: Advice to the patient

Advice for prescribing clinician to inform patient

1) Explain the treatment plan, with likely benefits.

Possible that they may experience some side-effects before full benefit realised. Patient and/or carer to monitor and report to their GP:

   a. Weight gain/waist circumference increase (provide information leaflet explaining benefits and risks).
   b. Movement disorders (e.g. movements of the mouth, tongue, jaw and sometimes limbs indicating tardive dyskinesia).
   c. Feeling of light-headedness (bradycardia/ arrythmias) or drowsiness (especially at start of treatment, but unlikely with flupentixol)
   d. Rare: Difficulty with breathing, swelling on the face or tongue; or high fever/severe muscle rigidity – ?allergy/NMS - stop taking the medicine and immediately seek medical advice.

2) If desire to drive or operate machinery – avoid until alertness and blurred vision susceptibility is known for certain, especially if consuming alcohol.
3) This medicine has been prescribed for you only. Do not pass it on to others. It may harm them, even if their signs of illness are the same as yours.
4) Potential allergies to excipients – see Table in section 1.
5) Let their GP or pharmacist know if they plan to self-medicate, prior to doing so, so that a check may be made for its appropriateness. If any new medication is started, always ask if it is suitable to be taken with your antipsychotic medication.

Section 7: Generic principles of shared care for SECONDARY CARE

Please do not amend.

Core responsibilities

1. Initiating treatment and prescribing for the length of time specified in **section 1.**
2. Undertaking the clinical assessment and monitoring for the length of time specified in **section 1** and thereafter undertaking any ongoing monitoring as detailed in **section 3.**
3. Communicate details of the above in 1 and 2 to GP within the first month of treatment. This information should be transferred in a timely manner.
4. Refer patients to GP and provide information of further action where appropriate e.g. if blood test is due.
5. To provide advice to primary care when appropriate. Advise the GP on when and how to adjust the dose
6. Review concurrent medications for potential interaction prior to initiation of drug specified in **section 1.**
7. Stopping treatment where appropriate or providing advice on when to stop.
8. Reporting adverse events to the MHRA.
9. Reminder to ask patients about particular problems see **section 5.**

Section 8: Generic principles of shared care for PRIMARY CARE

Please do not amend.

Core responsibilities

1. Responsible for taking over prescribing after the length of time specified in **section 1.**
2. Responsible for any clinical assessment and monitoring if detailed in **section 3** after the length of time specified in **section 1.**
3. Review of any new concurrent medications for potential interactions.
4. Reporting adverse events to the MHRA.
5. Refer for advice to specialist where appropriate.
6. Reminder to ask patients about particular problems see **section 5.**

Section 9: Contact Details

Name	Organisation	Telephone Number	E mail address
Click or tap here to enter text. Consultant Psychiatrist	Avon & Wiltshire Mental Health Partnership NHS Trust	Click or tap here to enter text.	Click or tap here to enter text.
Click or tap here to enter text. Key Worker		Click or tap here to enter text.	Click or tap here to enter text.
Euan Chew-Graham Medicines Optimisation Pharmacist			Euan.chew-graham2@nhs.net
Primary Care Liaison Services: Bristol Intensive and Primary Care Liaison North Somerset Intensive and Primary Care Liaison South Gloucestershire Intensive and Primary Care Liaison		0117 919 5670 01934 836406 0117 378 7960	

Section 10: Document Details

Date prepared	21.03.2025. AWP version approved at AWP MOG on 22/05/2025 for dissemination to local formulary groups.
Prepared by	Michael Vaggas, Senior Pharmacist (Governance) Reviewed by: Sarah Belcher, Clinical Lead Pharmacist Euan Chew-Graham, Lead Pharmacist – Medicines Optimisation & Physical Health
Date approved by JFG	July 2025
Date of review	2 years or sooner if guidance changes
Document Identification: Version	2.0

Section 11: Collaboration

All shared care protocols should be BNSSG wide where possible. Specialists in any one discipline are encouraged to collaborate across the health community in preparing shared care guidance. Please give details

1. AWP colleagues as per section 10
2. Jill Forrest BNSSG ICB interface pharmacist
3. Emily Knight BNSSG Principal Medicines Optimisation Pharmacist
4. Dr Bryn Bird BNSSG ICB Prescribing Clinical Lead

Section 12: References

Please list references

1. Clopixol information leaflet.
2. Clopixol SmPC.
3. Depixol information leaflet.
4. Depixol SmPC.
5. Psytixol SmPC
6. Psytixol information leaflet
7. Haldol information leaflet.
8. Haldol SmPC.
9. NHS England: Responsibility for Prescribing Between Primary and Secondary/ Tertiary Care. Ref 07573, Version 1.0, Published January 2018. (Accessed 03.10.2023).
10. NICE CG43 Obesity prevention
11. NICE CG189 Obesity: identification, assessment and management
12. NICE NG238 Cardiovascular disease: risk assessment and reduction, including lipid modification
13. NICE PH38 Type 2 diabetes: prevention in people at high risk
14. The Maudsley Prescribing Guidelines in Psychiatry 2021