Health and Social Care Board

Interface Pharmacist Network Specialist Medicines

# Methylphenidate - ADHD Shared Care Guideline

| Specialist Details | Patient Identifier |
|---|---|
| **Name:** _____ | |
| **Location:** _____ | |
| **Tel:** _____ | **Date:** _____ |

## Introduction

Methylphenidate is a CNS stimulant drug used in the treatment of Attention Deficit Hyperactivity Disorder (ADHD). It should only be initiated following assessment and diagnosis by a specialist with expertise in ADHD, as part of a comprehensive treatment plan.

**Amber Indications**: for use in Adults and children of 6 years and over (some use in Adults may be off-label)

Methylphenidate is a schedule 2 controlled drug (CD) and is therefore subject to normal CD regulations.

## Preparations available

**Immediate Release**: 5mg, 10mg, 20mg tablets

**Modified Release** preparations include: Concerta XL® tablets, Delmosart® prolonged-release tablets, Equasym XL® capsules, Matoride XL® tablets, Medikinet XL® capsules, and Xenidate XL® tablets.

**Notes:**

- Equasym XL® and Medikinet XL® capsules may be opened to allow contents to be sprinkled on food
- Concerta XL®, Matoride XL®, Delmosart® prolonged-release (and Xenidate XL® 18mg) cannot be chewed, divided, or crushed
- Xenidate XL® tablets (27mg, 36mg and 54mg tabs) can be broken in half but must not be chewed or crushed.

*Different versions of modified-release preparations may not have the same clinical effect. To avoid confusion between these different formulations of methylphenidate, prescribers should specify the brand to be dispensed.*

## Dosage and Administration (BNF, BNFc, NICE ADHD Clinical Guideline 72 )

**Immediate release**: Initially 5 mg 1–2 times daily, increased if necessary at weekly intervals by 5–10 mg daily (given in 2 - 3 divided doses).

**Modified Release**:

- Concerta XL®, Delmosart® prolonged-release, Matoride XL®, and Xenidate XL® should be started at 18mg in the morning – increased if necessary by increments of 9 - 18mg at approximately weekly intervals. Total daily dose of 15 mg of standard-release formulation is considered equivalent to Concerta XL®, Delmosart® prolonged-release, Matoride XL® or Xenidate XL® 18 mg once daily.
- Equasym XL® and Medikinet XL® should be started at a dose of 10mg in the morning before breakfast – increased if necessary by weekly increments of 10mg. Total daily dose of standard-release formulation is considered milligram equivalent with Equasym XL® and Medikinet XL®.

In some cases, patients may require both a modified release and immediate release preparation for adequate control of symptoms.

**Maximum Daily Doses.** The maximum licensed total daily dose in children and adults is 60mg (54mg for Concerta XL®, Delmosart® prolonged-release, Matoride XL® or Xenidate XL®).

For children, this may be increased (as per NICE and BNF) to 2.1 mg/kg daily under the direction of a specialist up to a maximum of 90mg daily (108mg for Concerta XL®, Delmosart® prolonged-release, Matoride XL® or Xenidate XL®).

For adults, the dose may be increased (as per NICE and BNF) to a maximum recommended total daily dose of 100mg (or an equivalent dose of modified-release methylphenidate)

## Hospital Specialist Responsibilities (continues overleaf)

- Diagnose the condition and assess if the patient is suitable for treatment with methylphenidate (as per the pre-drug assessment in NICE guidance including an assessment of cardiovascular status)
- Baseline height (not applicable to adults), weight, BP and heart rate
- Provide patient/carer with relevant information on use, side effects and need for monitoring of medication
- For patients 6 years and over, arrange shared care with the patient's GP

## Hospital Specialist Responsibilities (continued)

- Provide the GP with relevant information for each patient, including:
  - Treatment to be undertaken by GP (dose, any dosage titrations etc.)
  - Results of baseline investigations and physical monitoring undertaken
  - System of monitoring and recording of progress and side effects
- Monitoring side effects:
  - Height, Weight and appetite: Measure and record every six months
  - Heart Rate and Blood pressure: Measure and record every six months and after each dose change
  - Assess for development of tics, psychotic symptoms, anxiety, or seizures
- Monitor response to treatment and need to continue therapy. Advise discontinuation of methylphenidate if no improvement in symptoms is seen after 1 month at the maximum tolerated dose
- Specialist will continue to review the patient at regular intervals sending a written summary to the GP whenever the patient is reviewed
- Provide any other advice or information for the GP if required
- Supervise any discontinuation of treatment, or onward referral to adult service if appropriate.

## GP Responsibilities

- Prescribe methylphenidate (continued prescribing is appropriate for patients attending specialist review)
- Report concerns with adherence, potential misuse/diversion, signs of alcohol/drug dependence or misuse to the specialist
- Report any adverse events to the specialist, and the usual bodies (e.g. MHRA / CHM).

## Adverse Effects, Precautions and Contraindications

**Contraindications**: severe depression, suicidal ideation; anorexia nervosa; acute psychosis; uncontrolled bipolar disorder; hyperthyroidism; phaeochromocytoma; vasculitis; cerebrovascular disorders; glaucoma, current / recent (within 14 days) treatment with MAOIs; Severe cardiovascular disease – including uncontrolled hypertension and structural cardiac abnormalities (may be used with caution in patients with certain cardiovascular conditions following individual assessment by a cardiologist).

**Cautions**: Monitor for psychiatric disorders; anxiety or agitation; tics or a family history of Tourette's syndrome; drug or alcohol dependence; epilepsy (discontinue if increased seizure frequency); susceptibility to angle-closure glaucoma. Careful supervision is required during withdrawal as this may unmask depression as well as chronic over-activity. Some patients may require long-term follow up.

**Pregnancy**: avoid unless potential benefit outweighs risk.

**Breastfeeding**: excreted in breast milk - avoid.

**Adverse Effects**: Dizziness, nervousness, drowsiness and headaches are commonly experienced upon initiation of therapy. May affect performance of skilled tasks (e.g. driving). Loss of appetite (some weight loss may occur) and insomnia may also occur. These effects are often mild and transient and may be controlled by a reduction in dose.

**Other adverse effects** include: nasopharyngitis, abdominal pain, nausea and vomiting (can be alleviated with concomitant food intake), dry mouth, emotional lability, temporary growth retardation, changes in blood pressure, tachycardia, palpitations, skin rash or itching.

## Common Drug Interactions

- Increased risk of hypertension when volatile liquid general anaesthetics given with methylphenidate - omit methylphenidate on the day of surgery
- Contraindicated with current / recent (within 14 days) treatment with MAOIs
- Serious adverse events reported with concomitant use of clonidine and methylphenidate. The safety of using this combination has not been systematically evaluated
- May reduce effect of anti-hypertensives
- Can enhance anticoagulant effect of warfarin
- Can increase the plasma levels of some anticonvulsants (phenytoin, primidone, phenobarbitone) and tricyclic antidepressants
- Can exacerbate CNS adverse effects of alcohol (abstention advised)
- Should be used cautiously with any other drug that can elevate blood pressure.

There are no known interactions with antibiotics, simple analgesics and antihistamines commonly prescribed for children.

## Communication

For any queries relating to this patient's treatment with methylphenidate, please contact the specialist named at the top of this document.

**This information is not inclusive of all prescribing information and potential adverse effects.**
**Please refer to full prescribing data in the SPC or the BNF**