

ADHD Medications: A Guide for Healthcare Professionals

ADHD Medications	Characteristics	Duration of action	IR:MR Ratio	Works up to	Equivalent daily doses of IR MPH	Titration	Frequency of doses per day	Maximum dose per day
STIMULANT MEDICATION – Methylphenidate (MPH) based medications								
Medikinet 5 mg, 10 mg, 20 mg Ritalin 10 mg Generic methylphenidate 5mg,10 mg, 20 mg	Tablet, can be crushed	Short-acting	100% IR	Up to 4 hrs		Start with 5 mg 1-2 times daily, increase by 5-10 mg/day at weekly intervals.	2 or 3 times a day	Licensed maximum 60 mg/day Up to 2.1 mg/kg/day Or 90 mg/day
Medikinet XL , 5 mg, 10 mg, 20 mg, 30mg, 40 mg, 50 mg, 60 mg Equasym XL 10 mg, 20 mg, 30 mg Ritalin XL , 10 mg, 20 mg, 30mg, 40 mg, 60 mg	Capsule, contents can be sprinkled on to food	Long-acting Covers school day	IR:MR 50:50 IR:MR 30:70	Up to 8 hrs	5 mg = 2.5 mg MPH twice a day 10 mg = 5 mg MPH twice a day 20 mg = 10 mg MPH twice a day 30 mg = 15 mg MPH twice a day 40 mg = 20 mg MPH twice a day 50 mg = 25 mg MPH twice a day 60 mg = 30 mg MPH twice a day	Start with 5 to 10mg/day and increase weekly by 10 Start with 10mg/day and increase weekly by	Once a day in the morning with or after breakfast Once a day in the morning before breakfast Once a day in the morning with/without food	Licensed maximum 60 mg/day Up to 2.1 mg/kg/day Or 90 mg/day
Concerta XL, Xaggitin XL ,	Tablet, swallowed as a whole	Long-acting Covers school and home day	IR:MR 22:78 Concerta XL	Up to 12 hrs	18 mg = 5 mg MPH 3 times/day 36 mg = 10 mg MPH 3 times/day 54 mg = 15 mg MPH 3 times/day	Start with 18mg/day and increase by 9 to 18mg according to dose availability at weekly intervals	Once a day in the morning with or without food	Licensed maximum 54mg /day Up to 2.1 mg/kg/day Or 108 mg
STIMULANT MEDICATION – Amphetamine based medications								
Lisdexamfetamine (Elvanse) 20 mg, 30 mg, 40 mg, 50 mg , 60 mg and 70 mg	Capsule Content can be dissolved in water	Long-acting Covers school and home day		Up to 13 hrs		Start with 20 or 30 mg capsule once a day in the morning. Increase by 10 mg at weekly interval up to	Once a day in the morning with or without food	Licensed maximum 70 mg/day
NON-STIMULANT MEDICATIONS								
Guanfacine (Intuniv) 1mg, 2mg, 3mg, 4mg	Tablet, swallowed as a whole	Long-acting Covers school and home day		Up to 24 hrs		6-12 year olds (25 kg and up): start with 1 mg and increase by 1mg at weekly intervals 13 to 17 year olds : as above but the max dose varies	Once a day am or pm, with or without food but avoid high fat meal, grapefruit juice	6 to 12 olds : 4 mg 13 to 17 year olds: 5mg (41.5 -49.4kg)
Atomoxetine (Strattera) 10 mg, 18 mg, 25 mg, 40 mg, 60 mg and 80 mg	Capsule, swallowed as a whole	Long-acting Covers school and home day		Up to 24 hrs		<70 kg – start with 0.5 mg/kg/day for 7 days and increase to 1.2 mg/kg/day, according to response >70 kg – start with 40 mg per day for 7 days and increase to 80 mg /day, according to response	Once a day or 2 divided doses per day	<70 kg: 1.8 mg/kg/day or 120 mg/day >70 kg: 120 mg/day

MPH = Methylphenidate; IR = Immediate Release component; MR: Modified Release component

Please note the table is intended for general guidance only. Please ensure to check online [Electronic Medicines Compendium](#)/up-to-date BNFC when prescribing medications for accuracy and further guidance.

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When to use medications	Pre-drug treatment checklist	Follow up assessment	Managing side effects
<p>Indications</p> <ul style="list-style-type: none"> Medication should be used as part of comprehensive management, including behavioural, psychological and educational interventions Severe impairment due to ADHD in a child aged 5 years or above Methylphenidate is the first choice Consider lisdexamfetamine if methylphenidate is not effective after a 6-week-trial of methylphenidate Consider dexamfetamine when lisdexamfetamine is beneficial but longer duration not tolerated Consider Guanfacine or Atomoxetine if methylphenidate or Lisdexamphetamine not effective after separate 6-week trials or not tolerated <p>Contraindications to stimulant drugs</p> <ul style="list-style-type: none"> Treatment with MAO inhibitors and for up to 14 days after discontinuation Glaucoma Untreated hyperthyroidism Pre-existing gastrointestinal narrowing Known hypersensitivity or allergy to products <p>Drug holidays</p> <ul style="list-style-type: none"> Methylphenidate or lisdexamfetamine can be stopped during weekends and school holidays if needed and the child's condition is manageable Atomoxetine or Guanfacine should be taken every day to maintain the response 	<ul style="list-style-type: none"> Check BP and pulse rate and plot them on the centile chart. Seek specialist paediatric/cardiology advice if BP is consistently above the 95 centile. Check weight and height and plot them on growth chart Assess for cardiovascular problems <ul style="list-style-type: none"> congenital heart disease or previous cardiac surgery <ul style="list-style-type: none"> exercise syncope undue breathlessness palpitations (rapid, regular, start and stop suddenly) chest pain of cardiac origin signs of heart failure hypertension heart murmur on examination sudden death in 1st degree relative under the age of 40 years of cardiac cause <p>Ask for cardiology opinion if any of the above present.</p> <ul style="list-style-type: none"> Check for any history of substance misuse Assess baseline appetite and sleep pattern Ask if the child can swallow a tablet or capsule Assess if the ADHD symptom severity is present predominantly during school day or throughout the day at school and home Check for comorbidity – severe anxiety, tics, depression etc. 	<ul style="list-style-type: none"> After starting medication check BP and pulse rate every 6 months and plot them on the BP centile chart and pulse rate centile chart. <ul style="list-style-type: none"> Check BP and pulse rate before and after each dose change Measure height every 6 months in children and teenagers Measure weight every 3 months for children aged 10 years and under Measure weight at 3 and 6 months after starting treatment in children aged over 10 years and every 6 months thereafter <ul style="list-style-type: none"> Use a rating scale to monitor response to medication at home and school (e.g. ADHD rating scale etc.) Check the need for continuing medication every year Check for side effects including: <ul style="list-style-type: none"> Decreased appetite Weight loss Nervousness Difficulty getting to sleep Sleepiness Headache dizziness Stomach pain Dry mouth <p>Please note: Guanfacine has side effects SSF (Somnolence, Sedation and Fatigue). When stopping guanfacine, it should be reduced by 1 mg every 3 to 7 days and BP monitored to check for rise.</p> 	<p>Appetite decreased</p> <ul style="list-style-type: none"> Wait to see if it gets better Decrease dose of medication Encourage to eat better, increase calorie intake Monitor weight gain <p>Weight loss</p> <ul style="list-style-type: none"> Take medication with or after food Take additional meals or snack in the morning or evening when the effect of medication wears off Reduce dose of medication Consider lower dose or stop medication over weekends Take high calorie healthy foods Refer to dietician Assess for other causes -? unwell <p>Difficulty getting to sleep</p> <ul style="list-style-type: none"> Ensure bedtime routine and sleep hygiene in place <ul style="list-style-type: none"> If short-acting tablet – stop the dose after 3pm, alternatively try a short- acting tablet 1-2 hrs prior to bedtime for a short trial period If long-acting medication <ul style="list-style-type: none"> Reduce dose Start medication early in the morning before breakfast Change formulation Consider Atomoxetine Consider a trial of melatonin if delayed sleep phase syndrome present <p>Tics</p> <ul style="list-style-type: none"> Reduce stimulant dose or stop medication Restart medication to check if tics return Consider atomoxetine, clonidine or guanfacine

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e BNFC for accuracy and additional information.

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