

## ADHD Medications: A Guide for Healthcare Professionals

ADHD Medications available in the UK	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
<b>STIMULANT MEDICATION – Methylphenidate (MPH) based medications</b>								
<b>Medikinet</b> 5 mg, 10 mg, 20 mg <b>Ritalin</b> 10 mg <b>Generic methylphenidate</b> 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
<b>Medikinet XL</b> , 5 mg, 10 mg, 20 mg, 30mg, 40 mg, 50 mg, 60 mg <b>Equasym XL</b> 10 mg, 20 mg, 30 mg <b>Ritalin XL</b> , 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 mg increments Start with 10mg/day and increase weekly by 10mg increments	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
<b>Concerta XL, Xaggitin XL, Delmosart, Xenidate XL</b> (18 mg, 27 mg, 36 mg, 54 mg) <b>Matoride XL</b> , 18 mg, 36 mg, 54 mg	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 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 mg/day
<b>STIMULANT MEDICATION – Amphetamine based medications</b>								
<b>Dexamfetamine</b> 5mg <b>Amfexa</b> 5mg, 10mg, 20 mg	Tablet can be crushed	Short-acting		Up to 4 hrs	5 mg = 10 mg MPH	2.5mg 2 to 3 times a day and increase by 5mg per day at weekly intervals	2 or 3 times a day	1 mg/kg/day 20 mg/day. Up to 40 mg/day may occasionally be required
<b>Lisdexamfetamine (Elvanse)</b> 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 maximum dose of 70mg/day, if required	Once a day in the morning with or without food	Licensed maximum 70 mg/day
<b>NON-STIMULANT MEDICATIONS</b>								
<b>Guanfacine (Intuniv)</b> 1mg, 2mg, 3mg, 4mg	Tablet, swallowed as a whole	Long-acting Covers school and home day		Up to 24 hrs	<b>6-12 year olds (25 kg and up):</b> start with 1 mg and increase by 1mg at weekly intervals <b>13 to 17 year olds :</b> as above but the max dose varies		Once a day am or pm, with or without food but avoid high fat meal, grapefruit juice	<b>6 to 12 olds :</b> 4 mg <b>13 to 17 year olds:</b> 5mg (41.5 -49.4kg) 6 mg (49.5 to 58.4 kg) 7 mg (58.5kg and above)
<b>Atomoxetine (Strattera)</b> 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.

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