

# 1. SHORTAGES OF MEDICINES FOR ATTENTION DEFICIT HYPERACTIVITY DISORDER (ADHD)

## **GENERAL QUESTIONS**

### Why is there a shortage of certain ADHD products?

Answer: The shortage is due to supply chain disruptions caused by a combination of manufacturing issues and an increased global demand. There have been shortages of some medicines for several months but recently more types are affected.

# Which ADHD products are affected by the shortage?

#### Answer:

- Methylphenidate prolonged-release capsules (Equasym XL®) in 10 mg, 20 mg, and 30 mg strengths.
- Methylphenidate prolonged-release tablets (Xaggitin XL®) in 18 mg and 36 mg strengths.
- Methylphenidate prolonged-release tablets (Concerta XL®) in 54 mg strength.
- Methylphenidate prolonged-release tablets (Xenidate XL®) in 27 mg strength.
- Lisdexamfetamine capsules (Elvanse®) in various strengths, including Elvanse Adult.
- Atomoxetine capsules in various strengths and Strattera 4mg/1ml oral solution.
- Guanfacine 1,2,3 and 4mg prolonged release tablets (Intuniv®)

### When are these supply disruptions expected to resolve?

Answer: The supply disruptions are expected to resolve at various dates between October and December 2023.

### When will the Atomoxetine supply be restored?

Answer: We've been informed that the supply is expected to normalise on various dates throughout October. A national Patient safety alert has been issued with actions for healthcare professionals in general practice and specialist services.



## Is this shortage affecting all pharmacies?

Answer: This is a national shortage affecting all suppliers. Other ADHD products remain available but cannot meet excessive increases in demand. All pharmacies including community pharmacy and hospital pharmacy.

# Which services are affected by these shortages?

Medicines for ADHD are prescribed by Adult ADHD services, CAMHS services and paediatric services in some areas. Private providers may also prescribe these medicines.

Prescribing is also manged by GPs under shared care agreements.

All services and their patients will be impacted.

For up-to-date information of availability

[click link]: Prescribing available medicines to treat ADHD – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice

You may need to request a free registration.

Preparation affected by shortage	Switch options
Equasym XL® 10, 20, and 30mg capsules	Medikinet XL®
	Metyrol XL®
	MPH IR
Xaggitin XL® 18 and 36mg prolonged-release tablets	Affenid XL®
	Concerta XL®
	Delmosart XL®
	Matoride XL®
	Xenidate XL®
Concerta XL® 54mg prolonged-release tablets	Affenid XL®
	Delmosart XL®
	Matoride XL®
	Xaggitin XL®
	Xenidate XL®
Xenidate XL® 27mg prolonged-release tablets	Affenid XL®
	Concerta XL®
	Delmosart XL®
	Xaggitin XL®

[click link for anticipated supply dates for various strengths] Shortage of Atomoxetine capsules and oral solution – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice



### **PATIENT-SPECIFIC QUESTIONS**

#### What can I do now?

Answer: Make sure you order your next supply before you run out but do not over order.

# What should I do if I cannot get my ADHD prescription from the pharmacy?

Answer: Firstly, try other pharmacies as another one may have it in stock. You can use the find my pharmacy to help you locate the pharmacies and their contact details that are close by to you :- Find a pharmacy - NHS (www.nhs.uk)

Please contact your General Practitioner (GP) or your specialist service for advice on management options if the product cannot be sourced (contact your GP surgery if you are currently obtaining your prescription from them or you specialist service if they are providing your prescriptions).

### Are there alternative medications available?

Answer: There are alternatives, but they may not be suitable for everyone. Some types can be safely swapped but specialist advice may be sought to provide individualised management plans where required.

### Are there alternative to medications to help with symptoms?

Answer: Specialist advice must be sought to provide individualised management plans where required.

These websites have information that might be useful in helping you manage your condition and any changes in symptoms because of medication shortages:

https://www.mindmate.org.uk/nd/

https://www.nhs.uk/conditions/attention-deficit-hyperactivity-disorder-adhd

https://www.youngminds.org.uk/

https://www.adhdadult.uk/

### • Is it safe to stop taking Atomoxetine abruptly if I run out?

Answer: Atomoxetine doesn't have a recognised withdrawal syndrome, but it's always best to consult your GP or our Service for guidance on how to manage any medication interruption. Missing doses or stopping may affect the maintenance of response.



# Is it safe to stop taking methylphenidate or Lisdexamfetamine if I run out?

Answer: It can safely be stopped for a few days, for example over weekends or school holidays, but it is best to consult your GP or our Service for guidance on how to manage any medication interruption. You may wish to consider this to prolong your supplies.

# Is it safe to stop taking guanfacine if I run out?

No, Guanfacine must always be stopped slowly by gradually decreasing the dose over a period of time. If you stop taking this medication suddenly it can cause your blood pressure to increase.

GP practices and ADHD services identifying patients who take Guanfacine and will be in touch soon, to discuss how to adapt your treatment safely.

### **HEALTHCARE PROFESSIONALS IN PRIMARY CARE QUESTIONS**

### **Key Instructions for Primary Care:**

Until supply issues are resolved, avoid starting new patients on the affected medications. We will continue to review the situation in South and West Yorkshire and communicate any updates.

Identify all current patients on these medications using the available search functions in clinical systems.

### **Specific Medication Guidance:**

- a) Methylphenidate MR Tablets: Shift patients from brand-specific to generic versions. This allows pharmacies to provide any bioequivalent brand.
- <u>b) Methyphenidate XL Capsules:</u> Note that these are not bioequivalent. Patients can consider a different formulation if their usual one is out of stock. Refer to comparison tables for switching.
- c) <u>Lisdexamphetamine</u>: For doses exceeding 50mg/day, advise patients to gradually reduce the dose by no more than 20mg every 3 to 7 days until reaching 50mg, at which point it can be stopped.
- <u>d)</u> Guanfacine: Suggest patients gradually lower the dose by up to 1mg every 3 to 7 days, if supply allows. If rapid discontinuation is necessary, monitor blood pressure and heart rate.

If primary care professionals have concerns about a specific patient's treatment, they should consult specialist services.



Note: Hospital referrals for supply issues are not advised, as hospitals don't have extra stock. Also, specialist services' ability to assist may be limited due to capacity constraints and restricted medication options.

# What are the first steps if a patient contacts me about supply issues?

Answer: Establish which medication they are taking.

- For Methylphenidate a switch to a bio-equivalent or near equivalent products can be considered. For methylphenidate **prolonged release** tablets, prescribe as a generic.
- The patient may wish to consider a treatment break for methylphenidate or Lisdexamfetamine.
- For Guanfacine you should refer to the specialist service who originated the prescription.
- What amendments can be made to an atomoxetine or Lisdexamfetamine prescription prior to referral back to the specialist team?

Answer: You can discuss a drug-free trial for up to 4 weeks prior to referral following unsuccessful attempts at obtaining supplies. For Lisdexamfetamine, sparing use of supplies can be considered. However, for doses above 50mg a day the dose should be tapered to avoid withdrawal effects.

# What amendments can be made to a methylphenidate prescription prior to referral back to the specialist team?

Answer: Please consider prescribing a different bioequivalent product for prolonged release tablets. These products can be switched safely with a very low likelihood of side effects or loss of symptom control.

For Equasym®, the products are not directly equivalent and the closest match to the near-instant release component should be considered.



Preparation affected by shortage	Switch options
Equasym XL® 10, 20, and 30mg capsules	Medikinet XL®
	Metyrol XL®
	MPH IR
Xaggitin XL® 18 and 36mg prolonged-release tablets	Affenid XL®
	Concerta XL®
	Delmosart XL®
	Matoride XL®
	Xenidate XL®
Concerta XL® 54mg prolonged-release tablets	Affenid XL®
	Delmosart XL®
	Matoride XL®
	Xaggitin XL®
	Xenidate XL®
Xenidate XL® 27mg prolonged-release tablets	Affenid XL®
	Concerta XL®
	Delmosart XL®
	Xaggitin XL®

# • How do I switch between Methylphenidate preparations?

Answer: Concerta XL® and bioequivalent **prolonged release tablets** generic preparations release characteristics can be switched like for like doses. Prescribe as generic methylphenidate prolonged release tablets.

Affenid XL <sup>®</sup> , Concerta XL <sup>®</sup> , Delmosart XL <sup>®</sup> , Matoride XL <sup>®</sup> , Xaggitin XL <sup>®</sup> , Xenidate XL <sup>®</sup>				
Total daily dose	Immediate release component	Slow release component		
	0 - 4 hours	4 - 12hours		
18mg/day	4mg	14mg		
27mg/day	6mg	21mg		
36mg/day	8mg	28mg		
45mg/day	10mg	35mg		
54mg/day	12mg	42mg		
63mg/day	14mg	49mg		
72mg/day	16mg	56mg		



# Equasym XL® release characteristics

Equasym XL® capsules 30/70				
Total daily dose	Immediate release component	Slow release component		
	0 - 4 hours	4 - 8hours		
10mg/day	3mg	7mg		
20mg/day	6mg	14mg		
30mg/day	9mg	21mg		
40mg/day	12mg	28mg		
50mg/day	15mg	35mg		
60mg/day	18mg	42mg		

Medikinet XL®capsules 50/50				
Total daily dose	Immediate release	Slow release		
	component	component		
	0 - 4 hours	4 - 8hours		
5mg/day	2.5mg	2.5mg		
10mg/day	5mg	5mg		
20mg/day	10mg	10mg		
30mg/day	15mg	15mg		
40mg/day	20mg	20mg		
50mg/day	25mg	25mg		
60mg/day	30mg	30mg		



# Methylphenidate capsules

You can use the tables to find the IR component of current preparation. For example, if the patient is prescribed Equasym XL 20mg/day, the IR component of the preparation is 6mg. If you would like to prescribe Medikinet  $XL^{\otimes}$ , the closest match for the current IR component is 10mg so you can prescribe that dose.

Useful table showing ADHD medications with MPH IR:MR ratios: <a href="mailto:adhd-medications---a-guide-for-healthcare-professionals.pdf">adhd-medications---a-guide-for-healthcare-professionals.pdf</a> (cambscommunityservices.nhs.uk)



# **ADHD SPECIALIST TEAM QUESTIONS**

### What are the immediate actions to take?

Answer: No new patients may be initiated on products affected by this shortage until the supply issues resolve. (lisdexamphetamine, guanfacine and affected forms of methylphenidate). Defer of all new initiations of treatment to release clinic time to manage those affected by the shortages.

Patients calling for advice should be informed of current stock situation and a management plan should be agreed with the patient and prescriber.

# What alternatives can I prescribe to my patients?

Answer: Alternative medications are available. It's essential to provide individualised management plans.

# Should I expect an increase in side effects or withdrawal symptoms among my patients?

Answer: Atomoxetine does not have a recognised withdrawal syndrome, but changes in treatment could potentially cause fluctuations in symptoms. Methylphenidate and Lisdexamfetamine can be stopped for a few days but ideally best to taper down in a stepwise manner to help a patient get used to the change if a drug-free period is agreed. Special care is needed for guanfacine as abrupt stopping and starting is not recommended. Patients maintained on guanfacine should be advised to taper the level of medication by no more than 1mg every 3 to 7 days where supplies allow.

# • Are there any recommendations for transitioning patients to alternative treatments?

Answer: Always consult the most recent guidelines for the most up-to-date recommendations.

<u>Atomoxetine and Lisdexamfetamine</u>: gradual tapering off and close monitoring for any adverse effects is recommended. <u>MPH XL</u> as an alternative medication can be considered if not previously tried. <u>IR Dexamfetamine</u> is an option for Lisdexamfetamine, but risk of abuse or diversion must be considered.

<u>Methylphenidate:</u> consider an alternative bioequivalent product using the tables above.

Methylphenidate prolonged release tablets can be prescribed generically. Additional guidance can be found here <a href="mailto:add-medications---a-guide-for-healthcare-professionals.pdf">adhd-medications---a-guide-for-healthcare-professionals.pdf</a> (cambscommunityservices.nhs.uk).



Additional missing brands to consider which are not in the tables:

 Medrol 10mg, 20mg, 30mg, 40mg and 60mg as a 50:50 IR:MR release for Medikinet XL or Equasym products.

# **OTHER STAKEHOLDER QUESTIONS**

What steps are being taken to resolve the supply issue?

Answer: Unlicensed imports are being sourced for Lisdexamfetamine but lead times vary. Limited parallel imports of Equasym XL remain available but cannot support an uplift in demand. Supply is often variable and unreliable.

When will this be resolved or reviewed

Answer: The supply disruptions are expected to resolve at various dates between October and December 2023. Availability information will be regularly reviewed and guidance updated as required.



#### ADDITIONAL SOURCES OF INFORMATION

# **National Patient Safety Alert**

CAS-ViewAlert (mhra.gov.uk)

### **Current availability status of all ADHD medicines is available here:**

<u>Prescribing available medicines to treat ADHD – SPS - Specialist Pharmacy Service – The first stop for professional medicines advice</u>

# MHRA alert caution if switching between products due to differences in formulations

<u>Methylphenidate long-acting (modified-release) preparations: caution if switching between products due to differences in formulations - GOV.UK (www.gov.uk)</u>

# Extended-release methylphenidate: a review of the pharmacokinetic profiles of affected products

Extended-release-methylphenidate-3.pdf (sps.nhs.uk)

# **Electronic Medicines Compendium (eMC)**

<u>www.medicines.org.uk</u> for individual summary of product characteristics (SPCs) for individual brands

### **NICE Guidance**

Overview | Attention deficit hyperactivity disorder: diagnosis and management | Guidance | NICE