NHS
North East and North Cumbria

ADHD Medicines Supply Disruption

Last updated 13th October 2023
Created in partnership by North East and North Cumbria Integrated Care Board, Cumbria, Northumberland, Tyne and Wear NHS Foundation Trust and Tees, Esk and Wear Valley NHS Foundation Trust. Accurate on 13 October 2023
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Current situation

- National Patient Safety Alert issued on 27th September 2023, adding to a prior and ongoing supply disruption to ATOMOXETINE
- Supply disruptions affecting various products which are expected to resolve at various dates between October and December 2023 – current expected re-supply dates are here
- Latest information on **national** availability of products is here:

  https://www.sps.nhs.uk/articles/prescribing-available-medicines-to-treat-adhd/

  - **Local** availability may be different and is likely to change rapidly (daily)
- Boots provide a prescription stock checker: https://www.boots.com/online/psc/ but….
  - Availability is an indication only (contact store by phone to confirm)
  - Availability does not guarantee the product will be in stock when the patient presents their prescription

Expected re-supply dates of affected products

Methylphenidate

- Concerta XL 54 mg tablets – **back in stock**
- Equasym XL 10 mg & 20 mg capsules – 20th October 2023
- Equasym XL 30 mg capsules – 27th November 2023
- Xaggitin XL 18 mg & 36 mg tablets – **back in stock**
- Xenidate XL 27 mg tablets – 31st October 2023

Guanfacine

- Intuniv 1 mg & 2 mg tablets will be out of stock from 22nd October 2023 with anticipated re-supply date of 4th December 2023
- Intuniv 3 mg tablets will be out of stock from 5th November 2023 with anticipated re-supply date of 4th December 2023
- Intuniv 4 mg tablets are **out of stock** – anticipated re-supply date 20th November 2023

Lisdexamfetamine

- Elvanse 30 mg capsules – 22nd December 2023
- Elvanse 40 mg capsules – 15th December 2023
- Elvanse 50 mg capsules – 31st October 2023
- Elvanse 60 mg capsules – 20th October 2023
- Elvanse 70 mg capsules – 6th November 2023
- Elvanse Adult 30 mg capsules – 3rd November 2023
- Elvanse Adult 50 mg capsules – 20th October 2023
- Elvanse Adult 70 mg capsules – 20th October 2023

Elvanse 20mg capsules will be out of stock from 6th November 2023 with an anticipated resupply date of 1st December 2023

Atomoxetine

- 40 mg capsules – 13th October 2023
- 10 mg, 25 mg & 60 mg capsules – 31st October 2023
- 4 mg/1 ml oral solution – 27th October 2023

Action required – community pharmacies

- Be aware of the information included in this pack, and the current national communications, regarding the ADHD medicines supply disruption
- Community pharmacies are encouraged to work with their local networks to identify possible solutions for patients where medication is out of stock at their pharmacy
- Discuss the patient's current stock of medication to identify how much supply they have left at home
- Where possible, work with local networks to signpost patients to available stock of their usual medication where this is urgently required
- Return the electronic prescription to the Spine and provide patients with the EPS dispensing token if they are being signposted to another pharmacy to have their medication dispensed
- It may be appropriate to use the guidance in this document to suggest an alternative medication to the patient's GP, if there is an alternative medication currently available

Action required – General Practices

- **As per NPSA alert:**
  - Clinicians are recommended to identify patients taking ADHD medications known to be unavailable
  - Make early contact with patients in the two groups below to establish how much supply they have remaining
    1. GUANFACINE – should not be stopped abruptly, see this slide (specialist services are actively reaching out to patients prescribed guanfacine to commence dose tapering)
    2. LISDEXAMFETAMINE – no direct alternatives. Please refer to this slide
- **As these are shared care drugs specialist colleagues are willing to advise on all cases, but GP's can independently manage patients if they feel confident to do so using this guidance.**
- **If the patient's stock levels are insufficient to cover the anticipated out of stock period, the GP:**
  - Use this guidance to make changes if the solution is straight forward such as switching to a bioequivalent brand of methylphenidate and/or changing a methylphenidate prescription to generic. This would need to be undertaken as part of a shared decision making process with the patient acknowledging that this goes beyond the shared care agreement but taking into consideration the extenuating circumstances - see this slide for guidance
  - If unhappy to make any changes, seek further specialist guidance or decline to prescribe and defer to the specialist
  - As per the guidance a treatment break, treatment-free days (e.g non-school days) or reduced dosage to extend existing supply may be a solution
- **Non-pharmacological treatments are available**

Action required – specialist services

New patients

- DO NOT initiate treatment with a product which is currently unavailable (according to the national list)
- Ideally, do not initiate treatment with a product which is currently available (it may soon become unavailable). Discuss the national shortage with patients/carers and whether initiation of treatment can be postponed or not, taking clinical presentation and risk assessment into account.
- Offer non-drug treatment options until the supply disruption is fully resolved

Patients already on drug treatment (identified by Trusts or if asked for support from primary care)

- Identify which drug / product they are taking, and how much supply they have left
- Consider a treatment break, treatment-free days (e.g. non-school days) or reduced dosage to extend existing supply
- Agree an individual management plan with the patient/carers according to their current supply, and current / expected availability of the product being taken
  - 1st priority – patients taking GUANFACINE
  - 2nd priority – patients taking LISDEXAMFETAMINE
  - 3rd priority – all other patients taking affected products
- Refer to the advice on NICE-recommended alternative treatments (including non-drug), and how to switch and stop between drug treatments on the relevant following slide…..

Guanfacine prolonged-release tablets

- Usually used as a non-stimulant alternative to ATOMOXETINE
- No direct alternatives to Intuniv® are available; CLONIDINE may be considered as an alternative treatment (non-formulary, off-label use~~)~~
- Should not be stopped abruptly – risk of rebound hypertension
- Existing supplies should be used to plan down-tapering in case abrupt stopping is unavoidable (lower dose = lower risk)
  - Ideal tapering = 1 mg decrements every 3-7 days
- If tapering not possible, monitor BP and heart rate 2 and 4 days after stopping
  - Hypotensive effect may take 2-4 days to resolve
  - If BP is raised on day 4 – check at weekly intervals until normal
  - If signs of clinically significant hypertension, seek medical advice
- Once supplies are restored – re-start / increase back to target dose in 1 mg increments every 7 days
- If switching to another treatment, GUANFACINE **must** be stopped completely (ideally via tapering) before starting the new drug – particularly important when switching to/from CLONIDINE due to the BP-lowering effects of both drugs

Lisdexamfetamine

- No direct alternatives to Elvanse®
- Pro-drug of DEXAMFETAMINE which is therefore the logical alternative, but consider risk of abuse or diversion - METHYLPHENIDATE may be considered instead
- LISDEXAMFETAMINE can be stopped abruptly – side effects not expected, but some patients may experience fatigue or sleepiness for several days
- Switching to another stimulant drug/product:
  - Stop LISDEXAMFETAMINE at current dose (no need for tapering)
  - Start new stimulant at recommended initial dose the next day

Dose equivalence

With thanks to South London & Maudsley NHS Foundation Trust

LISDEXAMFETAMINE (Elvanse)	DEXAMFETAMINE sulfate
20 mg daily	5 mg/day in divided doses
30 mg daily	7.5 mg/day in divided doses
40 mg daily	10 mg/day in divided doses
50 mg daily	15 mg/day in divided doses
60 mg daily	17.5 mg/day in divided doses
70 mg daily	20 mg/day in divided doses
	…and adjust as needed

Dexamfetamine

- Obvious alternative to LISDEXAMFETAMINE if supplies are available – see previous slide for dose equivalence
- Only available as an immediate-release preparation - so 2-3 doses per day are required (last dose no later than “late-afternoon”)
- 5 mg, 10 mg & 20 mg tablets – score line on 5 mg tablets allows approximate 2.5 mg dose increments but note….
  - Manufacturer of Amfexa® states that “the score line is only to facilitate breaking for ease of swallowing and not to divide into equal doses”.
- Maximum recommended dose = 20 mg/day (but 40 mg/day may be needed in some cases)

Methylphenidate

- See Choice & Medication handy fact sheet for comparison of modified-release products. Even more detail available here: https://www.sps.nhs.uk/articles/extended-release-methylphenidate-a-review-of-the-pharmacokinetic-profiles-of-available-products/
- All XL products comprise an immediate-release (IR) + an extended-release (ER) component. Data from studies suggests clinical equivalence between XL products is more closely related to the IR component rather than the ER component
- **Affenid XL, Concerta XL, Delmosart XL, Matoride XL, Xaggitin XL** and **Xenidate XL*** are bioequivalent and can be safely prescribed as alternatives to each other, at the same daily dose, according to current availability. Even so, monitor response after changing to a different product and adjust dose if necessary. Alternatively, prescriptions for these products can be changed to a generic description (see below) which will allow a community pharmacist to supply any product they have available which meets the description:

  "Methylphenidate 18 / 27 / 36 / 54 mg prolonged-release tablets" *(NB prescribers must specify tablets)*

- **Equasym XL:**
  - no bioequivalent alternative
  - **Medikinet XL** is closest alternative (with greater IR component, lower ER component), and vice versa – see next slide for conversion advice
  - **IR methylphenidate** could be used instead, with daily dose divided into two, e.g. Equasym 5 mg daily = IR methylphenidate 2.5 mg twice daily [N.B. not all IR tablets are scored – Ritalin and Medikinet brands are]
- **Medikinet XL** and **Metyrol XL** – not currently affected, but these products are bioequivalent and interchangeable

** lactose-free option*

Switching from Equasym XL to Medikinet XL

Equasym XL®		
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®		
Total daily dose	Immediate release component	Slow release 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

Data from studies suggests clinical equivalence between XL products is more closely related to the IR component rather than the ER component

Worked example:

- Current prescription Equasym XL 20 mg daily
- IR component of current treatment = 6 mg over 0-4 hours
- Closest match to IR component is Medikinet XL 10 mg/day (5 mg over 0-4 hours)

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Atomoxetine

- Some strengths may now be available, or be available soon, so continuation of treatment is possible
- If continuation is not possible, consider a short break in treatment
- Not associated with withdrawal symptoms so can be stopped abruptly without dose tapering if necessary
- Some patients have been switched to GUANFACINE due to the supply disruption, but this may not be an option now
- Switching back to a stimulant – ideally stop ATOMOXETINE before starting stimulant the next day (or with a short break); otherwise, cross taper by reducing ATOMOXETINE and starting stimulant at lowest dose

Clonidine

- May be considered as an alternative to GUANFACINE
- Non-formulary, off-label use
- Switching:
  - Taper / discontinue GUANFACINE
  - Start CLONIDINE at 25 micrograms daily **at bedtime**
  - Increase in 25 micrograms increments weekly, according to response (approx. dose equivalence is GUANFACINE 1 mg = CLONIDINE 100 micrograms)
  - Doses >25 micrograms/day usually given in 2-3 divided doses
  - Maximum recommended dose = 150 micrograms/day (seek pharmacy advice if higher doses needed)
- Available as
  - 25 micrograms and 100 micrograms tablets
  - 50 micrograms / 5 ml oral solution (but local supply disruption reported)

Specialist services contact details

- **Refer to contact details on the transfer of prescribing / shared care request communication. Alternatively……**
- **Contact details for ADHD specialist services are available on our Trust websites:**
  - TEWV: https://www.tewv.nhs.uk/services/
  - CNTW: https://www.cntw.nhs.uk/services/

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