

IN USE PRODUCT SAFETY ASSESSMENT REPORT FOR DEXAMFETAMINE SULFATE TABLETS FOR ATTENTION DEFICIT HYPERACTIVITY DISORDER

SUMMARY OF ASSESSMENT AND ITS FINDINGS

BACKGROUND

Dexamfetamine sulfate is licensed for narcolepsy and refractory attention deficit hyperactivity disorder (ADHD) (1). In the UK, it is classified as a schedule 2 controlled drug substance and is available as non-proprietary preparations and the branded product, Amfexa®[▼], which is licensed for ADHD only (1-5). In December 2016, two new strengths of Amfexa®[▼] tablets (10mg and 20mg) were launched (6). Prior to then, dexamfetamine was only available in one strength: 5mg tablets.

A risk assessment is warranted to ascertain if medicines safety risk is introduced with the addition of two new strengths into NHS practice.

This UKMi assessment reviews the Amfexa®[▼] product range and non-proprietary preparations, and summarises considerations associated with medicines safety when used in paediatrics for ADHD.

DETAILS OF PRODUCT (S) ASSESSED

The products assessed using the validated UKMi product assessment tool were:

1. Amfexa® (dexamfetamine sulphate) 5mg, 10mg and 20mg tablets; Flynn Pharma Ltd
2. Dexamfetamine sulphate 5mg tablets; Auden Mckenzie*

Assessments were carried out with reference to: product packaging images, summaries of product characteristics (SmPC) and packaging inserts (2-5;7-9); and additional [risk minimisation material](#) supplied by Flynn Pharma Ltd.

*only one generic product was identified, but other products may be in circulation

CONCLUSION FOLLOWING APPLICATION OF VALIDATED ASSESSMENT TOOL

The following points were raised from the risk assessment; mitigating and other necessary actions are considered in the next section.

Impact of setting

- Dexamfetamine is used in paediatrics for ADHD, a setting with inherent risks. This is compounded by the fact that it is a controlled drug and has potential for abuse, which has further safety implications. Prescribing should be under the supervision of a specialist in childhood and/or adolescent behavioural disorders with a management plan and specific monitoring requirements. Any associated risks may be higher if prescribing and/or dispensing takes place across boundaries of care.

Product selection

- The availability of two new Amfexa®[▼] strengths introduces the potential for error through product mis-selection at the point of prescribing, preparation/supply and administration. This issue also applies to other medicines with multiple strengths but the paediatric setting increases the patient safety risk. The risk is deemed higher still if used across boundaries of care as there may be a lack of familiarity with the product range by non-specialists.
- In the case of electronic prescribing and dispensing systems, there are risks associated with product selection based on drop down menus.
- Overall the product packaging and presentation of the Amfexa®[▼] range were considered appropriate and should enable correct product selection in pharmacy and clinical settings. The generic name is prominent on 4 sides of the outer packaging and there is good use of colour to differentiate between the three strengths. See

product images at end of report.

Look and sound-alike names

- There is a risk of confusion with medicines with look and sound-alike names. Lisdexamfetamine dimesylate is one such look and sound-alike medicine. It is available in a variety of strengths (20mg, 40mg, 50mg, 60mg and 70mg capsules) and there is a potential of confusion, particularly with the Amfexa®[▼] 20mg strength.
- Both lisdexamfetamine and dexamfetamine require controlled drug storage requirements. The close proximity of the look-a-like medicines in the controlled drugs cabinet restricts opportunities to physically separate them and could increase the risk of wrong product selection.

Administration and dose titration

- For ADHD, careful dose titration is necessary at the start of treatment (5mg once or twice daily, increasing if necessary, by weekly increments of 5mg, up to a maximum daily dose of 20-40mg). All tablets are scored into four parts which enables division of the tablet into four parts to facilitate *swallowing difficulties only*. Tablet scoring does not allow division into equal doses; the lowest strength should be used for dose titration.
- For children requiring twice daily dosing, administration is recommended at breakfast and lunch, but not too late after lunch time to avoid disturbance of sleep. Controlled drug legislation will need to be considered if the child requires a dose in school.

POTENTIAL NEXT STEPS AND MITIGATION ACTIONS

To support safe use of all three strengths NHS Healthcare providers should consider:

- Conducting a risk assessment before local purchasing and procurement decisions are made to keep all three strengths of Amfexa®[▼].
- Reviewing and amending prescribing and dispensing systems to ensure risk of wrong product or strength selection is minimised
- Raising awareness (pharmacy, nursing staff, prescribers and children's community teams) of the availability of the new strengths and the potential for error to occur. Increasing the parents/carers awareness of the product they should be receiving may also be a useful measure in reducing the potential for error.
- Additional good practice associated with the dispensing of controlled substances (e.g. second checks). This is likely to reduce the risk of wrong product selection.
- Reviewing storage in controlled drugs cabinets of the various strengths and look and sound-alike medicines (e.g. lisdexamfetamine) to minimise wrong product selection.
- A careful evaluation of the associated risks if prescribing takes place across boundaries of care and strategies should be put in place to ensure safe prescribing. This may include:
 - Defining clear lines of responsibility for the specialists and healthcare professionals in primary care, for example on monitoring requirements.
 - Conducting dose titration schedules in the specialist setting and ensuring the dose has been stabilised before discharge to primary care.
 - Clear communication on the strength to be prescribed/dispensed and ensuring whole tablets are used to administer the correct dose.
- A formal shared care protocol between the specialist and GP which as a minimum address the points described above.
- Prescribing dosing schedules taking into account the need of a dose during school hours. In cases where a dose during these hours is necessary, ensure the practicalities of administering controlled drugs in school have been considered.
- Amfexa®[▼] is subject to additional monitoring to allow quick identification of new safety information. Adverse events should be reported via <https://yellowcard.mhra.gov.uk/> in addition to the manufacturer, Flynn Pharma Ltd.
- Use of manufacturer provided Risk Minimisation material, available <http://www.dexamfetamine-guide.co.uk/>

This report was produced in April 2017 using photographic images (not physical products) of dexamfetamine sulfate available at the time of assessment. Images were obtained primarily from pharmaceutical companies, but also from various sources within the NHS.

This report summarises product assessments undertaken by:

London Medicines Information Service (Northwick Park Hospital) and London & South East Medicines Information Service (Guys Hospital). The comments of paediatric specialists are gratefully acknowledged. For comments email lnwh-tr.medinfo@nhs.net

The UKMI product safety assessment group would appreciate your views on the usefulness of this report. We have devised a short survey which we would appreciate you completing, it should take approximately 10 minutes to complete. Click the following link to complete the survey:

<https://www.surveymonkey.com/r/UKMiProductSafetyAssessments>.

References

1. Joint Formulary Committee. British National Formulary (online) London: BMJ Group and Pharmaceutical Press <<http://www.medicinescomplete.com>> [Accessed on 20/03/2017]
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4. Summary of Product Characteristics. Amfexa 20mg tablets. Revision of text: 19/07/2016. Flynn Pharma Ltd. Accessed via www.emc.medicines.org.uk on 20/03/2017.
5. Summary of Product Characteristics. Dexamfetamine sulphate 5mg tablets. Revision of text: 20/06/2016. Auden Mckenzie (Pharma Division) Ltd. Accessed via www.emc.medicines.org.uk on 20/03/2017.
6. New Products 2016. Monthly Index of Medical Specialities. Accessed via www.mims.co.uk
7. Package leaflet: information for the patient. Amfexa 5mg tablets. Revision of text: 01/2016. Flynn Pharma Ltd. Accessed via <http://www.mhra.gov.uk/spc-pil/>
8. Package leaflet: information for the patient. Amfexa 10/20mg tablets. Revision of text: 07/2016. Flynn Pharma Ltd. Accessed via <http://www.mhra.gov.uk/spc-pil/>
9. Patient Information Leaflet. Dexamfetamine sulphate 5mg tablets. Last updated: 03/2016. Auden Mckenzie (Pharma Division) Ltd. Accessed via www.emc.medicines.org.uk on 20/03/2017.

PRODUCT PHOTOS

Amfexa® 5mg, 10mg and 20mg tablets (Flynn Pharma Ltd)



Dexamfetamine sulphate 5mg tablets (Auden Mckenzie)

