NHS
Kent and Medway
Clinical Commissioning Group

Prescribing of Adrenaline Auto Injectors

Document history:

Version	Date	Main Changes/Comments
1	September 2021	New document for KM CCG. Prepared by Chris Bridge, Yiki Chi Medicines Optimisation Team KMCCG, and comments received by the Integrated Respiratory Delivery Network and EKHUFT Lead Respiratory Nurse.
2	September 2021	Alterations to dosage structure as per comments from JFG

Approved by: JPC, KMMOC and Clinical Cabinet
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Recommendation

Adrenaline Auto Injectors (AAI) devices should ONLY be prescribed for a person with a history or an acknowledged risk of an anaphylactic reaction.

All patients should have two AAI devices prescribed, which they should carry at ALL times.

Adrenaline Auto Injectors should be prescribed by brand name only as administration instructions vary.

AAI prescribing advice:

Adults and Children

- All patients should have access to two prescribed Adrenaline Auto Injectors (AAI) devices. Patients should carry both injectors at all times.[1, 2] The 'carry two pens at ALL times' message should be on the label dosage instructions.

- AAIs should always be prescribed by brand.

- Ensure people with allergies and their carers have been trained to use the particular auto-injector that they have been prescribed. [1]

- Encourage people with allergies and their carers to obtain and practise using a trainer device. [1](see below product information for ordering details)

- If switching to a different brand of AAI is unavoidable (e.g. supply issues), it is essential that the patient and their caregivers learn how to use the new pen as each brand is used differently.[3]

- Patients should be provided with an anaphylaxis allergy plan. This is available on Ardens AAI template and from allergy society (British Society for Allergy and clinical immunology BSACI allergy action plan https://www.bsaci.org/wp-content/uploads/2020/02/BSACIAllergyActionPlan2019EpiPen-1.pdf)

- AAI should NOT be on repeat. Prescriptions should only be issued on basis of need i.e. evidence of expiry or use.

- Encourage patients to sign up for the Expiry Alert Service of their specific adrenaline auto-injector on the manufacturer's website.[4]

Dosage for emergency IM treatment of anaphylaxis[5, 6, 7, 8 ,9,11]

Dosing must always be adjusted to the weight of patient. Ensure this is reviewed before issuing a prescription. ***Patients with a weight of >60kg were in the past signposted to Emerade® 500µg. As this product was recalled in 2019 due to safety risks guidance has now changed and patients with a weight of >60kg will require a dose of 300-500µg***[11]***.***

Patient weight	Brand	Dose required	Image	Other info
Child < 7.5kg	Epipen® Jr	Not recommended	*NA*	Inject preferably into the anterolateral aspect of the middle third of the thigh.
Child 7.5kg-25kg	Epipen®Jr	0.15mg		
Child or adult > 25kg	Epipen®	0.3mg		
Child <15kg	Jext®	Not recommended	*NA*	Dose may be repeated if necessary after 5 minute. Emergency medical help should be sought early, immediately after using first dose.[2]
Child 15-30kg	Jext®	0.15mg		
Child or adult >30kg	Jext®	0.3mg		

After emergency treatment for suspected anaphylaxis

- Two AAI should be prescribed in the Emergency Department or in Primary Care with appropriate advice before the patient is sent home.[1]
- After emergency treatment for suspected anaphylaxis, patients should be referred to a specialist allergy service if available (age-appropriate where possible) consisting of healthcare professionals with the skills and competencies necessary to accurately investigate, diagnose, monitor and provide ongoing management of, and patient education about, suspected anaphylaxis.[1]
- This is an interim measure in case of another reaction prior to the specialist allergy appointment occurs and is in line with NICE guidance.[1]

Spare AAIs for Schools

- From 1 October 2017, schools in England have been allowed to purchase adrenaline auto-injector (AAI) devices without a prescription, for emergency use on children who are at risk of anaphylaxis but whose own device is not available or not working [10]. Additional emergency AAIs for schools should preferentially be supplied through this route. Spare AAIs purchased by the school must only be spares and not be considered replacements for the pupil's own AAI
- Guidance for schools on creating a policy around the use of emergency AAI is available at https://www.gov.uk/government/publications/using-emergency-adrenaline-auto-injectors-in-schools.
- GPs should not be asked to prescribe spare/back-up AAIs to be held at schools.
- Children and particularly teenagers should carry their AAI(s) on their person at all times or they should be quickly and easily accessible at all times.[10]
- If schools do not allow the child to carry the AAI(s) with them in school, then the child's supply of AAI(s) should be kept in a central place in a box marked clearly with the pupil's name but NOT locked in a cupboard or an office where access is restricted. [10]
- The prescribed AAI must be with the child when travelling to and from school.[10]

Acceptable prescribing of more than two AAIs

There two scenarios where prescribing of more than two AAIs may be appropriate:

1. It is acknowledged that not all schools have the protocols and policies to directly order and administer emergency AAIs (as above). These schools may still request that a pupil's AAI(s) are left in school to avoid the situation where a pupil or their family forgets to bring the AAI(s) to school each day. Where this occurs, the pupil must still have access to an AAI when travelling to and from school[10]. In these case prescribers may need to consider issuing more than two but no more than four pens per child (of any brand or strength). [11]

2. Rare scenarios such as prior severe reaction resistant to treatment with adrenaline. These requests should be assessed on a case by case basis and referred to the allergy specialist if available.

Advice to give to people with allergies and their carers [2]

The MHRA recommends the following advice for prescribers to give when supplying AAIs.

- it is recommended that you carry 2 adrenaline auto-injectors at all times; this is particularly important for people who are at increased risk of a severe anaphylactic reaction including those who have allergic-type asthma.
- use the adrenaline auto-injector at the first signs of a severe allergic reaction (remind patients of signs of severe allergic reaction)
- take the following actions immediately after every use of an adrenaline auto-

injector:

1. call 999, ask for an ambulance and state "anaphylaxis", even if symptoms are improving
2. lie flat with legs raised to maintain blood flow. However, if you have breathing difficulties, you may need to sit up to make breathing easier
3. seek help immediately after using the auto-injector and if at all possible make sure someone stays with you while waiting for the ambulance
4. if you do not start to feel better, use the second auto-injector 5– 15 minutes after the first one

- check the expiry date of the adrenaline auto-injectors and obtain replacements before they expire; expired injectors will be less effective.

The MHRA has produced an advice sheet to make it easier to provide patients with the correct information https://assets.publishing.service.gov.uk/media/5b644e25ed915d377695c83d/AAI-PDF-v4.pdf

Product information

Product name	Patient information leaflet	Educational material produced by the manufacturer	Free trainer pens available
EpiPen 0.3 mg and EpiPen Jr. 0.15 mg adrenaline (epinephrine) auto-injector	EpiPen and EpiPen Jr auto-injectors	EpiPen user guide and instruction video	Yes: https://www.epipen.co.uk/en-gb/hcp/patient-support/epipen-trainer-pen
Jext 150 µg and Jext 300 µg solution for injection in pre-filled pen	Jext pre-filled pens	Jext instructions for use and instruction video	Yes: https://hcp.jext.co.uk/resources/order-literature/

References:

1). Anaphylaxis: assessment and referral after emergency treatment https://www.nice.org.uk/guidance/cg134

2). Adrenaline auto-injectors: updated advice after European review https://www.gov.uk/drug-safety-update/adrenaline-auto-injectors-updated-advice-after-european-review

3). NICE updates anaphylaxis guidance to ensure patients carry two adrenaline injectors in response to coroner's report https://pharmaceutical-journal.com/article/news/nice-updates-anaphylaxis-guidance-to-ensure-patients-carry-two-adrenaline-injectors-in-response-to-coroners-report

4) MHRA Adrenaline auto-injectors: recent action taken to support safety
https://www.gov.uk/drug-safety-update/adrenaline-auto-injectors-recent-action-taken-to-support-safety

5) BNF https://bnf.nice.org.uk/drug/adrenalineepinephrine.html

6) Epipen Jr Summary of Product Characteristics https://www.medicines.org.uk/emc/product/4290/smpc

7) Jext Summary of Product Characteristics https://www.medicines.org.uk/emc/product/5748/smpc

8) Emerade Summary of Product Characteristics https://www.medicines.org.uk/emc/product/5278/smpc

9) Resuscitation Council UK https://www.resus.org.uk/media/337/download?attachment

10) Guidance on the use of adrenaline auto-injectors in schools
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/645476/Adrenaline_auto_injectors_in_schools.pdf

11) Allergy UK https://www.allergyuk.org/about/latest-news/1253-emerade-500-microgram-autoinjectors-recall

12) Medicines.org.uk. 2020. Emerade, 500 Micrograms, Solution For Injection In Pre-Filled Pen – Summary Of Product Characteristics (Smpc) https://www.medicines.org.uk/emc/product/5279/smpc [Accessed 30th September 2021]