South East London Integrated Medicines Optimisation Committee
Formulary recommendation

Reference	**168**
Intervention:	**Intranasal adrenaline (EURneffy® 2mg nasal spray) for emergency treatment of anaphylaxis in adults and children** (Adrenaline (also known as epinephrine) is a medicine used to treat severe allergic reactions)
Date of Decision	**March 2026**
Date of Issue:	**May 2026**
Recommendation:	**Amber 1 – initiation in primary care on the recommendation of a specialist**
Further Information:	• Intranasal adrenaline (EURneffy® 2mg nasal spray) is accepted for use in South East London (SEL) in line with its licensed indication. EURneffy® is licensed for the emergency treatment of severe allergic reactions (anaphylaxis) due to insect stings or bites, foods, medicinal products, and other allergens as well as idiopathic or exercise-induced anaphylaxis in adults and children with a body weight of at least 30kg. • The use of EURneffy® in SEL is in accordance with the British Society for Allergy & Clinical Immunology (BSACI) recommendations. In line with this, EURneffy® is **not** recommended for the treatment of anaphylaxis for the following patient groups: – People who have previously needed more than 1 dose of adrenaline to treat anaphylaxis* – People with a previous severe anaphylaxis with hypotension, something which is more common in those with allergies to insect venom • EURneffy® is recommended as an alternative treatment option to adrenaline autoinjectors (AAI).The decision on the most appropriate adrenaline preparation will be made by the allergy specialist. • Allergy specialists have confirmed that a blanket switch of patients from AAIs to EURneffy® is not required and is therefore not supported by this recommendation. Advice on switching individuals should be sought from the allergy specialist (e.g via Advice & Guidance). • Intranasal adrenaline is not intended to replace current anaphylaxis kits or the use of intramuscular adrenaline where these are recommended in resuscitation or anaphylaxis guidelines. • Some local guidance or standard operating procedures (SOPs) in paediatric allergy clinics may already specify that AAIs are the first line treatment for anaphylaxis. In such cases, EURneffy® may be included as an alternative to the AAI for use within the paediatric allergy clinic, provided the above criteria are met. • In line with the Summary of Product Characteristic (SmPC), clinicians who prescribe EURneffy® should take appropriate steps to ensure that the patient understands the indication and use of EURneffy® thoroughly. Clinicians should review the patient information leaflet and operating instructions for EURneffy® with the patient. **All patients who are prescribed EURneffy® should be clearly instructed on how and when to use the product**. It is strongly advised to also educate the patient's immediate associates (e.g. parents, caregivers, teachers) on the correct use of EURneffy® in case support is needed in an emergency. • Training videos on the administration of EURneffy® for healthcare professions and patients can be accessed here. • Medicines and Healthcare products Regulatory Agency (MHRA) guidance relating to the safe use of AAIs, recommends clinicians should only prescribe two AAIs per prescription to ensure patients always have a backup and patients and/or carers should always carry two AAIs at all times. In line with this, it is recommended clinicians only prescribe two EURneffy® nasal sprays per prescription where appropriate. One pack of EURneffy® contains two single dose nasal sprays. • Treatment with EURneffy® should be discontinued if the patient no longer requires adrenaline for the management of anaphylaxis (e.g., the allergy has resolved or a definitive diagnosis has been made indicating that adrenaline is no longer needed). **Note, in the paediatric population, there may be caveats to more than 1 dose of adrenaline being administered in the past. For example, if a second dose was pre-emptively administered by a carer/guardian when it was not needed (i.e. in a panic) or*

	a second dose may have been required because the child administered the first dose incorrectly. This information would be established through clinical history taking.
Shared Care/ Transfer of care required:	N/A
Cost Impact for agreed patient group	• EURneffy® costs ~50% more than AAIs according to the NHS drug tariff (April 2026), but its longer shelf-life may reduce annual prescriptions • At steady state (year 3), it is estimated up to 50% of adrenaline prescribed in primary care for the management of anaphylaxis will be attributed to EURNeffy®. Based on current AAI prescribing in primary care across SEL and a cost comparison of AAIs and EURneffy®, it is estimated the cost impact of prescribing EURneffy® in primary care instead of AAIs may equate to a cost impact of ~£359,562 per annum (~£17,122 per 100,000 population). • It is estimated that approximately 260 new patients per annum in SEL may be initiated on EURneffy® by the specialist allergy clinics. Assuming all 260 patients are prescribed EURneffy® instead of AAIs, the estimated additional cost impact for SEL is ~£21,000 (~£1000 per 100,000 population) per annum. For this calculation, no allowance has been made for potential reductions in repeat prescribing associated with the extended shelf-life of EURneffy®; consequently, the estimated cost impact is likely to represent an overestimate. • These estimated costs take into consideration real-world data and assumes ~33% of patients may require 2 packs (4 devices) per prescription.
Usage Monitoring & Impact Assessment	**Acute Trusts:** • Monitor use and submit usage data and audit reports upon request to the Committee. **SEL Borough Medicines Teams:** • Monitor ePACT2 data. Exception reports from GPs if inappropriate prescribing requests are made to primary care
Evidence reviewed	**References (from evidence evaluation)** 1. Summary of product characteristics for EURneffy, available via. www.medicines.org.uk. Last accessed 19.03.26 2. T. B. Casale, A. K. Ellis, A. Nowak-Wegrzyn, M. Kaliner, R. Lowenthal, and S. Tanimoto, "Pharmacokinetics/Pharmacodynamics of Epinephrine After Single and Repeat Administration of Neffy, EpiPen, and Manual Intramuscular Injection," Journal of Allergy and Clinical Immunology 152, no. 6 (2023): 1587–1596. 3. S. Tanimoto, M. Kaliner, R. F. Lockey, et al., "Pharmacokinetic and Pharmacodynamic Comparison of Epinephrine, Administered Intranasally and Intramuscularly: An Integrated Analysis," Annals of Allergy, Asthma & Immunology 130, no. 4 (2023): 508–514.e1. 4. T. B. Casale, J. Oppenheimer, M. Kaliner, J. A. Lieberman, R. Lowenthal, and S. Tanimoto, "Adult Pharmacokinetics of Self-Administration of Epinephrine Nasal Spray 2.0 mg Versus Manual Intramuscular Epinephrine 0.3 mg by Health Care Provider," Journal of Allergy and Clinical Immunology: In Practice 12, no. 2 (2024): 500–502.e1. 5. D. Fleischer, H. H. Li, R. Lockey, et al., "Pediatric Doses of Neffy (Intranasal Nasal Spray) Demonstrate Pharmacokinetic Profiles That Are Equivalent to Epinephrine Injections Products," Journal of Allergy and Clinical Immunology 153, no. 2 (2024): AB12, https://doi.org/10.1016/j.jaci.2023.11.059 6. M. Ebisawa, R. Lowenthal, S. Tanimoto, et al., "Neffy, Epinephrine Nasal Spray, Demonstrates a Positive Efficacy and Safety Profile for the Treatment of Allergic Reactions in Pediatric Patients At-Risk of Anaphylaxis: Phase 3 Study Results," Journal of Allergy and Clinical Immunology 153, no. 2 (2024): AB371, https://doi.org/10.1016/j.jaci.2023.11.888 – Phase 3 open-label study in ages 6–17 with OFC-induced anaphylaxis 7. D. Dworaczyk and A. Hunt, "Pharmacokinetic and Pharmacodynamic Effects of Intranasal Epinephrine Versus Intramuscular Epinephrine in Adults," Journal of Allergy and Clinical Immunology 145, no. 2 (2020): AB345. 8. D. A. Dworaczyk, A. L. Hunt, M. Di Spirito, et al., "A 13.2 mg Epinephrine Intranasal Spray Demonstrates Comparable Pharmacokinetics, Pharmacodynamics, and Safety to a 0.3 mg Epinephrine Autoinjector," Journal of Allergy and Clinical Immunology: Global 3, no. 2 (2023): 100200. 9. D. A. Dworaczyk, A. Hunt, M. Di Spirito, M. Lor, K. Rance, and A. D. van Haarst, "Randomized Trial of Pharmacokinetic and Pharmacodynamic Effects of 13.2 Mg Intranasal Epinephrine Treatment in Congestion," Annals of Allergy, Asthma & Immunology 133, no. 2 (2024): 186–193.e2. 10. Muraro A, Worm M, Alviani C, et al. EAACI guidelines: Anaphylaxis (2021 update). Allergy. 2022;77(2):357-377. doi:10.1111/all.15032 11. Thomas B. Casale et al. Real-world data on the effectiveness of neffy in clinical practice, Annals of Allergy, Asthma & Immunology, (Volume 135, Issue 6,2025,Pages 710-711,ISSN 1081-1206,) https://doi.org/10.1016/j.anai.2025.08.005 12. J. Oppenheimer, et al. PHARMACOKINETICS AND PHARMACODYNAMICS FOLLOWING REPEAT DOSING OF EPINEPHRINE NASAL SPRAY VERSUS INTRAMUSCULAR INJECTION DURING ALLERGIC RHINITIS, Annals of Allergy, Asthma & Immunology, (Volume 133, Issue 6, Supplement,2024,Page S68,ISSN 1081-1206,) https://doi.org/10.1016/j.anai.2024.08.227

NOTES:

a) SEL IMOC recommendations and minutes are available publicly via the website.

b) This SEL IMOC recommendation has been made on the cost effectiveness, patient outcome and safety data available at the time. The recommendation will be subject to review if new data becomes available, costs are higher than expected or new NICE guidelines or technology appraisals are issued.

c) Not to be used for commercial or marketing purposes. Strictly for use within the NHS