

A new route in anaphylaxis treatment: Intranasal adrenaline



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Anaphylaxis is a time-critical emergency. Prompt intramuscular (IM) adrenaline remains the first-line treatment, rapidly reversing airway oedema, vasodilatation and bronchospasm (MHRA, 2023). However, barriers such as fear of needles, incorrect injection technique or hesitancy are well documented and may delay or impair its administration.¹ In real-world settings, these human factors can influence outcomes as much as the pharmacotherapy itself.

In July 2025 the Medicines and Healthcare products Regulatory Agency (MHRA) approved EURneffy, an intranasal adrenaline spray, as the first needle-free formulation of adrenaline licenced in the UK for emergency treatment of anaphylaxis.² It is indicated for adults and children weighing 30 kg or more and delivers a 2 mg dose of adrenaline, comparable to a 0.3 mg IM injection in the thigh.

An intranasal device presents practical advantages. Needle-free administration may reduce reluctance among some patients and bystanders and avoids sharps disposal issues. Other benefits include ease of use and carriage, and prolonged shelf life.



Available data indicate that EURneffy achieves systemic adrenaline concentrations and pharmacodynamic effects comparable to those of IM auto-injectors.^{3,4} Reported adverse reactions associated with intranasal administration are generally mild and transient, including nasal discomfort or throat irritation. Nasal congestion does not appear to impair absorption in clinical studies.⁵

How to use the device

EURneffy releases its full dose automatically when activated and must not be primed. As with injectable adrenaline, it should be given at the first signs of anaphylaxis, followed immediately by a call to 999 or 112. Patients should always carry two devices. If symptoms do not improve within five minutes, a second dose should be administered into the same nostril.

Training devices to support patient education are available from the manufacturer: one simulates activation force while another is a reusable trainer enabling practice of correct insertion technique, directing the nozzle straight into the nostril towards the forehead.

Monitoring, access and positioning

As a newly authorised medicine, EURneffy carries a black triangle (▼), indicating enhanced monitoring. Suspected adverse reactions should be reported through the MHRA Yellow Card Scheme. A 1 mg formulation for children weighing 15–30 kg has been approved by the Food and Drug Administration and may soon become available in the UK.

At the time of writing, EURneffy is not listed in the British National Formulary but is available to order through Alliance Healthcare wholesalers. NHS prescribing data record two prescriptions dispensed in England in December 2025 at an average cost of £173 per item.⁶ As a hybrid medicine, EURneffy does not require Scottish Medicines Consortium approval and may therefore be considered for suitable patients across formularies throughout the UK. Formulary decisions will need to consider comparative cost, efficacy and safety data, shelf life and training requirements.

The introduction of intranasal adrenaline does not alter the central principle of anaphylaxis management: adrenaline should be given promptly. It does, however, provide an additional option for clinicians and patients, expanding the available tools for emergency treatment.

References

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