

## **Draft Guidance on Olopatadine Hydrochloride**

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic. It does not establish any rights for any person and is not binding on FDA or the public. You can use an alternative approach if it satisfies the requirements of the applicable statutes and regulations. To discuss an alternative approach, contact the Office of Generic Drugs.

**Active Ingredient:** Olopatadine hydrochloride

**Dosage Form; Route:** Metered spray; Nasal

**Recommended Studies:** In vitro studies

FDA recommends the following in vitro studies to establish bioequivalence (BE) of the test (T) and reference (R) nasal sprays containing olopatadine hydrochloride.

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### **In Vitro Studies**

FDA recommends that applicants conduct the following in vitro BE studies on samples from each of three or more batches of the T product and three or more batches of the R product, with no fewer than 10 units from each batch. A single batch of solution can be split-filled into three equal size sub-lots of product. The sub-lots should be prepared from three different batches of the same device (pump and actuator) components.

1. Single actuation content
2. Droplet size distribution by laser diffraction
3. Drug in small particles/droplets
4. Spray pattern
5. Plume geometry
6. Priming and repriming

Additional Comments: Refer to the product-specific recommendation for Fluticasone Propionate Nasal Spray Metered<sup>1</sup> for recommendations on design and equivalence criteria for the aforementioned in vitro BE studies, and general recommendations on the conduct of the in vitro BE studies and data submission.

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### **Additional Information**

Formulation:

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<sup>1</sup> <http://www.fda.gov/downloads/Drugs/GuidanceComplianceRegulatoryInformation/Guidances/UCM461051.pdf>

FDA recommends that the T product be qualitatively (Q1)<sup>2</sup> and quantitatively (Q2)<sup>3</sup> the same as the R product.

Device:

FDA recommends that the T product deliver the same number of doses as the R product, be similar in shape, size, and external operating principles to ensure substitutability with the R product without additional need to retrain patients upon use of the generic product.

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<sup>2</sup> Q<sub>1</sub> (qualitative sameness) means that the T product uses the same inactive ingredient(s) as the R product.

<sup>3</sup> Q<sub>2</sub> (quantitative sameness) means that concentrations of the inactive ingredient(s) used in the T product are within  $\pm 5\%$  of those used in the R product.