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*Draft – Not for Implementation*

## **Draft Guidance on Istradefylline**

**October 2024**

This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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.

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**Active Ingredient:** Istradefylline

**Dosage Form:** Tablet

**Route:** Oral

**Strengths:** 20 mg, 40 mg

**Recommended Study:** One in vivo bioequivalence study with pharmacokinetic endpoints

1. Type of study: Fasting  
Design: Single-dose, two-treatment, two-period crossover in vivo  
Strength: 40 mg  
Subjects: Healthy males and non-pregnant, non-lactating females  
Additional comments: Females of reproductive potential should use effective contraception during the study. Ensure an adequate washout period between treatments in the crossover study due to the long elimination half-life of istradefylline. Alternatively, a parallel study design may be considered.

**Analyte to measure:** Istradefylline in plasma

**Bioequivalence based on (90% CI):** Istradefylline

**Waiver request of in vivo testing:** 20 mg strength based on (i) acceptable bioequivalence study on the 40 mg strength, (ii) acceptable in vitro dissolution testing of both strengths, and (iii) proportional similarity of the formulations between both strengths

**Dissolution test method and sampling times:** The dissolution information for this drug product can be found in the FDA’s Dissolution Methods database, <http://www.accessdata.fda.gov/scripts/cder/dissolution/>. Conduct comparative dissolution testing on 12 dosage units for each of both strengths of the test product and reference listed drug (RLD).<sup>1</sup> Specifications will be determined upon review of the abbreviated new drug application.

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**Document History:** Recommended March 2021; Revised October 2024

**Unique Agency Identifier:** PSG\_022075

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<sup>1</sup> If the RLD is not available, refer to the most recent version of the FDA guidance for industry on *Referencing Approved Drug Products in ANDA Submissions*.