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*Draft – Not for Implementation*

## **Draft Guidance on Selegiline Hydrochloride**

**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This draft guidance, when finalized, will represent the current thinking of the Food and Drug Administration (FDA, or the Agency) on this topic.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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|---------------------------|---|
| <b>Active Ingredient:</b> | Selegiline hydrochloride  |
| <b>Dosage Form:</b>       | Tablet, orally disintegrating                                   |
| <b>Route:</b>             | Oral  |
| <b>Strength:</b>          | 1.25 mg   |
| <b>Recommended Study:</b> | One in vivo bioequivalence study with pharmacokinetic endpoints |

1. Type of study: Fasting  
Design: Single-dose, two-treatment, two-period crossover in vivo  
Strength: 1.25 mg at a dose of 2.5 mg (2 x 1.25 mg)  
Subjects: Healthy males and non-pregnant, non-lactating females  
Additional comments: The orally disintegrating tablet should be placed on the tongue, allowed to disintegrate, and swallowed without water. Applicants may consider using a reference-scaled average bioequivalence approach. If using this approach, provide evidence of high variability in the pharmacokinetic parameters (i.e., within-subject variability  $\geq 30\%$ ) for the reference listed drug (RLD). For detailed information on this approach, refer to the most recent version of the FDA guidance for industry on *Bioequivalence Studies with Pharmacokinetic Endpoints for Drugs Submitted Under an ANDA*.<sup>a</sup>

**Analytes to measure:** Selegiline and its metabolite N-desmethylselegiline in plasma

Submit the metabolite data as supportive evidence of comparable therapeutic outcome. For the metabolite, the following data should be submitted: individual and mean concentrations, individual and mean pharmacokinetic parameters, and geometric means and ratios of means for AUC and  $C_{max}$ .

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

**Waiver request of in vivo testing:** Not applicable

**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 the test product and RLD.<sup>1</sup> Specifications will be determined upon review of the abbreviated new drug application.

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**Document History:** Recommended September 2008; Revised October 2024

**Unique Agency Identifier:** PSG\_021479

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<sup>a</sup> For the most recent version of a guidance, check the FDA guidance website at <https://www.fda.gov/regulatory-information/search-fda-guidance-documents>.

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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*.