

## Draft Guidance on Thioguanine

This draft guidance, once finalized, will represent the Food and Drug Administration's (FDA's) current thinking on this topic. It does not create or confer any rights for or on any person and does not operate to bind FDA or the public. You can use an alternative approach if the approach satisfies the requirements of the applicable statutes and regulations. If you want to discuss an alternative approach, contact the Office of Generic Drugs.

**Active ingredient:** Thioguanine

**Form/Route:** Tablets; Oral

**Recommended studies:** 1 study

Type of study: Steady-state

Design: Randomized, steady-state, parallel, *in-vivo*

Strength: 40 mg

Subjects: Adult patients with acute myelogenous leukemia who are undergoing monotherapy or combination therapy with thioguanine, or patients being treated with thioguanine for other conditions.

Additional Comments:

- 1) For a parallel design study, the Test and Reference groups should be well balanced with respect to patient disease progression, treatment history, and treatment regimen.
- 2) It is recommended that the firm confirm steady-state conditions by measuring 3 consecutive thioguanine plasma concentrations prior to dosing, with 24 hours between each measurement.
- 3) Since this is a cytotoxic drug, an Investigational New Drug Application (IND) should be submitted prior to conducting the bioequivalence study as indicated in 21 CFR 320.31.

---

**Analytes to measure (in appropriate biological fluid):** Thioguanine and 2-amino-6-methylthiopurine in plasma

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

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

**Dissolution test method and sampling times:** Please note that **Dissolution Method Database** is available to the public at the OGD website at <http://www.accessdata.fda.gov/scripts/cder/dissolution/>. Please find the dissolution information for this product on this website. Please conduct comparative dissolution testing on 12 dosage units each of the test and reference products. Specifications will be determined upon review of the application.