

Leishmania Species and Drug Efficacy Comparison

This report compares the major species of Leishmania with the effectiveness of two key treatments:

- Milteforan (miltefosine)
- Glucantime (meglumine antimoniate)

Comparison Table:

1. Leishmania donovani (Visceral Leishmaniasis)

- Milteforan: Effective; oral treatment option, widely used in endemic areas.
- Glucantime: Very effective; mainstay treatment in many countries, especially injectable form.

2. Leishmania infantum (Visceral and Cutaneous; affects dogs)

- Milteforan: Moderate to good response in dogs; often combined with allopurinol.
- Glucantime: Very effective in dogs, especially when combined with allopurinol. Reduces parasite load significantly.

3. Leishmania major (Cutaneous Leishmaniasis)

- Milteforan: Shows efficacy; oral treatment preferred when systemic therapy is needed.
- Glucantime: Gold standard for localized cutaneous leishmaniasis; injected around lesion or systemically.

4. Leishmania tropica (Cutaneous Leishmaniasis)

- Milteforan: Moderate results; more research needed.
- Glucantime: Effective but treatment duration may be longer; species often more stubborn.

5. Leishmania braziliensis (Mucocutaneous Leishmaniasis)

- Milteforan: Limited success; higher risk of relapse; used with caution.
- Glucantime: First-line therapy; high-dose required; systemic injection needed.

6. Leishmania mexicana (Cutaneous Leishmaniasis)

- Milteforan: Moderate effectiveness; sometimes used for patients who can't tolerate injections.
- Glucantime: Reliable efficacy in most cutaneous cases.

7. *Leishmania amazonensis* (Cutaneous and Mucocutaneous)

- Milteforan: Some response seen, but relapse risk present.
- Glucantime: Used with variable results; may need longer treatment.

8. *Leishmania aethiopica* (Cutaneous Leishmaniasis)

- Milteforan: Limited data; not first-line.
- Glucantime: Used effectively; although relapse possible, it's still preferred.

Summary Recommendations:

- Milteforan is most convenient (oral), but slightly lower cure rates and higher relapse risk in resistant species.
- Glucantime requires injections, but provides stronger, faster responses across most species.
- Both drugs are often combined with Allopurinol for canine leishmaniasis (especially *L. infantum*).