Using a Guinea Pig (GP) Model

NA

Clinical Evaluation:
- Local changes to the area were clinically assessed and scored on day 12.
- The assessment of clinical efficacy for each treatment group is expressed as percentage relative to the vehicle control group.

Percent Efficacy:
- % efficacy = 100 – (T x 100) / K
- Where T = score in test group, and K = score in untreated control.

Statistical analysis:
Statistical significance of clinical and mycological study data was determined using a one-way analysis of variance (ANOVA) with a Bonferroni post hoc test. The treated groups were compared to the untreated control and to one another to determine antifungal activity.

Results

Clinical efficacy:
- Table 1 and Figure 1 show the clinical efficacy of each treatment.
- As expected, the vehicle control GPs showed hair loss and ulcerated, scaly skin.
- Percent efficacies for groups treated with CD101 10, 20, and 40 mg/kg on days 1 & 8 were 90.5, 94.2, and 98.4%, respectively, and 76.8% for terbinafine 10 mg/kg on days 1 & 8.
- All treatment groups showed significant efficacy compared to the vehicle control (P<0.001).
- The CD101 treated groups showed significant efficacy compared to the vehicle control (P<0.001).

Mycological efficacy:
- The vehicle control group behaved as expected having the highest average fungal positive hairs.
- Percent efficacies for groups treated with CD101 10, 20, and 40 mg/kg on days 1 & 8 were 80.9, 82.9, and 98.5%, respectively, and 54.2% for terbinafine 10 mg/kg on days 1 & 8.
- All treatment groups showed significant efficacy compared to the vehicle control (P<0.001).
- The CD101 treated groups showed significant efficacy compared to the terbinafine treated group (P<0.001).

Conclusions

All CD101 treated groups showed significant clinical and mycological efficacy compared to the vehicle treated control and terbinafine treated groups. Our findings demonstrate that CD101 dosed once weekly possesses potent mycological and clinical efficacy in a GP model of dermatophytosis. Further evaluation is warranted.

References


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