**Rhizopus delemar**

99-880 is a clinical strain isolated from

Lungs Brain

Table 1. *Rhizopus delemar* suscepible to APX001A.

<table>
<thead>
<tr>
<th>Species</th>
<th>MIC (50% inhibition)</th>
<th>MIC (100% inhibition)</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>R. delemar</em> 99-880</td>
<td>0.25 µg/mL</td>
<td>8 µg/mL</td>
</tr>
</tbody>
</table>

**RESULTS**

**SUMMARY/CONCLUSIONS**

- **APX001A** has in vitro activity against *R. delemar*, a leading cause of mucormycosis.
- In general, APX001A demonstrated efficacy in prolonging survival of neutropenic mice infected with *R. delemar*.
- Lower doses of 52 or 104 mg/kg (bid) of APX001A prolonged survival of neutropenic mice with pulmonary mucormycosis due to *R. delemar* at a level similar to high dose LAmB.
- At 156 mg/kg (bid), APX001A did not enhance survival of mice when compared to Placebo. These mice also looked unwell.
- All treatments resulted in significant reduction (~1 log) in Lungs CFU, while only APX001A at 105, and 156 mg/kg (bid) and LAmB resulted in significant reduction of brain fungal burden.
- The lack of survival efficacy seen in mice treated with APX001A at 156 mg/kg (bid), while the same dose is able to reduce organs CFU suggests potential mouse-specific toxicity with higher doses of this drug.

**ACKNOWLEDGEMENTS**

This project has been funded with Federal funds from the NIH/NIAID/DMID Under Contracts No. HHSN27220100038I (Task Order A93) and HHSN272201100018I (Task Order A21). APX001A and APX001 powders were provided by Amplyx Pharmaceuticals.

**REFERENCES**


**INTRODUCTION**

- **Mucormycosis** (zoogleomycosis) is a rare but life-threatening fungal infection which are mainly caused by *Rhizopus* species (1).
- It occurs mostly in immunocompromised hosts such as neutropenic patients (1).
- **APX001A** is a first-in-class antifungal that targets Gwt1, an enzyme required in the early steps of GPI post-translational modification of surface proteins in eukaryotic cells.
- Here we assessed the in vitro and in vivo activity of APX001A and APX001 against *Rhizopus oryzae*, the most common cause of mucormycosis.

**METHODS**

**RESULTS**

**SUMMARY/CONCLUSIONS**

- **APX001A** has in vitro activity against *R. delemar*, a leading cause of mucormycosis.
- In general, APX001A (bid) demonstrated efficacy in prolonging survival of neutropenic mice infected with *R. delemar*.
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