**METHODS**

C3H/HeN mice were infected with *Pneumocystis murina* intranasally at 2 x 10^6/50 µL after immunosuppression with dexamethasone. Mice were administered vehicle as a negative control (C/S), trimethoprim/sulfamethoxazole (T/S) as a positive control, caspofungin as a comparator (C/S), trimethoprim/sulfamethoxazole (T/S) at week 14 (Fig. 2).

Study drug administration was stopped at 2, 4, 6, and 8 weeks, at which time mice were immunosuppressed for an additional 6 weeks to allow any residual *P. murina* to re-activate. Mice were then euthanized, and lungs were processed for analysis of nuclei and asci.

**RESULTS**

All rezafungin dose regimens at all timepoints significantly reduced both nuclei and asci burdens versus the C/S group (Fig. 1). After 4 weeks of rezafungin prophylaxis (plus 6 weeks additional immunosuppression [Week 10 timepoint]; Fig. 1), both groups given rezafungin 20 mg/kg (3x/wk and 1x/wk) prevented *P. murina* organisms from activating infection. After 6 and 8 weeks of rezafungin prophylaxis plus 6 weeks additional immunosuppression (Week 12 and 14 timepoints; Fig. 1), no re-activation of infection was present in any of the study groups. After 2 and 4 weeks of prophylaxis (plus 6 weeks additional immunosuppression [Week 8 and 10 timepoints; Fig. 1], there was a significant reduction of nuclei and asci counts in all groups of rezafungin versus caspofungin.

After 2, 4, and 6 weeks of rezafungin prophylaxis plus 6 weeks additional immunosuppression, there was a significant reduction of nuclei and asci counts between all groups of rezafungin versus caspofungin.

**CONCLUSIONS**

• Prophylaxis with rezafungin for durations as short as 4 weeks prevented *P. murina* organisms from developing infection after cessation of therapy and showed more efficacy than caspofungin.

• These results provide evidence that rezafungin can prevent *Pneumocystis* reactivation and that such regimens hold promise for prophylaxis against *Pneumocystis* in at-risk patients undergoing blood and marrow transplantation.

**REFERENCES**

3. Cushion MT, et al. ASM Microbe 2016; Jun 16-20, 2016; Boston, MA.

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