Safety and Efficacy of Rezafungin in Immunocompromised Patients: Analysis of Outcomes from the Phase 2 STRIVE Trial of Rezafungin for Treatment of Candidemia and Invasive Candidiasis

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INTRODUCTION

- Infections due to *Candida* are very common in immunocompromised patients and are associated with higher morbidity and mortality[1,2]
- The phase 2, randomized, controlled STRIVE trial (NCT02734862) evaluated rezafungin versus caspofungin in patients with candidemia and/or invasive candidiasis (IC)[3]
- Rezafungin is currently in Phase 3 trials for the treatment of candidemia and IC (ReSTORE; NCT03667690) and for prevention of invasive fungal disease caused by *Candida*, *Aspergillus*, and *Pneumocystis* in allogeneic blood and marrow transplant patients (ReSPECT; NCT04368559)
- In this sub-analysis of the STRIVE trial, the efficacy and safety outcomes were evaluated in patients who received immunosuppressive agents prior to or during treatment

METHODS

- Adults (≥18 y) with systemic signs of infection and mycological confirmation of candidemia and/or IC were randomized to treatment with rezafungin or caspofungin (Table 1)

Table 1. Treatment Groups for Phase 2 STRIVE Trial

Group	Dose Regimen	Dose Schedule
RZF Group 1	IV RZF 400 mg QWk	On Days 1 and 8
RZF Group 2[a]	IV RZF 400 mg on Week 1, followed by 200 mg QWk	Optional dose(s) on Day 15 (and on Day 22 for IC)
CAS	IV CAS 70 mg on Day 1, followed by 50 mg QD (with optional step-down to oral fluconazole)	QD for up to 21 days for candidemia or 28 days for IC ± candidemia

CAS=caspofungin; IC=invasive candidiasis; IV=intravenous; QD=once daily; QWk=once weekly; RZF= rezafungin.
[a]Aligns with dosing in the ongoing Phase 3 trial.

- For this analysis, safety and efficacy outcomes were compared in:
  - immunocompromised patients (i.e., those with reported prior or concomitant use of immunosuppressants, calcineurin inhibitors, corticosteroids, and/or immunoglobulin)
  - non-immunocompromised patients (i.e., those with no reported prior or concomitant use of immunosuppressants)
- Outcomes are reported for the pooled RZF-treated arms (RZF Group 1 and RZF Group 2)

RESULTS

- Of 207 randomized patients, 27 were immunocompromised; of these, 21 patients had efficacy data evaluable for analysis
- The majority of immunocompromised patients had a diagnosis of candidemia (n=17); all 4 IC patients were in the rezafungin group
- While sample size limits broad interpretations, the following was observed:
  - Efficacy outcomes were generally consistent across groups with relatively higher rates among immunocompromised patients treated with rezafungin than for non-immunocompromised or CAS-treated patients, though the numbers of immunocompromised patients were small (Table 2)
  - Overall, there were no concerning trends in rates of AEs or SAEs between groups; the rates of AEs were relatively higher in the immunocompromised population for RZF, though the numbers of immunocompromised patients were small (Table 3)

Table 2. Efficacy Outcomes by Immune Status (mITT Population[a])

Outcomes at Day 14 n (%)	Immuno-compromised		Non–immunocompromised	
	RZF (N=12)	CAS (N=9)	RZF (N=110)	CAS (N=52)
Overall response	9 (75)	6 (66.7)	72 (65.5)	35 (67.3)
Mycological success	9 (75)	6 (66.7)	76 (69.1)	36 (69.2)
Investigator assessment of clinical cure	9 (75)	6 (66.7)	81 (73.6)	37 (71.2)

[a]All patients who received any amount of study drug and with documented *Candida* infection.

Table 3. Summary of Adverse Events (Safety Population[a])

Adverse Event n (%)	Immuno-compromised		Non–immunocompromised	
	RZF (N=18)	CAS (N=9)	RZF (N=116)	CAS (N=59)
Any AE	18 (100)	6 (66.7)	102 (87.9)	49 (83.1)
SAE	11 (61.1)	4 (44.4)	52 (44.8)	25 (42.4)

[a]All patients who received any amount of study drug.

AE=adverse event; CAS=caspofungin; RZF=rezafungin; SAE=serious adverse event.

CONCLUSIONS

- The Phase 2 STRIVE trial demonstrated safety and efficacy of rezafungin in the treatment of candidemia and IC
- This exploratory analysis, while limited by the relatively small number of patients and the fact that patients classified as 'non-immunocompromised' may have had some lesser degree of immunocompromise due to underlying illnesses, provides insight on the safety and efficacy of rezafungin in a high-risk, immunocompromised patient population
- Future analyses in immunocompromised patients will provide further understanding of the use of rezafungin

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