The FURI Study: Patient Outcomes After Treatment with Oral Ibrexafungerp Based on Prior Antifungal Therapy and Patient Enrollment Criteria

32nd ECCMID
Lisbon, Portugal
23–26 April 2022

OA Cornely[1], PG Pappas[2], R Miller[3], BD Alexander[3], M Johnson[3], J Vazquez[4], L Ostrosky-Zeichner[5], A Spec[6], R Rautemaa-Richardson[7], R Krause[8], GR Thompson[9], CG Morse[10], JW Sanders[10], D Andes[11], GM Lyon[12], MH Miceli[13], TF Patterson[14], M Hoenigl[8,15], TR King[16], N Azie[16], DA Angulo[16], TJ Walsh[17]

[1]University of Cologne, [2]University of Alabama-Birmingham, [3]Duke University, [4]Augusta University, [5]McGovern Medical School, [6]Washington University St. Louis, [7]University of Manchester, [8]Medical University of Graz, [9]University of California, Davis, [10]Wake Forest University, [11]University of Wisconsin, [12]Emory University, [13]University of Michigan, [14]UT Health San Antonio, [15]University of California at San Diego, [16]SCYNEXIS, Inc., [17]Cornell University

BACKGROUND

- There are limited oral treatment options available for patients with fungal infections who fail currently available antifungals or who have an infection caused by resistant organisms.
- Ibrexafungerp is an investigational broad-spectrum glucan synthase inhibitor antifungal with activity against *Candida* and *Aspergillus* species, including azole- and echinocandin-resistant strains.
- A Phase 3 open-label, single-arm study of ibrexafungerp (FURI; NCT03059992) is ongoing for the treatment of patients who were intolerant of, or with fungal disease refractory to standard antifungal therapy.

METHODS

- FURI subjects from global sites (**Table 1**) were eligible for enrollment if they had proven or probable:
  - mucocutaneous candidiasis,
  - invasive candidiasis,
  - invasive aspergillosis, or other fungal diseases.
- This report details treatment outcomes of patients based on the characterization of the patient condition at enrollment (e.g., refractory disease; continued IV antifungal therapy undesirable/unfeasible; intolerant to antifungal therapy, toxicity of antifungal therapy).

DEMOGRAPHICS

- Of the 74 patients treated with ibrexafungerp for various fungal infections:
  - 44 (59%) enrolled with disease refractory to antifungal therapy;
  - 22 (29%) enrolled due to continued IV antifungal therapy undesirable/unfeasible;
  - 8 (10%) due to intolerance or toxicity to prior antifungal therapy;
- Baseline fungal diseases are detailed in **Table 2**.

Table 1. Participating Centers

Continent	Country	Centers	Patients
North America	United States	20	46
	Canada	1	
Europe	Germany	5	28
	Austria	4	
	Spain	2	
	United Kingdom	2	
	Netherlands	1	
Africa	South Africa	4	-
Asia	Pakistan	1	-

Table 2. Baseline Fungal Disease

Category	Baseline Fungal Disease	Number of patients n=74 (%)
Invasive Candidiasis n=39 (52.7%)	Intra-abdominal infections	11 (14.9)
	Candidemia	11 (14.9)
	Bone / Joint infection	8 (10.8)
	Mediastinitis (1), empyema (1), endocarditis (1), liver (1)	4 (5.4)
	Subcutaneous wound infection	2 (2.7)
	Chronic disseminated candidiasis	2 (2.7)
	Urinary tract infection	1 (1.4)
Mucocutaneous Candidiasis n=32 (43.2%)	Oropharyngeal candidiasis	14 (18.9)
	Esophageal candidiasis	10 (13.5)
	Vulvovaginal candidiasis	7 (9.5)
	Chronic mucocutaneous candidiasis-skin	1 (1.4)
Aspergillosis n=3 (4.1%)	Invasive pulmonary aspergillosis	3 (4.1)

RESULTS

- Responses to ibrexafungerp by enrollment criteria are listed in **Table 3**.
- Most patients showed complete or partial response or clinical improvement (64%) regardless of reason for study entry.
- Enrolled patients received a variety of prior antifungal therapies. The majority included IV micafungin (n=22) and oral fluconazole (n=10). The complete breakdown of outcomes to ibrexafungerp therapy by prior antifungal therapy are listed in **Table 4.**

Table 3. Ibrexafungerp Response by Enrollment Criteria

	Complete or Partial Response	Stable Response	Progression of Disease	Indeterminate	Death*
Disease refractory to antifungal therapy (n=44)	26	10	3	4	1
Continued IV antifungal therapy undesirable/unfeasible (n=22)	17	3	2	-	-
Intolerance/toxicity to prior antifungal therapy (n=8)	4	4	-	-	-
Totals (n=74)	**47 (64%)**	**17 (23%)**	**5 (7%)**	**4 (5%)**	**1 (1%)**

*Death due to progression of underlying disease.

Table 4. Ibrexafungerp Response by Prior Antifungal Therapy

	Complete or Partial Response Clinical Improvement	Stable Response	Progression of Disease	Indeterminate	Death*
Systemic Agents					
IV Micafungin (n=22)	17	-	3	1	1
IV Caspofungin (n=13)	6	5	-	2	-
IV Fluconazole (n=3)	2	-	1	-	-
IV Voriconazole (n=1)	1	-	-	-	-
IV Ampho B/AmBisome (n=1)	-	1	-	-	-
Oral Fluconazole (n=14)	10	3	1	-	-
Oral Voriconazole (n=3)	-	3	-	-	-
Oral Itraconazole (n=2)	2	-	-	-	-
Oral Posaconazole (n=1)	-	1	-	-	-
Topical/Local Agents					
Topical/Oral Nystatin (n=7)	4	3	-	-	-
Topical Azole NOS (n=2)	2	-	-	-	-
Other Agent NOS (n=2)	2	-	-	-	-
Oral Amphotericin B (n=2)	1	1	-	-	-
Vaginal Flucytosine (n=1)	-	-	-	1	-
Totals (n=74)	**47**	**17**	**5**	**4**	**1**

*Death due to progression of underlying disease. NOS= not otherwise specified.

CONCLUSIONS

- This is an ongoing study.
- In patients with difficult to treat *Candida* infections with limited treatment options, ibrexafungerp treatment led to favorable responses in 64%.
- Ibrexafungerp is a promising oral antifungal agent for *Candida* infections.