Efficacy and Safety of Efinaconazole 10% Topical Solution for Onychomycosis Treatment in Older Adults

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SYNOPSIS

- Toenail onychomycosis treatment is challenging,[1] especially in older adults due to slower nail growth, increased nail thickness, longer disease duration, comorbidities (eg, diabetes, peripheral vascular disease, reduced renal function), and concomitant medication use[2-5]
- Unfortunately, published efficacy and safety data in older adults are very limited
- Efinaconazole 10% topical solution has demonstrated efficacy and favorable tolerability in two phase 3 studies,[6] including post hoc analyses by patient sex, ethnicity, baseline disease severity, and concurrent diabetes[7-10]

OBJECTIVE

- To evaluate efficacy and safety of efinaconazole 10% in patients aged ≥65 years with mild to moderate onychomycosis

METHODS

- Data were pooled from 2 multicenter, randomized, double-blind, vehicle-controlled, phase 3 studies (NCT01008033, NCT01007708) of participants aged 18–70 years with mild to moderate distal lateral subungual onychomycosis affecting ≥1 great toenail
  - Participants were randomized (3:1) to topical efinaconazole 10% or vehicle applied once daily for 48 weeks, with a follow-up visit at week 52
- Efficacy endpoints included complete cure (primary endpoint), complete/almost complete cure, unaffected new toenail growth, mycologic cure, and clinical efficacy
  - Statistical significance was only determined for week 52 as these phase 3 studies were not statistically powered for subgroup analyses
- Adverse events (AEs) were also assessed
- Only participants aged ≥65 years were included in this post hoc analysis

RESULTS

Participants

- Of a total of 1,655 pooled participants in the intent-to-treat population, 218 were aged ≥65 years (**Table 1**)
  - The majority of older adult participants were male, and most were White and not Hispanic/Latino
  - Mean target toenail involvement was 37.8%, and the mean number of affected nontarget toenails was 2.9; baseline severity was in line with the overall phase 3 populations[6]

TABLE 1. Demographic and Baseline Characteristics in Patients Aged ≥65 Years (ITT Population, Pooled)

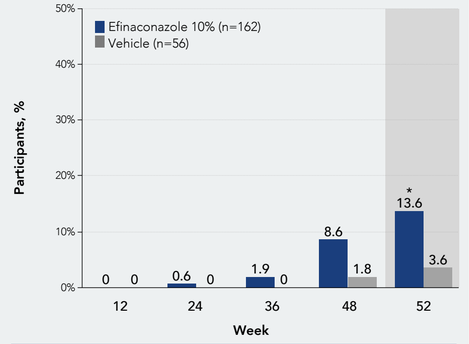
	Efinaconazole 10% (n=162)	Vehicle (n=56)
Age, mean (range), y	67.5 (65.0–71.0)	67.1 (65.0–70.0)
Male, n (%)	123 (75.9)	41 (73.2)
Race, n (%)		
Asian	43 (26.5)	11 (19.6)
Black	3 (1.9)	2 (3.6)
White	114 (70.4)	43 (76.8)
Other[a]	2 (1.2)	0
Not Hispanic or Latino, n (%)	149 (92.0)	48 (85.7)
Affected toenail, mean (range), %	37.8 (20.0–50.0)	37.9 (20.0–50.0)
Affected nontarget toenails, mean (range), n	2.8 (0–5.0)	3.3 (0–5.0)

[a]American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, and Other.
ITT, intent to treat.

Efficacy

- At week 52, significantly more older adults treated with efinaconazole vs vehicle achieved complete cure (13.6% vs 3.6%; $P<0.05$; **Figure 1**) or complete/almost complete cure (19.1% vs 5.4%; $P<0.01$, both; **Figure 2**)
- Least squares mean unaffected new nail growth was significantly greater with efinaconazole vs vehicle ($P<0.001$; **Figure 3**)
- Over half of participants treated with efinaconazole (59.3%) achieved mycologic cure vs 12.5% with vehicle ($P<0.001$; **Figure 4**)
- A quarter of participants (25.3%) achieved clinical efficacy with efinaconazole vs 14.3% with vehicle ($P<0.05$; **Figure 5**)
- Representative photographs of affected toenails from older adults treated with efinaconazole are shown in **Figure 6**

FIGURE 1. Complete Cure[a] by Visit in Patients Aged ≥65 Years (ITT Population, Pooled)



*$P<0.05$ vs vehicle. Statistical significance was only determined for week 52 because the study was not powered for subgroup analyses.
[a]Defined as no clinical involvement of the target toenail and mycologic cure (negative potassium hydroxide examination + negative fungal culture) of the target toenail sample.
ITT, intent to treat.

Safety/Tolerability

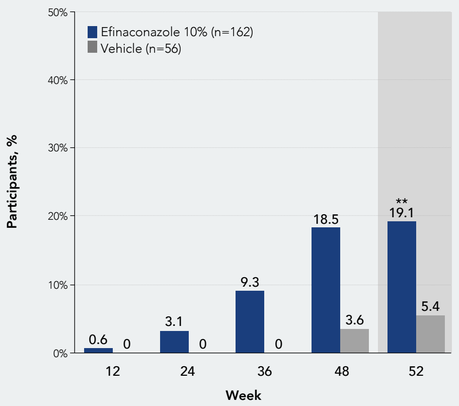
- The proportion of participants who experienced treatment-emergent AEs (TEAEs) through week 52 was slightly lower with efinaconazole than vehicle (**Table 2**)
- Most TEAEs with efinaconazole were mild to moderate in severity, and discontinuation rates were low (<4.5%), similar to the overall phase 3 populations[6]

TABLE 2. Treatment-Emergent Adverse Events Through Week 52 in Patients Aged ≥65 Years (Safety Population, Pooled)

Participants, n (%)	Efinaconazole 10% (n=162)	Vehicle (n=56)
Reporting any TEAE	110 (67.9)	42 (75.0)
Reporting any SAEs[a]	10 (4.0)	5 (3.5)
Discontinued drug or study due to AE	7 (4.3)	1 (1.8)
TEAE severity		
Mild	104 (41.9)	61 (43.0)
Moderate	130 (52.4)	75 (52.8)
Severe	14 (5.6)	6 (4.2)
Treatment-related TEAEs	15 (6.0)	2 (1.4)
TEAEs resolved without sequelae	196 (79.0)	113 (79.6)
Most common treatment-related TEAEs[b]		
Application site dermatitis	7 (4.3)	0

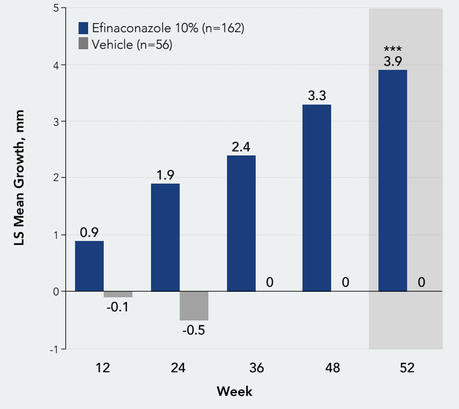
[a]None of the SAEs were considered related to study drug.
[b]Reported in ≥3% participants in any treatment group.
AE, adverse event; SAE, serious adverse event; TEAE, treatment-emergent adverse event.

FIGURE 2. Complete or Almost Complete Cure[a] by Visit in Patients Aged ≥65 Years (ITT Population, Pooled)



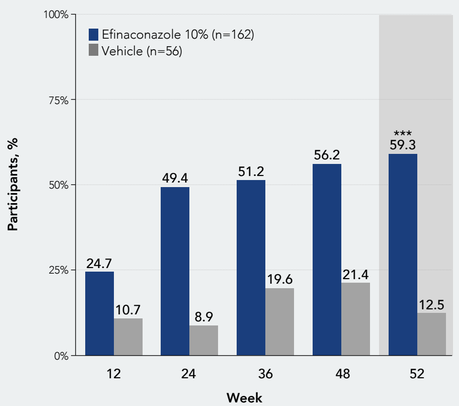
**$P\leq0.01$ vs vehicle. Statistical significance was only determined for week 52 because the study was not powered for subgroup analyses.
[a]Defined as ≤5% clinical involvement and mycologic cure (negative potassium hydroxide examination + negative fungal culture) of the target toenail sample.
ITT, intent to treat.

FIGURE 3. Unaffected New Toenail Growth[a] by Visit in Patients Aged ≥65 Years (ITT Population, Pooled)



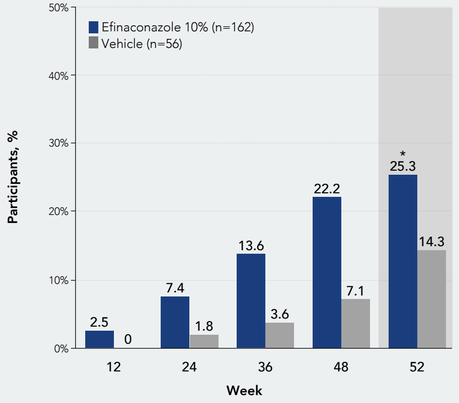
***$P<0.001$ vs vehicle. Statistical significance was only determined for week 52 because the study was not powered for subgroup analyses.
[a]Defined as change from baseline in the healthy (unaffected) toenail measurement of the target toenail. Interpretation was performed in a sequential manner to adjust for multiplicity: unaffected new toenail growth was considered statistically significant only if the complete/almost complete cure rate was significant.
LS, least squares; ITT, intent to treat.

FIGURE 4. Mycologic Cure[a] by Visit in Patients Aged ≥65 Years (ITT Population, Pooled)



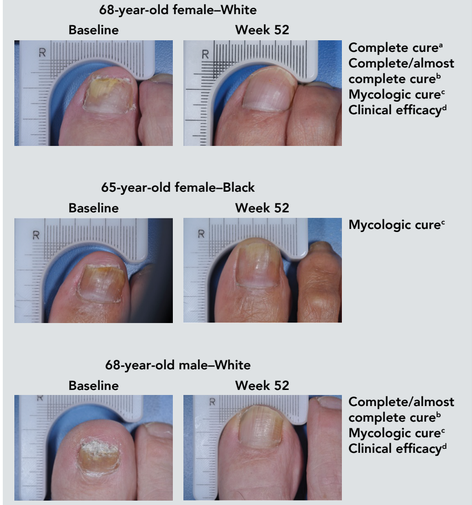
***$P<0.001$ vs vehicle. Statistical significance was only determined for week 52 because the study was not powered for subgroup analyses.
[a]Defined as a negative potassium examination and a negative fungal culture of the target toenail sample. Interpretation was performed in a sequential manner to adjust for multiplicity: mycologic cure rate was considered statistically significant only if the complete/almost complete cure rate and unaffected new toenail growth were significant.
ITT, intent to treat.

FIGURE 5. Clinical Efficacy[a] by Visit in Patients Aged ≥65 Years (ITT Population, Pooled)



*$P<0.05$ vs vehicle. Statistical significance was only determined for week 52 because the study was not powered for subgroup analyses.
[a]Defined as <10% clinical involvement of the affected target nail area.
ITT, intent to treat.

FIGURE 6. Representative Photographs From Three Patients Aged ≥65 Years Treated With Efinaconazole 10% for 48 Weeks



Individual results may vary.
Photographic Images © 2025. Courtesy of Ortho Dermatologics Study Investigators.
[a]Defined as no clinical involvement of the target toenail and mycologic cure (negative potassium hydroxide examination + negative fungal culture) of the target toenail sample.
[b]Defined as ≤5% clinical involvement and mycologic cure (negative potassium hydroxide examination + negative fungal culture) of the target toenail sample.
[c]Defined as a negative potassium hydroxide examination and a negative fungal culture of the target toenail sample.
[d]Defined as <10% clinical involvement of the affected target nail area.

CONCLUSIONS

- Topical efinaconazole 10% showed good efficacy and safety in participants aged ≥65 years with mild to moderate onychomycosis, despite possible age-related changes in nail growth
- These results are in line with those of the overall phase 3 populations,[6] demonstrating that efinaconazole is an efficacious treatment for older adults for whom there is a dearth of clinical data

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AUTHOR DISCLOSURES

Shari Lipner has served a consultant for Ortho Dermatologics, Eli Lilly, Moberg Pharmaceuticals, and BelleTorus Corporation. Aditya Gupta has served as consultant, speaker, and investigator for Ortho Dermatologics. Warren Joseph has served as consultant and speaker for Ortho Dermatologics. Boni Elewski has provided clinical research support (research funding to university) for AbbVie, Anaptys-Bio, Boehringer Ingelheim, Bristol Myers Squibb, Celgene, Incyte, LEO Pharma, Lilly, Merck, Menlo, Novartis, Pfizer, Regeneron, Sun Pharma, Ortho Dermatologics, and Vanda; and served as consultant (received honorarium) from Boehringer Ingelheim, Bristol Meyers Squibb, Celgene, LEO Pharma, Lilly, Menlo, Novartis, Pfizer, Sun Pharma, Ortho Dermatologics, and Verrica. Eric Guenin is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. Tracey Vlahovic has served as investigator and speaker for Ortho Dermatologics.

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