Efficacy and Safety of Halobetasol Propionate 0.01%/Tazarotene 0.045% (HP/TAZ) Lotion in the Treatment of Moderate to Severe Plaque Psoriasis of the Lower Extremities

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SYNOPSIS

- Psoriasis is a chronic, immune-mediated disease that varies widely in its clinical expression[1]
- Although plaque psoriasis can occur across different body regions, the lower extremities are one of the most commonly affected areas[2]
- Topical corticosteroids are the mainstay of psoriasis treatment; however, safety concerns limit their use[3]
- Recent phase 3 clinical data demonstrated the efficacy and tolerability of a fixed combination lotion containing halobetasol propionate 0.01% and tazarotene 0.045% (HP/TAZ; Duobrii® Ortho Dermatologics, Bridgewater, NJ) in patients with moderate-to-severe localized plaque psoriasis[4,5]

OBJECTIVE

- To evaluate the efficacy and safety of HP/TAZ lotion in participants where the leg was identified as the target lesion

METHODS

- In two phase 3, multicenter, randomized, double-blind studies (NCT02462070; NCT02462122), participants with moderate-to-severe plaque psoriasis were randomized (2:1) to receive HP/TAZ lotion or vehicle lotion once-daily for 8 weeks, with a 4-week posttreatment follow-up[4,5]
  - At baseline, participants were required to have an Investigator Global Assessment (IGA) score of moderate (3) or severe (4) and Body Surface Area (BSA) of 3% to 12%
  - In these studies, CeraVe® hydrating cleanser and CeraVe® moisturizing lotion (L'Oreal, NY) were provided as needed for optimal moisturization/cleaning of the skin
- A pooled, post hoc analysis was conducted in a subset of participants with plaque psoriasis of the lower extremities, with a target lesion of the leg
  - For the target lesion, participants needed a score of ≥3 for at least 2 of 3 signs of psoriasis (erythema, plaque elevation, scaling: each on a 5-point scale; 0=clear and 4=severe), a sum of at least 8, and could not have a score 0 or 1 in any one of the signs
  - Target could not be on areas covering bony prominences (i.e., knees); however, overall psoriasis assessment (IGA and BSA) did not exclude the knees
- Efficacy assessments included: treatment success (≥2-grade improvement from baseline) in each individual sign of psoriasis (erythema, plaque elevation, and scaling) at the target lesion (leg); overall treatment success (≥2-grade improvement from baseline in IGA score and a score of 'clear' or 'almost clear' [0 or 1]); improvements in overall mean BSA from baseline; and mean change from baseline in IGAxBSA composite score
- Safety and treatment-emergent adverse events (TEAEs) were evaluated throughout the study

RESULTS

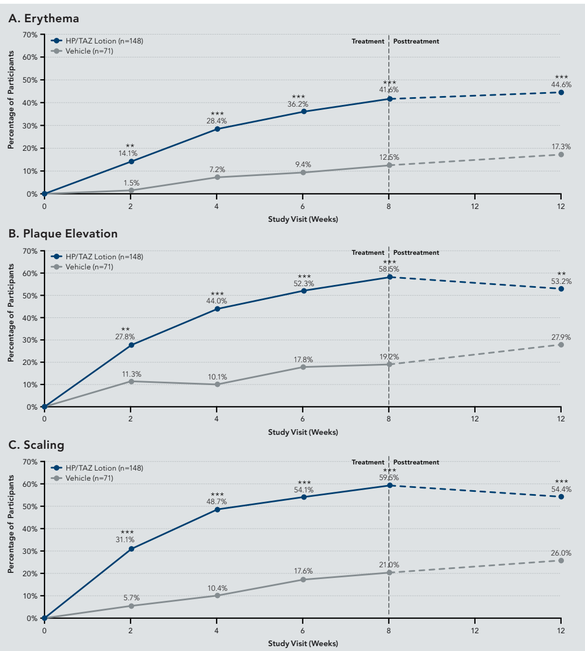
Participants

- This analysis included 219 participants where the leg was identified as the target lesion (HP/TAZ lotion, n=148; vehicle, n=71)

Efficacy

- At the end of the 8-week treatment period, significantly more HP/TAZ-treated participants achieved ≥2-grade reduction in erythema, plaque elevation, and scaling compared with vehicle-treated participants; significant differences between HP/TAZ and vehicle were observed as early as week 2 and sustained posttreatment (**Figure 1**)

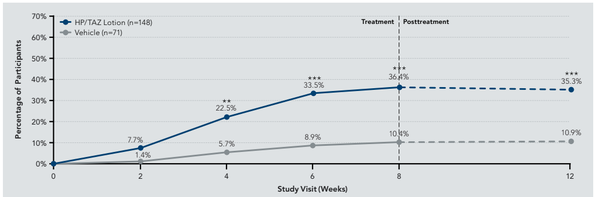
FIGURE 1. Treatment Success[a] in Psoriasis Signs of Erythema (A), Plaque Elevation (B), and Scaling (C) at the Leg Target Lesion by Study Visit (ITT Population, Pooled)



**P<0.01 vs vehicle; ***P<0.001 vs vehicle.
[a]Treatment success is defined as a ≥2-grade improvement from baseline in each individual sign of psoriasis at the target lesion.
HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; ITT, intent-to-treat.

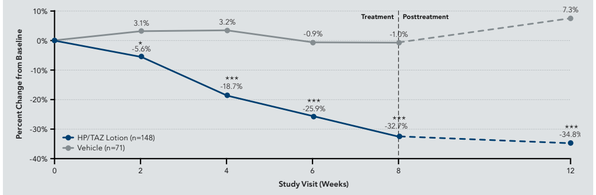
- Significantly more participants achieved overall treatment success (per IGA scores) at week 8 with HP/TAZ compared with vehicle (**Figure 2**)
- The HP/TAZ group also had a significantly greater mean percent reduction in BSA at week 8 versus vehicle (**Figure 3**)
- Change from baseline in IGAxBSA composite score was significantly improved with HP/TAZ lotion versus vehicle at all study visits assessed (**Figure 4**)

FIGURE 2. Overall Treatment Success[a] by Study Visit in Participants With a Target Lesion on the Leg (ITT Population, Pooled)



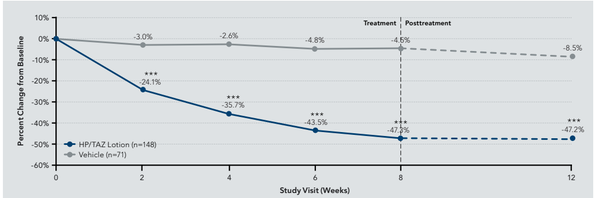
**P<0.01 vs vehicle; ***P<0.001 vs vehicle.
[a]Treatment success is defined as a ≥2-grade improvement from baseline in IGA score and a score of 'clear' or 'almost clear' (0 or 1).
HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; IGA, Investigator Global Assessment; ITT, intent-to-treat.

FIGURE 3. Mean Percent Reduction in Overall Affected Body Surface Area (BSA) by Study Visit in Participants With a Target Lesion on the Leg (ITT Population, Pooled)



*P<0.05 vs vehicle; ***P<0.001 vs vehicle.
HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; ITT, intent-to-treat.

FIGURE 4. Mean Percent Reduction in IGAxBSA Composite by Study Visit in Participants With a Target Lesion on the Leg (ITT Population, Pooled)



***P<0.001 vs vehicle.
BSA, Body Surface Area; HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; IGA, Investigator Global Assessment; ITT, intent-to-treat.

Safety

- The most frequently reported treatment-related TEAEs were contact dermatitis, skin atrophy, folliculitis, and excoriation; 11 participants treated with HP/TAZ lotion discontinued due to TEAEs (**Table 1**)

TABLE 1. Treatment-Emergent Adverse Events Through Week 8 in Participants With a Target Lesion on the Leg (Safety Population, Pooled)

Participants, n (%)	HP/TAZ Lotion (n=144)	Vehicle (n=70)
Reporting any TEAEs	52 (36.1)	16 (22.9)
Reporting any SAEs	3 (2.1)	0
Discontinued due to TEAEs	11 (7.6)	4 (5.7)
Severity of TEAEs reported		
Mild	10 (6.9)	3 (4.3)
Moderate	29 (20.1)	9 (12.9)
Severe	13 (9.0)	4 (5.7)
Relationship to study drug		
Related	34 (23.6)	7 (10.0)
Unrelated	18 (12.5)	9 (12.9)
Treatment-related TEAEs reported in ≥2% of participants		
Contact dermatitis	11 (9.0)	0
Skin atrophy	4 (2.8)	0
Folliculitis	4 (2.8)	0
Excoriation	3 (2.1)	0
Pruritis	2 (1.4)	2 (2.9)
Skin burning sensation	2 (1.4)	2 (2.9)
Burning sensation (nervous system disorders)	2 (1.4)	2 (2.9)

AE, adverse event; HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; SAE, serious adverse event; TEAE, treatment-emergent adverse event.

CONCLUSIONS

- HP/TAZ lotion was associated with significant, rapid, and sustained reductions in disease severity in patients with moderate-to-severe psoriasis where the leg was identified as the target lesion, with good tolerability and safety over 8 weeks of once-daily use

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AUTHOR DISCLOSURES

Stephen K. Tyring is has acted as an investigator for Ortho Dermatologics.
Leon H. Kircik has acted as an investigator, advisor, speaker, and consultant for Ortho Dermatologics.
Paul S. Yamauchi has served as speaker, consultant, and investigator for AbbVie, Amgen, Janssen, Novartis, Lilly, LEO, Ortho Dermatologics, and Sun Pharma.
Naveen Anbalagan and Tina Lin are employees of Ortho Dermatologics and may hold stock and/or stock options in its parent company.

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