Efficacy of Halobetasol 0.01%/Tazarotene 0.045% (HP/TAZ) Fixed Combination in the Treatment of Moderate Plaque Psoriasis: Indirect Comparison Between Pooled Phase 3 Trials of HP/TAZ and Oral Treatment (Apremilast)

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SYNOPSIS

- Psoriasis treatment includes both topical and systemic therapies, with treatment type selected based on a variety of considerations—including disease severity, patient preference, and efficacy
- Topicals are considered first-line therapy for mild disease[1] and systemic therapies may be useful in patients with more severe disease; however, topical treatments are having an increasing role in moderate-to-severe psoriasis as an integral part of combination therapy
- Recently, a novel halobetasol propionate 0.01%/tazarotene 0.045% (HP/TAZ) lotion formulation has demonstrated efficacy versus vehicle for the treatment of moderate or severe plaque psoriasis,[2,3] and the combination of these two agents in this formulation demonstrated a synergistic benefit[4]
- No direct comparative studies have been conducted between HP/TAZ and systemic therapies such as apremilast (Otezla®), an oral treatment approved in patients with moderate-to-severe plaque psoriasis

OBJECTIVES

- To evaluate efficacy of a once-daily fixed combination of HP/TAZ lotion compared with vehicle in a subgroup of patients with moderate plaque psoriasis
- To place HP/TAZ results in context with published data from the oral treatment apremilast[5]

METHODS

- This analysis was a pooled post hoc analysis of two phase 3, multicenter, double-blind, vehicle-controlled studies (NCT02462070 and NCT02462122)[2]
- Participants in the phase 3 studies were randomized (2:1) to receive HP/TAZ or vehicle lotion once-daily for 8 weeks, with a 4-week posttreatment follow-up
- Analyses were conducted in a subset of participants with a baseline Investigator Global Assessment (IGA) score of 3 (moderate) and Body Surface Area (BSA) 5-10%
- Efficacy assessments included:
  - Mean percent change from baseline in 5-point IGAxBSA scores
  - Percentage of participants with a ≥75% reduction in mean IGAxBSA (IGAxBSA-75)
- The subgroup population analyzed in these post hoc analyses aligns closely with the population analyzed in a published phase 4 study of oral apremilast[5]
  - In this apremilast study, patients with a static Physician's Global Assessment (PGA) score=3 were randomized (2:1) to twice-daily active treatment or placebo for 16 weeks; assessments included the 6-point PGAxBSA and PGAxBSA-75

RESULTS

- This analysis included 163 participants in the HP/TAZ study (HP/TAZ, n=100; vehicle, n=63) and 221 participants in the apremilast study (apremilast, n=148; placebo, n=73)
- Age, sex, and mean baseline BSA and IGAxBSA scores in the HP/TAZ analysis population were similar to those enrolled in the apremilast study (**Table 1**)

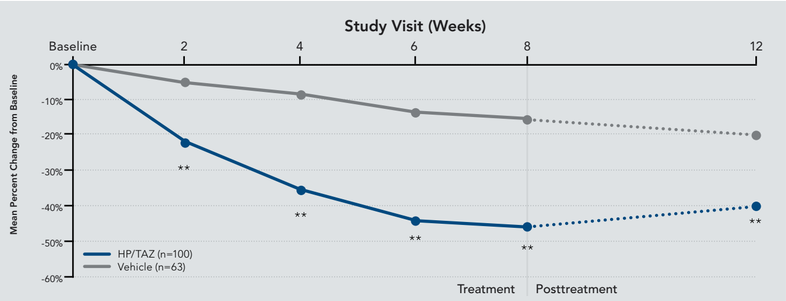
TABLE 1: **Baseline Demographics and Disease Characteristics (ITT Population)**

	HP/TAZ Pooled Analysis		Apremilast Study[a]	
	HP/TAZ (n=100)	Vehicle (n=63)	Apremilast (n=148)	Placebo (n=73)
Age, mean (SD), years	49.4 (15.7)	50.9 (14.9)	48.6 (15.4)	51.1 (13.7)
Male, n (%)	63 (63.0)	38 (60.3)	74 (50.0)	41 (56.2)
IGAxBSA score, mean (SD)[b]	20.9 (5.0)	18.7 (4.3)	21.8 (5.3)	21.6 (5.9)
BSA, mean (SD)	7.0 (1.7)	6.2 (1.4)	7.2 (1.6)	7.1 (1.8)
DLQI total score, mean (SD)	7.2 (5.4)	8.4 (5.8)	11.0 (6.5)	11.1 (6.5)

[a]Strober et al. 2017.[5]
[b]Assessment was PGAxBSA in apremilast study.
BSA, body surface area; DLQI, Dermatology Life Quality Index; HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; IGA, Investigator Global Assessment; ITT, intent-to-treat; PGA, Physician's Global Assessment.

- At Week 8, HP/TAZ-treated participants had a 46% mean reduction from baseline in IGAxBSA scores compared with a 16% reduction in vehicle-treated participants ($P<0.001$; **Figure 1 and Figure 3A**)
  - This effect was sustained during the 4-week posttreatment period, with a 40% reduction from baseline in IGAxBSA score with HP/TAZ at the end of 12 weeks (**Figure 1**)

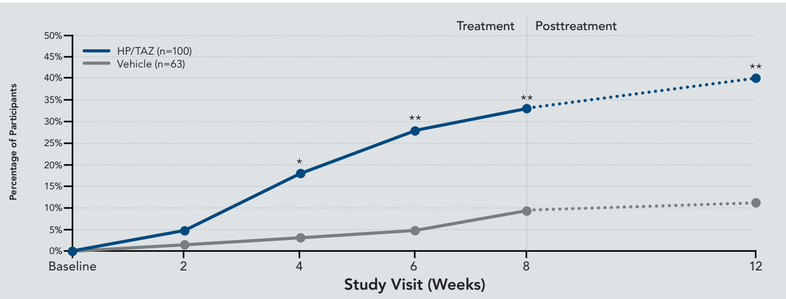
FIGURE 1: **Mean Percent Reduction From Baseline in IGAxBSA Score By Study Visit (ITT Population)**



**$P<0.001$ vs vehicle (=0.001 at Week 12).
BSA, body surface area; HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; IGA, Investigator Global Assessment; ITT, intent-to-treat.

- The percentage of participants with a ≥75% reduction from baseline IGAxBSA at Week 8 was significantly higher following treatment with HP/TAZ lotion (33.0%) compared with vehicle (9.5%; $P<0.001$; **Figure 2 and Figure 3B**)

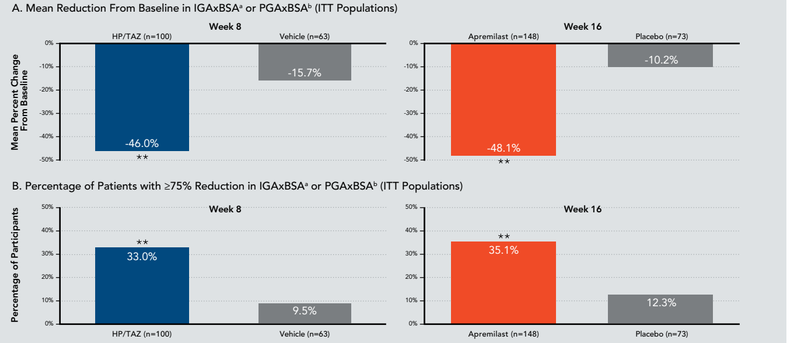
FIGURE 2: **Percentage of Patients With ≥75% Reduction From Baseline in IGAxBSA (ITT Population)**



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

- These HP/TAZ results align closely with those from the apremilast study
  - Apremilast-treated participants had a 48% mean reduction from baseline in PGAxBSA scores at Week 16 compared with a 10% reduction in placebo-treated participants ($P<0.0001$; **Figure 3A**)
  - The percentage of participants achieving a ≥75% reduction from baseline in IGAxBSA score was 35.1% in the apremilast group versus 12.3% in the placebo group ($P<0.001$; **Figure 3B**)

FIGURE 3: **Indirect Comparison Between HP/TAZ and Apremilast**



**$P<0.001$ vs vehicle/placebo.
[a]HP/TAZ pooled phase 3 data.
[b]Apremilast data from Strober et al. 2017.[5]
BSA, body surface area; HP/TAZ, halobetasol propionate 0.01% and tazarotene 0.045%; IGA, Investigator Global Assessment; ITT, intent-to-treat; PGA, Physician's Global Assessment.

CONCLUSION

- In patients with moderate plaque psoriasis (IGA score of 3 and BSA 5-10%), HP/TAZ lotion provides significantly greater efficacy than vehicle, an effect that was sustained posttreatment
- These Week 8 results with HP/TAZ lotion align closely with Week 16 results from a study of the oral psoriasis treatment apremilast in a similar patient population

REFERENCES

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AUTHOR DISCLOSURES

Dr. Brad Glick has served as investigator, advisor, and/or speaker for AbbVie, Celgene, Janssen, Sun Pharma, Lilly, Novartis, Dermira, Sanofi/Genzyme, Regeneron, Pfizer, Dermavant, ChemoCentryx, and Ortho Dermatologics. He is a stockholder in Top MD. Dr. Edward Lain has nothing to disclose. Dr. Tina Lin is an employee of Ortho Dermatologics. Dr. Robert Israel is an employee of Bausch Health.

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