Efficacy and Safety of Fixed-Dose Clindamycin Phosphate 1.2%/Adapalene 0.15%/Benzoyl Peroxide 3.1% Gel in Caucasian Participants With Moderate to Severe Acne

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SYNOPSIS

- Triple-combination therapies for acne including an antibiotic, topical or oral retinoid, and benzoyl peroxide (BPO) are more effective than dual combinations or topical monotherapy[1]
- In clinical studies of participants with moderate to severe acne, clindamycin phosphate (CLIN) 1.2%/adapalene (ADAP) 0.15%/BPO 3.1% (CAB) gel demonstrated superior efficacy to vehicle and component dyads, with good safety and tolerability[2-4]
- As acne pathogenesis and presentation can vary by skin type and ethnicity, it is important to assess treatment outcomes for specific populations[5]

OBJECTIVE

- To assess efficacy and safety of CAB gel (Cabtreo®, Ortho Dermatologics) vs vehicle, 3 component dyads, and branded ADAP 0.3%/BPO 2.5% gel (Epiduo® Forte, Galderma) in Caucasian clinical trial participants

METHODS

- Data were pooled from two phase 2 (NCT03170388, NCT04892706) and two phase 3 (NCT04214639, NCT04214652) double-blind, 12-week studies of participants with moderate to severe acne
- Eligible participants aged ≥9 years (≥12 years in NCT04892706) with moderate to severe acne were randomized to once-daily treatment with CAB or vehicle gel
  - One phase 2 study (NCT03170388) included 3 treatment arms with component dyad gels: ADAP/BPO, CLIN/BPO, and CLIN/ADAP formulated at the same concentrations and in the same vehicle as CAB gel
  - The other phase 2 study (NCT04892706) was a head-to-head comparison between CAB and branded ADAP 0.3%/BPO 2.5% gel
- Endpoints included treatment success (percentage of participants achieving ≥2-grade reduction from baseline in Evaluator's Global Severity Score and a score of 0 [clear] or 1 [almost clear]) and reductions from baseline in inflammatory and noninflammatory lesions
- Safety assessments included treatment-emergent adverse events (TEAEs) and cutaneous safety/tolerability

RESULTS

Participants

Of 1787 participants in the pooled study populations, 1283 self-identified as White (Caucasian; **Table 1**)

- Demographic and baseline disease characteristics were similar across most treatment groups; however, in the ADAP 0.15%/BPO 3.1% dyad group, a lower percentage of participants were female, and a higher percentage had severe acne at baseline

Efficacy

- At week 12, over half of CAB-treated Caucasian participants achieved treatment success, significantly greater than with any dyad combination (range, 31.7–34.3%) or vehicle (17.9%; *P*<0.01, all; **Figure 1**)
- CAB gel yielded >70% reductions in inflammatory and noninflammatory lesions, significantly greater than with any dyad combination or vehicle (*P*<0.05, all; **Figure 2A** and **2B**)
  - For both inflammatory and noninflammatory lesions, reductions from baseline were significantly greater with CAB gel than with branded ADAP 0.3%/BPO 2.5% as early as week 2

Safety and Tolerability

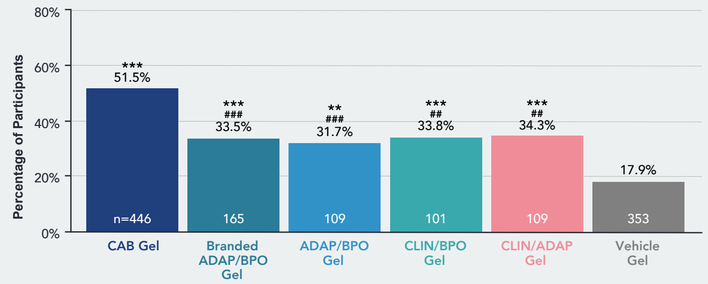
- Across treatment groups, most TEAEs were of mild to moderate severity, and discontinuations due to adverse events were low (**Table 2**)
  - Rates of treatment-related TEAEs were similar for CAB and both ADAP/BPO gel combinations
  - The most common treatment-related TEAEs were application site reactions typical of topical acne treatments
- Across treatment groups, mean cutaneous safety/tolerability scores at all post-baseline visits were <1 (mild; **Figure 3**)
  - Transient increases in scaling, burning, and stinging began at week 2 but resolved back to or near baseline by week 8
  - For CAB-treated participants, rates and severity of cutaneous safety/tolerability signs were similar to the overall study populations[2-4]

TABLE 1. Participant Demographics and Baseline Characteristics of Caucasian Participants (ITT Population, Pooled)

	CAB Gel (n=446)	Branded ADAP/BPO Gel (n=165)	ADAP/BPO Gel (n=109)	CLIN/BPO Gel (n=101)	CLIN/ADAP Gel (n=109)	Vehicle Gel (n=353)
Age, mean (SD), y	19.4 (7.0)	19.7 (6.8)	17.8 (6.2)	18.0 (4.9)	19.3 (6.7)	18.8 (6.2)
Age, median (range), y	17.0 (10–56)	17.0 (12–51)	16.0 (12–60)	16.0 (11–34)	17.0 (11–50)	17.0 (11–48)
Sex, female, n (%)	265 (59.4)	95 (57.6)	53 (48.6)	58 (57.4)	64 (58.7)	192 (54.4)
Ethnicity, Hispanic/Latino, n (%)	115 (25.8)	48 (29.1)	24 (22.0)	26 (25.7)	22 (20.2)	91 (25.8)
Inflammatory lesion count, mean (SD)	38.6 (10.6)	38.5 (9.9)	40.8 (11.2)	39.8 (12.4)	38.5 (8.0)	39.1 (10.9)
Noninflammatory lesion count, mean (SD)	52.1 (20.5)	51.0 (19.6)	48.5 (15.6)	49.8 (19.1)	52.1 (19.1)	51.2 (19.8)
Evaluator's Global Severity Score, n (%)						
3 – Moderate	395 (88.6)	145 (87.9)	82 (75.2)	85 (84.2)	93 (85.3)	314 (89.0)
4 – Severe	51 (11.4)	20 (12.1)	27 (24.8)	16 (15.8)	16 (14.7)	39 (11.0)

ADAP, adapalene; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/benzoyl peroxide 3.1%/adapalene 0.15%; CLIN, clindamycin phosphate; ITT, intent to treat; SD, standard deviation.

FIGURE 1. Treatment Success[a] at Week 12 in Caucasian Participants (ITT Population, Pooled)



**P<0.01, ***P≤0.001 vs vehicle; ##P<0.01, ###P<0.001 vs CAB gel.
Values have been adjusted for multiple imputation.
[a]Defined as percentage of participants achieving ≥2-grade reduction from baseline in Evaluator's Global Severity Score and a score of 0 (clear) or 1 (almost clear).
ADAP, adapalene; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/benzoyl peroxide 3.1%/adapalene 0.15%; CLIN, clindamycin phosphate; ITT, intent to treat.

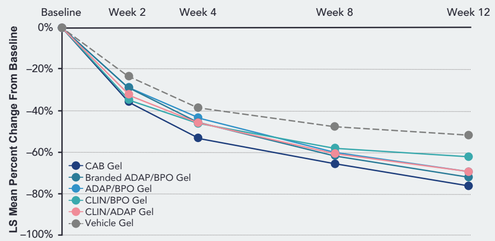
TABLE 2. Summary of Adverse Events Through Week 12 in Caucasian Participants (Safety Population, Pooled)

Participants, n (%)	CAB Gel (n=442)	Branded ADAP/BPO Gel (n=165)	ADAP/BPO Gel (n=105)	CLIN/BPO Gel (n=101)	CLIN/ADAP Gel (n=107)	Vehicle Gel (n=353)
TEAEs	162 (36.7)	62 (37.6)	36 (34.3)	19 (18.8)	34 (31.8)	54 (15.4)
Related	94 (21.3)	36 (21.8)	24 (22.9)	3 (3.0)	15 (14.0)	8 (2.3)
Serious AEs	1 (0.2)	0	0	0	2 (1.9)	0
Discontinued drug or study due to AE	16 (3.6)	7 (4.2)	6 (5.7)	0	3 (2.8)	2 (0.6)
Most common treatment-related TEAEs (>3% of participants in any treatment arm)						
AS pain	52 (11.8)	13 (7.9)	13 (12.4)	1 (1.0)	4 (3.7)	2 (0.6)
AS dryness	20 (4.5)	9 (5.5)	7 (6.7)	2 (2.0)	7 (6.5)	2 (0.6)
AS dermatitis	7 (1.6)	6 (3.6)	2 (1.9)	0	2 (1.9)	0
AS erythema	7 (1.6)	3 (1.8)	1 (1.0)	1 (1.0)	5 (4.7)	0

ADAP, adapalene; AE, adverse event; AS, application site; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/benzoyl peroxide 3.1%/adapalene 0.15%; CLIN, clindamycin phosphate; TEAE, treatment-emergent adverse event.

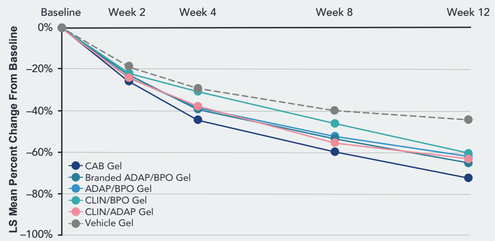
FIGURE 2. Acne Lesion Reductions Through Week 12 (ITT Population, Pooled)

A. Inflammatory lesions



	CAB Gel (n=446)	Branded ADAP/BPO Gel (n=165)	ADAP/BPO Gel (n=109)	CLIN/BPO Gel (n=101)	CLIN/ADAP Gel (n=109)	Vehicle Gel (n=353)
Week 2	–36.1%***	–30.0%*#	–29.3%#	–35.0%***	–33.1%**	–24.3%
Week 4	–53.7%***	–46.3%*##	–43.9%##	–46.3%*#	–46.3%#	–39.0%
Week 8	–65.5%***	–62.2%***	–60.5%***#	–58.6%***	–61.0%***#	–47.7%
Week 12	–76.8%***	–72.6%***#	–70.0%***##	–62.7%***###	–70.2%***##	–52.3%

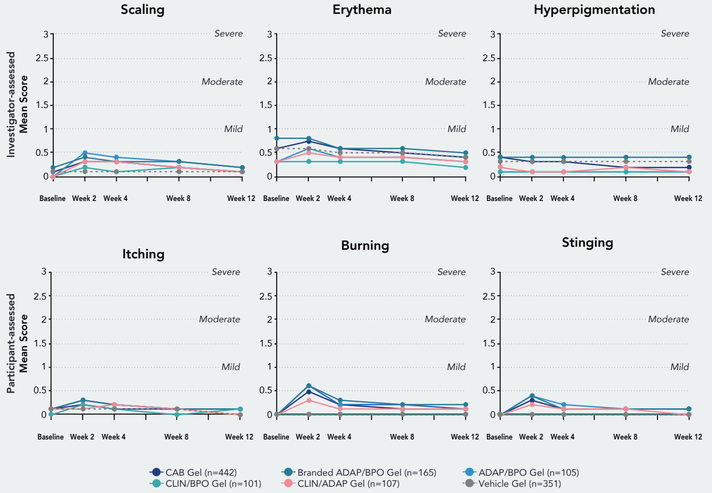
B. Noninflammatory lesions



	CAB Gel (n=446)	Branded ADAP/BPO Gel (n=165)	ADAP/BPO Gel (n=109)	CLIN/BPO Gel (n=101)	CLIN/ADAP Gel (n=109)	Vehicle Gel (n=353)
Week 2	–26.1%***	–22.2%#	–24.8%*	–22.3%	–24.3%	–18.7%
Week 4	–44.9%***	–39.8%***#	–38.5%*#	–31.1%###	–37.7%*#	–29.3%
Week 8	–59.7%***	–53.6%***#	–52.8%***#	–46.0%###	–55.6%***	–40.1%
Week 12	–73.0%***	–65.7%***##	–62.5%***##	–60.9%***###	–63.4%***##	–44.8%

*P<0.05, **P<0.01, ***P≤0.001 vs vehicle; #P<0.05, ##P<0.01, ###P<0.001 vs CAB gel.
Values have been adjusted for multiple imputation.
ADAP, adapalene; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/benzoyl peroxide 3.1%/adapalene 0.15%; CLIN, clindamycin phosphate; ITT, intent to treat; LS, least squares.

FIGURE 3. Cutaneous Safety and Tolerability in Caucasian Participants (Safety Population, Pooled)



ADAP, adapalene; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/benzoyl peroxide 3.1%/adapalene 0.15%; CLIN, clindamycin phosphate.

CONCLUSIONS

- In Caucasian participants with moderate to severe acne, fixed-dose, triple-combination CAB gel demonstrated greater efficacy than dyad combination gels, branded ADAP 0.3%/BPO 2.5% gel, or vehicle
  - CAB-treated participants experienced >70% reductions in inflammatory and noninflammatory lesions, and over half achieved treatment success
- Despite the addition of a third active ingredient in CAB gel, rates of treatment-related TEAEs and cutaneous safety/tolerability findings were similar to branded ADAP 0.3%/BPO 2.5% gel
- These results demonstrate the efficacy, safety, and tolerability of CAB gel for the treatment of acne in Caucasian patients

REFERENCES

1. Huang CY, et al. *Ann Fam Med*. 2023;21(4):358-369.
2. Stein Gold L, et al. *Am J Clin Dermatol*. 2022;23(1):93-104.
3. Stein Gold L, et al. *J Am Acad Dermatol*. 2023;89(5):927-935.
4. Kircik LH, et al. *Dermatol Ther (Heidelb)*. 2024;14(5):1211-1227.
5. Alexis AF, et al. *J Drugs Dermatol*. 2021;20(7):716-725.

AUTHOR DISCLOSURES

Glynis Ablon has served as a consultant and advisory board member for Galderma, Sinclair, Thermi-Almirall, Erchonia, Sunetics, Nutrafol, and Lifes2Good. *Hilary Baldwin* has served as advisor, investigator, and on speakers bureaus for Almirall, Cassiopea, Foamix, Galderma, Ortho Dermatologics, Sol Gel, and Sun Pharma. *Valerie D Callender* has served as an investigator, consultant, or speaker for Acne Store, Almirall, Aerolase, AbbVie, Allergan Aesthetics, Avava, Avita Medical, Beiersdorf, Cutera, Dermavant, Evion Therapeutics, Eli Lilly, Galderma, Janssen, Jeune Aesthetics, L'Oréal, Ortho Dermatologics, Pfizer, Prollineum, Regeneron, Scientis, Sente, SkinBetter Science, SkinCeuticals, Symatese, Texvune, and UpToDate. *Zoe D Draelos* received funding from Ortho Dermatologics to conduct the research presented in this poster. *Michael Gold* has acted as an investigator, advisor, speaker, and consultant for Ortho Dermatologics. *Ted Lain* has served as investigator, consultant, and/or speaker for Ortho Dermatologics, AbbVie, Almirall, Amgen, Arcutis, Dermavant, EPI Health, Galderma, Incyte, LEO Pharma, Novartis, Eli Lilly, Pfizer, Sun Pharma, UCB, Endo International, ChemoCentryx, Biorasi, Simaomics, Evelo Biosciences, Concert Pharmaceuticals, Cara Therapeutics, Castle Biosciences, Mindera, Biohunters, Alfasigma, AiVita Biopharma, Anaptys Bio, Bausch Health, Dr Reddy's, and Trevi Therapeutics. *Leon H Kircik* has served as either a consultant, speaker, advisor or an investigator for Allergan, Almirall, EPI Health, Galderma, Novartis, Ortho Dermatologics, and Sun Pharma. *Emil A Tanghetti* has served as speaker for Novartis, Ortho Dermatologics, Sun Pharma, Lilly, Galderma, AbbVie, and Dermira; served as a consultant/clinical studies for Hologic, Ortho Dermatologics, and Galderma; and is a stockholder for Accure. *Karol Wroblewski* has nothing to disclose. *Eric Guenin* is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company.

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