Clindamycin Phosphate 1.2%/Adapalene 0.15%/Benzoyl Peroxide 3.1% Gel for Moderate to Severe Acne: Efficacy and Safety Results From 4 Clinical Trials

Leon H Kircik, MD[1-3]; Zoe D Draelos, MD[4]; Edward Lain, MD, MBA[5]; Julie C Harper, MD[6]; Hilary Baldwin, MD[7,8]; Eric Guenin, PharmD, PhD, MPH[9]; Linda Stein Gold, MD[10]; Michael Gold, MD[11]

[1]Icahn School of Medicine at Mount Sinai, New York, NY; [2]Indiana University School of Medicine, Indianapolis, IN; [3]Physicians Skin Care, PLLC, DermResearch, PLLC, and Skin Sciences, PLLC, Louisville, KY; [4]Dermatology Consulting Services, PLLC, High Point, NC; [5]Austin Institute for Clinical Research, Austin, TX; [6]Dermatology & Skin Care Center of Birmingham, Birmingham, AL; [7]The Acne Treatment and Research Center, Brooklyn, NY; [8]Robert Wood Johnson University Hospital, New Brunswick, NJ; [9]Ortho Dermatologics*, Bridgewater, NJ; [10]Henry Ford Hospital, Detroit, MI; [11]Tennessee Clinical Research Center, Nashville, TN

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SYNOPSIS

- Treatment guidelines for acne management recommend combination topical therapies targeting multiple pathogenic processes, with strong recommendations for benzoyl peroxide (BPO), retinoids, and/or antibiotics[1]
- Additionally, a network meta-analysis of over 200 clinical trials of acne treatments found that triple combinations that included BPO, a topical retinoid, and an oral or topical antibiotic were among the most efficacious treatments[2]
- Clindamycin phosphate 1.2%/adapalene 0.15%/benzoyl peroxide (BPO) 3.1% (CAB) gel is the only fixed-dose, triple-combination topical approved for acne
- In clinical trials, CAB gel has demonstrated efficacy and safety in the treatment of moderate to severe acne[3,4]

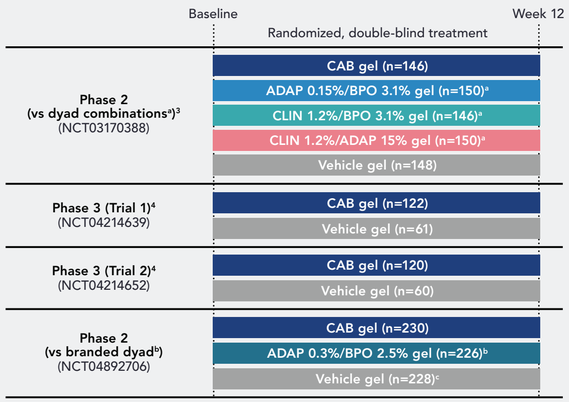
OBJECTIVE

- To compare efficacy and safety of topical fixed-combination CAB gel vs 3 constituent dyad gels and commercially available adapalene 0.3%/BPO 2.5% gel across 4 clinical trials

METHODS

- Pooled post hoc analyses of two phase 2 and two phase 3 trials were used to evaluate CAB gel, 3 constituent dyad gels, commercially available adapalene 0.3%/BPO 2.5% gel, and vehicle (**Figure 1**) Eligible participants were aged ≥9 years (≥12 years in NCT04892706) with moderate or severe acne (Evaluator's Global Severity Score [EGSS] 3 or 4)
- Assessments included treatment success (percentage of participants achieving a ≥2-grade reduction from baseline in EGSS and a score of 0 [clear] or 1 [almost clear]), least squares mean percent change from baseline in inflammatory and noninflammatory lesion counts, and treatment-emergent adverse events (TEAEs)

FIGURE 1. Clinical Trial Designs



[a]Dyad combinations were formulated at the same concentrations and in the same vehicle as CAB gel.
[b]Commercially available product (Epiduo® Forte; Galderma).
[c]Combined vehicle groups (gel stored at either 2-8 °C or room temp).
ADAP, adapalene; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/adapalene 0.15%/benzoyl peroxide 3.1% (Cabtreo®, Ortho Dermatologics); CLIN, clindamycin phosphate; EGSS, Evaluator's Global Severity Score.

RESULTS

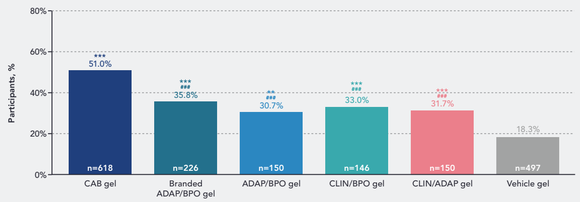
Participants

- The pooled intent-to-treat population comprised 1,787 participants, and the pooled safety population comprised 1,772 participants
- Demographics and baseline characteristics were generally similar across treatment groups

Efficacy

- Across 4 trials, over 50% of CAB-treated participants achieved treatment success by week 12, significantly greater than approximately the 33% treated with dyads or adapalene 0.3%/BPO 2.5% and <20% treated with vehicle ($P \leq 0.001$, all; **Figure 2**)

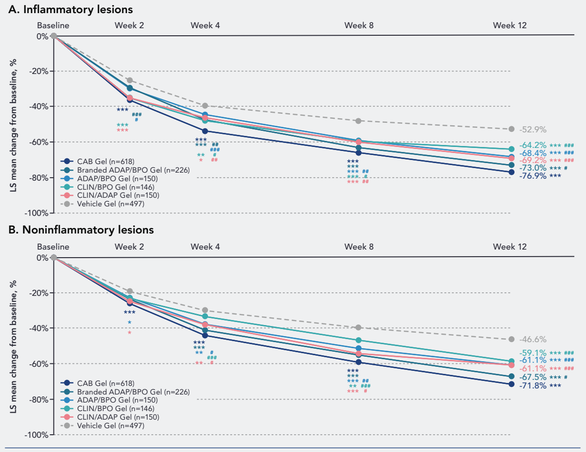
FIGURE 2. Treatment Success[a] at Week 12 (ITT Population, Pooled)



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

- At week 12, CAB-treated participants had >75% reductions from baseline in inflammatory lesions and >70% reductions from baseline in noninflammatory lesions, significantly greater than vehicle or any dyad combination, including branded ADAP 0.3%/BPO 2.5% gel (**Figure 3**)

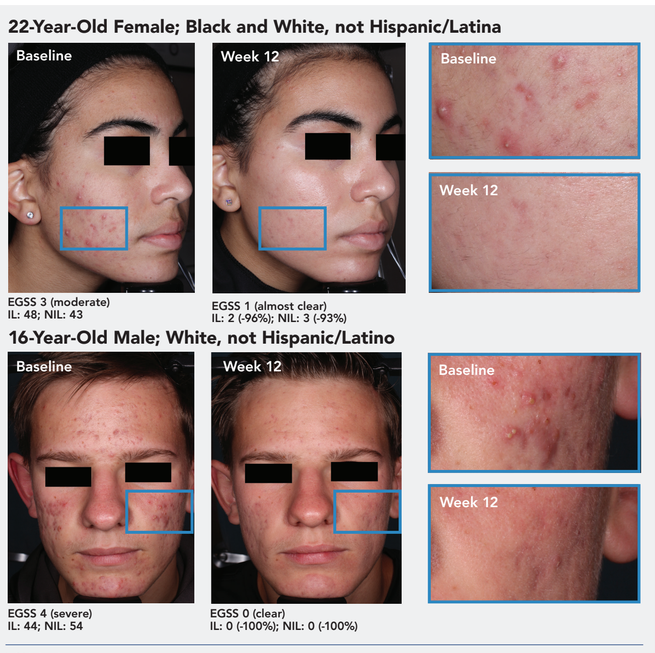
FIGURE 3. Lesion Reductions From Baseline by Visit (ITT Population, Pooled)



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

- Images showing acne improvement in CAB-treated participants are shown in **Figure 4**

FIGURE 4. Acne Improvements With CAB Gel



Individual results may vary.
Photographic Images ©2025. Courtesy of Trial Investigator.
CAB, clindamycin phosphate 1.2%/adapalene 0.15%/benzoyl peroxide 3.1%; EGSS, Evaluator's Global Severity Score; IL, inflammatory; NIL, noninflammatory.

Safety

- Most TEAEs were mild to moderate in severity across all groups
- The safety profile of CAB gel was similar to the ADAP/BPO dyads, indicating the addition of clindamycin did not worsen tolerability (**Table 1**)

TABLE 1. Summary of Adverse Events Through Week 12 (Safety Population, Pooled)

Participants, n (%)	CAB gel (n=613)	Branded ADAP/BPO gel (n=226)	ADAP/BPO gel (n=146)	CLIN/BPO gel (n=144)	CLIN/ADAP gel (n=148)	Vehicle gel (n=495)
TEAEs	200 (32.6)	79 (35.0)	52 (35.6)	26 (18.1)	40 (27.0)	71 (14.3)
Related	115 (18.8)	44 (19.5)	32 (21.9)	3 (2.1)	18 (12.2)	9 (1.8)
Serious AEs[a]	2 (0.3)	0	0	0	3 (2.0)	0
Discontinued drug or study due to AE	17 (2.8)	8 (3.5)	9 (6.2)	0	3 (2.0)	2 (0.4)
Most common treatment-related TEAEs (>2% of participants in any treatment arm)[b]						
Pain	64 (10.4)	16 (7.1)	16 (11.0)	1 (0.7)	5 (3.4)	2 (0.4)
Dryness	25 (4.1)	11 (4.9)	8 (5.5)	2 (1.4)	9 (6.1)	2 (0.4)
Exfoliation	13 (2.1)	4 (1.8)	3 (2.1)	0	2 (1.4)	1 (0.2)
Irritation	10 (1.6)	6 (2.7)	4 (2.7)	1 (0.7)	3 (2.0)	2 (0.4)
Erythema	9 (1.5)	4 (1.8)	2 (1.4)	1 (0.7)	5 (3.4)	0
Dermatitis	8 (1.3)	7 (3.1)	3 (2.1)	0	2 (1.4)	0

[a]None were deemed related to study drug.
[b]All occurred at the application site.
ADAP, adapalene; AE, adverse event; BPO, benzoyl peroxide; CAB, clindamycin phosphate 1.2%/adapalene 0.15%/benzoyl peroxide 3.1%; CLIN, clindamycin phosphate; TEAE, treatment-emergent adverse event.

CONCLUSIONS

- Across 4 clinical trials, efficacy of triple-combination CAB gel was significantly greater than with component dyads and commercially available ADAP 0.3%/BPO 2.5% gel
  - Over half of CAB-treated participants achieved clear or almost clear skin at week 12
  - CAB gel yielded >70% reductions in inflammatory and noninflammatory lesions
- The safety profile of CAB gel was consistent with topical retinoid treatments for acne
- To our knowledge, these analyses include data from the only double-blind, vehicle-controlled, head-to-head study of topical combination acne treatments

REFERENCES

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AUTHOR DISCLOSURES

Leon Kircik has served as either a consultant, speaker, advisor, or an investigator for Allergan, Almirall, EPI Health, Galderma, Novartis, Ortho Dermatologics, and Sun Pharma. Zoe Draelos received funding from Ortho Dermatologics to conduct the research presented here. Edward 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, Sirnaomics, Evelo Biosciences, Concert Pharmaceuticals, Cara Therapeutics, Castle Biosciences, Mindera, Biofrontera, Alfasigma, AiViva Biopharma, Anaptys Bio, Bausch Health, Dr Reddy's, and Trevi Therapeutics. Julie Harper has received honoraria from Almirall, Cutera, Galderma, LaRoche-Posay, Ortho Dermatologics, and Sun Pharma. Hilary Baldwin has served as an advisor, as an investigator, and on speakers bureaus for Almirall, Cassiopea, Foamix, Galderma, Ortho Dermatologics, Sol Gel, and Sun Pharma. Eric Guenin is an employee of Ortho Dermatologics and may hold stock and/or stock options in its parent company. Linda Stein Gold has served as investigator/consultant or speaker for Ortho Dermatologics, LEO Pharma, Dermavant, Incyte, Novartis, AbbVie, Pfizer, Sun Pharma, UCB, Arcutis, and Lilly. Michael Gold has acted as an investigator, advisor, speaker, and consultant for Ortho Dermatologics.

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