Treating Acne in Obese and Morbidly Obese Patients With Tazarotene 0.045% Lotion: Post Hoc Analysis of Pooled Phase 3 Data

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SYNOPSIS

Acne prevalence may be higher in obese individuals, potentially due to hormonal, inflammatory, and/or dietary factors.1,2
However, the effect of obesity on the efficacy and safety of topical acne treatments is largely unknown.

The growing population of obese individuals in the United States, along with the negative impact of high body mass index (BMI) and acne on health-related quality of life, underscores the need to identify appropriate acne therapies in this population.2,3

A new, lower-dose tazarotene 0.045% lotion formulation (Aratol® Ortho Dermatologics) was developed utilizing polymeric emulsion technology.

This easily spreadable lotion formulation allows for more efficient delivery of tazarotene into dermal layers while reducing potential skin irritation.

OBJECTIVE

To evaluate efficacy, safety, and impact on quality of life of tazarotene 0.045% lotion in obese and morbidly obese individuals with acne

METHODS

In two identical phase 3 randomized, double-blind, vehicle-controlled studies (NCT03168334 and NCT03483834), participants aged ≥9 years with moderate-to-severe acne, tazarotene 0.045% lotion were substantially greater in the overall population than males.2

Furthermore, females have been shown to have relatively greater quality of life improvements with tazarotene 0.045% lotion than males.2

Cutaneous safety and tolerability scores with tazarotene lotion were generally similar between baseline and week 12.

Tazarotene 0.045% lotion was efficacious and well tolerated in obese and morbidly obese individuals with acne, and led to large improvements in the quality of life of these participants.

These results are notable given the limited clinical data of acne treatments in this growing population.

REFERENCES

6. 10.

AUTHOR DISCLOSURES

K Yang L, Colditz GA.

Funding and disclosure information for each author is available in the online version of this study.

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FIGURE 1. Lesion Reductions in Participants With BMI ≥30 kg/m² (ITT Population, Pooled)

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FIGURE 2. Acne-QoL Improvements at Week 12 in Participants With BMI ≥30 kg/m² (Safety Population, Pooled)

Acne-QoL Domains

Safety

• Mean cutaneous safety and tolerability scores were low for both tazarotene 0.045% lotion and vehicle (scores from 0–none to 3–severe; Figure 3)
• With both tazarotene and vehicle, mean scores at baseline and week 12 were ≤0.2 for scaling, hypopigmentation, itching, burning, and stinging
• Slight improvements at week 12 versus baseline were observed for erythema, hypopigmentation, and hyperpigmentation with tazarotene
• Results were similar to the overall population (data not shown)

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