**COMPARISON OF A 3-STEP ACNE SYSTEM CONTAINING SOLUBILIZED BENZOYL PEROXIDE VERSUS BENZOYL PEROXIDE/CLINDAMYCIN: A MULTICENTER, INVESTIGATOR-BLIND, RANDOMIZED STUDY**

**INTRODUCTION**

Benzoic acid (BPO) can be highly effective in the treatment of both comedonal and inflammatory acne. However, its use has been limited due to its relatively low water solubility and instability in vehicles with high water content. This can lead to difficulties in maintaining consistent levels of active ingredient in the final product.

**OBJECTIVES**

- To compare the efficacy and tolerability of the following treatments: 3-step acne system (3-step system: control cleanser, BPO gel, and topical acne products) vs. BPO/clindamycin combinatorial product (BPO gel, BPO/clindamycin ointment, control cleanser).
- To evaluate the safety and tolerability of the 3-step acne system in comparison to the BPO/clindamycin combinatorial product.
- To determine if the 3-step acne system is at least as effective as the BPO/clindamycin combinatorial product in reducing the mean non-inflammatory lesion count at week 10.

**METHODOLOGY**

**Study Design**

- Multicenter, randomized, investigator-blinded study.
- 139 patients enrolled (69 in 3-step acne system group, 70 in BPO/clindamycin group), of whom 128 (92%) completed.
- Between-group differences were analyzed using a mixed-effects linear model approach.

**Primary Outcome Measures**

- Non-inflammatory lesion count.
- Mean percent reduction in non-inflammatory lesion count (± SD).

**Key Findings**

- The 3-step acne system was associated with numerically lower reductions in inflammatory lesion count than BPO/clindamycin treatment.
- Between-group differences were not statistically significant for any of the outcome measures at baseline.

**Conclusion**

The data suggest that the 3-step acne system may be a viable alternative to the BPO/clindamycin combinatorial product, with potential benefits in terms of efficacy and tolerability. Further studies are warranted to confirm these findings.

**ACKNOWLEDGMENT**

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**REFERENCES**

1. Belknap BS. Treatment of acne with 5% benzoyl peroxide gel or 0.05% retinoic acid cream. Cutis 1992;49:167-170.

**TABLE 1**

<table>
<thead>
<tr>
<th>Week</th>
<th>Primary Outcome Measures</th>
<th>BPO/clindamycin</th>
<th>3-step Acne System</th>
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<td>0</td>
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<td>-</td>
</tr>
<tr>
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<td>Mean percent reduction in inflammatory lesion count (± SD)</td>
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</tr>
<tr>
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</tr>
<tr>
<td>10</td>
<td>Mean percent reduction in inflammatory lesion count (± SD)</td>
<td>-</td>
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</table>

**Figures**

- **Figure 2.** Mean percent reduction in inflammatory lesion count (± SD).
- **Figure 5.** Mean percent reduction in non-inflammatory lesion count (± SD).

**Schematic**

- **Figure 7.** Schematic representation of the 3-step acne system.