Efficacy and Safety of Fixed-Dose Triple-Combination Clindamycin Phosphate 1.2%/Adapalene 0.15%/Benzoyl Peroxide 3.1% Gel for Moderate-to-Severe Acne Vulgaris in Children and Adolescents

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ABSTRACT

Objectives: To investigate the efficacy and safety of CAB in children and adolescents in two pooled phase 3 studies.

Methods: Data were pooled from two phase 3, double-blind, randomized, 12-week studies (PACT3045815088; 2018-1-1530941). Eligible patients were 12-17 years of age with moderate-to-severe acne (CAB: n=123; vehicle: n=50). CAB and vehicle were applied to the entire facial skin surface and neck, with sparing of the upper chest. The primary outcome was least-squares mean percent change from baseline in Investigator’s Global Severity Score (IGSS) at Week 12. The study was powered to demonstrate non-inferiority of CAB to vehicle with a non-inferiority margin of 20%. Other efficacy endpoints included least-squares mean change from baseline in rate of inflammatory and noninflammatory lesions (IL and NIL) assessed to the nearest 10%, and proportion of participants with a 30% to 75% reduction in lesion counts versus vehicle with a non-inferiority margin of 15%. Safety endpoints included treatment-emergent adverse events (TEAEs) assessed by MedDRA preferred term (PT). Discontinued study/drug due to AEs was also assessed.

Results: The majority of participants aged 12-17 years were White and non-Hispanic, and 10% were males. Most participants had moderate acne at baseline. CAB treatment also resulted in significant reductions of >70% in inflammatory and noninflammatory lesion counts versus vehicle (50.5% and 42.9%; p<0.01 vs vehicle). Most common (>3% in any treatment group) treatment-related TEAEs were application site react/dermatitis (13.0%) and backache (8.9%). One CAB-treated participant withdrew due to TEAEs (2.5% of participants withdrew due to TEAEs or discontinuation of study drug). Any TEAE with a prevalence of >3% in CAB vs vehicle was acne. The most common (>3% in any treatment group) treatment-related TEAE was acne (13.0%). Most participants completed the study (CAB: n=3; vehicle: n=2) are also summarized.

Conclusions: Efficacy and safety of CAB in children and adolescents in two pooled phase 3 studies support the use of CAB for moderate-to-severe acne vulgaris. CAB was well tolerated and efficacious in pediatric patients treated with moderate-to-severe acne, with >50% achieving treatment success at week 12. CAB treatment was associated with greater improvement in rate of inflammatory and noninflammatory lesions compared to vehicle in both studies; findings were consistent with prior studies of similar triple-combination topical products. Moreover, the overall safety profile of CAB in children is consistent with that observed in prior studies and other age groups.

TABLE 1. Demographics and Baseline Characteristics of Adolescents Aged 12-17 Years (ITT Population)

<table>
<thead>
<tr>
<th>Race, n (%)</th>
<th>White</th>
<th>Black/African American</th>
<th>Asian</th>
<th>Other/Native American</th>
<th>Hispanic/Latino, n (%)</th>
<th>Not Hispanic/Latino, n (%)</th>
<th>Sex, n (%)</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>123</td>
<td>50</td>
<td>15</td>
<td>3</td>
<td>3</td>
<td>114</td>
<td>123</td>
<td>57</td>
<td>66</td>
</tr>
</tbody>
</table>

This post hoc analysis evaluated adolescents aged 12-17 years (CAB: n=123; vehicle: n=50). Images showing acne improvement in CAB-treated adolescents are shown in Figure 1.

FIGURE 1. Treatment Success at Week 12 in Adolescents Aged 12-17 Years (ITT Population)

Most common treatment-related TEAEs for CAB and vehicle are summarized in Table 2.

TABLE 2. Summary of Adverse Events Through Week 12 in Adolescents Aged 12-17 Years (ITT Population)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Adverse Event</th>
<th>n (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB</td>
<td>Acne</td>
<td>16</td>
</tr>
<tr>
<td>Vehicle</td>
<td>Acne</td>
<td>3</td>
</tr>
</tbody>
</table>

This post hoc analysis evaluated adolescents aged 12-17 years (CAB: n=123; vehicle: n=50). Images showing acne improvement in CAB-treated adolescents are shown in Figure 1.

FIGURE 2. Mean Percent Change from Baseline in Lesion Counts by Visit Adolescents Aged 12-17 Years (ITT Population)

Efficacy of CAB treatment was also assessed by Investigator’s Global Severity Score (IGSS), evaluator’s global severity score (EGSS), and application site react/dermatitis (AS). The most common (>3% in any treatment group) treatment-related TEAE was acne (13.0%).

TABLE 3. Descriptive Baseline and Week 12 Efficacy Data for Children Aged 10-13 Years (n=178)

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Baseline</th>
<th>Week 12</th>
<th>Change</th>
<th>Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAB</td>
<td>50</td>
<td>16</td>
<td>-36.5%</td>
<td>-36.5%</td>
</tr>
<tr>
<td>Vehicle</td>
<td>50</td>
<td>50</td>
<td>0%</td>
<td>0%</td>
</tr>
</tbody>
</table>

This post hoc analysis evaluated adolescents aged 12-17 years (CAB: n=123; vehicle: n=50). Images showing acne improvement in CAB-treated adolescents are shown in Figure 1.

FIGURE 3. Acne improvements with CAB in Adolescents Aged 12-17 Years (ITT Population)

References: