OMALIZUMAB DOSE STEP-UP AND TREATMENT RESPONSE IN PATIENTS WITH CHRONIC IDIOPATHIC/SPOONETE URticaria (CIU/CSU): RESULTS FROM THE OPTIMA STUDY

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INTRODUCTION

• The OPTIMA (efficacy of omalizumab in patients with moderate to severe persistent allergic asthma on conventional H1-antihistamine therapy) study was designed to address some of the key gaps in the knowledge of optimal CSU/CIU treatment with omalizumab1
• Omalizumab is approved for the treatment of adults and adolescents (12 years and above) with CIU/CSU who remain symptomatic despite ee, antihistamine treatment: in Canada the approved dosage is omalizumab 150 mg or 300 mg every 4 weeks
• The treatment algorithm proposed by international guidelines states that the disease should be treated to complete resolution of symptoms1
• To date, no data evaluating the efficacy of step-up therapy in patients inadequately controlled with omalizumab 150 mg are available

OBJECTIVES

• Four objectives were to be answered in OPTIMA:
  - If a patient’s signs and symptoms of CIU/CSU are well controlled with omalizumab 150 mg and treated as per protocol, will the patient relapse? How long will it take until relapse?
  - If omalizumab treatment is restarted, will the patient respond to treatment?
  - If the patient does not sufficiently respond to omalizumab 150 mg, will step-up therapy to 300 mg improve the signs and symptoms of CIU/CSU?
  - If the patient does not respond to 300 mg, will treatment extension improve the signs and symptoms of CIU/CSU?

• This paper will cover the third question

METHODS

Study design

• OPTIMA is a 48-week, international, multicenter, randomized, open-label, noncomparator study
• Patients with CIU/CSU who were symptomatic despite H1-antihistamines at approved doses were randomized 4:3 to omalizumab 150 mg or 300 mg for 24 weeks (1st dosing period)
• Based on weekly Urticaria Activity Score (UAS7), patients entered one of the following phases: treatment withdrawal (P1AUST 1A); step-up to 300 mg (if UAS7 ≥20 at Week 16 or 24), or continued treatment for 12 more weeks (if UAS7 ≥20 at Week 16 and UAS7 <4 at Week 24)
• Patients who relapsed (UAS7 >10) during the treatment withdrawal period were retreated with the same dose (omalizumab 150 mg or 300 mg every 4 weeks) during the 12-week second dosing period

ICLUSION CRITERIA

• Men or women at least 18 years of age
• Diagnosis of CIU/CSU and the presence of symptoms for ≥6 months prior to the randomization visit
• Patient must have been on an approved dose of nonmedicating H1-antihistamine for CIU/CSU, and no other concomitant CUS/U treatment, for at least the 7-consecutive days immediately prior to the randomization visit and must have documented current use on the day of the randomization visit
• UAS7 score ≥16 (scale 0–42) and itch component of UAS7 ≥8 (scale 0–21) at baseline
• Diagnosis of CIU/CSU and the presence of symptoms for ≥6 months prior to the randomization visit and must have documented current use on the day of the randomization visit
• All patients were on a stable dose of nonmedicating H1-antihistamine during the entire trial duration. No rescue medication was allowed

• Of those patients who had not been well controlled by omalizumab 150 mg, 45.4% were well controlled by omalizumab 300 mg during the step-up phase, and 24.4% of these were symptom free

EXCLUSION CRITERIA

• Four exclusion criteria were followed in OPTIMA:
  - History of severe allergic asthma or anaphylaxis
  - Systolic blood pressure ≥140 mm Hg or diastolic blood pressure ≥90 mm Hg
  - Patients with a history of malignancy or any organ system
  - Exclusion of patients for whom treatment withdrawal was planned to be continued

RESULTS

Table 1. Baseline characteristics

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Omalizumab 150 mg</th>
<th>Omalizumab 300 mg</th>
<th>Randomized</th>
<th>Total</th>
</tr>
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<tbody>
<tr>
<td>Age (mean, years)</td>
<td>42.5 (18–71)</td>
<td>43.8 (18–71)</td>
<td>43.1 (18–71)</td>
<td>43.1 (18–71)</td>
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<tr>
<td>Gender, %</td>
<td>51.8</td>
<td>51.8</td>
<td>51.8</td>
<td>51.8</td>
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<tr>
<td>Ethnicity</td>
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<td>73.6</td>
<td>73.9</td>
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<tr>
<td>Asian</td>
<td>8.4</td>
<td>7.6</td>
<td>8.0</td>
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<tr>
<td>Black</td>
<td>5.0</td>
<td>4.2</td>
<td>5.1</td>
<td></td>
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<tr>
<td>American Indian/Alaska Native</td>
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<tr>
<td>Other</td>
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<td>10.5</td>
<td>10.5</td>
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<tr>
<td>Race, %</td>
<td>Hispanic</td>
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<td>4.2</td>
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<tr>
<td>Other</td>
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<tr>
<td>Income, median</td>
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<td>$25,001–$40,000</td>
<td>$25,001–$40,000</td>
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<tr>
<td>Education level, %</td>
<td>≤12 years</td>
<td>20.3</td>
<td>19.7</td>
<td>20.0</td>
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<td>13–16 years</td>
<td>22.4</td>
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<td>22.1</td>
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</tr>
<tr>
<td>&gt;16 years</td>
<td>57.3</td>
<td>58.0</td>
<td>57.5</td>
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<tr>
<td>Type of CIU/CSU, n (%)</td>
<td>UAS7 &gt;6</td>
<td>41.2</td>
<td>43.8</td>
<td>42.5</td>
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<tr>
<td>UAS7 ≤6</td>
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<td>56.2</td>
<td>57.5</td>
<td></td>
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<tr>
<td>Baseline UAS7, mean (range), units</td>
<td>18.4 (0–42)</td>
<td>18.4 (0–42)</td>
<td>18.4 (0–42)</td>
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</tr>
<tr>
<td>Gender, %</td>
<td>Female</td>
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<td>56.7</td>
<td>56.5</td>
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<tr>
<td>Male</td>
<td>43.7</td>
<td>43.3</td>
<td>43.5</td>
<td></td>
</tr>
</tbody>
</table>

Figure 1: Patient disposition after first dosing period

Figure 2: Baseline characteristics

Figure 3: Disease severity distribution at baseline and after step-up

CONCLUSIONS

• Of those patients who had not been well controlled by omalizumab 150 mg, 45.4% were well controlled by omalizumab 300 mg during the step-up phase, and 24.4% of these were symptom free

• Step-up treatment improved the disease severity scenario2

ACKNOWLEDGMENTS

2. Authors declare the following, real or perceived conflicts of interest:
   - Standard data or message rates may apply
   - Of those patients who had not been well controlled by omalizumab 150 mg, 45.4% were well controlled by omalizumab 300 mg during the step-up phase, and 24.4% of these were symptom free
   - Step-up treatment improved the disease severity scenario2

Figure 4: Baseline UAS7 and UAS7 after step-up

Figure 5: Disease severity distribution at baseline and after step-up

Figure 6: Disease severity distribution at baseline and after step-up

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Poster presented at the Winter Clinical Dermatology Conference, January 13–17, 2018, Lahaina, HI, USA