Ligelizumab achieves fast control of symptoms in more patients with chronic spontaneous urticaria compared with omalizumab: Analysis of the first 12 weeks of the Phase 2b study

Marcus Maurer1, Ana Giménez-Arnau2, Weily Soong3, M Hide4, Jonathan A Bernstein5, Eva Hua6, Avantika Barve7, Thomas Severin8, Reinhold Janocha8

1Dermatogical Allergology, Allergie-Centrum-Charité, Department of Dermatology and Allergy, Charité - Universitätsmedizin Berlin, Germany
2Dermatology Department, Hospital del Mar-Parc de Salut Mar, Universitat Autònoma Barcelona, Spain
3Alabama Allergy and Asthma Center, Clinical Research Center of Alabama, Birmingham, Alabama, USA
4Department of Dermatology, Hiroshima University, Hiroshima, Japan
5University of Cincinnati College of Medicine and Bernstein Clinical Research Center, Cincinnati, OH, USA
6Shanghai Novartis Trading Ltd., Shanghai, China
7Novartis Pharmaceuticals Corporation, East Hanover, NJ, United States
8Novartis Pharma AG, Basel, Switzerland

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Disclosures

In relation to this presentation, I declare the following, real or perceived conflicts of interest:

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Chronic spontaneous urticaria (CSU) is characterized by the occurrence of itchy wheals (hives), angioedema, or both for 6 weeks or more in the absence of specific external stimuli and has a significant negative impact on the quality of life.

Ligelizumab is a next generation high-affinity humanised monoclonal anti-IgE antibody developed for the treatment of CSU patients inadequately controlled by an H₁-AH.

In a Phase 2b clinical trial, ligelizumab, demonstrated improved symptom control in patients with moderate to severe CSU inadequately controlled with H₁-AH.

Here, we analysed the early response after the first dose (the first 4 weeks) and sustainability over the first 12 weeks with ligelizumab 72 mg and 240 mg vs. omalizumab 300 mg.

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Phase 2b study of ligelizumab in patients with CSU inadequately controlled with H₁-AH

<table>
<thead>
<tr>
<th>Treatment</th>
<th>Week 0</th>
<th>4</th>
<th>8</th>
<th>12</th>
<th>16</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ligelizumab 240 mg q4w (n=85)</td>
<td><strong>Week 20</strong> Primary endpoint</td>
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<tr>
<td>Ligelizumab 72 mg q4w (n=84)</td>
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<tr>
<td>Ligelizumab 24 mg q4w (n=43)</td>
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<tr>
<td>Omalizumab 300 mg q4w (n=85)</td>
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<tr>
<td>Placebo (n=42)</td>
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<td></td>
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<tr>
<td>Placebo (n=43)</td>
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- **Screening**
- **Follow-up**

Week 32: Eligible to enroll in the extension study

- **R** = Randomization
- **=** Treatment visit in the core study

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**Notes:**
- The ligelizumab 24 and 120 mg SD arms are not presented further as they were not relevant to outcomes presented here.
- Patients who remained in the follow-up period for at least 12 weeks and had active disease (UAS7≥12), could enter the extension study from Week 32 onward; H₁-AH, H₁-antihistamines; CSU, chronic spontaneous urticaria; n, number of patients; q4w, every 4 weeks; R, randomized; SD, single dose; UAS7, weekly Urticaria Activity Score.
Methods

- Adult patients with moderate to severe CSU (UAS7≥16 at baseline) were included in the study and were provided with an electronic diary to capture their daily urticaria symptoms (Urticaria Activity Score [UAS])

- The UAS7 is a 7 day cumulative score of daily itch severity (scored 0[itch free]–3[severe itch]) and daily number of hives (scored 0–3: 0=no hives, 1=1–6 hives, 2=7–12 hives, and 3=13 hives or more) with a total score ranging between 0 and 42

- The weekly proportion of patients with either complete control of urticaria symptoms (UAS7=0) or well controlled urticaria (UAS7≤6), and the mean percentage of weeks that patients were urticaria free or well controlled up to Week 12 was analysed
Patients treated with ligelizumab 72 mg and 240 mg achieved UAS7=0 as early as Week 2 and at a numerically higher rate than omalizumab*

*Analysis performed on as observed data.
N, total number of patients in each arm at that time point; q4w, every 4 weeks; UAS7, weekly Urticaria Activity Score, complete response: UAS7=0
Patients with well-controlled urticaria (%)

<table>
<thead>
<tr>
<th>Weeks</th>
<th>Ligelizumab 72 mg q4w</th>
<th>Ligelizumab 240 mg q4w</th>
<th>Omalizumab 300 mg q4w</th>
</tr>
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<tr>
<td>0</td>
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</tr>
<tr>
<td>1</td>
<td>28.6 (N=84)</td>
<td>32.5 (N=83)</td>
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<td>2</td>
<td>36.1 (N=83)</td>
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<td>3</td>
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<td>48.8 (N=84)</td>
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<td>4</td>
<td>43.9 (N=82)</td>
<td>48.8 (N=84)</td>
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<td>5</td>
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<td>11</td>
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<tr>
<td>12</td>
<td>52.6 (N=78)</td>
<td>52.6 (N=78)</td>
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</tr>
</tbody>
</table>

*Analysis performed on as observed data.
N, total number of patients in each arm at that time point; q4w, every 4 weeks; UAS7, weekly Urticaria Activity Score, well control urticaria: UAS7≤6
For patients with well-controlled urticaria at Week 12, the rate of urticaria free weeks was numerically higher for ligelizumab vs. omalizumab.

For cumulative % of weeks with response, patients with UAS7≤6 at week 12 were analyzed. Error bars represent standard deviation.

n, number of patients (who achieved UAS7≤6 at Week 12) analyzed, N, total number of patients in the arm; q4w, every 4 weeks; UAS7, weekly urticaria activity score.
For patients with well-controlled urticaria at Week 12, the rate of well-controlled urticaria weeks was numerically higher for ligelizumab vs. omalizumab.

For cumulative % of weeks with response, patients with UAS7≤6 at week 12 were analyzed. Error bars represent standard deviation.

- Ligelizumab 72 mg q4w: n/N=49/84
- Ligelizumab 240 mg q4w: n/N=41/85
- Omalizumab 300 mg q4w: n/N=40/85

For cumulative % of weeks with response, patients with UAS7≤6 at week 12 were analyzed. Error bars represent standard deviation.
In the Phase 2b study, a **numerically larger proportion of CSU patients** treated with ligelizumab showed **complete symptom control** after the first dose (within 2 weeks) vs. omalizumab.

For patients who achieved complete control at Week 12, ligelizumab provided a **numerically more pronounced and stable response** over time in terms of **complete control of urticaria symptoms** vs. omalizumab.

The **ongoing Phase III studies (PEARL 1 and PEARL 2)** will further evaluate the **efficacy and safety of ligelizumab treatment for up to 1 year** in patients with CSU who remain symptomatic despite H₁-AH treatment at approved doses.

CSU, chronic spontaneous urticaria; H₁-AH, H₁-antihistamines