**Zanubrutinib Plus Obinutuzumab Versus Obinutuzumab in Patients With Relapsed or Refractory Follicular Lymphoma: Updated Analysis of the ROSEWOOD Study**

Christopher R. Flowers,1 Pier Luigi Zinzani,1 Jiti Mayer,1 Fontanet Bijou,1 Ana C. de Oliveira,1 Yuyin Song,2 Qingyang Zhang,3 Michelle Merli,4 Krimo Bouadiba,5 Peter S. Ganly,6 Haiui Zhang,7 Sam Yuan,8 Edwin Kingsley,9 Sant E. Assounole,9 Rebecca Aue,9 Pi Kim,9 Adam Greenbaum,9,10 Hina Huang,9 Richard Delarue,10 Judith Trauernicht,11

1Department of Lymphoma/Myeloma, The University of Texas MD Anderson Cancer Center, Houston, TX; 2Institute of Hematology, 'Seràgnoli,' University of Bologna, Bologna, Italy; 3Department of Internal Medicine-Hematology and Oncology, Masaryk University and University Hospital Brno, Brno, Czech Republic; 4Institut Bergonié, Bordeaux, France; 5Institute of Clinical Oncology (ICD) Hospital Duren Buren, Reykjavík, Iceland; 6Peking University Cancer Hospital and Institute, Beijing, China; 7Harbin Medical University Cancer Hospital, Harbin, China; 8Hematology, University Hospital 'Ospedale di Circolo e Fondazione Macchi,' ASST Sede Luraghi, University of Insubria, Varese, Italy; 9'Hospital Nazionale Lavao,' CHU Bordeaux, Pessac, France; 10Department of Hematology, Onexo Hospital, Chiejina, New Zealand; 11Therapy Methods, University Cancer Institute Hospital, Kuopio, Finland; 12Cancer Institute Hospital, Tohoku, Japan; 13University of Nevada, Las Vegas, NV; 14South General Hospital, Montrose, Canada; 15St. Bartholomew’s Hospital, Barts Health NHS Trust, London, UK; 16Beigene (Shanghai) Co. Ltd, Shanghai, China, and BeiGene USA, Inc, San Mateo, CA; 17Concord Repatriation General Hospital, University of Sydney, Concord, NSW, Australia.

**BACKGROUND**

Follicular lymphoma (FL) is the second most common non-Hodgkin lymphoma subtype in adults. While nearly 75% of patients achieve a complete or partial response to first-line therapy, the median duration of response is only about 2 years. The proportion of patients with refractory disease continues to rise as the global population ages. There is an ongoing need for effective second-line and subsequent-line therapies.

**METHODS**

ROSEWOOD was a global, open-label, randomized, phase II/III study to evaluate zanubrutinib plus obinutuzumab versus obinutuzumab alone as second-line treatment for patients with R/R FL. Patients were eligible if they had at least one prior line of therapy and had progressing or refractory disease. The primary endpoint was overall survival (OS) at 2 years. Median age at diagnosis was 66 years (range, 26-86 years), and 57% of patients had Rai stage IV disease. The median number of prior lines of therapy was 2 (range, 1-10 lines).

**RESULTS**

At the median follow-up of 22.2 months, the OS rates were 69.0% (95% CI, 60.8-76.4) and 39.3% (95% CI, 26.6-51.6) in the zanubrutinib plus obinutuzumab and obinutuzumab groups, respectively (hazard ratio [HR], 0.49; 95% CI, 0.31-0.79; P=.0017) (Figure 7). At 12 months, the OS rates were 100% and 60% (hazard ratio, 0.19; 95% CI, 0.05-0.78), respectively. A 24-month OS rate of 69.0% (95% CI, 60.8-76.4) was observed in the zanubrutinib plus obinutuzumab group, which compared favorably with 39.3% (95% CI, 26.6-51.6) in the obinutuzumab group (P=.0017).

**CONCLUSIONS**

Zanubrutinib plus obinutuzumab demonstrated meaningful OS improvement and a manageable safety profile in heavily pretreated patients with R/R FL.

**REFERENCES**


**ACKNOWLEDGMENTS**

The authors thank the patients, families, and study sites who participated in this study. They also thank the study investigators, study nurses, and all the other individuals who contributed to this study. The authors thanking to all the other individuals who contributed to this study.

**DISCLOSURES**

Conflict of Interest Disclosures: The authors disclosed conflicts of interest, which are listed in the Acknowledgments.

**TABLE 3. Selected Grade ≥3 Nonhematologic TEAEs**

<table>
<thead>
<tr>
<th>Event</th>
<th>Zanubrutinib + Obinutuzumab</th>
<th>Obinutuzumab</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constipation</td>
<td>24 (34%)</td>
<td>9 (13%)</td>
</tr>
<tr>
<td>Diarrhea</td>
<td>37 (52%)</td>
<td>36 (53%)</td>
</tr>
<tr>
<td>Dental disorder</td>
<td>6 (9%)</td>
<td>3 (5%)</td>
</tr>
<tr>
<td>Fatigue</td>
<td>32 (45%)</td>
<td>27 (41%)</td>
</tr>
<tr>
<td>Headache</td>
<td>12 (17%)</td>
<td>14 (21%)</td>
</tr>
<tr>
<td>Hypertension</td>
<td>32 (45%)</td>
<td>19 (29%)</td>
</tr>
<tr>
<td>Infection</td>
<td>17 (25%)</td>
<td>15 (23%)</td>
</tr>
<tr>
<td>Inflammation</td>
<td>31 (44%)</td>
<td>25 (37%)</td>
</tr>
</tbody>
</table>

**Figure 3. ORR by IRC in Predetermined Subgroups**

**Figure 4. Duration of Response by IRC**

**Figure 5. Progression-Free Survival by IRC**

**Figure 6. Time to Next Antilymphoma Treatment**

**Figure 7. Overall Survival**

**Figure 8. Common Nonhematologic TEAEs (Any Grade)**

**Figure 9. EMA for TEAEs of Special Interest**