

# HEALTH-RELATED QUALITY OF LIFE OUTCOMES ASSOCIATED WITH ZANUBRUTINIB VS IBRUTINIB MONOTHERAPY IN PATIENTS WITH RELAPSED/REFRACTORY (RR) CLL/SLL: RESULTS FROM THE RANDOMIZED PHASE 3 ALPINE TRIAL

Peter Hillmen<sup>1</sup>, Jennifer Brown<sup>2</sup>, Nicole Lamanna<sup>3</sup>, Susan O'Brien<sup>4</sup>, Constantine Tam<sup>5, 6, 7, 8</sup>, Lugui Qiu<sup>9</sup>, Keri Yang<sup>10</sup>, Gisoo Barnes<sup>10</sup>, Ken Wu<sup>10</sup>, Tommi Salmi<sup>11</sup>, Barbara Eichhorst<sup>12</sup>  
<sup>1</sup>St James's University Hospital, Leeds, United Kingdom, <sup>2</sup>Medical Oncology, Dana-Farber Cancer Institute, Boston, <sup>3</sup> Herbert Irving Comprehensive Cancer Center, Columbia University, New York, <sup>4</sup>Chao Family Comprehensive Cancer Center, University of California, Irvine, United States of America, <sup>5</sup>Peter MacCallum Cancer Centre, Melbourne, <sup>6</sup> University of Melbourne, Parkville, <sup>7</sup>St Vincent's Hospital Melbourne, Fitzroy, <sup>8</sup>Royal Melbourne Hospital, Parkville, Australia, <sup>9</sup>Chinese Academy of Medical Sciences & Peking Union Medical College, Tianjin, China, <sup>10</sup>BeiGene USA, Inc., San Mateo, United States of America, <sup>11</sup>BeiGene Switzerland GmbH, Basel, Switzerland, <sup>12</sup>Department of Internal Medicine, University of Cologne, Center for Integrated Oncology Aachen, Cologne, Germany

**Background:** In the phase 3 ALPINE trial (BGB-3111-305; NCT03734016), efficacy and safety of zanubrutinib, a highly selective, next-generation Bruton tyrosine kinase inhibitor (BTKi), were compared with the first-generation BTKi, ibrutinib, in adult patients with RR chronic lymphocytic leukemia/small lymphocytic lymphoma (CLL/SLL).

**Aims:** This abstract, based on the interim analysis of the ALPINE trial, describes the effects of zanubrutinib monotherapy and ibrutinib monotherapy on the health-related quality of life (HRQoL).

**Methods:** Health-related quality of life was examined by patient-reported outcomes (PROs) measures assessed by EORTC QLQ-C30 and EQ-5D-5L at baseline, Cycle 1, and then every 3rd cycle until end of treatment. Key PRO endpoints included global health status (GHS), physical and role functions, and fatigue, pain, diarrhea, and nausea/vomiting. Descriptive analysis on all the scales was conducted as was a mixed model repeated-measure (MMRM) analysis of the longitudinal QLQ-C30 data. Data presented are from key cycles (7 and 13), corresponding to 6 and 12 months of treatment, respectively.

**Results:** In the intent-to-treat population (N=652; zanubrutinib, n=327; ibrutinib, n=325), adjusted completion rates were high (>85%) in both arms at Cycles 7 and 13. On the QLQ-C30, estimated mean treatment differences and 95% CI in key PRO endpoints demonstrated treatment differences, in favor of zanubrutinib, in GHS, physical functioning, and fatigue in Cycle 7, and diarrhea in Cycle 13 (**Table**). Mean change from baseline (SD) in EQ-5D-5L VAS showed consistently more improvement with zanubrutinib compared with ibrutinib at both Cycle 7 (8.4 [18.2] vs 4.0 [16.6]) and Cycle 13 (6.8 [18.8] vs 5.2 [17.5]).

**Image:**

	Cycle 7 Estimated Mean Difference (95% CI)	2-sided P-value	Cycle 13 Estimated Mean Difference (95% CI)	2-sided P-value
GHS	3.45 (0.3, 6.6)	0.0322	-0.36 (-3.6, 2.9)	0.8306
<b>Functional domains</b>				
Physical functioning	2.63 (0.2, 5.1)	0.0346	1.23 (-1.4, 3.9)	0.3562
Role functioning	0.97 (-2.4, 4.4)	0.5724	2.05 (-1.6, 5.7)	0.2725
<b>Symptoms</b>				
Diarrhea	-1.25 (-4.0, 1.5)	0.3669	-2.50 (-5.2, 0.2)	0.0726
Fatigue	-2.95 (-6.1, 0.2)	0.0635	-0.40 (-3.8, 3.0)	0.8187
Nausea/vomiting	-1.13 (-2.5, 0.2)	0.1022	-0.52 (-2.2, 1.1)	0.5391
Pain	-1.20 (-4.7, 2.3)	0.5061	-1.88 (-5.8, 2.1)	0.3492

For GHS and physical functional domain, higher scores indicate a higher (better) function; for the fatigue domain and symptom scales, higher scores indicate a higher (worse) severity of symptoms.

**Summary/Conclusion:** In the ALPINE trial, patients with RR CLL/SLL who received zanubrutinib monotherapy reported improvements in key HRQoL endpoints compared with patients who received ibrutinib monotherapy.