

Activity of Zanubrutinib in Chronic Lymphocytic Leukemia/Small Lymphocytic Lymphoma

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COI disclosure

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- Author(s) have the following COI to disclose:

KF: Research funding from Parexel International Co, Ltd, Insight Biosciences Japan, LLC. **KSu:** Honoraria from Celgene, Bristol Myers Squibb, Takeda Pharmaceutical, Sanofi; research funding from Ono Pharmaceutical, MSD, Celgene, AbbVie G.K., Takeda Pharmaceutical, Sanofi, Bristol Myers Squibb, Daiichi Sankyo, Alexion Pharma, GSK, Otsuka Pharmaceutical, Novartis Pharma, Astellas, Amgen, Janssen Pharma, Chugai Pharmaceutical, Kyowa Kirin, Pfizer. **SKa:** Honoraria from Daiichi Sankyo; research funding from Novartis Pharma, Astellas Pharma, Daiichi Sankyo. **HG:** Employment, stock options, travel fees, gifts, and other from BeiGene. **JZ:** Employment and stock options from BeiGene. **KI:** Honoraria from Ono Pharmaceutical, Janssen; research funding from AstraZeneca, AbbVie, Incyte, Bristol Myers Squibb, Novartis, Janssen, Yakult, Daiichi Sankyo, Chugai, BeiGene, Genmab.

- This study has been approved by the local IRB.

Background

- CLL/SLL is a B-cell malignancy characterized by progressive accumulation of leukemic cells in the peripheral blood, bone marrow, and lymphoid tissues¹
- The BTK inhibitor zanubrutinib significantly improved PFS vs BR in patients with TN CLL/SLL² and has shown superior efficacy and improved safety outcomes compared with ibrutinib in patients with R/R CLL/SLL³
- BGB-3111-111 (NCT04172246) is an ongoing, multicenter, open-label phase 1/2 study to assess the safety and efficacy of zanubrutinib in Japanese patients with mature B-cell malignancies

Here, we present efficacy assessed by INV and safety data on zanubrutinib for Japanese patients with CLL/SLL in the BGB-3111-111 study, along with data from global zanubrutinib studies with comparable follow-up times

- Data presented here are updated from the abstract to the 2023 DCO

BR, bendamustine and rituximab; BTK, Bruton tyrosine kinase; CLL/SLL, chronic lymphocytic leukemia/small lymphocytic lymphoma; DCO, data cut-off; INV, investigator; PFS, progression-free survival; R/R, relapsed or refractory; TN; treatment naive.

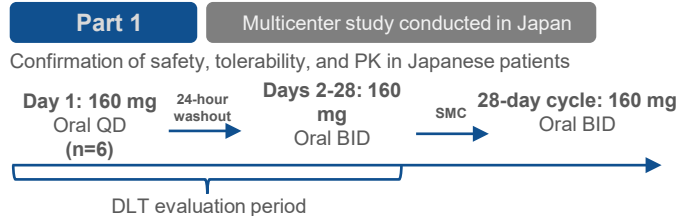
1. Zelenetz AD, et al. *J Natl Compr Canc Netw*. 2015;13(3):326-362; 2. Tam C, et al. *Lancet Oncol*. 2022;23(8):1031-1043;

3. Brown JR. *N Engl J Med*. 2023;388(4):319-332.

Study design

Key eligibility criteria

- Japanese
- Age ≥ 20 years
- ECOG PS of 0-2
- Confirmed diagnosis of mature B-cell neoplasms (CLL/SLL, MCL, FL, MZL, or WM)
- Measurable disease^a
- No prior systemic chemotherapy or radiation therapy within 2 weeks prior to first dose of zanubrutinib
- No prior alloSCT or therapy with B-cell receptor inhibitor or BCL2 inhibitor



Primary endpoints

- Safety (TEAEs)
- PK parameters

Part 2

Efficacy, safety, and tolerability in disease-specific cohorts

MCL cohort
R/R disease
(n=10)

CLL/SLL cohort
TN disease
(n=5-12)

CLL/SLL cohort
R/R disease
(n=5-12)

WM cohort
TN or R/R disease
(n=16-19)

Primary endpoints

- ORR by IRC

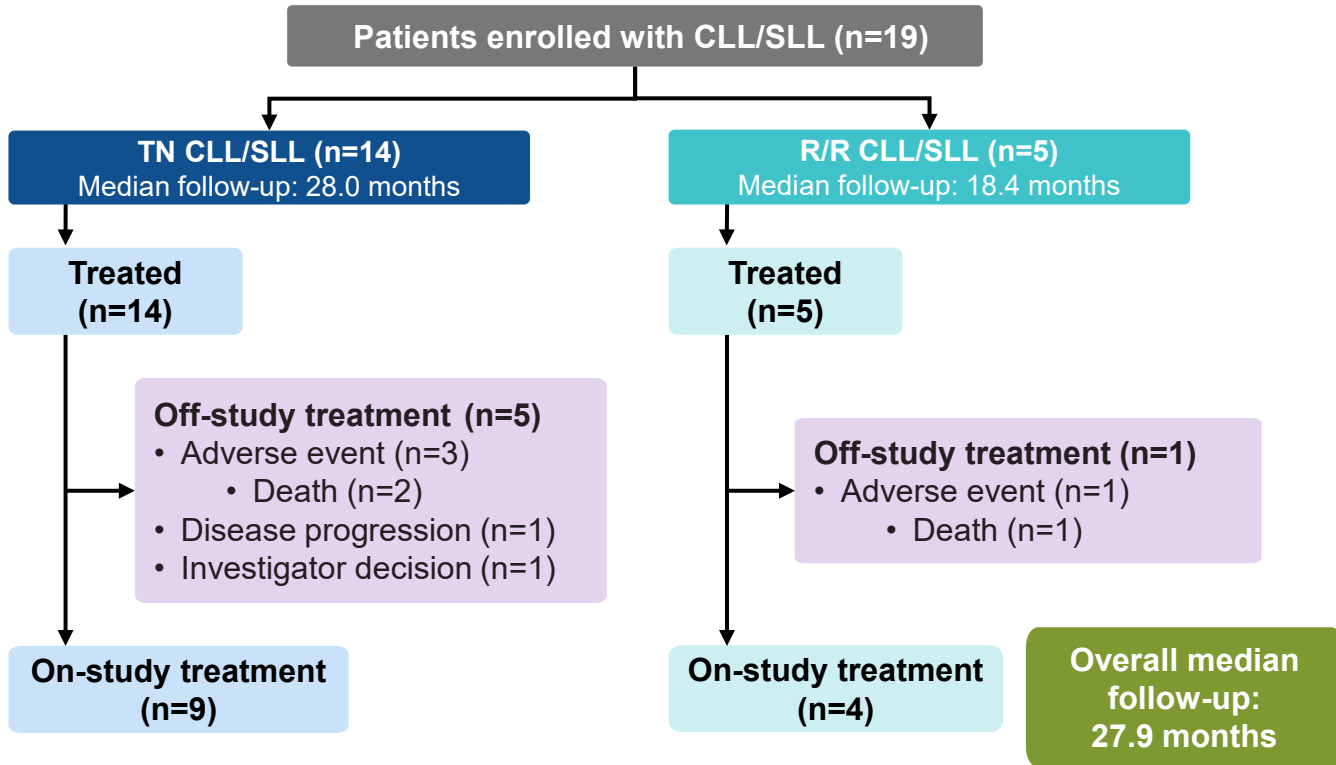
Key secondary endpoints

- PFS, DOR, TTR by IRC
- ORR by INV
- OS
- Safety (TEAEs)

alloSCT, allogeneic stem cell transplant; BCL2, B-cell lymphoma 2; BID, twice daily; DLT, dose-limiting toxicity; CLL/SLL, chronic lymphocytic leukemia/small lymphocytic lymphoma; DOR, duration of response; ECOG PS, Eastern Cooperative Oncology Group performance status; FL, follicular lymphoma; INV, investigator; IRC, independent review committee; MCL, mantle cell lymphoma; MZL, marginal zone lymphoma; ORR, overall response rate; OS, overall survival; PFS, progression-free survival; PK, pharmacokinetics; QD, once daily; R/R, relapsed or refractory; SMC, safety monitoring committee; TEAE, treatment-emergent adverse event; TN, treatment naive; TTR, time to response; WM, Waldenström macroglobulinemia.

^a MCL, WM, MZL, and FL only

Patient disposition



Baseline characteristics

Characteristics	Japanese TN (n=14)	SEQUOIA global TN ¹ (n=241) ^a	Japanese R/R (n=5)	ALPINE global R/R ² (n=327) ^b
Age, median (range), years	67.5 (38-77)	70 (40-86) ^c	72.0 (52-77)	67 (35-90)
<65 years, n (%)	6 (42.9)	45 (18.7)	1 (20.0)	126 (38.5)
≥65 years, n (%)	8 (57.1)	196 (81.3)	4 (80.0)	201 (61.5)
Sex, n (%)				
Male	10 (71.4)	154 (63.9)	4 (80.0)	213 (65.1)
Female	4 (28.6)	87 (36.1)	1 (20.0)	114 (34.9)
ECOG PS, n (%)				
0	12 (85.7)	110 (45.6)	5 (100)	129 (39.4)
≥1	2 (14.3)	131 (54.4)	0	198 (60.6)
No. of prior lines of therapy in patients with R/R disease, median (range)	–	–	2.0 (1-4)	1.0 (1-6)

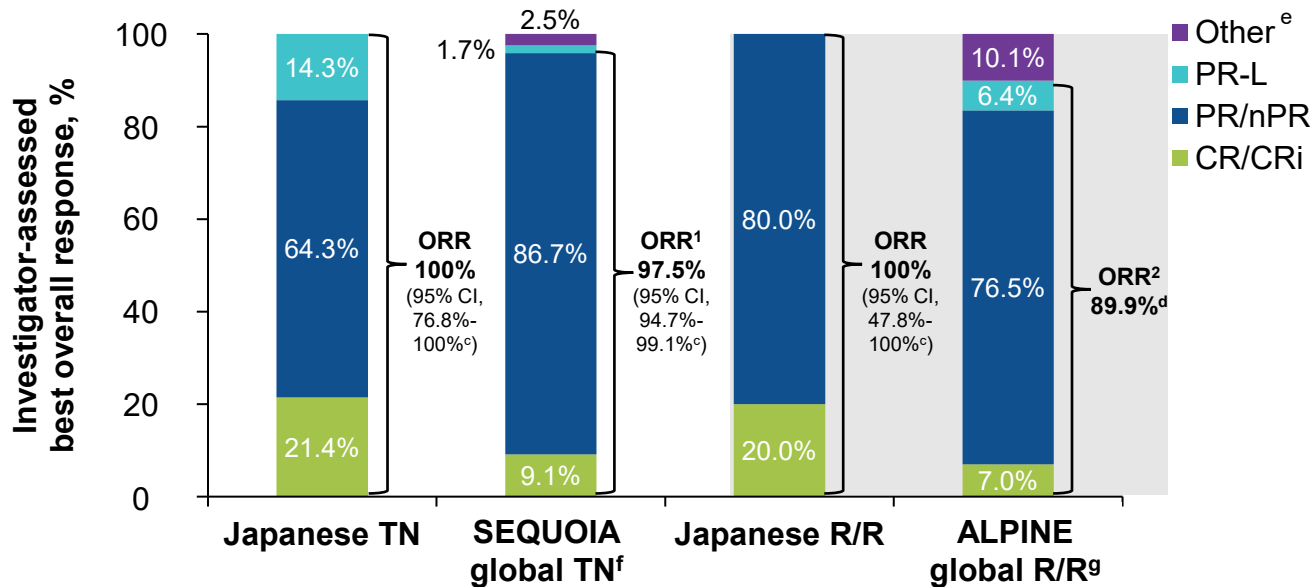
CLL/SLL, chronic lymphocytic leukemia/small lymphocytic lymphoma; ECOG PS, Eastern Cooperative Oncology Group performance status; R/R, relapsed or refractory; TN, treatment naive.

^a Patients without del(17p) randomized to receive zanubrutinib treatment. ^b Patients randomized to receive zanubrutinib treatment.

^c Unpublished data.

1. Tam CS, et al. *Lancet Oncol.* 2022;23(8):1031-1043; 2. Brown JR, et al. *N Engl J Med.* 2023;388(4):319-332.

ORR^a was 100% for both the Japanese TN and R/R cohorts^b



Sample size	n=14	n=241 ^h	n=5	n=327 ⁱ
Median follow-up, mo	28.0	26.2 ¹	18.4	29.6 ²

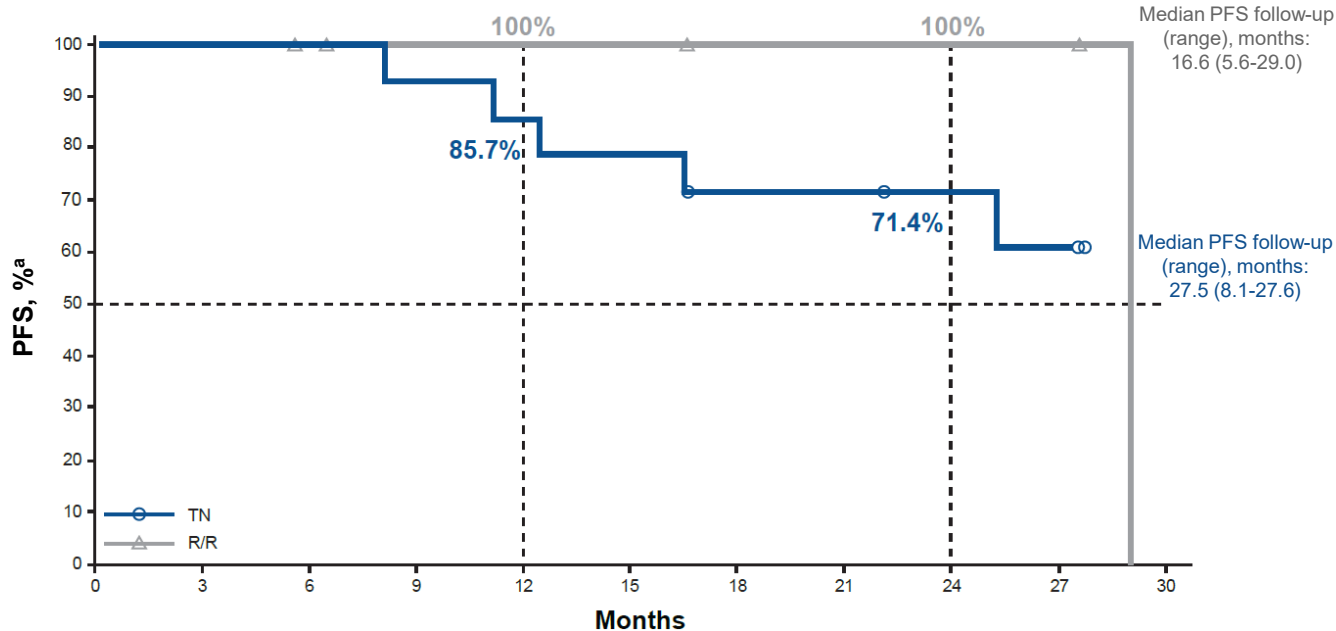
CLL, chronic lymphocytic leukemia; CR, complete response; CRi, CR with incomplete bone marrow recovery; ORR, overall response rate; PR, partial response; PR-L, partial response with lymphocytosis; PD, progressive disease; R/R, relapsed/refractory; SD, stable disease; TN, treatment naive.

^a PR-L or better. ^b No CRi, SD, or PD was reported. ^c Estimated using the Clopper-Pearson method. ^d 95% CI not presented in the paper. ^e Other includes patients with SD or PD or regarded as not evaluable or discontinued prior to first assessment. ^f Patients without del(17p) randomized to receive zanubrutinib treatment.

^g Patients randomized to receive zanubrutinib treatment. ^h Includes 3 patients who discontinued before the first assessment. ⁱ Includes 9 patients who discontinued before the first assessment.

1. Tam CS, et al. *Lancet Oncol.* 2022;23(8):1031-1043; 2. Brown JR, et al. *N Engl J Med.* 2023;388(4):319-332.

50% PFS was not reached in either the TN or R/R subgroup



No. at risk

TN	14	14	14	13	12	11	8	8	7	6	0
R/R	5	5	4	3	3	3	2	2	2	2	0

PFS, progression-free survival; R/R, relapsed or refractory; TN, treatment naive.

^a PFS rates were estimated by Kaplan-Meier method, with 95% CIs estimated using the Greenwood formula.

The most common ($\geq 15\%$) TEAEs primarily occurred at lower grades

n (%)	TN (n=14)		R/R (n=5)		All (n=19)	
	Any grade	Grade ≥ 3	Any grade	Grade ≥ 3	Any grade	Grade ≥ 3
≥ 1 TEAE	14 (100.0)	7 (50.0)	4 (80.0)	1 (20.0)	18 (94.7)	8 (42.1)
COVID-19	4 (28.6)	0	1 (20.0)	0	5 (26.3)	0
Anemia	3 (21.4)	0	1 (20.0)	0	4 (21.1)	0
Constipation	3 (21.4)	0	1 (20.0)	0	4 (21.1)	0
Dental caries	2 (14.3)	0	2 (40.0)	1 (20.0)	4 (21.1)	1 (5.3)
Neutrophil count decreased	2 (14.3)	2 (14.3)	1 (20.0)	1 (20.0)	3 (15.8)	3 (15.8)
Platelet count decreased	3 (21.4)	3 (21.4)	0	0	3 (15.8)	3 (15.8)
Pyrexia	3 (21.4)	0	0	0	3 (15.8)	0

Rates of atrial fibrillation/flutter were low and similar to those found in the SEQUOIA and ALPINE studies^{1,2}

Patients, n (%)	Japanese TN (n=14)	SEQUOIA global TN ¹ (n=240) ^a	Japanese R/R (n=5)	ALPINE global R/R ² (n=324) ^b
Any TEAE of special interest	12 (85.7)	207 (86.3)	4 (80.0)	294 (90.7)
Infections	10 (71.4)	149 (62.1)	3 (60.0)	231 (71.3)
Hemorrhage	6 (42.9)	108 (45.0)	2 (40.0)	137 (42.3)
Anemia	3 (21.4)	11 (4.6)	1 (20.0)	50 (15.4)
Neutropenia	3 (21.4)	38 (15.8)	1 (20.0)	95 (29.3)
Thrombocytopenia	3 (21.4)	11 (4.6)	0	42 (13.0)
Second primary malignancies	2 (14.3)	31 (12.9)	1 (20.0)	40 (12.3)
Atrial fibrillation and flutter	1 (7.1)	8 (3.3)	0	17 (5.2)
Hypertension	0	34 (14.2)	0	76 (23.5)

CLL/SLL, chronic lymphocytic leukemia/small lymphocytic lymphoma; R/R, relapsed or refractory; TEAE, treatment-emergent adverse event; TN, treatment naive.

^a Zanubrutinib-treated patients without del(17p). ^b Zanubrutinib-treated patients.

1. Tam CS, et al. *Lancet Oncol.* 2022;23(8):1031-1043; 2. Brown JR, et al. *N Engl J Med.* 2023;388(4):319-332.

Conclusions

- Zanubrutinib was safe and effective in Japanese patients with CLL/SLL in the BGB-3111-111 study
- Efficacy results and safety profile were consistent with results from the global SEQUOIA and ALPINE studies in patients with TN CLL/SLL and R/R CLL/SLL, respectively
- These results support the use of zanubrutinib as a treatment option for Japanese patients with CLL/SLL in both the TN and R/R setting

Acknowledgments

- The authors thank the patients and their families, investigators, co-investigators, and the study teams at each of the participating centers
- This study was sponsored by BeiGene, Ltd
- Medical writing support was provided by Bryan Hodson, PhD, of Articulate Science, LLC, and was funded by BeiGene