Sonrotoclax (BGB-11417) + Zanubrutinib in Patients With Treatment-Naive CLL/SLL: An Ongoing Phase 1/2 Study

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Background

- Sonrotoclax is a BH3 mimetic that binds and inhibits BCL2
  - >10-fold potency compared to venetoclax[1] and better in vitro activity against BCL2 mutations, including BCL2 G101V
  - Demonstrated high selectivity
  - Short half life (4 hours)
- The combination of BCL2 and BTK inhibitors has shown synergistic activity in preclinical CLL models[2-5]
- Ibrutinib with venetoclax in patients with CLL/SLL is effective, however, toxicities can limit use[6]
- Zanubrutinib is highly effective in patients with TN and R/R CLL/SLL including those with high-risk diseases[7,8]
  - Zanubrutinib demonstrated a superior efficacy and safety profile, including less cardiovascular toxicity than ibrutinib in R/R CLL/SLL[8]
- Here, we report preliminary results of the BGB-11417-101 trial (NCT04277637) in patients with TN CLL/SLL treated with sonrotoclax in combination with zanubrutinib

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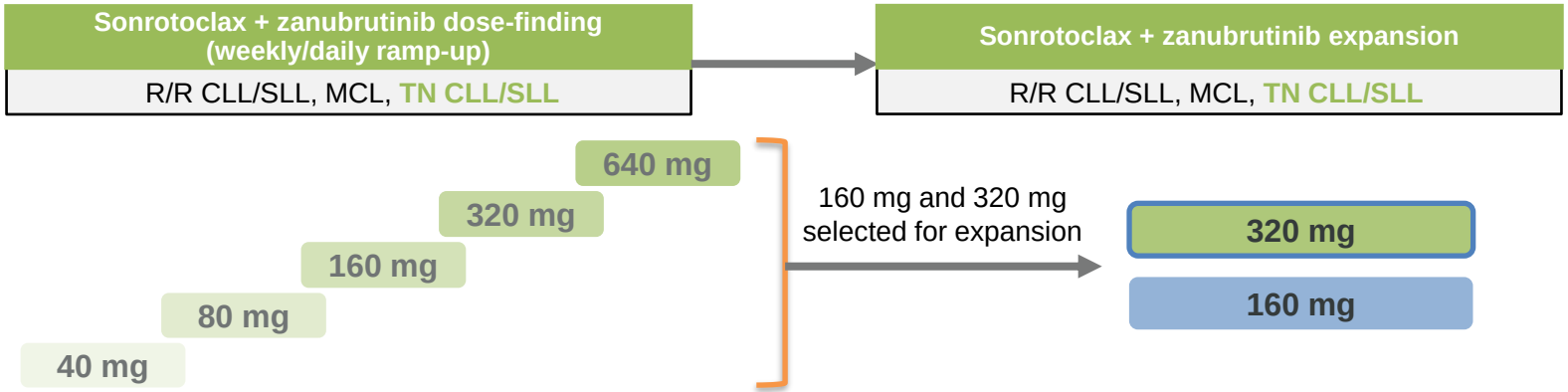
Study Design and Methods

- BGB-11417-101 is a phase 1/2 study evaluating sonrotoclax as monotherapy, in combination with zanubrutinib, and in combination with obinutuzumab ± zanubrutinib in patients with B-cell malignancies
- Main study objectives (TN CLL/SLL cohorts): determine safety and tolerability and define the recommended phase 2 dose of sonrotoclax when given in combination with zanubrutinib (160 mg BID or 320 mg QD)



- 8 to 12 weeks of zanubrutinib monotherapy was given prior to sonrotoclax dosing (12 weeks if high tumor burden)
- Sonrotoclax was dosed orally, once daily, using a weekly or daily ramp-up schedule to reach the target dose

Baseline Characteristics

Characteristics	Sonrotoclax 160 mg + zanu (n=51)	Sonrotoclax 320 mg + zanu (n=56)	All Patients (N=107)
Study follow up time, median (range), months	7.2 (0.3-21.1)	9.8 (0.5-17.4)	9.7 (0.3-21.1)
Age, median (range), years	63 (38-82)	61 (34-84)	62 (34-84)
≥65 years, n (%)	20 (39)	19 (34)	39 (36)
≥75 years, n (%)	4 (8)	7 (13)	11 (10)
Sex, n (%)			
Male	37 (73)	44 (79)	81 (76)
Disease type, n (%)			
CLL	49 (96)	52 (93)	101 (94)
SLL	2 (4)	4 (7)	6 (6)
Risk status, n/tested (%)[a]			
del(17p)	6/49 (12)	6/54 (11)	12/103 (12)
del(17p) and/or *TP53*^{mut}	12/50 (24)	15/55 (27)	27/105 (26)
IGHV status, n/tested (%)			
Unmutated	33/47 (70)	28/51 (55)	61/98 (62)
Tumor bulk at baseline, n (%)			
High[b]	20 (39)	14 (25)	34 (32)
Not High	31 (61)	42 (75)	73 (68)

Data cutoff: August 15, 2023.

[a] *TP53* mutations defined as >10% VAF. [b] Nodes ≥10 cm or nodes >5 cm and ALC >25×10^9/L

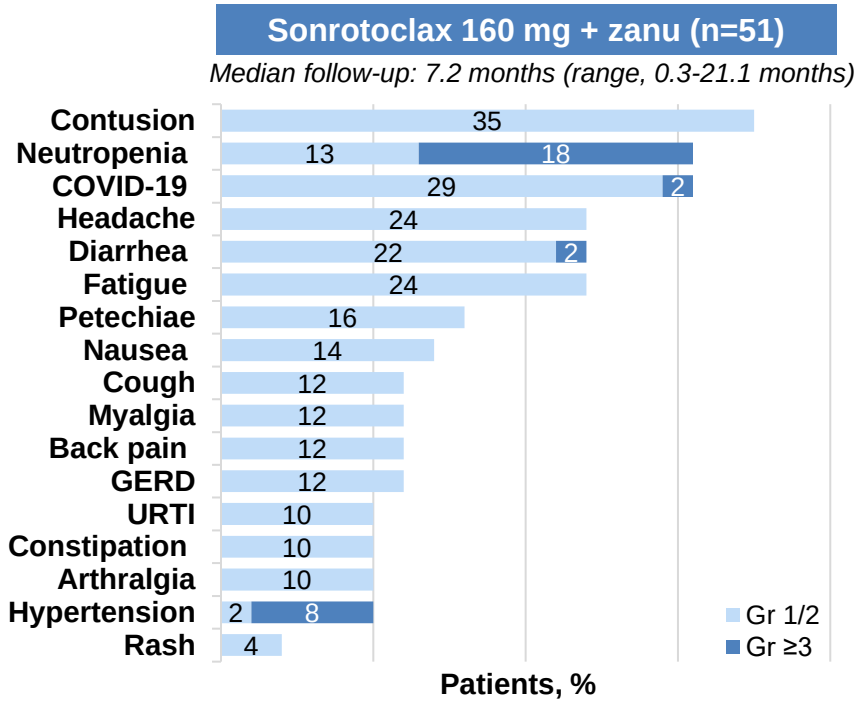
Dose Modification and AE Summary

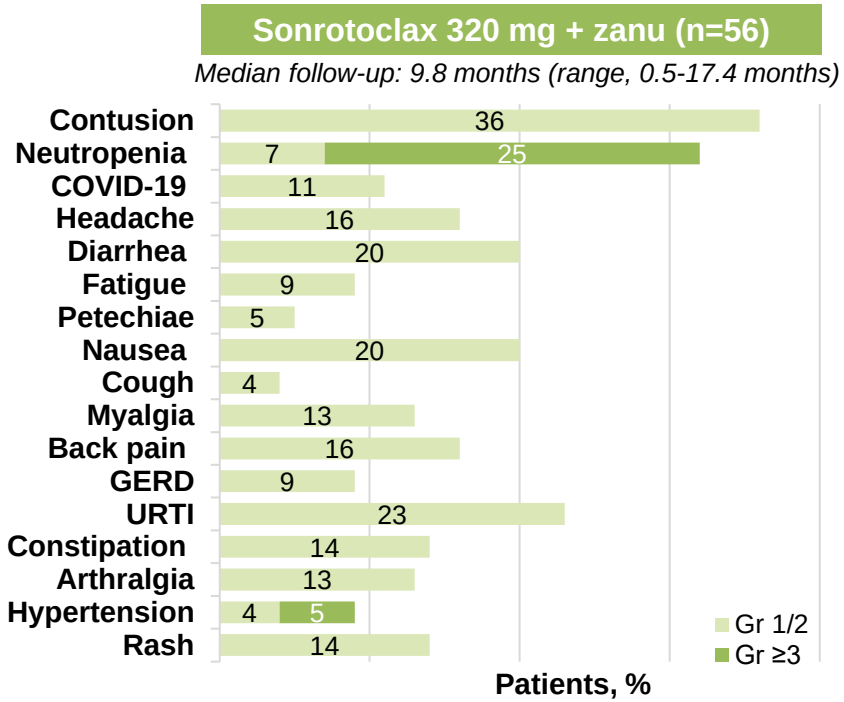
	Sonrotoclax 160 mg + zanu (n=51)	Sonrotoclax 320 mg + zanu (n=56)	All Patients (N=107)
Any AEs, n (%)	47 (92.2)	49 (87.5)	96 (89.7)
Grade ≥3	22 (43.1)	21 (37.5)	43 (40.2)
Serious AEs	7 (13.7)	8 (14.3)	15 (14.0)
Leading to death	0	0	0
Leading to dose reduction of zanubrutinib	1 (2.0)	2 (3.6)	3 (2.8)
Leading to discontinuation of zanubrutinib[a]	1 (2.0)	0	1 (0.9)
Treated with sonrotoclax, n (%)	41 (80.4)	53 (94.6)	94 (87.9)
Leading to hold of sonrotoclax	11 (26.8)	10 (18.9)	21 (22.3)
Leading to dose reduction of sonrotoclax	2 (4.9)	3 (5.7)	5 (5.3)
Leading to discontinuation of sonrotoclax[a]	1 (2.4)	0	1 (1.1)

- Sonrotoclax in combination with zanubrutinib is well tolerated and generally favorable, with very low rates of treatment discontinuation and dose reductions

[a] One patient stopped both sonrotoclax and zanubrutinib due to fungal infection.
AE, adverse event.

Most Frequent AEs (Incidence ≥5 Patients)[a,b]





- AEs observed with sonrotoclax + zanubrutinib combination therapy were mostly grades 1 and 2

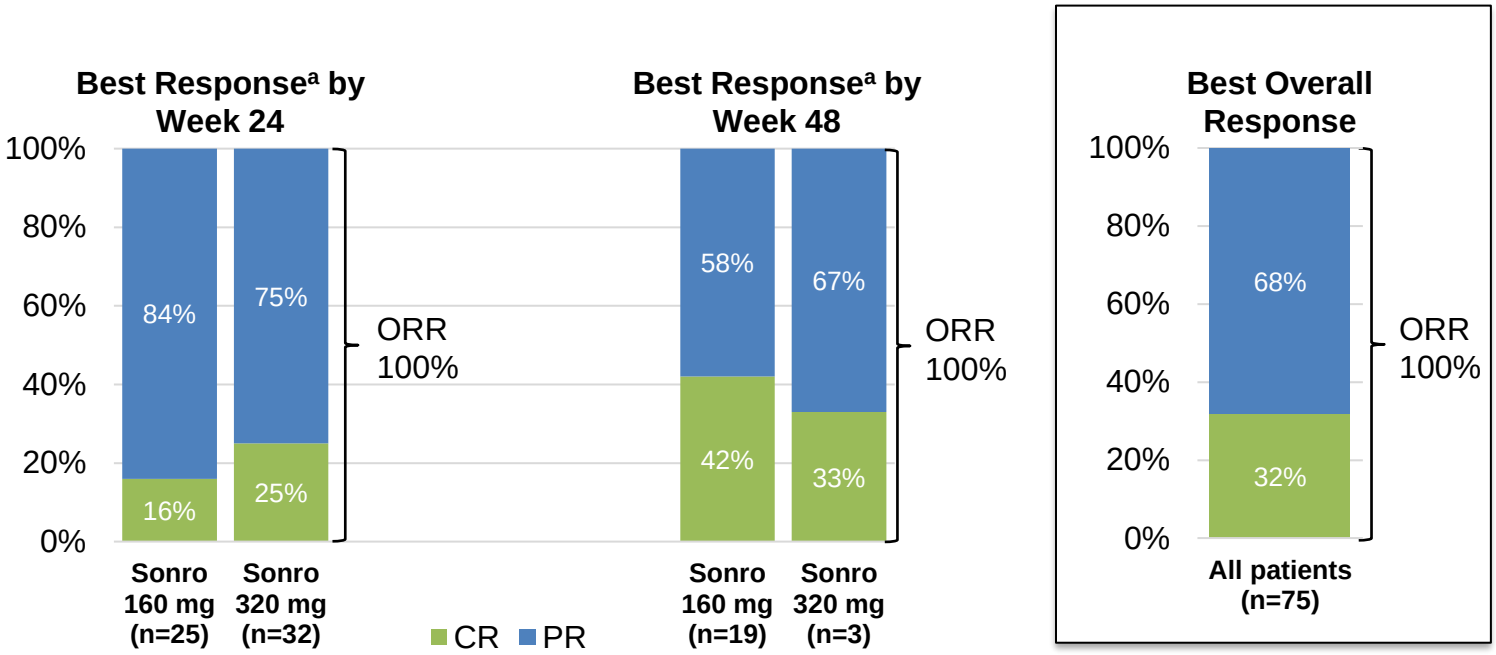
[a] Grade is listed as worst grade experienced by patient on any drug. [b] Hematologic AEs were graded per iwCLL criteria; nonhematologic AEs were graded per CTCAE v5.0 criteria.
AE, adverse event.

Treatment Emergent AEs of Interest

TLS[a]	No clinical or laboratory TLS was observed with weekly or daily ramp-up
GI toxicity[b]	Diarrhea events were mostly Grade 1; no dose reductions occurred
Atrial fibrillation	No atrial fibrillation was observed
Neutropenia	Most frequent AE (and Grade ≥3 AE); 1 dose reduction/no dose holds, 18 patients (17%) used G-CSF[c]
Febrile neutropenia	Observed in 2 patients (2%) assigned to the 160 mg dose level; events resolved without sequelae
Infections	Low rate of Grade ≥3 infections (8%); pneumonia (n=4) was the only Grade ≥3 infection in more than 1 patient

[a] TLS, tumor lysis syndrome, defined by Howard criteria. [b] One patient experienced multiple episodes of Grade 2 diarrhea so ramp-up was paused at 80 mg, they subsequently increased to 160 mg. [c] Includes all patients reporting G-CSF use during treatment, regardless of whether it was used for neutropenia or prophylaxis. G-CSF was used in 7 patients in the 160 mg cohort (14%) and 11 patients in the 320 mg cohort (20%). The median duration was 10 days.
AE, adverse event.

Overall Response Rate

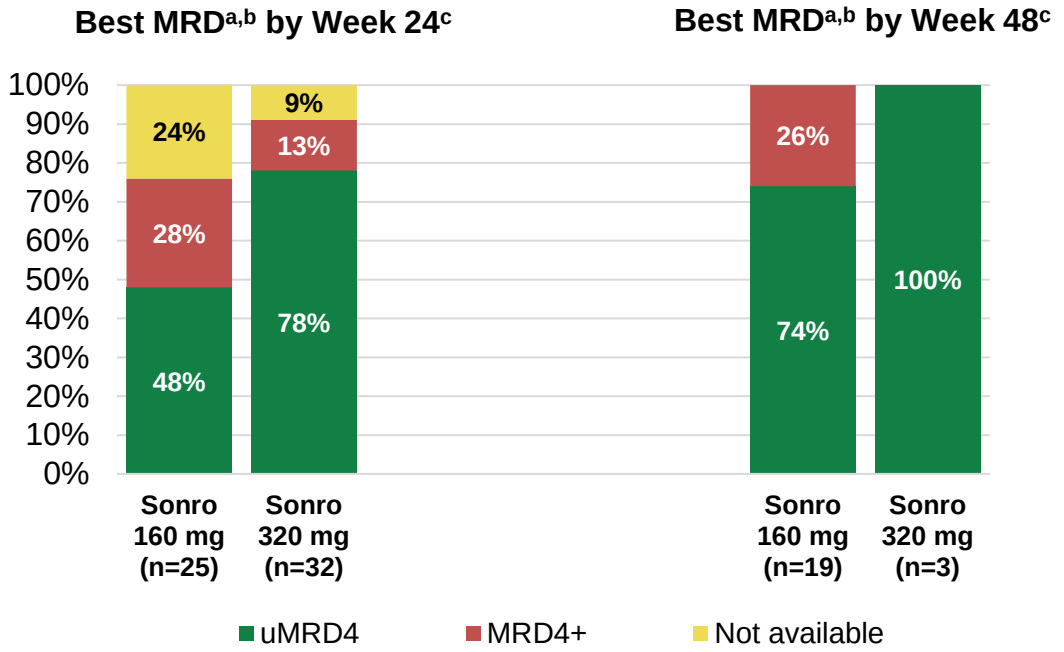


Response rates improved with time

[a] Percentage of response is based on number of patients who have reached the assessment at 24 or 48 weeks after completion of ramp-up, following zanubrutinib monotherapy and sonrotoclax ramp-up to target dose.

Minimal Residual Disease in Peripheral Blood

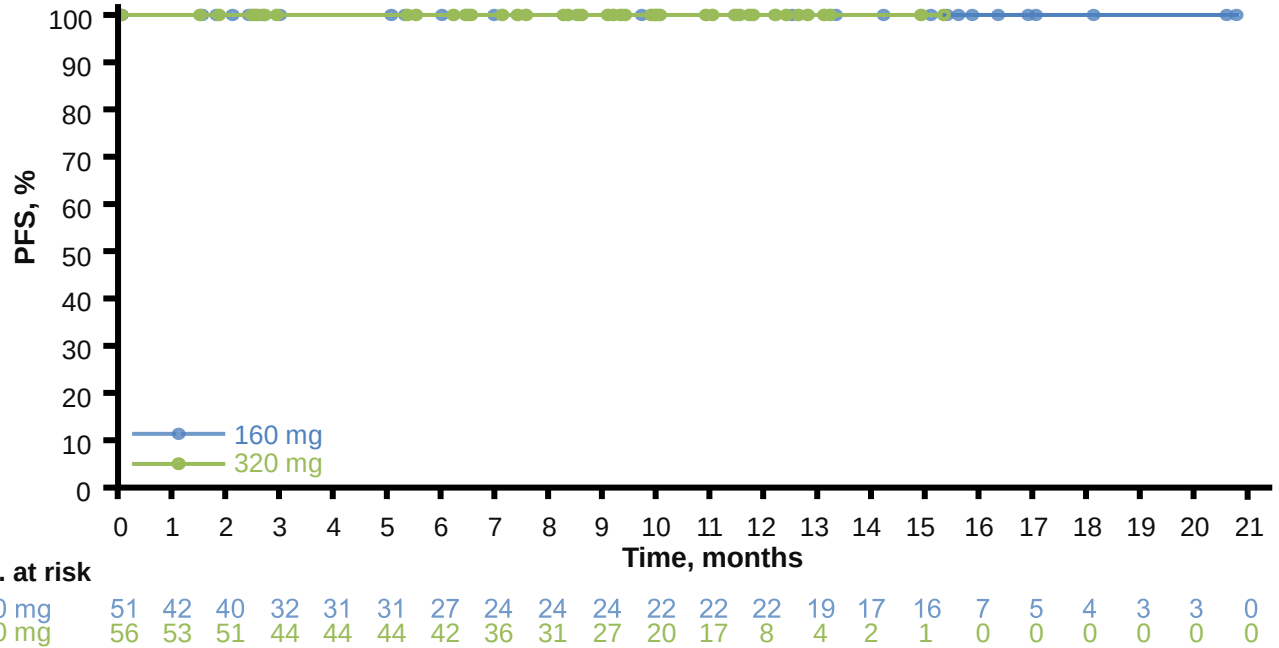
- High uMRD achieved at both dose levels
- Trend for higher uMRD rates with 320 mg compared with 160 mg
- Deepening response over time



[a] MRD was measured by ERIC flow cytometry with 10^{-4} sensitivity. uMRD4 is defined as the number of CLL cells of total nucleated cells $<10^{-4}$. MRD4+ is defined as the number of CLL cells of total nucleated cells $>10^{-4}$; [b] MRD is best reported within a 2-week window following the Week 24 Day 1 and Week 48 Day 1 MRD assessment timepoints, respectively;
[c] Week 24 or 48 represents 24 or 48 weeks at target dose, following zanubrutinib monotherapy and sonrotoclax ramp-up to target dose.

Progression-Free Survival

- At a median follow-up of 9.7 months, no patient has experienced disease progression or died at either sonrotoclax dose level



Conclusions

- Sonrotoclax 160 or 320 mg in combination with zanubrutinib 320 mg QD was well tolerated
  - 106/107 of patients remain on treatment
  - No TLS and no cardiac toxicity were observed; low rates of GI AEs (predominantly Grade 1)
  - Most commonly reported grade ≥3 AE was neutropenia which was mostly transitory and not requiring dose modifications or interruptions
- Efficacy was very promising in this all-comer TN CLL/SLL population
  - ORR was 100%
  - High blood MRD negativity by Week 24, with deepening response by Week 48 of combination therapy
  - No PFS events were observed at the time of the data cut off date
- Based on these data, sonrotoclax 320 mg was selected for the phase 3 study with zanubrutinib in the CELESTIAL-TNCLL study (BGB-11417-301), comparing this combination to venetoclax + obinutuzumab

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