

CELESTIAL-TNCLL: An ongoing, open-label, multiregional, phase 3 study of sonrotoclax (BGB-11417) + zanubrutinib vs venetoclax + obinutuzumab in treatment-naive CLL

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ABSTRACT

Background: The combination of venetoclax (ven), the first-generation BCL2 inhibitor, and ibrutinib, a BTK inhibitor, has efficacy in CLL. However, the toxicity profile of this regimen suggests a need for a more tolerable combination of BTK and BCL2 inhibitors. Sonrotoclax, a next-generation BCL2 inhibitor, is a more selective and pharmacologically potent inhibitor of BCL2 than ven in biochemical assays. Zanubrutinib, a next-generation BTK inhibitor, significantly improved progression-free survival (PFS) and had a more tolerable safety profile, including fewer cardiac adverse events, vs ibrutinib in a randomized head-to-head study in patients with CLL/SLL. In a phase 1 study in patients with treatment-naive (TN) CLL treated with sonrotoclax + zanubrutinib, the ORR and 1-year PFS rate were 100%, and deep responses based on undetectable measurable residual disease at $<10^{-4}$ sensitivity (uMRD4) were observed. The most common grade ≥ 3 TEAE was neutropenia, and no tumor lysis syndrome or cardiac toxicity was observed. The design of a phase 3 trial to compare the efficacy of sonrotoclax + zanubrutinib vs ven + obinutuzumab (obi) in patients with TN CLL is presented.

Methods: CELESTIAL-TNCLL (BGB-11417-301; NCT06073821) is a randomized, open-label, phase 3 study. Eligible patients have previously untreated CLL that requires treatment per 2018 iwCLL criteria, measurable disease by CT/MRI, an ECOG performance status of 0 to 2, and adequate hematologic and organ function. Approximately 640 patients will be randomized 1:1 to receive either 3 cycles of oral zanubrutinib monotherapy (320 mg daily) followed by zanubrutinib + sonrotoclax or standard ven + obi for 12 cycles. Randomization will be stratified by age (<65 vs ≥ 65 years) and IGHV and del(17p)/TP53 mutation status. The primary endpoint is PFS assessed by independent review committee (IRC) per 2018 iwCLL guidelines, with modifications for treatment-related lymphocytosis in patients with CLL. Key secondary endpoints include complete response rate (CRR), defined as CR or CR with incomplete hematopoietic recovery, assessed by IRC; rates of uMRD4 in bone marrow and peripheral blood at the first post-treatment follow-up visit by next-generation sequencing (clonoSEQ[®]); and overall survival. Other secondary endpoints include investigator (INV)-assessed PFS, CRR-INV, uMRD4 rate by flow cytometry, ORR-IRC and -INV, DOR-IRC and -INV, patient-reported outcomes, and safety and tolerability. Recruitment is ongoing.