CARNA BIOSCIENCES

News Release

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Carna Biosciences, Inc.

Carna Opens Dose Expansion Part of Phase 1b Study for Next Generation BTK Inhibitor AS-1763

Carna Biosciences, a clinical-stage biopharmaceutical company focusing on the discovery and development of innovative therapies to treat serious unmet medical needs, announces that the dose expansion part of a Phase 1b study for AS-1763 has been opened.

AS-1763, an investigational small molecule drug designed to non-covalently inhibit Bruton's tyrosine kinase (BTK) in a highly selective manner, is currently under development for the treatment of patients with chronic lymphocytic leukemia (CLL), small lymphocytic lymphoma (SLL), and B-cell non-Hodgkin lymphoma (B-cell NHL) who have developed resistance or are intolerant to at least two prior lines of systemic therapy including a covalent BTK inhibitor. The Phase 1b study of AS-1763, led by Prof. Nitin Jain, MD, Department of Leukemia, The University of Texas MD Anderson Cancer Center, was initiated in the U.S. in August 2023 as a multi-center clinical study. The study consists of two parts: dose escalation part and dose expansion part and dosing at 500 mg BID level in the dose escalation part is currently underway.

Carna's initial plan was to start the dose expansion part after evaluating the data from all dose levels in the dose escalation part, including the maximum dose level of 600 mg BID, to determine the maximum tolerated dose (MTD). However, Carna decided to start the dose expansion part in parallel with the ongoing dose escalation part with the approval by the principal investigators of the study. This decision was supported by the encouraging preliminary data from the ongoing dose escalation part including favorable safety, tolerability and high overall response rate as well as favorable plasma concentrations that suggest therapeutic effect.

The dose expansion part consists of three parts: Cohort 1 will include patients with CLL/SLL, Cohort 2 will include patients with B-cell NHL and Cohort 3 will include pirtobrutinib-pretreated patients. Based on the results from the dose escalation study, three dose levels were chosen for Cohort 1 and Cohort 2 and two dose levels were chosen for Cohort 3. Carna plans to swiftly enroll patients in each cohort to evaluate safety, efficacy and pharmacokinetic (PK) of AS-1763 and determine the recommended phase 2 dose (RP2D). The dose escalation part will be continued in parallel with the dose expansion part.

About AS-1763

AS-1763 is a highly selective, orally bioavailable, non-covalent inhibitor of both the wild type and mutant BTKs for the treatment of CLL and other B cell malignancies. Covalent BTK inhibitors including ibrutinib are key therapeutic options for patients with B cell malignancies. However, patients are reported to develop resistance during the treatment due to substitution of cysteine residue at 481 position with serine (C481S

mutation) in BTK, which reduces the efficacy of the covalent BTK inhibitors. In addition, the emergence of other types of resistance mutations to non-covalent BTK inhibitor, recently approved pirtobrutinib, has been reported. AS-1763 potently inhibited both wild type and those mutant BTKs, strongly suggesting that AS-1763 will be a new therapeutic option for treating patients with B cell malignancies both having wild type and resistance mutations in BTK. Carna is advancing development of AS-1763 as a next-generation BTK inhibitor.

The Phase 1b study of AS-1763 is being conducted in the U.S. and preliminary data from the study was presented at the European Hematology Association (EHA) 2024 Hybrid Congress in June 2024 by Prof. Nitin Jain, MD, Department of Leukemia, The University of Texas MD Anderson Cancer Center, who leads the study. Preliminary data showed a favorable safety and PK profile as well as promising efficacy in patients with CLL who have been heavily pretreated with systemic therapies including covalent BTK inhibitors and BCL2 inhibitor.

Contact:
Corporate Planning
Carna Biosciences, Inc.
TEL: +81-78-302-7075
https://www.carnabio.com/english/