IN8bio Announces New Preclinical Data for Gamma-Delta nsCAR-T Cell Therapy Platform at AACR 2024

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- Preclinical data supports potential for proprietary nsCAR platform to selectively eliminate cancer cells while preserving healthy tissue

- Gamma-delta nsCAR platform emerging as an advanced technology for targeting hematologic and solid tumor cancers

NEW YORK, April 09, 2024 (GLOBE NEWSWIRE) -- IN8bio, Inc. (Nasdaq: INAB) a clinical-stage biopharmaceutical company developing innovative gamma-delta T cell therapies, today announced new preclinical data from its non-signaling gamma-delta T cell based Chimeric Antigen Receptor-T cell (nsCAR) platform, known as INB-300, that demonstrated improved selectivity to target leukemia cells while preserving healthy ones. The data support the potential for nsCAR to have a wider therapeutic window and to be used to prevent on-target off-tumor killing of healthy tissue that may express the CAR-T target. The data was presented in a poster session at the American Association for Cancer Research (AACR) Annual Meeting 2024 on April 9, 2024.

IN8bio's nsCAR platform is based on the natural ability of gamma-delta T cells to distinguish between healthy and malignant tissue. By using a Chimeric Antigen Receptor (CAR) that lacks a signaling domain, IN8bio believes it has created a technology that enables these cells to differentiate between tumor and healthy tissue, even when both express the CAR-targeted antigen.

Approved CAR-T therapies have shown remarkable efficacy against B cell malignancies, offering hope to patients with limited treatment options. However, extending this therapy to myeloid malignancies and solid tumors has proven challenging since the antigens they target are also often found on the surface of healthy blood cells and tissues. This unintended targeting of healthy cells and tissues has led to many of the toxicities, including patient deaths, observed in prior CAR-T therapies and has limited their utility. Unlike traditional CAR-T therapy, IN8Bio's nsCAR is designed to direct the gamma delta T cell to its target while maintaining their unique gamma-delta T cell receptors, allowing them to identify and specifically eliminate heterogeneous tumor cells through recognition of tumor-associated stress antigens.

The new data presented at AACR included results from proprietary constructs targeting CD33 and/or CD123 for *in vitro* evaluation against various types of leukemia, including acute myeloid leukemia (AML) and chronic myeloid leukemia (CML). The study results demonstrated notable differences between cells expressing traditional signaling CARs and those expressing the nsCAR constructs, which include a reduction in activation-induced cell death with nsCAR constructs.

The nsIL3-33mb15 CAR (CD123+CD33+IL-15) enhancement of the gamma delta T cells against leukemia cells demonstrated an average 1.8x increase in tumor killing capability across three AML cell lines (HL-60, KG-1a and MOLM-13), compared to unmodified gamma-delta T cells as measured by a 24-hour cytotoxicity assay. Importantly, the nsCAR cells did not lead to significant killing of healthy cells expressing the CD33 or CD123 target, demonstrating the selectivity of the nsCAR platform. Results were run in triplicate and on average the selectivity was increased by 5.5x. Across all runs, killing by the nsIL3-33mb15 construct against healthy CD34+ HPCs was below that of un-transduced control gamma-delta T cells.

"INB-300 can selectively target leukemia cells while preserving healthy tissue. We are now conducting further optimization to improve the integration of membrane-bound IL-15 co-expression to potentially enhance both the efficacy and safety of next-generation adoptive cell therapies against a wider spectrum of cancers," said Lawrence Lamb, Ph.D., co-founder and Chief Scientific Officer of IN8bio. "These results can potentially improve INB-300, as we advance towards IND enabling studies of our next-generation gamma-delta T cell therapies to treat cancers."

About INB-300

INB-300 is an nsCAR gamma-delta T cell platform with several preclinical product candidates, including the INB-330 program against AML targets, that combine our expertise in gamma-delta T cells and genetic engineering. These nsCAR constructs lack signaling domains in order to take advantage of the unique properties of gamma-delta T cells to differentiate between healthy and tumor tissues. IN8bio is advancing new nsCAR constructs against multiple targets to treat both solid and liquid tumors.

About IN8bio

IN8bio is a clinical-stage biopharmaceutical company developing gamma-delta T cell-based immunotherapies for cancer patients. Gamma-delta T cells are a specialized population of T cells that possess unique properties, including the ability to differentiate between healthy and diseased tissue. The company's lead program, INB-400, is in a Phase 2 trial in glioblastoma multiforme (GBM). Additional programs include Phase 1 trials in solid and hematologic tumors, including INB-200 for GBM and INB-100 for patients with hematologic malignancies undergoing transplantation. For more information about IN8bio, visit www.IN8bio.com.

Forward-Looking Statements

This press release may contain forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements may be identified by words such as "aims," "anticipates," "believes," "could," "estimates," "expects," "forecasts," "goal," "intends," "may," "plans," "possible," "potential," "seeks," "will" and variations of these words or similar expressions that are intended to identify forward-looking statements, although not all forward-looking statements contain these words. Forward-looking statements in this press release include, but are not limited to, statements regarding the ability of IN8bio's nsCAR platform to (i) selectively target and eradicate cancer cells while preserving healthy tissue through recognition of tumor-associated stress antigens and (ii) have a wider therapeutic window and to be used to prevent on-target off-tumor killing of healthy tissue that may express the CAR-T target; IN8bio's ability to enhance both the efficacy and safety of next-generation adoptive cell therapies against a wider spectrum of cancers; and IN8bio's ability to advance its pipeline of novel gamma-delta CAR-T therapies to treat additional

cancers, including both solid and liquid tumors. IN8bio may not actually achieve the plans, intentions, or expectations disclosed in these forward-looking statements, and you should not place undue reliance on these forward-looking statements. Actual results or events could differ materially from the plans, intentions, and expectations disclosed in these forward-looking statements as a result of various factors, including: uncertainties inherent in the initiation and completion of preclinical studies and clinical trials and clinical development of IN8bio's product candidates, including patient enrollment and follow-up and IN8bio's ability to meet anticipated deadlines and milestones; the risk that IN8bio may not realize the intended benefits of its DeltEx platform; availability and timing of results from preclinical studies and clinical trials; whether the outcomes of preclinical studies will be predictive of clinical trial results; whether initial or interim results from a clinical trial will be predictive of the final results of the trial or the results of future trials; the risk that trials and studies may be delayed and may not have satisfactory outcomes; potential adverse effects arising from the testing or use of IN8bio's product candidates; uncertainties related to regulatory approvals to conduct trials or to market products; IN8bio's reliance on third parties, including licensors and clinical research organizations; and other important factors, any of which could cause our actual results to differ from those contained in the forward-looking statements, that are described in greater detail in the section entitled "Risk Factors" in our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 14, 2024, as well as in other filings IN8bio may make with the SEC in the future. Any forward-looking statements contained in this press release speak only as of the date hereof, and IN8bio expressly disclaims any obligation to update any forward-looking statements contained herein, whether because of any new information, future events, changed circumstances, or otherwise, except as otherwise required by law.

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