



## NextCure Presents Preclinical Data on NC181, a Novel Therapeutic Candidate Targeting ApoE4, for the Treatment of Alzheimer's Disease

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- Data presented at the 2023 Cambridge Health Tech Institute's 2nd Annual Neurodegeneration Targets Conference in Boston, MA
- In preclinical testing, NC181 demonstrated amyloid clearance, prevention of amyloid deposition, plaque clearance and other important findings

BELTSVILLE, Md., Sept. 26, 2023 (GLOBE NEWSWIRE) -- [NextCure, Inc.](http://www.nextcure.com) (Nasdaq: NXTC), a clinical-stage biopharmaceutical company committed to discovering and developing novel, first-in-class immunomedicines to treat cancer and other immune-related diseases, including neuroinflammatory disease, today announced the presentation of preclinical data relating to NC181, a novel humanized antibody targeting ApoE4, for the treatment of Alzheimer's disease (AD), at the 2nd Annual Neurodegeneration Targets, Drug Discovery for Progressive Central Nervous System Disorders conference.

Published research has shown that different forms of the apolipoprotein E (APOE) gene affect the risk of developing AD in distinct ways, with the APOE4 allele most highly associated with and linked to increased risk. The ApoE4 isoform increases ab amyloid plaque formation, promotes Tau spreading, disrupts the blood brain barrier (BBB), promotes neurovasculature leakage, and increases microglia-mediated inflammation, which has been shown to lead to cognitive decline. Deletion of APOE has been demonstrated to limit disease in multiple AD models.

In preclinical AD animal models, NC181 has demonstrated differentiation from amyloid targeted therapies. Key findings from the study include:

- NC181 binds to amyloid associated ApoE4, resulting in amyloid clearance and prevention of amyloid deposition in mice.
- Clearance of the ApoE plaques
  - Normalizes neuroinflammation and restores neuroimmune homeostasis.
  - Improves vasodilation in amyloid laden blood vessels, which results in less vascular toxicity and lower vascular leakage.

"The tremendous need for novel therapies to prevent, delay the onset, slow the progression, and improve the symptoms of Alzheimer's disease remains," said Solomon Langermann, Ph.D., NextCure's chief scientific officer. "In collaboration with Dr. David Holtzman, Professor of Neurology, Director, Hope Center for Neurological Disorders and Director, Knight Alzheimer's Disease Research Center, at Washington University in St. Louis, we generated NC181, which has been shown to bind a key epitope of ApoE4 seen during disease. The antibody reduced amyloid-b plaque load and ApoE-mediated inflammation in preclinical AD models."

In addition to its role in amyloid deposition, ApoE is also a major mediator of a condition known as Cerebral Amyloid Angiopathy (CAA), where deposition of amyloid-b occurs in leptomeningeal and cortical blood vessels. This results in BBB dysfunction, ischemia, and a risk for microhemorrhages leading to cognitive dysfunction.

Additional studies to characterize NC181 as a potential therapeutic for AD and CAA are ongoing.

### About NextCure, Inc.

NextCure is a clinical-stage biopharmaceutical company committed to discovering and developing novel, first-in-class immunomedicines to treat cancer and other immune-related diseases. Through our proprietary FIND-IO™ platform, we study various immune cells to discover and understand targets and structural components of immune cells and their functional impact in disease to develop immunomedicines. Our focus is to bring hope and new treatments to patients who do not respond to current cancer therapies, patients whose cancer progresses despite treatment and patients with cancer types not adequately addressed by available therapies. <http://www.nextcure.com>

### Cautionary Statement Regarding Forward-Looking Statements

Statements made in this press release that are not historical facts are forward-looking statements. Words such as "expects," "believes," "intends," "hope," "forward" and similar expressions are intended to identify forward-looking statements. Examples of forward-looking statements in this press release include, among others, statements about NextCure's plans, objectives, and intentions with respect to the discovery of immunomedicine targets and the discovery and development of immunomedicines. Forward-looking statements involve substantial risks and uncertainties that could cause actual results to differ materially from those projected in any forward-looking statement. Such risks and uncertainties include, among others: our limited operating history and no products approved for commercial sale; our history of significant losses; our need to obtain additional financing; risks related to clinical development, including that early clinical data may not be confirmed by later clinical results; risks that pre-clinical research may not be confirmed in clinical trials; risks related to marketing approval and commercialization; and the unproven approach to the discovery and development of product candidates based on our FIND-IO platform. More detailed information on these and additional factors that could affect NextCure's actual results are described in NextCure's filings with the Securities and Exchange Commission (the "SEC"), including NextCure's most recent Form 10-K and subsequent Form 10-Q. You should not place undue reliance on any forward-looking statements. NextCure assumes no obligation to update any forward-looking statements, even if expectations change.

**Investor Inquiries**

Timothy Mayer, Ph.D.  
NextCure, Inc.  
Chief Operating Officer  
(240) 762-6486  
[IR@nextcure.com](mailto:IR@nextcure.com)



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