



Voyager Therapeutics Presents New Data Demonstrating Novel Candidate Therapeutic Antibodies Reduced Tau Pathology in Multiple Preclinical Models

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Novel passive antibodies bind to paired helical filamentous tau and inhibit propagation of pathological tau

Vectorized antibody demonstrates durable CNS expression more than six months post-dose

Research presented at the Alzheimer's Association International Conference

CAMBRIDGE, Mass., Aug. 03, 2022 (GLOBE NEWSWIRE) -- Voyager Therapeutics, Inc. (Nasdaq: VYGR), a gene therapy and neuroscience company developing life-changing treatments and next-generation adeno-associated virus (AAV) capsids, today presented data showing the use of novel antibodies targeting hyperphosphorylated forms of tau. Two therapeutic approaches were used to show that the spread of pathological tau can be impeded in rodent models: passive immunotherapy with novel antibodies and an intravenously delivered vectorized novel antibody using a blood-brain-barrier penetrating AAV capsid. The data were presented at the Alzheimer's Association International Conference.

Tauopathies such as Alzheimer's disease, progressive supranuclear palsy, and frontotemporal dementia are characterized by the progressive accumulation and/or propagation of neurofibrillary tangles associated with tau hyperphosphorylation in the brains of patients, leading to neuronal and synaptic loss, brain atrophy, and inflammation. Although current therapies are limited to symptom management and have a modest impact¹, investigational therapeutics designed to disrupt the propagation of tau pathology may hold promise in the treatment of tauopathies.

"The Voyager team has maintained a long-standing focus on the development of novel approaches to disrupt the progression of tau pathology believed to be central to multiple neurodegenerative diseases," said Todd Carter, Ph.D., Senior Vice President of Research at Voyager. "Our novel passive and vectorized anti-tau antibodies have important properties, including specific targeting of specific pathological epitopes of the tau protein that could offer a differentiated clinical profile compared to first generation approaches. We look forward to advancing research and discovery efforts for our tau program, potentially leading the way to vectorize select antibodies into gene therapy product candidates."

Passive Antibody Research Highlights:

- 113 anti-tau antibodies were characterized based on specified biochemical and biophysical properties, including functional inhibition of filamentous tau seeding in vitro and high affinity and specificity for pathological forms of tau, and antibodies that met the desired target profile were selected for in vivo efficacy screening.
- Four novel antibodies targeting epitopes of the mid- and C-terminus tau domains were selected.
- Selected antibodies were demonstrated to block the seeding/propagation of filamentous tau in a P301S seeding-propagation tauopathy mouse model and demonstrated substantial reduction of induced tau pathology.

Vectorized Antibody Research Highlights:

- Vectorized antibody expression was detected in the hippocampus, cortex, and cerebrospinal fluid of mice as soon as two days after administration with sustained durability of expression more than six months post-dose.
- The vectorized antibody was observed to be well tolerated at all assessed doses, with robust efficacy observed in all P301S hippocampal seeding/propagation and P301S intrinsic mouse models of tauopathy.

These results build upon [previous findings](#) demonstrating distribution and expression of vectorized anti-tau antibodies in the mouse brain using a blood-brain barrier penetrant capsid administered intravenously.

Full results of both posters are available on the Investor page of the Voyager website.

¹2022 Alzheimer's Disease Facts and Figures

About Voyager Therapeutics

Voyager Therapeutics (Nasdaq: VYGR) is leading the next generation of AAV gene therapy to unlock the potential of the technology to treat devastating diseases. Proprietary capsids born from the Company's TRACER screening platform are powering a rich early-stage pipeline of programs and may elevate the field to overcome the limitations of conventional gene therapy vectors across neurologic disorders and other therapeutic areas.

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Forward-Looking Statements

This press release contains forward-looking statements for the purposes of the safe harbor provisions under The Private Securities Litigation Reform Act of 1995 and other federal securities laws. The use of words such as “may,” “might,” “will,” “would,” “should,” “expect,” “plan,” “anticipate,” “believe,” “estimate,” “undoubtedly,” “project,” “intend,” “future,” “potential,” or “continue,” and other similar expressions are intended to identify forward-looking statements. For example, all statements Voyager makes regarding preclinical data for its antibody programs including the presentation of preclinical data at the 2022 Alzheimer’s Association International Conference; Voyager’s ability to continue to identify and develop anti-tau antibodies and blood-brain-barrier penetrating TRACER capsids that may be used to deliver vectorized anti-tau antibodies; Voyager’s ability to develop novel antibody-based product candidates; and Voyager’s ability to utilize its TRACER capsids and antibodies in its product development programs are forward looking.

All forward-looking statements are based on estimates and assumptions by Voyager’s management that, although Voyager believes such forward-looking statements to be reasonable, are inherently uncertain. All forward-looking statements are subject to risks and uncertainties that may cause actual results to differ materially from those that Voyager expected. Such risks and uncertainties include, among others, the severity and length of the COVID-19 health crisis; the continued development of Voyager’s technology platforms, including Voyager’s TRACER platform and its antibody [screening] technology; the ability to initiate and conduct of preclinical studies in pre-clinical animal models; the ability to attract and retain talented contractors and employees; the ability to create and protect intellectual property; and the sufficiency of cash resources.

These statements are also subject to a number of material risks and uncertainties that are described in Voyager’s most recent Annual Report on Form 10-K filed with the Securities and Exchange Commission, as updated by its subsequent filings with the Securities and Exchange Commission. All information in the press release is as of the date of this press release, and any forward-looking statement speaks only as of the date on which it was made. Voyager undertakes no obligation to publicly update or revise this information or any forward-looking statement, whether as a result of new information, future events or otherwise, except as required by law.

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