Trace Neuroscience Launches with $101 Million Series A Financing to Expand Genomic Medicine for Neurodegenerative Diseases

Lead program in amyotrophic lateral sclerosis (ALS) is an antisense oligonucleotide that restores UNC13A protein to preserve and potentially improve muscle function

UNC13A is a genetically validated target with the potential to treat 97% of people living with ALS

Financing led by Third Rock Ventures with participation from Atlas Venture, GV and RA Capital Management

SOUTH SAN FRANCISCO, Calif., November 12, 2024 – Trace Neuroscience, Inc., a biopharmaceutical company expanding the promise of genomic medicine for people living with neurodegenerative diseases, today announced its launch with a $101 million Series A financing led by Third Rock Ventures, with participation from Atlas Venture, GV and RA Capital Management. The company is developing novel genomic therapies that restore UNC13A protein to re-establish healthy communication between nerves and muscle cells impacted by neurodegenerative disease.

Trace Neuroscience's lead program is an antisense oligonucleotide (ASO) designed to preserve and potentially improve muscle function in people living with amyotrophic lateral sclerosis (ALS), including those with the sporadic form that affects nine out of 10 people with the disease.

"UNC13A is a highly compelling genetic target directly linked to ALS disease progression and survival. Insights from the human genome have led to transformative medicines for many diseases, and with what we now know about the role of UNC13A, we believe the time is right to apply this approach to ALS," said Eric Green, M.D., Ph.D., co-founder and CEO of Trace Neuroscience. "We envision a world where UNC13A restoration improves outcomes across a range of neurodegenerative diseases, including for the approximately 30,000 people in the U.S. living with ALS."

The formation of Trace Neuroscience is based on simultaneous convergent discoveries from the company's co-founders linking abnormal function of TDP-43 protein with the loss of UNC13A protein, an essential component for neuronal communication in the brain and spinal cord. In almost all people with ALS, this relationship progressively breaks down and leads to decreased mobility, paralysis and difficulty breathing.

"Genomic-based therapies have begun to transform the lives of people living with ALS. But so far, they have only been effective for those rare forms of the disease caused by SOD1 or FUS mutations, which account for only 3% of all ALS cases. The remaining people, including those with sporadic disease, the most common form that occurs randomly without a clear cause, need new treatments grounded in human genetics with defined mechanisms of action," said co-founder Aaron Gitler, Ph.D., Professor of Genetics at Stanford University. "Our insights into UNC13A biology may be the key to slowing disease progression, preserving or restoring muscle function and extending survival for people living with ALS."

Targeted Approach, Broad Impact
Approximately 97% of people with ALS produce insufficient amounts of UNC13A, which is directly regulated by the TDP-43 protein that controls RNA splicing. When TDP-43 stops functioning normally, as occurs in nearly all people with ALS, the UNC13A messenger RNA (mRNA) is improperly spliced, which hinders adequate UNC13A production. Trace Neuroscience's ASO development candidate is designed to deliver a targeted intervention by binding directly to UNC13A mRNA to regulate its processing and ensure proper splicing, thereby correcting synaptic dysfunction and preserving neuronal signaling.

"UNC13A is critical for neurons to communicate amongst each other and with muscles through synaptic function, which is lost in ALS. Being able to re-establish this is groundbreaking. Our focus is now on rapidly translating this science into a life-changing medicine by advancing our lead program toward the clinic," said co-founder Pietro Fratta, M.D., Ph.D., Professor of Cellular and Molecular Neuroscience at University College London, Francis Crick Institute. "This is an exciting time in brain disease innovation, and we also see potential for treating frontotemporal dementia and over half of Alzheimer's disease patients where TDP-43 pathology occurs and UNC13A is lost."

Leaders in Genomic Medicine Innovation
Trace Neuroscience leadership includes clinicians at the forefront of neurodegenerative research, renowned neuroscience drug developers and proven company builders:

Co-founders

- Pietro Fratta, M.D., Ph.D., Professor of Cellular and Molecular Neuroscience, University College London, Francis Crick Institute
- Aaron Gitler, Ph.D., Professor of Genetics, Stanford University
- Eric Green, M.D., Ph.D., CEO, Trace Neuroscience
- Michael Ward, M.D., Ph.D., Senior Investigator, National Institute of Neurological Disorders and Stroke, National Institutes of Health

Management team

- Irina Antonijevic, M.D., Ph.D., Chief Medical Officer
- Megan Baierlein, Chief Operating Officer
- Eric Green, M.D., Ph.D., CEO
- Marjie Hard, Ph.D., SVP, Development Sciences
- Nick Mordwinkin, Pharm.D., Ph.D., Chief Business Officer and Chief Strategy Officer
- Precillia Redmond, Chief People Officer

Board of directors

- Jeffrey Tong, Ph.D., Chairman; Partner, Third Rock Ventures
- David Grayzel, M.D., Partner, Atlas Venture
- Eric Green, M.D., Ph.D., CEO, Trace Neuroscience
- Douglas Kerr, M.D., Ph.D., Chief Medical Officer, Dyne Therapeutics
- Anthony Philippakis, M.D., Ph.D., General Partner, GV
- Richard Scheller, Ph.D., Chairman of R&D, BridgeBio
- Dodzie Sogah, Ph.D., Venture Partner, Third Rock Ventures

"The Trace Neuroscience team is strongly positioned with the right leadership, the right scientific approach and the right molecules to disrupt the treatment paradigm in ALS and beyond," said Chairman Jeffrey Tong, Ph.D., Partner at Third Rock Ventures. "People living with

neurodegenerative diseases are waiting for more effective new treatments, and UNC13A restoration has the potential to deliver meaningful innovation that will improve their quality of life and overall health outcomes."

About Trace Neuroscience
Trace Neuroscience is a biopharmaceutical company on a mission to expand the promise of genomic medicine for people living with neurodegenerative diseases. With an initial focus on ALS, the company is developing novel therapies to restore UNC13A protein function to re-establish healthy communication between nerves and muscle cells. Trace Neuroscience launched in 2024 with funding from Third Rock Ventures and other leading life sciences investors, and is headquartered in South San Francisco, CA. For more information, please visit us at www.traceneuro.com and follow us on LinkedIn and X.

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