

The Science to Prevail

About Prevail

At Prevail, we are leading a new era of gene therapy-based treatments with the potential to slow or stop the progression of neurodegenerative diseases, including genetic forms of Parkinson's disease, frontotemporal dementia, and rare conditions like Gaucher disease.



Founded in partnership with a patient-led research foundation in 2017 and headquartered in New York City, we are leveraging recent scientific and technical advancements to accelerate the development of novel treatments for disease communities with urgent unmet needs and where limited or no treatments currently exist.

In 2021, we became a wholly owned subsidiary of Eli Lilly and Company, an established leader in neuroscience drug development and commercialization who shares our commitment to people living with neurodegenerative disease. We continue to work diligently to develop safe and effective gene therapies for as many patients as possible with the support of Lilly's global scale and resources.



Our Commitment

We are committed to ensuring patients and families remain at the heart of our work as we strive to advance potential one-time gene therapies for people living with neurodegenerative diseases.

Recognizing the critical need to include patient and caregiver voices in the drug development process, we seek to understand the unique needs of each disease community we serve, collaborate with advocacy leaders around shared goals and initiatives, and empower decision-making through information sharing and community education.



"We are pioneering the use of gene therapy for both rare and common neurodegenerative diseases, based on biology we understand and technology we can deliver."

Franz Hefti, Ph.D., CEO
PREVAIL THERAPEUTICS

About Gene Therapy

Gene therapy is one approach to treating genetic diseases.

The goal of gene therapy—sometimes referred to as gene transfer, gene augmentation, or gene replacement— is to introduce a healthy copy of a mutated gene into a person's cells or tissues. The majority of gene therapies in development are intended to be one-time and life-long treatments.

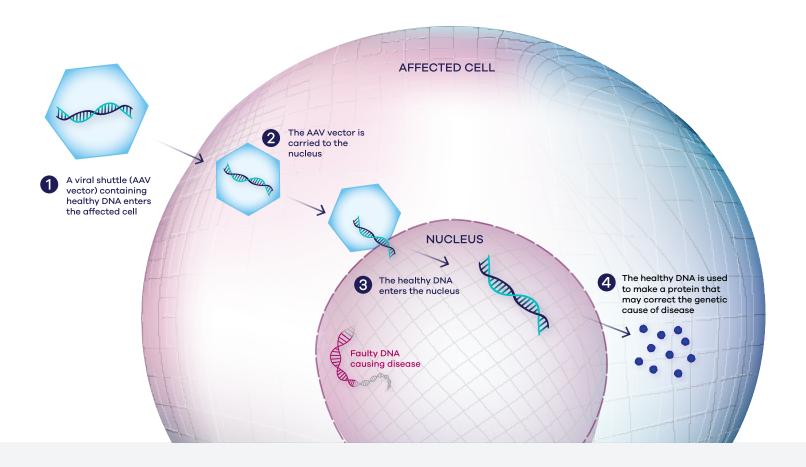


At Prevail, we are researching adeno-associated virus or AAV-based gene therapy, which relies on a modified virus (also called a "vector") to transport genetic material to specific cells in the body and potentially restore the function of a disease-causing gene. Viruses are ideal transporters because they are

naturally designed to enter cells. To develop our gene therapies, we modify AAVs by replacing the viral genes with only therapeutic genes. AAV is not known to cause disease in humans and has been used to successfully treat other genetic conditions like spinal muscular atrophy.

ABOUT GENE THERAPY

Unlike other forms of genetic medicine such as gene editing, AAV gene therapy is not intended to alter or change a person's DNA, but rather to provide the body with a new set of instructions for creating missing or deficient proteins.



For more information about Prevail's approach to gene therapy, please visit

our website.



Our Focus





Parkinson's disease with *GBA1* mutations (PD-GBA)

Parkinson's disease (PD) is a severe neurodegenerative disorder that causes tremors and a stiffening and slowing of movement, as well as other symptoms including psychosis, dementia, and cognitive impairment.

Large studies have recently identified dozens of genes that may cause the disease. In particular, mutations in the *GBA1* gene are now known to be the single largest genetic risk factor for developing PD. The type of PD that results from a mutation in at least one copy of a person's *GBA1* gene is known as PD-GBA.

PD-GBA starts earlier with more severe symptoms and increased likelihood of dementia compared to PD in people without this genetic mutation. It is estimated that as many as seven to ten percent of people living with PD worldwide have at least one *GBA1* mutation, including some 90,000 patients in the United States.



Our Focus

Gaucher Disease

Gaucher disease is a rare genetic disorder driven by mutations in the *GBA1* gene, that like PD-GBA, can cause lysosomal dysfunction and have a wide range of effects on organs throughout the body. Gaucher disease and PD-GBA share the same underlying genetic mutation that causes a reduction in the enzyme GCase. While PD-GBA is caused by a single *GBA1* mutation, Gaucher disease is caused by a mutation in both copies of the *GBA1* gene.

Gaucher disease has three subtypes (Type 1, Type 2 and Type 3), which are classified by variation in the severity of symptoms, age of onset, and the presence or lack of symptoms that affect the brain. At Prevail, we are focused on Type 1 and Type 2 Gaucher disease.

Our Focus

Type 1 Gaucher Disease (GD1)

Type 1 Gaucher disease (GD1), the most common form, has a wide variety of symptoms, such as spleen and liver enlargement, low blood counts issues with bleeding and bone pain and damage. People living with GD1 are at a higher risk of developing Parkinson's disease because of the genetic connection between both diseases.

Type 2 Gaucher Disease (GD2)

The most severe form, Type 2 Gaucher disease (GD2), affects infants and toddlers. GD2 is known as neuronopathic Gaucher disease (nGD) because it is characterized by symptoms that affect the brain. It causes rapid, progressive and irreversible brain damage usually beginning in the first six months of life; children typically die by age two. Children diagnosed with GD2 are also affected by the symptoms of Gaucher disease that occur throughout the body, such as spleen and liver enlargement and blood abnormalities.



OUR FOCUS

Frontotemporal dementia with *GRN* mutations (FTD-GRN)

Frontotemporal dementia (FTD) is the second most common cause of dementia in people under the age of 60 (after Alzheimer's disease).

FTD affects 50,000 to 60,000 individuals in the U.S. and 80,000 to 110,000 people in the European Union. It causes progressive degeneration of the frontal and temporal lobes of the brain, which control decision-making, behavior, emotion, and language.

Several forms of FTD are known to be caused by genetic mutations. One of these forms, called FTD-GRN, results from mutations in the *GRN* gene. *GRN* produces a protein called progranulin that is important for breaking down cellular waste. These mutations lead to insufficient progranulin levels, which can lead to the neuroinflammation and neurodegeneration observed in FTD-GRN, considered the most aggressive and rapidly progressive form of FTD.

Our Clinical Trials





PROPEL is a Phase 1/2 clinical trial sponsored by Prevail to assess the safety and efficacy of PROO1; a potentially disease-modifying, single-dose gene therapy for people living with Parkinson's disease with *GBA1* mutations.

Click here to learn more about Prevail's research in PD-GBA



PROVIDE is a Phase 1/2 clinical trial sponsored by Prevail to assess the safety and efficacy of PRO01; a potentially disease-modifying, single-dose gene therapy for infants diagnosed with Type 2

Gaucher disease.

Click here to learn more about Prevail's research in Type 2 Gaucher disease



PROCEED is a Phase 1/2 clinical trial sponsored by Prevail to assess the safety and efficacy of PROO1; a potentially disease-modifying, single-dose gene therapy for people living with Type 1 Gaucher disease.

Click here to learn more about Prevail's research in Type 1 Gaucher Disease



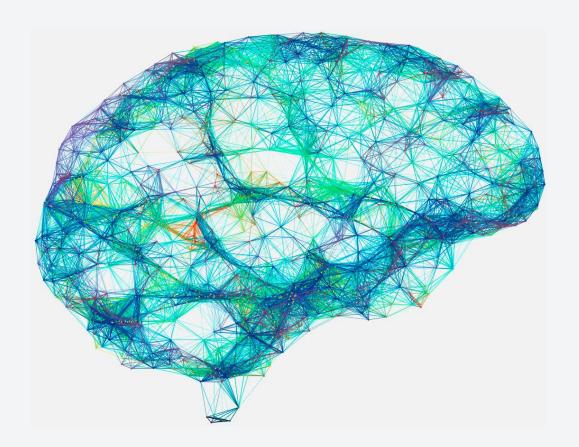
PROCLAIM is a Phase 1/2 clinical trial sponsored by Prevail to assess the safety and efficacy of PROO6; a potentially disease-modifying, single-dose gene therapy for people living with frontotemporal dementia with *GRN* mutations (FTD-GRN).

Click here to learn more about Prevail's research in FTD-GRN

Visit our website for more information or ClinicalTrials.gov to see the full study listings.







Contact Prevail

For more information about Prevail, our programs, or clinical trials please contact:

PREVAILTHERAPEUTICS.COM