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TREATMENT FOR NEURODEGENERATIVE DISORDERS

Novel Treatment for Neuropathies and Neurodegeneration

Brief Description of Technology

Use of IL-17c as a novel neurotrophic factor can be applied to treat neurodegenerative disorders.

BUSINESS OPPORTUNITY
Exclusive license
Sponsored research

TECHNOLOGY TYPE
Therapeutic

STAGE OF DEVELOPMENT
Preclinical *in vitro*

PATENT INFORMATION
WO 2017007960

LEARN MORE
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Technology Overview

Dr. Corey and his colleagues have discovered that Interleukin-17c (IL-17c), previously only known as a cytokine, is secreted by keratinocytes during HSV infection and acts as a neurotrophic factor for neural cells. They demonstrated for the first time, that IL-17c can promote neural cell survival, neural growth, and axon guidance. Use of IL-17c as a novel neurotrophic factor can be applied to treat neurodegenerative disorders, for example, neuropathies in the peripheral nervous system that cause weakness, paralysis, numbness or pain. Treatment using IL-17c can be applied to a vast array of patients experiencing neuropathies including those caused by diabetes, autoimmune disorders, tumors, heredity, infections, chemotherapy, medications, toxins, and trauma.

Applications

- Neurodegenerative disorders
- Peripheral neuropathies
- Neuropathic pain
- Diabetic patients

Advantages

- Promote neural cell survival
- Neural growth
- Axon guidance

Market Overview

Peripheral neuropathies affect 20 million people in the U.S. Approximately 30% of peripheral neuropathies are caused by diabetes. Neuropathic pain market in the United States, France, Germany, Italy, Spain, the United Kingdom and Japan was $6.3 billion in 2012.

Investigator Overview

Larry Corey, PhD, Clinical Research and Vaccine and Infectious Disease Divisions