



The ALS Association, the Huntington's Disease Society of America, and Teva Pharmaceuticals Partner to Identify Novel Therapeutic Targets for CNS Disorders

Disorders of the central nervous system (CNS) afflict approximately 300 million people worldwide, are severely debilitating, and span many years. In addition to the personal cost to patients and families, the economic burden reaches an estimated \$1.5 trillion in total annual costs in the U.S., or 8.8 percent of the country's gross domestic product (GDP).

To improve outcomes for patients suffering from CNS disorders, significant investment in the development of new therapies is necessary. An essential step toward developing new treatment avenues is to unravel the pathophysiological mechanisms contributing to these disorders and identify novel molecular targets for drug intervention.

To address the severe, unmet need for new therapies for CNS disorders, The ALS Association, the Huntington's Disease Society of America (HDSA), and Teva Pharmaceutical Industries Ltd. are launching a crowdsourcing challenge to seek novel targets with therapeutic potential. Called the [Teva CNS Target Identification Challenge](#), the crowdsourcing challenge calls on researchers from all over the world to submit proposals for novel drug targets implicated in neurodegenerative disorders, including amyotrophic lateral sclerosis (ALS), Huntington's disease (HD), and Parkinson's disease (PD), as well as migraine and headache disorders and pain. Solutions will be considered for monetary awards and funded collaborative research projects with Teva.

Committed to advancing solutions for patients in the field of neurodegenerative diseases, migraine and pain, Teva is leading the Challenge. The company aims to grant awards to high-caliber proposals for novel disease-modifying targets, as well as to pursue partnerships with the relevant researchers to further validate the targets and discover novel drugs.

To further their missions to advance the development of new therapies to benefit patients in their respective disease areas, The ALS Association and HDSA are co-sponsoring the Challenge with Teva. The ALS Association, which leads the way in advocacy, care services, and research for ALS, is co-funding the ALS-related Challenge awards, and will consider top ALS-related submissions for grant awards toward a collaborative translational research project with Teva relating to the novel target. HDSA, the premier nonprofit organization dedicated to improving the lives of everyone affected by HD, is co-sponsoring the HD-related Challenge awards.

"This is a particularly robust time for drug development opportunities in ALS, with many more small companies entering the ALS field. Prioritizing and identifying the most promising targets for ALS drug development, as well as encouraging new ideas and investigators, are key to driving the pipeline of potential ALS therapies," commented Lucie Bruijn, Ph.D., MBA, Chief Scientist, The ALS Association. "The ALS Association is pleased to partner with Teva on this important initiative."

"The identification of *novel*, well-validated targets, *other than* the causative gene huntingtin, to confidently launch a Huntington's disease drug discovery program, remains a critical gap in our research community", said George Yohrling, Ph.D., HDSA's Senior Director of Mission and Scientific Affairs. "HDSA is excited to join forces with Teva on the CNS Target Identification Challenge to enable scientists to better bridge that gap."

“The identification and validation of new molecular targets that contribute to disease processes is an essential step toward developing new treatment to help patients,” said Steffen Nock, Ph.D., Senior Vice President, Specialty Research & Development, at Teva Global R&D. “We are enthusiastic about the Teva CNS Target Identification Challenge as an opportunity to identify therapeutically relevant targets in strategic areas of interest to Teva, as well as to identify researchers with diverse scientific backgrounds and unique expertise related to the target of interest as potential collaboration partners.”

The Teva CNS Target Identification Challenge was launched in collaboration with InnoCentive, a global pioneer in innovation and crowdsourcing. More information about the Challenge can be found at:

<https://www.innocentive.com/TEVAchallenge>.

Submissions will be accepted until April 29, 2018, at 11:59PM EST.

About amyotrophic lateral sclerosis (ALS)

Amyotrophic lateral sclerosis (ALS) is a progressive degenerative neuromuscular disease that afflicts approximately 30,000 people in the United States and a comparable number of patients in Europe. Approximately 6,000 new cases of ALS are diagnosed each year in the United States. In people living with ALS, motor neurons progressively die and the brain can no longer communicate with the muscles through the spinal cord. As muscles are used less and less frequently, they can atrophy, causing people with ALS to lose the ability to perform everyday activities, such as walking, speaking, and eating. The average life expectancy of an ALS patient is approximately three to five years after diagnosis and only 10% of patients survive for more than 10 years. Death is usually due to respiratory failure because of diminished strength in the skeletal muscles responsible for breathing. Few treatment options exist for these patients, resulting in a high unmet need for new therapies to address functional deficits and disease progression. Only two FDA-approved therapies exist with limited effects, and drugs to prolong life and improve motor function are critically needed.

About Huntington’s disease (HD)

Huntington’s disease is a fatal neurodegenerative disorder caused by a mutation in the huntingtin gene. The inherited mutation leads to progressive loss of neurons in regions of the brain that control movement, leading to behavioral, cognitive and motor deficits that significantly impair quality of life. Approximately 30,000 people are living with HD in the United States. There is no cure for the disease and the life expectancy for patients is approximately 15-25 years after clinical onset of the disease. To date there are no FDA-approved treatments for HD that slow or stop disease progression.

About The ALS Association

The ALS Association is the only national non-profit organization fighting Lou Gehrig’s Disease on every front. By leading the way in global research, providing assistance for people with ALS through a nationwide network of chapters, coordinating multidisciplinary care through certified clinical care centers, and fostering government partnerships, The Association builds hope and enhances quality of life while aggressively searching for new treatments and a cure. For more information about The ALS Association, visit our website at www.alsa.org.

About the Huntington's Disease Society of America (HDSA)

The Huntington's Disease Society of America (HDSA) is the premier nonprofit organization dedicated to improving the lives of everyone affected by Huntington's disease. From community services and education to advocacy and research, HDSA is the world's leader in providing help for today and hope for tomorrow for people with Huntington's disease and their families.

HDSA's network of chapters, affiliates, HDSA Centers of Excellence, social workers and support groups provides a seamless connection for help, education and outreach to HD families and healthcare professionals across the United States. For more information about The Huntington's Disease Society of America, visit www.hdsa.org

About Teva

Teva Pharmaceutical Industries Ltd. (NYSE and TASE: TEVA) is a leading global pharmaceutical company that delivers high-quality, patient-centric healthcare solutions used by millions of patients every day. Headquartered in Israel, Teva is the world's largest generic medicines producer, leveraging its portfolio of more than 1,800 molecules to produce a wide range of generic products in nearly every therapeutic area. In specialty medicines, Teva has a world-leading position in innovative treatments for disorders of the central nervous system, including pain, as well as a strong portfolio of respiratory products. Teva integrates its generics and specialty capabilities in its global research and development division to create new ways of addressing unmet patient needs by combining drug development capabilities with devices, services and technologies. Teva's net revenues in 2017 were \$22.4 billion. For more information, visit www.tevapharm.com.

About InnoCentive

InnoCentive is the global pioneer in crowdsourced innovation, enabling organizations to solve their pressing problems through the power of the crowd. InnoCentive's diverse global network of problem Solvers, proven Challenge Driven Innovation methodology, and purpose-built platform combine to fundamentally transform the economics of innovation and R&D through rapid solution delivery and the development of sustainable open innovation programs. Since 2001, leading commercial, government, and nonprofit organizations such as AstraZeneca, Ford, Thomson Reuters, NASA, Lumina Foundation, and Essity have been partnering with InnoCentive to solve problems and innovate faster, more cost effectively, and with less risk than ever before. For more information, visit www.innocentive.com.

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