March 9, 2017

Results for Prothena's Phase 1b Multiple Ascending Dose Study of PRX002/RG7935 in Patients with Parkinson's Disease to be Presented at the 13th International Conference on Alzheimer's and Parkinson's Diseases

- **Investor webcast planned for April 2, 2017 at 9:00 AM EDT to discuss Phase 1b study results**
- **Prothena and Roche to co-host symposium on alpha-synuclein pathology and non-motor manifestations in Parkinson's disease on March 31, 2017 at 5:15 CET**

DUBLIN, Ireland, March 09, 2017 (GLOBE NEWSWIRE) -- Prothena Corporation plc (Nasdaq:PRTA), a late-stage clinical biotechnology company focused on the discovery, development and commercialization of novel protein immunotherapies, today announced that clinical data from the Phase 1b multiple ascending dose study of PRX002 in patients with Parkinson's disease will be highlighted in an oral presentation in the late-breaking therapeutic strategies session at the 13th International Conference on Alzheimer's and Parkinson's Diseases (AD/PD), to be held March 29 — April 2, in Vienna, Austria. PRX002, also known as RG7935, is a monoclonal antibody for the potential treatment of Parkinson's disease and other related synucleinopathies, and is the focus of a worldwide collaboration between Prothena and Roche. A Phase 2 clinical study of PRX002/RG7935 in patients with Parkinson's disease is expected to begin in 2017.

Clinical data from the Phase 1b multiple ascending dose study of PRX002/RG7935 in patients with Parkinson's disease, will be presented in the following oral session:

Results from a Phase 1b Multiple Ascending-dose Study of PRX002/RG7925, An Anti-alpha-synuclein Monoclonal Antibody, in Patients with Parkinson's Disease

- Presenter: Joseph Jankovic, MD, Distinguished Chair in Movement Disorders, Baylor College of Medicine
- Session: Symposium 58 — Late Breaking Therapeutic Strategies in AD and PD
- Date and Time: Oral presentation — Sunday, April, 2, 12:00 — 12:15 PM CET (6:00 — 6:15 AM EDT)
- Location: Hall C, Austria Center, Vienna, Austria

An investor conference call and webcast to discuss the results is planned for Sunday, April 2, 2017 at 9:00 AM EDT, and dial-in details will be made available in advance of the call.

In addition, an abstract on the feasibility of using smartphone-based assessments and sensors to monitor symptoms and mobility in patients with early-stage Parkinson's disease will be presented in the following oral presentation:

Remote, High-frequency Monitoring of Motor Symptoms in Early-stage Parkinson's Disease Patients in the Phase 1b RG7935/PRX002 Clinical Trial

- Presenter: Michael Lindemann, Professor, Baden-Württemberg Cooperative State University
- Session: Symposium 58 — Late Breaking Therapeutic Strategies in AD and PD
- Date and Time: Oral presentation — Sunday, April, 2, 12:15 — 12:30 PM CET (6:15 — 6:30 AM EDT)
- Location: Hall C, Austria Center, Vienna, Austria

Prothena and Roche to Co-Host Symposium

In addition to the scientific presentation, leading researchers in the field of Parkinson's disease will present at a symposium entitled "Beyond the Basal Ganglia: Alpha-synuclein Pathology and Non-motor Manifestations in Parkinson's Disease" during the conference. The symposium will be held on March 31, 2017 at 5:15 PM local time, and will feature experts from around the world, including: Thomas Beach, MD, PhD, Sun Health Research Institute, Sun City; Patrik Brundin, MD, PhD, Van Andel Research Institute, Grand Rapids; Jamie L Eberling, PhD, The Michael J. Fox Foundation for Parkinson's Research, New York; Tom Isaacs, The Cure Parkinson's Trust, Rickmansworth, Herts; Brit Mollenhauer, MD, Georg-August University Göttingen, Göttingen; Wolfgang Oertel, MD, PhD, of University of Marburg, Marburg; Ronald Postuma, MD, MSc, McGill University, Montreal.

About Alpha-synuclein

Alpha-synuclein, a protein found in neurons and other cells, is a major component of pathology that characterizes several neurodegenerative disorders including Parkinson's disease, dementia with Lewy bodies, and multiple system atrophy, which collectively are termed synucleinopathies. While the normal function of alpha-synuclein is not well understood, the protein generally occurs in a soluble form. In synucleinopathies, the alpha-synuclein protein can misfold and aggregate to form soluble aggregates and insoluble fibrils that contribute to disease pathology. There is increasing evidence that this disease-causing alpha-synuclein can be propagated and transmitted from neuron to neuron, resulting in an infection-like spread of neuronal death. Recent studies in cellular and animal models suggest that the spread of alpha-synuclein-associated neurodegeneration can be disrupted by targeting aberrant forms of alpha-synuclein.

About PRX002/RG7935

PRX002**/**RG7935 is a monoclonal antibody under development for the potential treatment of Parkinson's disease. PRX002**/**RG7935 targets alpha-synuclein and is designed to slow the progressive neurodegeneration associated with alpha-synuclein misfolding and/or the cell-to-cell transmission of the aggregated pathogenic forms of alpha-synuclein found in Parkinson's disease and other synucleinopathies. Prior to initiating clinical trials, Prothena demonstrated the efficacy of PRX002**/**RG7935 in various cellular and animal models of alpha-synuclein-related disease. In multiple transgenic mouse models of Parkinson's disease, the murine version of PRX002**/**RG7935, reduced the appearance of alpha-synuclein pathology, protected synapses and improved performance in behavioral testing. In December 2013 Prothena and Roche entered into a worldwide collaboration to develop and commercialize antibodies that target alpha-synuclein, including PRX002**/**RG7935. Prothena has an option to co-promote PRX002**/**RG7935 in the U.S., where the companies share all development and commercialization costs, as well as profits, on a 30/70 basis (30 percent Prothena, 70 percent Roche). Outside the U.S., Roche will have sole responsibility for developing and commercializing PRX002**/**RG7935 and will pay Prothena up to double-digit royalties on net sales. A Phase 2 clinical study of PRX002**/**RG7935 in patients with Parkinson's disease is expected to begin in 2017.

About Parkinson's Disease

Parkinson's disease is a progressive degenerative disorder of the central nervous system (CNS) that affects one in 100 people over age 60. With an estimated seven to 10 million patients living with Parkinson's disease worldwide, it is the second most common neurodegenerative disorder after Alzheimer's disease. The disease is characterized by the neuronal accumulation of aggregated alpha-synuclein in the CNS and peripheral nervous system that results in a wide spectrum of worsening progressive motor and non-motor symptoms. While diagnosis relies on motor symptoms classically associated with Parkinson's disease, non-motor symptoms may present many years earlier. Current treatments for Parkinson's disease are symptomatic and only address a subset of symptoms such as motor impairment, dementia, or psychosis. Symptomatic therapies do not target the underlying cause of the disease and lose effectiveness, often leading to debilitating side effects as the disease progresses.

About Prothena

Prothena Corporation plc is a global, late-stage clinical biotechnology company establishing fully-integrated research, development and commercial capabilities. Fueled by its deep scientific understanding built over decades of research in protein misfolding and cell adhesion — the root causes of many serious or currently untreatable amyloid and inflammatory diseases — Prothena seeks to fundamentally change the course of progressive diseases associated with this biology. The Company's pipeline of antibody therapeutic candidates targets a number of indications including AL amyloidosis (NEOD001), Parkinson's disease and other related synucleinopathies (PRX002**/**RG7935), inflammatory diseases, including psoriasis and psoriatic arthritis (PRX003), and ATTR amyloidosis (PRX004). The company continues discovery of additional novel therapeutic candidates where its deep scientific understanding of disease pathology can be leveraged. For more information, please visit the company's website at www.prothena.com.

Forward-looking Statements

This press release contains forward-looking statements. These statements relate to, among other things, plans for and the timing of initiating a Phase 2 clinical study of PRX002**/**RG7935*; and the design of* PRX002**/**RG7935 *and its potential as a disease modifying treatment for Parkinson's disease. These statements are based on estimates, projections and assumptions that may prove not to be accurate, and actual results could differ materially from those anticipated due to known and unknown risks, uncertainties and other factors, including but not limited to the risks, uncertainties and other factors described in the "Risk Factors" sections of our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on February 27, 2017 filed with the SEC. Prothena undertakes no obligation to update publicly any forward-looking statements contained in this press release as a result of new information, future events or changes in Prothena's expectations.*

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