



August 26, 2014

Prothena Announces Presentation at Federation of European Physiological Societies 2014 Congress

- **Data to be Presented by Dr. Timo Siepmann on the Discovery of a Potential New Non-Invasive Biomarker for Parkinson's Disease**
- **Results Extend Prior Research Confirming Skin Response (Goose Bump) Deficit in Patients With Early Stage Parkinson's Disease**

DUBLIN, Ireland, Aug. 26, 2014 (GLOBE NEWSWIRE) -- Prothena Corporation plc (Nasdaq:PRTA), a clinical stage biotechnology company focused on the discovery, development and commercialization of novel antibodies for the potential treatment of diseases that involve protein misfolding or cell adhesion, today announced that Timo Siepmann, MD, will present new interim data from an ongoing clinical study sponsored by Prothena that identify potential new biomarkers for Parkinson's disease.

Dr. Siepmann, Research Fellow at Dresden University Hospital, will present the data in a session entitled '*Quantitative pilomotor axon-reflex test to assess autonomic dysfunction in Parkinson's disease*,' at the Federation of European Physiological Societies (FEPS) 2014 Congress in Budapest, Hungary on August 27, 2014. For the full abstract, click [here](#) or visit www.feps2014.org for more information on the Congress.

"There is an urgent need for novel biomarkers in Parkinson's disease, as patients can be treated effectively when diagnosed early," said Dr. Siepmann. "Non-motor dysfunction such as skin function is frequently among the first symptoms in Parkinson's, and the quantitative pilomotor axon-reflex test (QPART) technique, which assesses autonomic skin function, could be a promising biomarker to evaluate early stages of disease."

Dr. Siepmann's initial data in six patients with Parkinson's disease showed significantly reduced pilomotor (goose bump) responses in early disease, when evaluated using the non-invasive QPART technique, compared to the pilomotor response in six healthy adults ($p < 0.05$). The use of the QPART technique is promising, as previous research confirmed that pilomotor nerves in patients with Parkinson's disease are damaged by alpha-synuclein deposition in early stages of the disease. This damage correlates with both motor and autonomic clinical symptoms. Consistent with the decrease in pilomotor function, sudomotor responses were decreased in patients with Parkinson's disease ($p < 0.01$).

"As we work with Roche to develop PRX002, the first disease-modifying antibody directed at Parkinson's disease and other synucleinopathies, we continue to collaborate with leading physicians around the world to identify quantitative measurements and short-term endpoints that could allow early detection and monitoring of patients with Parkinson's disease," said Gene Kinney, PhD, Chief Scientific Officer and Head of Research and Development of Prothena. "Building on prior research that indicate skin function, including sweat (sudomotor) and vasomotor responses, is impaired in patients in the early stages of Parkinson's disease, Dr. Siepmann's initial data confirm these prior data and support the potential use of non-invasive biomarkers that measure goose bump (pilomotor) response for early disease identification and clinical development of new therapeutics."

About alpha-synuclein

Alpha-synuclein, is found extensively in neurons and is a major component of pathological inclusions that characterize several neurodegenerative disorders, including Parkinson's disease, dementia with Lewy bodies, and multiple system atrophy, which collectively are termed synucleinopathies.

About Parkinson's Disease

Parkinson's disease is the second most common neurodegenerative disorder after Alzheimer's disease. There are an estimated seven to ten million patients with Parkinson's disease worldwide. Current treatments for Parkinson's disease are effective at managing the early motor symptoms of the disease, mainly through the use of levodopa and dopamine agonists. As the disease progresses and dopaminergic neurons continue to be lost, these drugs eventually become less effective at treating the symptoms.

About Prothena

Prothena Corporation plc is a clinical stage biotechnology company focused on the discovery, development and commercialization of novel antibodies for the potential treatment of diseases that involve protein misfolding or cell adhesion. The Company focuses on therapeutic monoclonal antibodies directed specifically to disease-causing proteins and its antibody-based product candidates target a number of potential indications including AL and AA forms of amyloidosis (NEOD001), Parkinson's disease and related synucleinopathies (PRX002) and novel cell adhesion targets involved in inflammatory diseases and cancers (PRX003).

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, the promising aspects of pilomotor function as a biomarker to assess early stages of 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 and uncertainties described in the "Risk Factors" sections of our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 7, 2014, and our subsequent Quarterly Reports on Form 10-Q 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.

CONTACT: Investors: Tran Nguyen, CFO

650-837-8535, IR@prothena.com

Media: Anita Kawatra

646-256-5116, anita.kawatra@prothena.com