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Prothena Highlights Breadth of Novel Pipeline at R&D Day

- **Clinical development programs advancing toward key milestones**
- **Dr. Morie Gertz of Mayo Clinic discusses clinical aspects of AL amyloidosis and the role of cardiac biomarker NT-proBNP**
- **Novel discovery pipeline in neuroscience and orphan disease areas; highlights include tau and ALECT2**
- **R&D Day hosted today in New York City from 12:00 — 2:00 PM ET, live webcast available**

DUBLIN, Ireland, Nov. 16, 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, will provide an update on the Company's growing research and development pipeline of first-in-class therapies in the neuroscience and orphan disease categories during an R&D Day hosted today in New York City.

Prothena management, including Gene Kinney, PhD, President & CEO; Sarah Noonberg, MD, PhD, Chief Medical Officer and Wagner Zago, PhD, Chief Scientific Officer, will discuss progress on Prothena's clinical and discovery programs. Independent subject matter expert Morie Gertz, MD, Chair Emeritus of the Department of Internal Medicine at Mayo Clinic in Rochester, Minn., will discuss the current AL amyloidosis treatment landscape, unmet medical need and use of NT-proBNP, a cardiac biomarker shown to be predictive of survival in the treatment of patients with AL amyloidosis.

"R&D Day is an opportunity to provide additional insight into our clinical development programs that are advancing toward key milestones, and also to highlight our growing discovery pipeline of innovative approaches for neuroscience and orphan diseases," stated Gene Kinney, PhD, President and Chief Executive Officer of Prothena.

Clinical Pipeline Highlights

During R&D Day, Prothena will discuss its clinical development pipeline of first-in-class protein immunotherapies including the following program highlights:

NEOD001 is an investigational first-in-class antibody that specifically targets disease-causing misfolded light chain in AL amyloidosis. There are two ongoing late-stage global clinical studies of NEOD001.

- The Phase 2b PRONTO study of previously treated patients with AL amyloidosis and cardiac dysfunction is evaluating best cardiac response over 12 months based on reduction of the cardiac biomarker NT-proBNP, and topline results are expected in the second quarter of 2018. Key baseline characteristics of patients enrolled in the Phase 2b PRONTO study are similar to baseline characteristics of patients in the Phase 1/2 study.
- The Phase 3 VITAL study of newly diagnosed, treatment naive patients with AL amyloidosis and cardiac dysfunction is evaluating a composite endpoint of time to all-cause mortality or cardiac hospitalization. Baseline characteristics of patients enrolled in the Phase 3 VITAL study support the evaluation of NEOD001 effect on morbidity and mortality.

PRX002/RG7935 is an investigational first-in-class antibody targeting alpha-synuclein for the potential treatment of Parkinson's disease and is the subject of a worldwide collaboration with Roche. The Phase 2 PASADENA study in patients with early Parkinson's disease was initiated in the second quarter of this year and enrollment is ongoing.

PRX004 is an investigational first-in-class antibody that specifically targets disease-causing misfolded transthyretin in ATTR amyloidosis.

- Phase 1 study of PRX004 in patients with ATTR amyloidosis is expected to initiate by mid-2018.
- Prothena will discuss a proprietary, high-sensitivity assay that specifically detects circulating misfolded-hATTR in plasma across multiple TTR mutations and that can be used in clinical studies to monitor pharmacodynamic response to PRX004 in plasma.

Discovery Pipeline Highlights

"Our disciplined approach to advancing new compounds from discovery into clinical development is based on a deep understanding of how to optimally target proteins, assess target engagement and disease progression and develop antibodies that relevantly influence biology," continued Dr. Kinney. "Beyond the catalysts in our clinical programs, we look

forward to advancing our exciting discovery pipeline of novel approaches in the neuroscience and orphan areas including targets such as tau, ALECT2, TDP-43, beta amyloid, and others that are implicated in devastating diseases that lack effective therapies such as Alzheimer's disease (AD), ALECT2 amyloidosis, frontotemporal dementia (FTD) and amyotrophic lateral sclerosis (ALS)."

During R&D Day Prothena will also discuss a number of its discovery-stage programs in the neuroscience and orphan disease categories including:

- **Tau**, a protein implicated in diseases including Alzheimer's disease (AD), progressive supranuclear palsy (PSP), frontotemporal dementia (FTD) and chronic traumatic encephalopathy (CTE). Prothena has identified antibodies targeting novel epitopes on the tau protein with the ability to block misfolded tau from binding to cells and to inhibit cell-to-cell transmission, preventing downstream functional effects.
- **LECT2,** a protein implicated in ALECT2 amyloidosis. Similar to AL amyloidosis and ATTR amyloidosis, ALECT2 amyloidosis is a rare disease caused by deposits of misfolded aggregated protein in vital organs, most often the kidneys and liver. Prothena has identified novel epitopes on the misfolded forms of the protein.

Webcast Details

Prothena will host R&D Day today from 12:00 - 2:00 PM ET in New York, NY. For those not able to attend, a live webcast that will include audio and slides of the presentation can be accessed through the Investors section of the Company's website at www.prothena.com. Following the live presentations, a replay of the webcast will be available on the Company's website for at least 90 days.

About Prothena

Prothena Corporation plc is a global, late-stage clinical biotechnology company establishing fully integrated research, development and commercial capabilities and focused on advancing new therapies in the neuroscience and orphan arenas. Fueled by its deep scientific understanding built over decades of research in protein misfolding, Prothena seeks to fundamentally change the course of grave or currently untreatable diseases associated with this biology. Prothena's pipeline of antibody therapeutic candidates targets a number of indications including AL amyloidosis (NEOD001), Parkinson's disease and other related synucleinopathies (PRX002/RG7935) 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, the predictive value of the cardiac biomarker NT-proBNP; the timing of announcing topline results from the Phase 2b PRONTO study of NEOD001; the timing of initiating a Phase 1 study of PRX004; our expectations on a new assay for detecting circulating misfolded-hATTR in plasma; our ability to advance a growing pipeline of novel first-in-class therapies in neuroscience and orphan diseases; and the potential targeting of novel epitopes we have identified on misfolded forms of tau protein and on misfolded forms of LECT2 protein. 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 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.

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