Prothena Reports Fourth Quarter and Full Year 2017 Financial Results, and Provides Financial Guidance and R&D Update

February 14, 2018

- **Net cash used in operating and investing activities was $39.9 million in the fourth quarter and $134.7 million for the full year 2017; quarter-end cash and restricted cash position of $421.7 million supports advancement through key milestones of R&D pipeline**
- **Completed enrollment in the Phase 2b PRONTO and Phase 3 VITAL studies of NEOD001 in AL amyloidosis**
- **Presented new preclinical data at HFSA Annual Scientific Meeting on the important role of the cardiac biomarker NT-proBNP in AL amyloidosis**
- **Initiated, with Roche, the global Phase 2 PASADENA study of PRX002/RG7935 in patients with early Parkinson's disease, triggering a $30 million milestone payment from Roche to Prothena**
- **Highlighted at R&D Day a growing pipeline in neuroscience and orphan disease categories and announced additional novel discovery-stage programs against targets including tau, Aβ and ALECT2**

DUBLIN, Ireland, Feb. 14, 2018 (GLOBE NEWSWIRE) -- Prothena Corporation plc (NASDAQ:PRTA), a late-stage clinical biotechnology company focused on the discovery, development and commercialization of novel therapies in the neuroscience and orphan categories, today reported financial results for the fourth quarter and full year 2017. In addition, the Company provided 2018 financial guidance and an update on its R&D programs.

"In 2017, our team progressed our clinical stage development programs towards key milestones, unveiled novel discovery programs, and continued to build our organization to support our maturing pipeline," said Gene Kinney, Ph.D., President and Chief Executive Officer of Prothena. "We successfully completed enrollment in both the Phase 2b PRONTO and Phase 3 VITAL studies in AL Amyloidosis. We also presented data elucidating the toxic effect — that is unique from other forms of heart failure — of misfolded soluble light chain on cardiomyocytes that results in increased production o NT-proBNP, a cardiac biomarker that has been shown in multiple independent studies to predict survival in patients with AL amyloidosis. We also initiated, with our partners at Roche, the Phase 2 PASADENA study of PRX002/RG7935 in patients with early Parkinson's disease. Looking ahead, in 2018 we will continue to capitalize on our deep expertise in protein misfolding in seeking to advance a broad pipeline of disease-modifying therapeutics in the neurodegenerative and orphan disease categories, and we remain focused and on track to reach key milestones, including the topline data from the Phase 2b PRONTO study which is expected in the second quarter and the initiation of the Phase 1 multiple ascending dose study of PRX004 in patients with ATTR amyloidosis expected by mid-year."

Full Year 2017 and Recent Highlights:

NEOD001 is a monoclonal antibody for the potential treatment of AL amyloidosis:

- Presented new preclinical data at the Heart Failure Society of America 21st Annual Meeting (HFSA) Annual Scientific Meeting that further supports the important role of the cardiac biomarker NT-proBNP in the biology of AL amyloidosis. Preclinical data presented in a moderated poster talk and poster session at the conference demonstrated the relationship between misfolded soluble light chain toxicity to cardiomyocytes and production of NT-proBNP.
- Completed enrollment in the Phase 3 VITAL Amyloidosis Study evaluating NEOD001 in newly diagnosed, treatment naïve patients with AL amyloidosis and cardiac dysfunction. The VITAL study is a global, double-blind, placebo-controlled, registrational study with an event-based composite primary endpoint of all-cause mortality or cardiac hospitalizations as qualifying events. Secondary endpoints include Short-form 36 (SF-36, a quality of life measure) and Six-Minute Walk Test.
- Completed enrollment in the Phase 2b PRONTO study evaluating NEOD001 in previously treated patients with AL amyloidosis and persistent cardiac dysfunction. The PRONTO study is a global, double-blind, placebo-controlled, registration-directed study with a primary endpoint of best response over 12 months of the cardiac biomarker NT-proBNP, defined by the consensus criteria of NT-proBNP change. Secondary endpoints include evaluations of SF-36 and Six-Minute Walk Test.

PRX002/RG7935 is a monoclonal antibody for the potential treatment of Parkinson's disease and related synucleinopathies, and is the primary focus of Prothena's worldwide collaboration with Roche:

- Initiated the Phase 2 PASADENA study of PRX002/RG7935 in patients with early Parkinson's disease, triggering a $30 million milestone payment from Roche to Prothena. PASADENA is a global two-part clinical study being conducted by Roche. The primary endpoint of this study is the comparison of change from baseline in the Movement Disorder Society-Unified Parkinson's Disease Rating Scale (MDS-UPDRS) total score (parts 1, 2 and 3) at week 52 in each of the two treatment groups vs. the placebo group.
- In a late-breaking therapeutic strategies session at the 13th International Conference on Alzheimer's and Parkinson's Diseases (AD/PD), Joseph Jankovic, M.D., of Baylor College of Medicine presented clinical data from the 80-patient Phase 1b multiple ascending dose study of PRX002/RG7935 in patients with Parkinson's disease. The Phase 1b study results

further supported advancing PRX002/RG7935 into the Phase 2 PASADENA study.

PRX004 is a monoclonal antibody for the potential treatment of ATTR amyloidosis:

- Advanced a proprietary, high-sensitivity assay that specifically detects circulating misfolded-hATTR in plasma across multiple TTR mutations that can be used in clinical studies to monitor pharmacodynamic response to PRX004 in plasma.

Additional Discovery Program Highlights:

- Provided an update on the Company's growing discovery pipeline targeting novel therapeutic approaches in the neuroscience and orphan disease categories during an R&D day hosted in New York City.
- Identified antibodies targeting novel epitopes on the tau protein with the potential to block misfolded tau from binding to cells to inhibit cell-to-cell transmission, preventing downstream toxic functional effects. Tau is a protein implicated in neurodegenerative diseases including Alzheimer's disease (AD), progressive supranuclear palsy (PSP), frontotemporal dementia (FTD), chronic traumatic encephalopathy (CTE) and other tauopathies.
- Advanced a new approach to design a potentially more potent anti-Aβ antibody. Aβ, or Amyloid Beta is a protein implicated in Alzheimer's disease (AD).
- Identified novel epitopes on the misfolded forms of 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.

Upcoming Research and Development Milestones

Prothena's development pipeline includes three protein immunotherapy programs.

NEOD001

- Topline results in the Phase 2b PRONTO study expected following the 12-month study period in the second quarter of 2018.
- The Phase 3 VITAL study is designed to evaluate a composite endpoint of time to all-cause mortality or cardiac hospitalization with an anticipated final event in the second half of 2019.

PRX002/RG7935

- The Phase 2 PASADENA study, initiated in the second quarter of 2017, continues to enroll patients with early Parkinson's disease.

PRX004

- Phase 1 multiple ascending dose study expected to begin by mid-2018.

Fourth Quarter and Full Year of 2017 Financial Results and 2018 Financial Guidance

Prothena reported a net loss of $47.8 million and $153.2 million for the fourth quarter and full year of 2017, respectively, as compared to a net loss of $48.9 million and $160.1 million for the fourth quarter and full year of 2016, respectively. Net loss per share for the fourth quarter and full year of 2017 was $1.24 and $4.07, respectively, as compared to a net loss per share of $1.41 and $4.66 for the fourth quarter and full year of 2016, respectively.

Prothena reported total revenue of $0.2 million and $27.5 million for the fourth quarter and full year of 2017, respectively, as compared to total revenue of $0.2 million and $1.1 million for the fourth quarter and full year of 2016, respectively. The increase in revenue for the full year of 2017 was primarily due to achievement of a clinical milestone payment from Roche of $30.0 million, of which $26.6 million was recognized as collaboration revenue and $3.4 million was recognized as an offset to research and development expenses.

Research and development (R&D) expenses totaled $33.5 million and $134.5 million for the fourth quarter and full year of 2017, respectively, as compared to $39.8 million and $119.5 million for the fourth quarter and full year of 2016, respectively. The decrease in R&D expenses for the fourth quarter of 2017 compared to the same period in the prior year was primarily due to lower product manufacturing expenses and to a lesser extent lower clinical trial costs, which were partially offset by higher personnel costs, higher consulting expense, and higher expense associated with PRX002/RG7935. The increase in R&D expenses for the full year of 2017 compared to the same period in the prior year was primarily due to higher personnel costs, and to a lesser extent higher clinical trial costs associated primarily with the NEOD001 program, higher consulting expenses and higher expenses associated with PRX002/RG7935, which were partially offset by a decrease in external expenses related to product manufacturing. R&D expenses included non-cash share-based compensation expense of $3.1 million and $10.9 million for the fourth quarter and full year of 2017, respectively, as compared to $1.9 million and $7.1 million for the fourth quarter and full year of 2016, respectively.

General and administrative (G&A) expenses totaled $14.0 million and $48.2 million for the fourth quarter and full year of 2017, respectively, as compared to $9.6 million and $41.1 million for the fourth quarter and full year of 2016, respectively. The increase in G&A expenses for the fourth quarter and full year of 2017 compared to the same periods in the prior year was primarily due to higher personnel costs and to a lesser extent higher consulting expense and other expenses in 2017, which were partially offset by a reduction in share-based compensation expense related to the accelerated vesting of stock options in the comparable periods in the prior year. Additionally, a gain was recognized from the assignment of the Company's former South San Francisco facility lease in January 2017. G&A expenses included non-cash share-based compensation expense of $4.4 million and $15.9 million in the fourth quarter and full year of 2017, respectively, as compared to $3.3 million and $17.8 million in the fourth quarter and full year of 2016, respectively.

Total non-cash share-based compensation expense was $7.4 million and $26.8 million for the fourth quarter and full year of 2017, respectively, as compared to $5.2 million and $24.9 million for the fourth quarter and full year of 2016, respectively.

As of December 31, 2017, Prothena had $421.7 million in cash, cash equivalents and restricted cash and no debt.

As of February 9, 2018, Prothena had approximately 38.5 million ordinary shares outstanding.

The Company expects the full year 2018 net cash burn from operating and investing activities to be $175 to $230 million, and to end the year with approximately $218 million in cash (mid-point). The estimated full year 2018 net cash burn from operating and investing activities is primarily driven by an estimated net loss of $200 to $260 million, which includes an estimated $33 million of non-cash share-based compensation expense.

Conference Call Details

Prothena management will discuss these results and its 2018 financial guidance during a live audio webcast and conference call today, Wednesday, February 14, 2018, at 4:30 PM ET. The webcast will be made available on the Company's website at www.prothena.com under the Investors tab in the Events and Presentations section. Following the live audio webcast, a replay will be available on the Company's website for 90 days.

To access the call via dial-in, please dial (877) 887-5215 (U.S. toll free) or (315) 625-3069 (international) five minutes prior to the start time and refer to conference ID number 2186715. A replay of the call will be available until February 28, 2018 via dial-in at (855) 859-2056 (U.S. toll free) or (404) 537-3406 (international), Conference ID Number 2186715.

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 categories. 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 to advance additional discovery programs against targets including tau, Aβ (Amyloid beta) and ALECT2 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 sufficiency of our cash position to support advancement of our pipeline and our continued development to key milestones; whether we can capitalize on our expertise to advance a broad pipeline of disease-modifying therapeutics; the proposed mechanisms of action of NEOD001, PRX002/RG7935 and PRX004; whether NT-proBNP along with secondary clinical outcomes in the Phase 2b study of NEOD001 has the potential to expedite our development timeline and provide an opportunity to engage with European regulators; the role of NT-proBNP in the biology of AL amyloidosis and its relationship to misfolded soluble light chain toxicity in cardiomyocytes; whether we can advance our growing discovery pipeline of potentially novel therapeutic approaches in the neuroscience and orphan disease categories; whether we are able to design a more potent anti-Aβ antibody; the expected timing of announcing topline results from the Phase 2b study of NEOD001; the anticipated timing of the final event in the Phase 3 study of NEOD001; the expected timing of advancing PRX004 into a Phase 1 clinical study; our anticipated net cash burn from operating and investing activities for 2018 and expected cash balance at the end of 2018; and our estimated net loss and non-cash share-based compensation expense for 2018. 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, our subsequent Quarterly Reports on Form 10-Q filed with the SEC and our Annual Report on Form 10-K to be filed with the SEC for our fiscal year 2017. 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.

PROTHENA CORPORATION PLC
CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited - amounts in thousands except per share data)

	Three Months Ended December 31,		Twelve Months Ended December 31,	
	2017	2016	2017	2016
Collaboration revenue	$ 229	$ 171	$ 27,519	$ 1,055
Total revenue	229	171	27,519	1,055
Operating expenses:				
Research and development	33,502	39,844	134,547	119,534
General and administrative	14,044	9,604	48,226	41,056
Total operating expenses	47,546	49,448	182,773	160,590
Loss from operations	(47,317)	(49,277)	(155,254)	(159,535)
Other income (expense), net	(154)	727	(2,349)	571
Loss before income taxes	(47,471)	(48,550)	(157,603)	(158,964)
Provision for (benefit from) income taxes	287	353	(4,366)	1,144
Net loss	$ (47,758)	$ (48,903)	$ (153,237)	$ (160,108)
Basic and diluted net loss per share	$ (1.24)	$ (1.41)	$ (4.07)	$ (4.66)
Shares used to compute basic and diluted net loss per share	38,455	34,603	37,654	34,351

PROTHENA CORPORATION PLC
CONSOLIDATED BALANCE SHEETS
(unaudited - amounts in thousands)

	December 31, 2017	December 31, 2016
Assets		
Cash and cash equivalents	$ 417,620	$ 386,923
Other current assets	8,707	4,439
Total current assets	426,327	391,362
Property and equipment, net	54,990	56,452
Restricted cash	4,056	4,056
Other assets	10,956	8,106
Total non-current assets	70,002	68,614
Total assets	$ 496,329	$ 459,976
Liabilities and Shareholders' Equity		
Accrued research and development	$ 13,509	$ 19,073
Other current liabilities	23,862	22,002
Total current liabilities	37,371	41,075
Non-current liabilities:	51,769	53,498
Total liabilities	89,140	94,573
Total shareholders' equity	407,189	365,403
Total liabilities and shareholders' equity	$ 496,329	$ 459,976

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