

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. _____)

Prothena Corporation plc
(Name of Issuer)

Ordinary Shares, par value \$0.01 per share
(Title of Class of Securities)

G72800108
(CUSIP Number)

James J. Frolik, Esq.
Ellyn Roberts, Esq.
Shartsis Friese LLP
One Maritime Plaza, 18th Floor
San Francisco, CA 94111
(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

August 23, 2019
(Date of Event Which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of sections 240.13d-1(e), 240.13d-1(f) or 140.13d-1(g), check the following box. []

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See section 240.13d-7 for other parties to whom copies are to be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

1. Names of Reporting Persons.

EcoR1 Capital, LLC

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) **X**

(b) _____

3. SEC Use Only

4. Source of Funds (See Instructions) **AF**

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) _____

6. Citizenship or Place of Organization **Delaware**

Number of
Shares

7. Sole Voting Power **0**

Beneficially
Owned by

8. Shared Voting Power **9,426,640**

Each Reporting
Person With

9. Sole Dispositive Power **0**

10. Shared Dispositive Power **9,426,640**

11. Aggregate Amount Beneficially Owned by Each Reporting Person **9,426,640**

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) _____

13. Percent of Class Represented by Amount in Row (11) **23.6%**

14. Type of Reporting Person (See Instructions) **IA, OO**

1. Names of Reporting Persons.

Oleg Nodelman

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) **X**

(b) _____

3. SEC Use Only

4. Source of Funds (See Instructions) **AF**

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) _____

6. Citizenship or Place of Organization **U.S.A.**

Number of
Shares

7. Sole Voting Power **0**

Beneficially
Owned by

8. Shared Voting Power **9,426,640**

Each Reporting
Person With

9. Sole Dispositive Power **0**

10. Shared Dispositive Power **9,426,640**

11. Aggregate Amount Beneficially Owned by Each Reporting Person **9,426,640**

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) _____

13. Percent of Class Represented by Amount in Row (11) **23.6%**

14. Type of Reporting Person (See Instructions) **IN, HC**

1. Names of Reporting Persons.

EcoR1 Capital Fund Qualified, L.P.

2. Check the Appropriate Box if a Member of a Group (See Instructions)

(a) _____

(b) _____

3. SEC Use Only

4. Source of Funds (See Instructions) **WC**

5. Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e) _____

6. Citizenship or Place of Organization **Delaware**

Number of
Shares

7. Sole Voting Power **0**

Beneficially
Owned by

8. Shared Voting Power **7,853,087**

Each Reporting
Person With

9. Sole Dispositive Power **0**

10. Shared Dispositive Power **7,853,087**

11. Aggregate Amount Beneficially Owned by Each Reporting Person **7,853,087**

12. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions) _____

13. Percent of Class Represented by Amount in Row (11) **19.7%**

14. Type of Reporting Person (See Instructions) **PN**

Item 1. Security and Issuer

This statement relates to shares of Ordinary Shares, par value \$0.01 per share (the “Stock”), of **Prothena Corporation plc** (the “Issuer”). The principal executive office of the Issuer is located at **77 Sir John Rogerson’s Quay, Block C, Grand Canal Docklands, Dublin 2, D02 T804, Ireland.**

Item 2. Identity and Background

The persons filing this statement and the persons enumerated in Instruction C of Schedule 13D and, where applicable, their respective places of organization, general partners, directors, executive officers and controlling persons, and the information regarding them, are as follows:

- (a) **EcoR1 Capital Fund Qualified, L.P. (“Qualified Fund”); EcoR1 Capital, LLC (“EcoR1”) and Oleg Nodelman (“Nodelman”) (collectively, the “Filers”).**

Qualified Fund is filing this statement jointly with the other Filers, but not as a member of a group and it expressly disclaims membership in a group. In addition, filing this Schedule 13D on behalf of Qualified Fund should not be construed as an admission that it is, and it disclaims that it is, a beneficial owner, as defined in Rule 13d-3 under the Act, of any of the Stock covered by this Schedule 13D.

Each Filer also disclaims beneficial ownership of the Stock except to the extent of that person’s pecuniary interest therein.

- (b) The business address of the Filers is **357 Tehama Street #3, San Francisco, CA 94103**
- (c) Present principal occupation or employment of the Filers and the name, principal business and address of any corporation or other organization in which such employment is conducted:
EcoR1 is an investment adviser to investment funds, including Qualified Fund (collectively, the “Funds”).. Mr. Nodelman is the manager and control person of EcoR1.
- (d) During the last five years, none of the Filers has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) During the last five years, none of the Filers was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
- (f) For citizenship of the Filers, see Item 6 of each Filer’s cover page.

Item 3. Source and Amount of Funds or Other Consideration

The source and amount of funds used in purchasing the Stock were as follows:

Purchaser	Source of Funds	Amount
the Funds	Working Capital	\$63,534,392

Item 4. Purpose of Transaction

EcoR1 purchased the Stock based on the Reporting Persons' belief that the Shares, when purchased, were undervalued and represented an attractive investment opportunity. The Filers will routinely monitor the Issuer regarding a wide variety of factors that affect their investment considerations, including, current and anticipated future trading prices of the Stock and other securities, the Issuer's operations, assets, prospects, financial position, and business development, Issuer's management, Issuer-related competitive and strategic matters, general economic, financial market and industry conditions, and other investment considerations. Depending on their evaluation of various factors, the Filers may take such actions regarding their holdings of the Issuer's securities as they deem appropriate in light of circumstances existing from time to time. Such actions may include purchasing additional Stock in the open market, through privately negotiated transactions with third parties or otherwise, selling at any time, in the open market, through privately negotiated transactions with third parties or otherwise, of all or part of the Stock now owned or hereafter acquired by either of them. The Filers also may from time to time enter into or unwind hedging or other derivative transactions with respect to the Stock or pledge their interests in the Stock to obtain liquidity. In addition, from time to time the Filers and their representatives and advisers may communicate with other stockholders, industry participants and other interested parties about the Issuer. Further, the Filers may recommend action to the Issuer's management, board of directors and stockholders. Any of the foregoing actions could involve one or more of the events referred to in paragraphs (a) through (j), inclusive, of Item 4 of Schedule 13D, including, potentially, one or more mergers, consolidations, sales or acquisitions of assets, change in control, issuances, purchases, dispositions or pledges of securities or other changes in capitalization.

Item 5. Interest in Securities of the Issuer

The beneficial ownership of the Stock by each Filer on the date hereof is reflected on that Filer's cover page.

On August 23, 2019, the Filers purchased 8,703,340 shares of the Stock in the open market, which is the Filers' only transaction in the Stock in the past 60 days.

Item 6. Contracts, Arrangement, Understandings or Relationships with Respect to Securities of the Issuer

None.

Item 7. Material to Be Filed as Exhibits

Exhibit A Agreement Regarding Joint Filing of Statement on Schedule 13D or 13G.

SIGNATURES

After reasonable inquiry and to the best of my knowledge, I certify that the information set forth in this statement is true, complete and correct.

Dated: August 26, 2019

EcoR1 CAPITAL, LLC

By: /s/ Oleg Nodelman
Manager

/s/ Oleg Nodelman

EcoR1 CAPITAL FUND QUALIFIED, L.P.

By: EcoR1 Capital, LLC, General Partner

By: /s/ Oleg Nodelman
Manager

EXHIBIT A

AGREEMENT REGARDING JOINT FILING
OF STATEMENT ON SCHEDULE 13D OR 13G

The undersigned agree to file jointly with the Securities and Exchange Commission (the "SEC") any and all statements on Schedule 13D, Schedule 13G or forms 3, 4 or 5 (and any amendments or supplements thereto) required under section 13(d) or 16(a) of the Securities Exchange Act of 1934, as amended, in connection with purchases by the undersigned of the securities of any issuer. For that purpose, the undersigned hereby constitute and appoint EcoR1 Capital, LLC, a Delaware limited liability company, as their true and lawful agent and attorney-in-fact, with full power and authority for and on behalf of the undersigned to prepare or cause to be prepared, sign, file with the SEC and furnish to any other person all certificates, instruments, agreements and documents necessary to comply with section 13(d) and section 16(a) of the Act, in connection with said purchases, and to do and perform every act necessary and proper to be done incident to the exercise of the foregoing power, as fully as the undersigned might or could do if personally present.

Dated: August 26, 2019

EcoR1 CAPITAL, LLC

By: /s/ Oleg Nodelman
Manager

/s/ Oleg Nodelman

EcoR1 CAPITAL FUND QUALIFIED, L.P.

By: EcoR1 Capital, LLC, General Partner

By: /s/ Oleg Nodelman
Manager