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

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**SCHEDULE 13D**

Under the Securities Exchange Act of 1934

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**Nightstar Therapeutics plc**  
(Name of Issuer)

**Ordinary Shares, nominal value £0.01**  
(Title of Class of Securities)

**65413A101**  
(CUSIP Number)

**Susan H. Alexander, Esq.**  
**Executive Vice President, Chief Legal Officer and Secretary**  
**Biogen Inc.**  
**225 Binney Street**  
**Cambridge, MA 02142**  
**(617) 679-2000**

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

*With a Copy to:*

**Zachary Blume**  
**Paul Kinsella**  
**Ropes & Gray LLP**  
**Prudential Tower**  
**800 Boylston Street**  
**Boston, MA 02199**  
**(617) 951-7000**

**March 4, 2019**

(Date of Event which Requires Filing of this Statement)

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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 §§240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box.

\* 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 disclosures provided in a prior cover page.

The information required on 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).

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1.	Names of Reporting Persons.  Biogen Inc.	
2.	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>	
3.	SEC Use Only	
4.	Source of Funds  OO	
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  <input type="checkbox"/>	
6.	Citizenship or Place of Organization  Delaware	
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7.	Sole Voting Power  -0-
	8.	Shared Voting Power  20,638,209 (1)(2)(3)
	9.	Sole Dispositive Power  -0-
	10.	Shared Dispositive Power  20,638,209 (1)(2)(3)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person  20,638,209 (1)(2)(3)	
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares  <input type="checkbox"/>	
13.	Percent of Class Represented by Amount in Row (11)  61.6% (2)	
14.	Type of Reporting Person (See Instructions)  CO	

- (1) The shares may be represented by ADSs (as defined below) of NST (as defined below), each representing one Ordinary Share (as defined below).
- (2) Beneficial ownership of the above referenced NST Shares (as defined below) is being reported hereunder solely because Biogen (as defined below) may be deemed to have indirect beneficial ownership of such NST Shares as a result of the Irrevocable Undertakings (as defined below) in favor of its wholly-owned subsidiary, Biogen Switzerland (as defined below). Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by Biogen that it is the beneficial owner of any NST Shares for purposes of Section 13(d) of the Act, or for any other purpose, and such beneficial ownership thereof is expressly disclaimed.  
The calculation of the approximately 61.6% beneficial ownership is based on (i) an aggregate of 20,638,209 NST Shares beneficially owned by the Undertaking Parties (as defined below) that are party to the Irrevocable Undertakings as of March 4, 2019, and (ii) 33,533,714 NST Shares outstanding as of March 1, 2019, as indicated in Appendix II to Schedule II of the Implementation Agreement (as defined below).
- (3) See Item 5 of this Schedule 13D (as defined below).

1.	Names of Reporting Persons.  Biogen Switzerland Holdings GmbH
2.	Check the Appropriate Box if a Member of a Group (a) <input type="checkbox"/> (b) <input type="checkbox"/>
3.	SEC Use Only
4.	Source of Funds  OO
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)  <input type="checkbox"/>
6.	Citizenship or Place of Organization  Switzerland
NUMBER OF SHARES BENEFICIALLY OWNED BY EACH REPORTING PERSON WITH	7. Sole Voting Power  -0-
	8. Shared Voting Power  20,638,209 (1)(2)(3)
	9. Sole Dispositive Power  -0-
	10. Shared Dispositive Power  20,638,209 (1)(2)(3)
11.	Aggregate Amount Beneficially Owned by Each Reporting Person  20,638,209 (1)(2)(3)
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares  <input type="checkbox"/>
13.	Percent of Class Represented by Amount in Row (11)  61.6% (2)
14.	Type of Reporting Person (See Instructions)  CO

(1) The shares may be represented by ADSs of NST, each representing one Ordinary Share.

(2) Beneficial ownership of the above referenced NST Shares is being reported hereunder solely because Biogen Switzerland may be deemed to have beneficial ownership of such NST Shares as a result of the Irrevocable Undertakings. Neither the filing of this Schedule 13D nor any of its contents shall be deemed to constitute an admission by Biogen Switzerland that it is the beneficial owner of any NST Shares for purposes of Section 13(d) of the Act, or for any other purpose, and such beneficial ownership thereof is expressly disclaimed. The calculation of the approximately 61.6% beneficial ownership is based on (i) an aggregate of 20,638,209 NST Shares beneficially owned by the Undertaking Parties that are party to the Irrevocable Undertakings as of March 4, 2019, and (ii) 33,533,714 NST Shares outstanding as of March 1, 2019, as indicated in Appendix II to Schedule II of the Implementation Agreement.

(3) See Item 5 of this Schedule 13D.

## Item 1. Security and Issuer

This Statement on Schedule 13D (this “**Schedule 13D**”) relates to ordinary shares, nominal value £0.01 per share (the “**Ordinary Shares**”), including Ordinary Shares represented by American Depositary Shares (the “**ADSs**” and together with the Ordinary Shares, collectively the “**NST Shares**”), with each ADS representing one Ordinary Share of Nightstar Therapeutics plc, a public limited company incorporated in England and Wales (the “**Issuer**” or “**NST**”). The Issuer’s principal executive offices are located at 10 Midford Place, 2<sup>nd</sup> Floor, London W1T 5BJ, United Kingdom.

## Item 2. Identity and Background

This Schedule 13D is being filed jointly, pursuant to a joint filing agreement included as Exhibit 1.01 hereto, by:

1. Biogen Inc., a Delaware corporation (“**Biogen**”). The principal business office of Biogen is 225 Binney Street, Cambridge, MA 02142. Biogen is focused on discovering, developing and delivering worldwide innovative therapies for people living with serious neurological and neurodegenerative diseases.

2. Biogen Switzerland Holdings GmbH, a limited liability company incorporated in Switzerland (“**Biogen Switzerland**” and together with Biogen, the “**Reporting Persons**”). The principal business office of Biogen Switzerland is Neuhofstrasse 30, 6340 Baar, Switzerland. Biogen Switzerland is an indirect wholly-owned subsidiary of Biogen.

Set forth on Schedule A to this Schedule 13D, and incorporated herein by reference, is a list of the executive officers and directors of the Reporting Persons, which contains the following information with respect to each such person: (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of the corporation or other organization in which such employment is conducted and (d) citizenship.

During the last five years, none of the Reporting Persons nor, to the best of the Reporting Persons’ knowledge, any of the persons listed on Schedule A has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction as a result of which such person 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.

## Item 3. Source and Amount of Funds or Other Consideration

As described in response to Item 4, the NST Shares to which this Schedule 13D relates have not been purchased by Biogen or Biogen Switzerland, and thus no funds were used for such purpose. In connection with the entry by Biogen Switzerland and Tungsten Bidco Limited, a limited liability company incorporated in England and Wales and wholly-owned subsidiary of Biogen Switzerland (“**Bidco**”), into the Implementation Agreement described in Item 4, (i) New Enterprise Associates 2015, Limited Partnership and New Enterprises Associates 15, limited Partnership (together “**NEA**”), (ii) Syncona Portfolio Limited (together with NEA, the “**Specified NST Shareholders**”) and (iii) each of the directors of NST (collectively, the “**Director Shareholders**” and together with the Specified NST Shareholders, the “**Undertaking Parties**”) entered into a Shareholder’s Irrevocable Undertaking (the “**Shareholder’s Irrevocable Undertakings**”) or a Director’s Irrevocable Undertaking (the “**Director’s Irrevocable Undertakings**” and together with the Shareholder’s Irrevocable Undertakings, the “**Irrevocable Undertakings**”), as applicable, with Biogen Switzerland with respect to the NST Shares held by such Undertaking Party. Neither Biogen nor Biogen Switzerland paid additional consideration to the Undertaking Parties in connection with the execution and delivery of the Irrevocable Undertakings. For a description of the Irrevocable Undertakings, see Item 4 below, which description is incorporated herein by reference in response to this Item 3.

## Item 4. Purpose of Transaction

Item 3 is incorporated by reference in this Item 4 as if fully set forth herein.

In connection with Biogen Switzerland's and Bidco's entry into the Implementation Agreement, the Undertaking Parties entered into the Irrevocable Undertakings. The purpose of the Irrevocable Undertakings is to facilitate the consummation of the Scheme (as defined below).

#### *Implementation Agreement*

On March 4, 2019, Biogen Switzerland and Bidco entered into an Implementation Agreement (the "**Implementation Agreement**") with Issuer pursuant to which Bidco has agreed to acquire, by means of a scheme of arrangement (the "**Scheme**") under Part 26 of the UK Companies Act 2006, the entire issued and to be issued share capital of the Issuer for \$25.50 per NST Share in cash (the "**Consideration**").

Under the Scheme, all outstanding stock options, restricted shares and restricted stock units awarded pursuant to the Issuer's 2017 Equity Incentive Plan will be cancelled and cease to be outstanding upon the Effective Time (as defined in the Implementation Agreement), and the holders will be entitled to receive the cash consideration payable by Bidco to Scheme Shareholders (as defined in the Implementation Agreement) less any applicable exercise or purchase price.

The Implementation Agreement contains representations and warranties from the Issuer, Biogen Switzerland and Bidco, each with respect to its business, and each party has agreed to customary pre-closing covenants, including obligations on the Issuer to conduct its business in the ordinary course of business and to refrain from taking specified actions without the consent of Biogen Switzerland. The Implementation Agreement has been approved by the board of directors or similar governing body of each of the Issuer, Biogen Switzerland and Bidco. The Scheme is subject to customary closing conditions for a transaction of this nature, including court approval, approval of the Scheme by a majority in number of the Scheme Shareholders, representing not less than 75% in value of the Scheme Shares held by those Scheme Shareholders, present and voting, either in person or by proxy, at the Court Meeting (as defined in the Implementation Agreement), passing of the resolutions by the requisite majority at the General Meeting (as defined in the Implementation Agreement), and applicable regulatory approvals by the relevant authorities in the United States and Germany.

The Implementation Agreement contains certain customary termination rights for each of Biogen Switzerland and the Issuer. The Issuer will be required to pay a termination fee of \$8,773,855 ("**Termination Fee**") if the Implementation Agreement is terminated, subject to certain exceptions and qualifications:

- (i) by the Issuer, pursuant to its right to terminate the Implementation Agreement in the context of a Superior Proposal (as defined in the Implementation Agreement);
- (ii) by Biogen Switzerland, pursuant to its right to terminate the Implementation Agreement in the context of (x) the Issuer's notification to Biogen Switzerland or public statement that it no longer recommends a vote in favor of the transactions contemplated by the Implementation Agreement, (y) the Issuer's board of director effects a Company Adverse Change Recommendation (as defined in the Implementation Agreement) or (z) the Issuer fails to reaffirm its recommendation in favor of the transactions contemplated by the Implementation Agreement in certain circumstances; or
- (iii) (x) (1) when a condition for the benefit of Biogen Switzerland becoming incapable of satisfaction by September 4, 2019 (the "**Long Stop Date**"), (2) after a notification or public statement by the Issuer's board of directors that it will no longer seek the sanctioning of the Scheme or (3) due to a breach by the Issuer of any of its representations and warranties in the Implementation Agreement or failure by the Issuer to perform any covenant or obligation in the Implementation Agreement required on the part of the Issuer such that certain closing conditions cannot be satisfied by the Long Stop Date, (y) any person shall have publicly disclosed a *bona fide* Acquisition Proposal (as defined in the Implementation Agreement) prior to such termination which Acquisition Proposal has not been publicly withdrawn and (z) within twelve months of such termination, an Acquisition Proposal is announced and is completed anytime thereafter.

The Implementation Agreement has been included as an exhibit to this Schedule 13D to provide investors and security holders with information regarding its terms. It is not intended to provide any other financial information about Biogen, Biogen Switzerland, Bidco, the Issuer or their respective subsidiaries or affiliates. The representations, warranties and covenants contained in the Implementation Agreement were made only for purposes

of that agreement and as of specific dates, were solely for the benefit of the parties to the Implementation Agreement, may be subject to limitations agreed upon by the parties, including being qualified by confidential disclosures made for the purposes of allocating contractual risk between the parties to the Implementation Agreement instead of establishing these matters as facts, and may be subject to standards of materiality applicable to the contracting parties that differ from those applicable to investors. Biogen's and Biogen Switzerland's shareholders and the Issuer's shareholders and other investors are not third-party beneficiaries under the Implementation Agreement and should not rely on the representations, warranties and covenants or any description thereof as characterizations of the actual state of facts or condition of Biogen, Biogen Switzerland, Bidco, the Issuer or any of their respective subsidiaries or affiliates. Moreover, information concerning the subject matter of the representations, warranties and covenants may change after the date of the Implementation Agreement, which subsequent information may or may not be fully reflected in public disclosures by Biogen and the Issuer.

#### *Irrevocable Undertakings*

In connection with Biogen Switzerland's, Bidco's and the Issuer's entry into the Implementation Agreement, the Specified NST Shareholders entered into the Irrevocable Undertakings.

Subject to the terms and conditions set forth in the Irrevocable Undertakings, each Specified NST Shareholder has agreed, among other things, to vote or procure votes in favor of the resolutions relating to the Scheme at the Meetings (as defined in the Implementation Agreement) (or in the event that the Acquisition (as defined in the Implementation Agreement) is implemented by way of an Offer (as defined in the Implementation Agreement), to accept or procure acceptance of such Offer) in respect of their entire beneficial holdings.

The Irrevocable Undertakings also restrict each Specified NST Shareholder from, among other things:

(a) selling, transferring or otherwise disposing of any NST Shares other than pursuant to the Scheme;

(b) accepting any other offer in respect of the shares or securities referred to in clause (a) above; or

(c) entering into any agreement or arrangement or incur any obligation (i) to do any of the acts referred to in clauses (a) or (b) above in relation to, or operating by reference to, the NST Shares, or (ii) which, in relation to the NST Shares, would or might restrict or impede such Specified NST Shareholder complying with the terms of such NST Shareholder's Irrevocable Undertakings.

The Irrevocable Undertakings will cease to be binding in certain circumstances, including if:

(a) the Scheme lapses or is withdrawn in accordance with its terms and Biogen Switzerland or Bidco publicly confirms that it does not intend to proceed with the Acquisition or to implement the Acquisition by way of an Offer or otherwise;

(b) the Scheme or Offer does not become effective by the Long Stop Date; or

(c) the Implementation Agreement is terminated in accordance with its terms.

The foregoing descriptions of the Implementation Agreement and the Irrevocable Undertakings are qualified in their entirety by reference to the full text of such agreements. The Implementation Agreement and the forms of Irrevocable Undertakings are filed as Exhibits 1.02, 1.03 and 1.04 hereto and are incorporated herein by reference.

Except as set forth in this Item 4, the Implementation Agreement and the Irrevocable Undertakings, none of the Reporting Persons have any plans or proposals that relate to or would result in any of the transactions described in subparagraphs (a) through (j) of Item 4 of Schedule 13D of the Exchange Act.

#### **Item 5. Interest in Securities of the Issuer**

The responses of Biogen and Biogen Switzerland to rows (7) through (13) of the cover page to this Schedule 13D and Item 3 are incorporated by reference in this Item 5 as if fully set forth herein.

(a) Other than those NST Shares that may be deemed to be beneficially owned by Biogen and Biogen Switzerland in connection with the Irrevocable Undertakings, Biogen and Biogen Switzerland have not acquired and do not beneficially own any NST Shares. Neither Biogen nor Biogen Switzerland is entitled to any rights as a shareholder of the Issuer as to the NST Shares covered by the Irrevocable Undertakings, except as expressly provided in the Irrevocable Undertakings. This Schedule 13D shall not be construed as an admission by Biogen or Biogen Switzerland that Biogen or Biogen Switzerland, as applicable, is, for the purposes of Section 13(d) or Section 13(g) of the Act, the beneficial owner of any NST Shares.

(b) Except as set forth in this Item 5, no Reporting Person and, to the best of the Reporting Persons' knowledge no person listed on Schedule A beneficially owns any NST Shares or has the right to acquire any NST Shares.

(c) Except as set forth in this Item 5, no Reporting Person, and to the best of the Reporting Persons' knowledge, no persons listed in Schedule A has effected any transactions in the NST Shares during the past sixty (60) days.

(d) No Reporting Person and, to the best of the Reporting Persons' knowledge, no person listed on Schedule A (other than the Undertaking Parties) has the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of, the NST Shares.

(e) Inapplicable.

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

Item 3, Item 4 and Item 5 and the agreements filed as Exhibits 1.02, 1.03 and 1.04 are incorporated by reference in this Item 6 as if fully set forth herein.

Except as set forth in this Item 6, to the best of the Reporting Persons' knowledge, there are no contracts, arrangements, understandings or relationships (legal or otherwise), among Biogen and Biogen Switzerland or any of the persons listed in Schedule A, or between such persons and any person with respect to any securities of the Issuer (including any securities pledged or otherwise subject to a contingency the occurrence of which would give another person voting power or investment power over such securities other than standard default and similar provisions contained in loan agreements), including, but not limited to, transfer or voting of any of the Ordinary Shares, finder's fees, joint ventures, loan or option arrangements, puts or calls, guarantees of profits, division of profits or loss or the giving or withholding of proxies.

## Item 7. Material to be Filed as Exhibits

<u>Exhibit Number</u>	<u>Exhibit Name</u>
1.01*	Joint Filing Agreement, dated as of March 14, 2019, by and between Biogen Inc. and Biogen Switzerland Holdings GmbH.
1.02	Implementation Agreement, dated as of March 4, 2019, by and among Biogen Switzerland Holdings GmbH, Tungsten Bidco Limited and Nightstar Therapeutics plc (incorporated by reference to Exhibit 2.1 to the Current Report on Form 8-K filed by Nightstar Therapeutics plc with the Securities and Exchange Commission (the “SEC”) on March 4, 2019).
1.03	Form of Shareholder’s Irrevocable Undertaking (incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K filed by Nightstar Therapeutics plc with the SEC on March 4, 2019).
1.04	Form of Director’s Irrevocable Undertaking (incorporated by reference to Exhibit 99.2 to the Current Report on Form 8-K filed by Nightstar Therapeutics plc with the SEC on March 4, 2019).

\* Filed herewith



**SIGNATURE**

After reasonable inquiry and to the best of the undersigned's knowledge and belief, the undersigned certifies that the information set forth in this Statement is true, complete and correct.

March 14, 2019

**Biogen Inc.**

By: /s/ James Basta

Name: James Basta

Title: Chief Corporation Counsel and  
Assistant Secretary

**Biogen Switzerland Holdings GmbH**

By: /s/ Frederick Lawson

Name: Frederick Lawson

Title: Managing Director

[Signature Page to Schedule 13D]

**Directors and Executive Officers of Biogen Inc.**

The following sets forth the (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of the corporation or other organization in which such employment is conducted and (d) citizenship of each of the executive officers and directors of Biogen Inc. Unless otherwise indicated, (x) the executive officer's or director's business address is located at 225 Binney Street, Cambridge, MA 02142, (y) the name, principal business and address of the corporation or other organization in which an executive officer's or director's employment is conducted refers to Biogen Inc. as described in Biogen Inc.'s response to Item 2 of this Schedule 13D, which is incorporated herein by reference and (z) all of the persons listed below are citizens of the United States.

Name	Present Principal Occupation or Employment & Name, Principal Business and Address of the Corporation or Organization in which Conducted
<b><i>Board of Directors</i></b>	
Michel Vounatsos <sup>1</sup> Stelios Papadopoulos, Ph.D.	Chief Executive Officer, Biogen Inc. Director, Chairman of the Board, Biogen Inc. Chairman of the Board, Exelixis, Inc. Chairman of the Board, Regulus Therapeutics Inc.
Alexander J. Denner, Ph.D.	Founding Partner and Chief Investment Officer, Sarissa Capital Management LP
Caroline D. Dorsa Nancy L. Leaming Richard C. Mulligan, Ph.D.	Retired Independent consultant Mallinckrodt Professor of Genetics, Emeritus, Harvard Medical School and Executive Vice Chairman of the Board, Sana Biotechnology
Robert W. Pangia Brian S. Posner	Partner, Ivy Capital Partners, LLC Private investor and Founder and Managing Partner of Point Rider Group LLC
Eric K. Rowinsky, M.D. Lynn Schenk, J.D. Stephen A. Sherwin, M.D.	President and Executive Chairman, RGenix, Inc. Attorney in private practice Clinical Professor of Medicine, the University of California, San Francisco Volunteer attending physician in Hematology-Oncology, Zuckerberg San Francisco General Hospital Venture partner, Third Rock Ventures, LLC

<sup>1</sup> Citizen of France.

Name	Present Principal Occupation or Employment & Name, Principal Business and Address of the Corporation or Organization in which Conducted
<b><i>Executive Officers</i></b>	
Michel Vounatsos <sup>2</sup>	Chief Executive Officer
Susan H. Alexander	Executive Vice President, Chief Legal Officer and Secretary
Jeffrey D. Capello	Executive Vice President and Chief Financial Officer
Michael D. Ehlers, M.D., Ph.D.	Executive Vice President, Research and Development
Ginger Gregory, Ph.D.	Executive Vice President and Chief Human Resources Officer
Chirfi Guindo	Executive Vice President and Head of Global Marketing, Market Access and Customer Innovation
Daniel Karp	Executive Vice President, Corporate Development
Robin C. Kramer	Vice President, Chief Accounting Officer
Paul McKenzie, Ph.D.	Executive Vice President, Pharmaceutical Operations and Technology
Alfred W. Sandrock, Jr., M.D., Ph.D.	Executive Vice President and Chief Medical Officer

**Executive Officers and Directors of Biogen Switzerland Holdings GmbH**

The following sets forth the (a) name, (b) business address, (c) present principal occupation or employment and the name, principal business and address of the corporation or other organization in which such employment is conducted and (d) citizenship of each of the executive officers and directors of Biogen Switzerland Holdings GmbH. Unless otherwise indicated, (x) the executive officer's or director's business address is located at Neuhofstrasse 30, 6340 Baar, Switzerland, (y) the name, principal business and address of the corporation or other organization in which an executive officer's or director's employment is conducted refers to Biogen Switzerland Holdings GmbH as described in Biogen Switzerland Holdings GmbH's response to Item 2 of this Schedule 13D, which is incorporated herein by reference and (z) all of the persons listed below are citizens of the United States.

Name	Present Principal Occupation or Employment & Name, Principal Business and Address of the Corporation or Organization in which Conducted
Frederick Lawson <sup>3</sup>	Managing Director, Biogen Switzerland Holdings GmbH Senior Director, Biogen, Inc.
Peter Pol Puype <sup>4</sup>	Managing Director, Biogen Switzerland Holdings GmbH Vice President, Global Supply Chain, Biogen, Inc.
Neil Raymond Sisak	Managing Director, Biogen Switzerland Holdings GmbH Vice President, EU Customer Excellence & Operations & Finance, Biogen, Inc.

<sup>2</sup> Citizen of France.

<sup>3</sup> Citizen of the United Kingdom.

<sup>4</sup> Citizen of Belgium.

**Joint Filing Agreement**

The undersigned hereby agree that the Statement on Schedule 13D to which this Joint Filing Agreement is annexed as Exhibit 1.01, and any amendments thereto, is and will be filed on behalf of each of them in accordance with the provisions of Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended.

Dated: March 14, 2019

**Biogen Inc.**

By: /s/ James Basta

Name: James Basta

Title: Chief Corporation Counsel and  
Assistant Secretary

**Biogen Switzerland Holdings GmbH**

By: /s/ Frederick Lawson

Name: Frederick Lawson

Title: Managing Director