

DIRECTOR'S IRREVOCABLE UNDERTAKING

To: Biogen Switzerland Holdings GmbH (the "**Offeror**")
Neuhofstrasse 30,
6340 Baar,
Switzerland

From: Paula Cobb
c/o Nightstar Therapeutics plc
9-10 Midford Place
London, England, W1T 5BJ, United Kingdom

March 4, 2019

Dear Sirs

Proposed acquisition of Nightstar Therapeutics plc ("Nightstar") – Deed of Irrevocable Undertaking

Defined terms in this undertaking have the meaning given to them in Schedule 1 (*Definitions*).

1. In consideration of Offeror agreeing to implement the Acquisition on the terms and conditions referred to in paragraph 3, I the undersigned hereby, subject to paragraph 7, irrevocably and unconditionally represent, warrant and undertake as follows:
 - (a) either my spouse, civil partner, de facto partner or similarly-related person (a "**Spouse**") is, or I am, the beneficial holder of the number of ordinary shares of £0.01 each in the capital of Nightstar (collectively, the "**Nightstar Shares**") and the number of American depositary receipts, each representing an interest in one ordinary share of £0.01 in the capital of Nightstar (collectively, the "**Nightstar ADRs**" and, together with the Nightstar Shares, the "**Nightstar Securities**") in each case reported on the last Initial Statement of Beneficial Ownership on Form 3 and Statement of Changes in Beneficial Ownership on Form 4 filed by me or on my behalf with the U.S. Securities and Exchange Commission prior to the date hereof (together, the "**Section 16 Filings**") and either my Spouse has, or I have, full power and authority to vote and sell the Nightstar Securities as beneficial owner with full title guarantee, free from all Encumbrances, together with all rights attaching to or enjoyed by them, including but not limited to any voting rights the right to all dividends and other distributions (if any) announced, declared, made or paid on or after the date of this undertaking, subject to the terms of the Acquisition;
 - (b) the information set out in the Section 16 Filings is complete and accurate and, other than as set out in the Section 16 Filings, my Spouse and I do not have any Interest or short position in any securities or shares of Nightstar or any rights to subscribe for, purchase or otherwise acquire any securities or shares of Nightstar;
 - (c) I shall not, and shall procure that my Spouse does not, prior to this undertaking lapsing in accordance with paragraph 7, acquire any further shares, or securities convertible into shares, in Nightstar or any Interests in such shares or securities;

- (d) I have not, and my Spouse has not, accepted any offer to dispose of all or any of the Nightstar Securities and I shall not, and shall procure that my Spouse does not, save pursuant to the Acquisition, prior to this undertaking lapsing in accordance with paragraph 7, sell, transfer, loan, charge, grant any option or Encumbrance over or otherwise dispose of all or any of the Nightstar Securities or any Interest therein;
- (e) I have not, and my Spouse has not, accepted any offer to dispose of all or any of the Nightstar Securities and I shall not, and shall procure that my Spouse does not, accept any offer in respect of all or any of the Nightstar Securities that is made in competition with the Acquisition or vote in favour of any resolution in respect of any other offer (including any offer to be implemented by way of a scheme of arrangement) which is proposed in competition with the Acquisition;
- (f) I shall not (other than pursuant to the Acquisition or in accordance with the terms of this undertaking) enter into any agreement or arrangement or permit any agreement or arrangement to be entered into or incur any obligation or permit any obligation to arise:
 - (i) in relation to, or operating by reference to, the Nightstar Securities;
 - (ii) to do any of the acts referred to in paragraphs 1(c), 1(d) or 1(e) (inclusive); or
 - (iii) which would or would reasonably be expected to restrict or impede my voting in favour of the Scheme or my acceptance of the Offer in respect of the Nightstar Securities or otherwise preclude me from complying with my obligations under this paragraph 1,

and references to any acceptance of any offer or any agreement, arrangement or obligation shall include any such acceptance of an offer or agreement, arrangement or obligation whether or not subject to any conditions or which is to take effect upon or following the closing (or, if applicable, becoming effective) or lapsing of the Acquisition or upon or following this undertaking ceasing to be binding or upon or following any other event;

- (g) I have full power and authority and the right (and will at all times continue to have all relevant power and authority and the right) to enter into this undertaking and, to perform my obligations under it in accordance with its terms;
- (h) unless the Offeror elects to implement the Acquisition by way of an Offer:
 - (i) I will (or to the extent that I am not the registered holder of the relevant shares will procure that the registered holder of such shares will) in person or by proxy exercise all voting rights attaching to the Nightstar Securities to vote in favour of all Relevant Resolutions (as defined below) proposed at any general or class meeting (collectively, the "**Shareholders' Meetings**") and at any Court convened meeting (collectively, the "**Court Meetings**") of Nightstar to be convened and held in connection with the Scheme, or at any adjournment of any such meeting;
 - (ii) I will (or to the extent that I am not the registered holder of the relevant shares will procure that the registered holder of such shares will) after the posting of the circular to Nightstar shareholders in respect of the Scheme (the "**Scheme Document**") (and without prejudice to my right to attend and vote in person at any Shareholders' Meeting and Court Meeting), return the signed forms of proxy

enclosed with the Scheme Document (completed and signed and voting in favour of the Relevant Resolutions in respect of all of the Nightstar Securities) in accordance with the instructions printed on those forms of proxy, as soon as possible and in any event within seven days after the posting of the Scheme Document (and, unless instructed to do so by the Offeror, shall not thereafter revoke any such forms of proxy, either in writing or by voting in person at the Court Meeting or the Shareholders' Meeting or otherwise). Furthermore, I shall not, and shall procure that my Spouse does not, without the consent of the Offeror, requisition, or join in requisitioning, any general or class meeting of Nightstar for the purposes of voting on any resolution other than contemplated by this undertaking.

- (i) if the Offeror elects to implement the Acquisition by way of an Offer:
 - (i) I will accept (or to the extent that I am not the registered holder of the Nightstar Securities procure the acceptance of) the Offer in respect of all the Nightstar Securities not later than 5.00 p.m. on the seventh day after the date of the Offer Document;
 - (ii) notwithstanding that the terms of an Offer will confer a right of withdrawal on accepting shareholders, I will not, and, to the extent that I am not the registered holder of the Nightstar Securities, will procure that such registered holder will not, withdraw acceptances in respect of the Nightstar Securities;
 - (iii) I will transfer (or procure the transfer by my Spouse of) the Nightstar Securities pursuant to the Offer with full title guarantee, free from all Encumbrances or restrictions of any nature and together with all rights now or hereafter attaching thereto including voting rights and all rights to all dividends and/or other distributions hereafter declared, made or paid except as otherwise referred to in the terms of the Offer; and
 - (iv) I shall promptly forward or procure the forwarding of, in respect of any Nightstar Securities held in certificated form, the relevant certificate(s) to the Offeror or its nominated representative (or a form of indemnity acceptable to the directors of Nightstar in respect of any lost certificate(s)) at the time of acceptance and, in respect of any Nightstar Securities held in uncertificated form, shall promptly take any action which may be required by the Offeror or its nominated representative;
- (j) subject to paragraph 2, until such time as the Scheme is approved by the shareholders of Nightstar and the Court or the Offer is declared unconditional in all respects I shall promptly:
 - (i) exercise or procure the exercise of the votes attaching to the Nightstar Securities on a Relevant Resolution only in accordance with the directions of the Offeror; and
 - (ii) exercise or procure the exercise of the rights attaching to the Nightstar Securities only in accordance with the directions of the Offeror in order to requisition or join in requisitioning any general meeting of Nightstar for the purposes of considering a Relevant Resolution;

- (k) if so requested by the Offeror, upon the Scheme being approved by the members of Nightstar and the Court, or the Offer becoming or being declared unconditional in all respects, I will resign my office as a director (but not as an employee) of Nightstar and any subsidiary or subsidiary undertaking of Nightstar and enter into, sign and deliver to the Offeror and Nightstar an undertaking of resignation in respect of my position as director in the terms annexed;
- (l) in so far as I am not the registered holder of any Nightstar Securities, I will procure the delivery by the registered holder of such Nightstar Securities of a duly executed undertaking to vote in favour of the Scheme and/or to accept the Offer in respect of such Nightstar Securities substantially in the form of the undertakings herein within seven days of the date of this undertaking; and
- (m) this paragraph 1 (if and to the extent applicable) shall not restrict me from
 - (i) exercising any options under any of Nightstar's share option schemes, or
 - (ii) selling such number of Nightstar Securities as may be required to cover my liability for income tax and/or employee social security contributions in respect of the exercise of any such options or vesting of awards.

Documentation

2. I irrevocably and unconditionally consent to (and shall procure that my Spouse irrevocably and unconditionally consents to):
 - (a) the issue of a press announcement in relation to the Acquisition (by the way of the Scheme) (the "**Scheme Press Announcement**") incorporating references (if any) to my Spouse and me substantially in the form and context in which they appear therein;
 - (b) the issue of a press announcement in relation to an Offer (the "**Offer Press Announcement**") incorporating references (if any) to my Spouse and me substantially in the form and context in which they appear in the Scheme Press Announcement, as the Offeror may deem necessary or appropriate;
 - (c) the inclusion of references to my Spouse and me, and particulars of this undertaking and our legal and beneficial holdings of relevant securities of Nightstar in the Press Announcement and any Scheme Document or Offer Document, and any other announcement made, or document issued, by or on behalf of the Offeror or Nightstar in connection with the Acquisition; and
 - (d) this undertaking being published on a website.
3. The terms and conditions of the Acquisition will be as set out in the Scheme Press Announcement or on such other terms as may be determined by the Offeror, subject to such variation as may be required to comply with the requirements of any Relevant Authority.
4. All references in this undertaking to the Acquisition, the Scheme or the Offer (as the case may be) shall:
 - (a) mean any scheme of arrangement or offer that may be made by or on behalf of the Offeror to acquire all of the issued and to be issued share capital of Nightstar (other than that already owned by the Offeror or any entity in the same group as the Offeror) on the terms of the Scheme Press Announcement or on such other terms as may be agreed by the Offeror and Nightstar, subject to such variation as may be required to comply with the requirements of any Relevant Authority; and
 - (b) include any new, increased or revised scheme of arrangement or offer for the acquisition by the Offeror of all of the issued and to be issued share capital of

Nightstar (other than that already owned by the Offeror or any entity in the same group as the Offeror), provided that any such scheme of arrangement or offer in all material respects is, in the good faith determination of the Offeror and Centerview Partners LLC (as financial adviser to Nightstar), no less favorable to holders of ordinary shares (or options over shares in Nightstar under Nightstar's existing employee share option schemes) in Nightstar than the terms set out in the Scheme Press Announcement.

5. All references in this undertaking to Nightstar Securities shall include any shares or depositary receipts in Nightstar (as the case may be) issued, allotted or transferred to or granted to my Spouse or me, as the case may be, ("**Further Nightstar Securities**") prior to the Scheme Record Time or while the Offer remains open for acceptance.
6. In this undertaking, a "**Relevant Resolution**" means any resolution (whether or not amended) which is proposed at a Shareholders' Meeting or at any adjournment thereof or at any other class or general meeting of Nightstar, the passing or rejection of which is necessary for or would assist the implementation of the Scheme or the Offer might otherwise impact the success of the Scheme or the Offer, or which might reasonably be expected to impede or frustrate the Scheme or the Offer in any way, including, but not limited to, any resolution relating to a proposal by a person other than the Offeror to acquire (or have issued to it) any shares in the capital of Nightstar. Resolutions to adjourn a Court Meeting or a Shareholders' Meeting and a resolution to amend a Relevant Resolution, shall also be Relevant Resolutions.

Termination

7. My undertakings, warranties, consents, waivers, agreements and obligations in this undertaking are conditional upon the issue of the Press Announcement and (save as expressly provided for herein) will lapse and cease to have effect to the extent not already undertaken and without prejudice to any liability for antecedent breach if:
 - (a) the Press Announcement is not released by noon (London time) on 4 March 2019 or such later time or date as the Offeror and Nightstar may agree in writing; or
 - (b) the Scheme Document or Offer Document, as the case may be, is not posted within 15 Business Days following the date Nightstar has cleared comments received from the SEC, if any, on such document (or such later date as the Offeror and Nightstar agree in writing); or
 - (c) if the Scheme or Offer (as applicable) does not become effective, lapses or is withdrawn without becoming or being declared unconditional in accordance with its terms; or
 - (d) the Offeror announces, with the consent of any Relevant Authority (if required) and before the Scheme Document or Offer Document is posted, that it does not intend to proceed with the Acquisition; or
 - (e) the Scheme or Offer lapses or is withdrawn or otherwise becomes incapable of becoming effective or has not become effective on or before 4 September 2019 (or such later date as the Offeror and Nightstar agree in writing and that the Court, if required, approves).
8. The obligation to implement the Acquisition (referred to in paragraph 1 of this undertaking) is conditional upon the Offeror determining, in its sole discretion, to issue the Press Announcement with respect to the Acquisition which is publicly recommended by the board of directors of Nightstar.
9. I hereby acknowledge that I have not entered into this undertaking relying on any statement or representation, whether or not made by the Offeror or its advisers (or any

of their respective directors, officers, employees or agents) and I acknowledge that nothing in this undertaking obliges the Offeror to despatch the Press Announcement or the Scheme Document or the Offer Document.

Power of Attorney

10. We irrevocably, unconditionally and by way of security for our obligations hereunder appoint each of the Offeror and any director or officer of the Offeror to be our attorney to execute on our behalf proxy forms for any Court Meeting or Shareholders' Meeting or forms of acceptance to be issued with the Offer Documents in respect of the Nightstar Securities and to sign, execute, and deliver any documents and do all acts and things as may be necessary for or incidental to the acceptance of the Scheme or the Offer (as applicable) and/or performance of our obligations under this undertaking.

Independent Advice

11. I recognise that Ropes & Gray LLP and Goldman Sachs & Co (together, the "Advisers") are acting on behalf of the Offeror and, as such I am not a client of the Advisers. I have taken my own independent financial and legal advice in agreeing to execute this undertaking.
12. Neither the Advisers nor the Offeror has any responsibility to me to ensure that this undertaking is suitable for execution by me or otherwise. I confirm that I have been given an adequate opportunity to consider whether or not to give this undertaking and to obtain independent advice.

Binding Effect

13. This undertaking shall bind my estate and personal representatives except in relation to those obligations that relate to my position as a director of Nightstar.

Third Party Rights

14. A person who is not a party to this undertaking has no right under the Contracts (Rights of Third Parties) Act 1999 to enforce any term of this undertaking.

Governing Law and Jurisdiction

15. This undertaking and any claim, dispute or difference (including non-contractual claims, disputes or differences) arising out of or in connection with it or its subject matter shall be governed by, and construed in accordance with, English law.
16. I irrevocably agree to submit to the exclusive jurisdiction of the courts of England to settle any claim, legal action, proceeding, dispute or matter of difference (including non-contractual claims, disputes or differences) which may arise out of or in connection with this undertaking or its subject matter (including a dispute regarding the existence, validity, formation, effect, interpretation, performance or termination of this undertaking) and that accordingly any proceedings be brought in such courts.

Miscellaneous

17. This undertaking shall not obligate the Offeror to proceed with the Acquisition.
18. We acknowledge that, except to the extent otherwise specified, our obligations, undertakings, representations and warranties set out in this undertaking are unconditional and irrevocable; time shall be of the essence in connection with any deadline or time for performance referred to in this undertaking.
19. We acknowledge that damages would not be an adequate remedy for breach of the obligations contained in this undertaking and we further undertake that we will not assert otherwise in any proceedings relating hereto. We acknowledge that the Offeror shall be entitled to seek the remedies of specific performance, injunctive relief or

other equitable relief and no proof of special damages shall be necessary for the enforcement by the Offeror of its rights hereunder.

20. This undertaking is given in my capacity as a shareholder of Nightstar and without prejudice to any statutory or fiduciary obligations I may have in my capacity as a director of Nightstar.

EXECUTED and DELIVERED as a DEED by

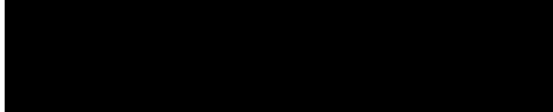
Signature:



Name:

Paula Cobb

in the presence of:

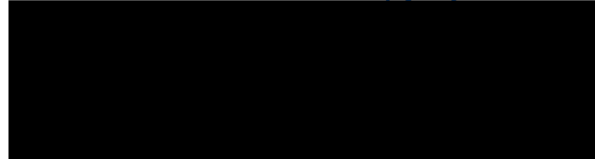


Signature of witness:

Name:

Christine Edmonson

Address:



Occupation:

DEFINITIONS

In this undertaking:

Acquisition	means the proposed recommended acquisition by, or on behalf of, the Offeror of the whole of the issued and to be issued share capital of Nightstar, by way of the Scheme or, if the Offeror so elects and subject to the consent of Nightstar, an Offer
"Business Day"	a day (other than Saturday, Sunday or a public holiday) on which banks in the City of London and New York City are open for business generally;
Court	means the High Court of Justice of England and Wales
Court Meeting	has the meaning set out in paragraph 1(h)(i)
Encumbrance	means any charge, mortgage, lien, hypothecation, judgment, encumbrance, easement, security, title retention, preferential right, right of pre-emption, trust arrangement, or any other security interest or any other agreement or arrangement having a commercial effect analogous to the conferring of security or similar right in favour of any person
Interest	<p>a person will be treated as having an interest in securities if:</p> <ul style="list-style-type: none">(a) he owns them;(b) he has the right (whether conditional or absolute) to exercise or direct the exercise of the voting rights attaching to them or has general control of them;(c) by virtue of any agreement to purchase, option or derivative he:<ul style="list-style-type: none">(i) has the right or option to acquire them or call for their delivery; or(ii) is under an obligation to take delivery of them,whether the right, option or obligation is conditional or absolute and whether it is in the money or otherwise; or(d) he is party to any derivative:<ul style="list-style-type: none">(i) whose value is determined by reference to their price; and(ii) which results, or may result, in his having a long position in them.
Nightstar ADRs	has the meaning set out in paragraph 1(a)
Nightstar Securities	has the meaning set out in paragraph 1(a)
Nightstar Shares	has the meaning set out in paragraph 1(a)
Offer	means the implementation of the Acquisition by means of a takeover offer as defined in Chapter 3 of Part 28 of the Companies Act 2006,

and subject to the consent of Nightstar under the terms of the implementation agreement between Nightstar, the Offeror and a wholly-owned subsidiary of the Offeror in connection with the Acquisition

Offer Document	means the formal document containing, inter alia, the Offer
Offer Press Announcement	has the meaning set out in paragraph 2(b)
Press Announcement	means the Scheme Press Announcement and/or the Offer Press Announcement
Relevant Authority	means the Nasdaq Global Select Market or any other relevant exchange or regulatory authority
Relevant Resolution	has the meaning set out in paragraph 6
Scheme	means the implementation of the Acquisition by means of a scheme of arrangement of Nightstar under Part 26 of the Companies Act 2006
Scheme Document	means the circular to be issued by Nightstar to its shareholders containing, inter alia, the Scheme
Scheme Press Announcement	has the meaning set out in paragraph 2(a)
Shareholders' Meetings	has the meaning set out in paragraph 1(h)(i)

ANNEX

Director's Resignation

To: The Directors
Nightstar Therapeutics plc (the "Company")
c/o Nightstar Therapeutics plc
9-10 Midford Place
London, England, W1T 5BJ, United Kingdom

_____2019

Recommended Acquisition by Biogen Switzerland Holdings GmbH (the "Offeror") for the entire issued and to be issued share capital of the Company

I, Paula Cobb, hereby resign my office as director of the Company with effect from the date hereof and, without prejudice to (i) my contractual rights to any outstanding unpaid fees or disbursements due to me from the Company in relation to my appointment as a director of the Company; (ii) the Company's indemnification of me pursuant to the articles of association thereof; and (iii) any protection afforded to me under any directors and officers insurance policy operated by the Company, I acknowledge and confirm that I have no claims against the Company, its directors, officers or employees whether under any contract of employment with the Company or under any statutory provision or otherwise for damages for wrongful dismissal or redundancy or compensation for loss of office or unfair dismissal, discrimination or breach of contract or otherwise in relation to my resignation as director. To the extent that any such claim or obligation exists or may exist, I irrevocably and unconditionally waive such claim or obligation and release the Company and any such other persons referred to above (and in that capacity) from any liability whatsoever in respect of any such claim or obligation.

In witness whereof this document has been duly executed and delivered as a deed the day and year first above written.

SIGNED by)
)
in the presence of:)

Witness: Signature
Name
Address