

OMB APPROVAL	
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INITIAL STATEMENT OF BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

1. Name and Address of Reporting Person* <u>Syncona Portfolio Ltd</u> <hr/> (Last) (First) (Middle) ARNOLD HOUSE, ST JULIAN'S AVENUE <hr/> (Street) ST PETER PORT Y7 GY1 3RD <hr/> (City) (State) (Zip)	2. Date of Event Requiring Statement (Month/Day/Year) 01/01/2019	3. Issuer Name and Ticker or Trading Symbol <u>Nightstar Therapeutics plc [NITE]</u>	
		4. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director <input type="checkbox"/> 10% Owner <input checked="" type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) <input type="checkbox"/>	5. If Amendment, Date of Original Filed (Month/Day/Year) 01/02/2019 6. Individual or Joint/Group Filing (Check Applicable Line) <input type="checkbox"/> Form filed by One Reporting Person <input checked="" type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security (Instr. 4)	2. Amount of Securities Beneficially Owned (Instr. 4)	3. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	4. Nature of Indirect Beneficial Ownership (Instr. 5)
Ordinary Shares	13,203,922 ⁽¹⁾	D ⁽²⁾	

Table II - Derivative Securities Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

1. Title of Derivative Security (Instr. 4)	2. Date Exercisable and Expiration Date (Month/Day/Year)		3. Title and Amount of Securities Underlying Derivative Security (Instr. 4)	4. Conversion or Exercise Price of Derivative Security	5. Ownership Form: Direct (D) or Indirect (I) (Instr. 5)	6. Nature of Indirect Beneficial Ownership (Instr. 5)
	Date Exercisable	Expiration Date				

1. Name and Address of Reporting Person*
Syncona Portfolio Ltd

 (Last) (First) (Middle)
 ARNOLD HOUSE, ST JULIAN'S AVENUE

 (Street)
 ST PETER PORT Y7 GY1 3RD

 (City) (State) (Zip)

1. Name and Address of Reporting Person*
Syncona Holdings Ltd

 (Last) (First) (Middle)
 ARNOLD HOUSE, ST JULIAN'S AVENUE

 (Street)
 ST PETER PORT Y7 GY1 3RD

 (City) (State) (Zip)

1. Name and Address of Reporting Person *		
Syncona Ltd		
(Last)	(First)	(Middle)
ARNOLD HOUSE, ST JULIAN'S AVENUE		
(Street)		
ST PETER PORT	Y7	GY1 3RD
(City)		
(State)	(Zip)	
1. Name and Address of Reporting Person *		
Syncona Investment Management Ltd		
(Last)	(First)	(Middle)
2ND FLOOR, 8 BLOOMSBURY STREET		
(Street)		
LONDON	X0	WC1B 3SR
(City)		
(State)	(Zip)	

Explanation of Responses:

1. Consists of 11,203,922 ordinary shares and 2,000,000 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.01 GBP per share, of the Issuer.

2. The shares are owned directly by Syncona Portfolio Limited ("Syncona Portfolio") and indirectly by Syncona Holdings Limited ("Syncona Holdings") and Syncona Limited ("Syncona Limited"). Syncona Portfolio is a wholly owned subsidiary of Syncona Holdings, and Syncona Holdings is a wholly controlled subsidiary of Syncona Limited ("Syncona Limited"), a publicly-listed company. Investment and voting decisions with respect to these shares are made by Syncona Portfolio, acting upon the recommendation of an investment committee of Syncona Investment Management Limited, also a subsidiary of Syncona Holdings. Each of these entities disclaims beneficial ownership except to the extent of its pecuniary interest therein, if any.

Remarks:

This Form 3/A amends the Form 3 filed on January 2, 2019 for the sole purpose of including Syncona Investment Management Limited as an additional reporting person.

Syncona Portfolio Limited,	
By: Nick Moss, Director, /s/	02/13/2019
Nick Moss	
Syncona Holdings Limited,	
By: Nick Moss, Director, /s/	02/13/2019
Nick Moss	
Syncona Investment	
Management Limited, By:	02/13/2019
Martin Murphy, Director, /s/	
Martin Murphy	
Syncona Limited, By: Nick	02/13/2019
Moss, Director, /s/ Nick Moss	
** Signature of Reporting Person	Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

* If the form is filed by more than one reporting person, see Instruction 5 (b)(v).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.