UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Amendment No. 1)*

Autolus Therapeutics plc

(Name of Issuer)

American Depository Shares and Ordinary Shares, nominal value £0.000042 per share (Title of Class of Securities)

05280R 100** (CUSIP Number)

December 31, 2018 (Date of Event which Requires Filing of this Statement)

Check the appropriate box to designate the rule pursuant to which this Schedule is filed:

☐ Rule 13d-1(b)

☐ Rule 13d-1(c)

☒ Rule 13d-1(d)

* 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*).

** There is no CUSIP number assigned to the ordinary shares. CUSIP number 05280R 100 has been assigned to the American Depositary Shares of the Issuer, which are quoted on the Nasdaq Global Select Market under the symbol "AUTL." Each American Depositary Share represents the right to receive one ordinary share.

CUSIP No. 05280R 100 Page 2 of 8

1	1 Names of Reporting Person:					
	Syncona Portfolio Limited					
2	Check the appropriate box if a member of a Group (see instructions)					
	(a) □ (b) ⊠					
3	SEC Use Only					
4	Citizenship or Place of Organization					
	Guernsey					
	5 Sole Voting Power					
Number of 0						
9	Shares 6 Shared Voting Power					
	neficially wned by 13,592,098 (1)					
	Each 7 Sole Dispositive Power					
	eporting Person 0					
	With: 8 Shared Dispositive Power					
	13,592,098 (1)					
9						
	40 700 000 (1)					
10	13,592,098 (1) Check box if the aggregate amount in row (9) excludes certain shares (See Instructions)					
10	Check box it the aggregate amount in row (5) excludes certain shares (see instructions)					
11	Percent of class represented by amount in row (9)					
	33.9% (2)					
12	Type of Reporting Person (See Instructions)					
	CO					

- (1) Consists of 12,180,333 ordinary shares and 1,411,765 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer. The ordinary shares and the ADS are collectively referred to as the "**Ordinary Shares**".
- (2) Based on 40,146,182 Ordinary Shares outstanding as of September 30, 2018 as reported in the Issuer's Annual Report on Form 20-F, filed with the SEC on November 23, 2018.

CUSIP No. 05280R 100 Page 3 of 8

1	1 Names of Reporting Person:					
	Syncona Holdings Limited					
2	11 1 / /					
	(a) □ (b) ⊠					
3	SEC Use Only					
	one one only					
4	Citizens	ship or Place of Organization				
	Guerns					
		5 Sole Voting Power				
Number of Shares Beneficially		6 Shared Voting Power				
Owned by		13,592,098 (1)				
	Each	7 Sole Dispositive Power				
Reporting						
Person With:						
***		8 Shared Dispositive Power				
		13,592,098 (1)				
9	Aggrega	ate Amount Beneficially Owned by Each Reporting Person				
	00 0					
	13,592,098 (1)					
10	Check b	box if the aggregate amount in row (9) excludes certain shares (See Instructions)				
11	Dorgont	t of class represented by amount in row (9)				
11	rercent	t of class represented by anifoldit in row (3)				
	33.9% (2)					
12		f Reporting Person (See Instructions)				
	CO					

- (1) Consists of 12,180,333 ordinary shares and 1,411,765 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer. The ordinary shares and the ADS are collectively referred to as the "**Ordinary Shares**".
- (2) Based on 40,146,182 Ordinary Shares outstanding as of September 30, 2018 as reported in the Issuer's Annual Report on Form 20-F, filed with the SEC on November 23, 2018.

CUSIP No. 05280R 100 Page 4 of 8

1	1 Names of Reporting Person:						
	Syncona Investment Management Limited						
2	2 Check the appropriate box if a member of a Group (see instructions)						
	(a) □ (b) ⊠						
3 SEC Use Only			nly				
4 Citizenship or Place of Organization			or Place of Organization				
	United Kingdom						
			Sole Voting Power				
			0				
Number of Shares Beneficially Owned by		6	Shared Voting Power				
			13,592,098 (1)				
	Each	7	Sole Dispositive Power				
1	eporting Person		0				
	With:	8	Shared Dispositive Power				
			13,592,098 (1)				
9							
	13,592,098 (1)						
10							
11	Percent of class represented by amount in row (9)						
	33.9% (2)						
12							
	CO						

- (1) Consists of 12,180,333 ordinary shares and 1,411,765 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer. The ordinary shares and the ADS are collectively referred to as the "**Ordinary Shares**".
- (2) Based on 40,146,182 Ordinary Shares outstanding as of September 30, 2018 as reported in the Issuer's Annual Report on Form 20-F, filed with the SEC on November 23, 2018.

CUSIP No. 05280R 100 Page 5 of 8

1	Names of Reporting Person:							
2	Syncona Limited							
2	2 Check the appropriate box if a member of a Group (see instructions) (a) □ (b) ⊠							
3	SEC Use	e O	nly					
	C'		. Discost Ourselands					
4	Citizens	nıp	or Place of Organization					
	Guerns	ev						
		5	Sole Voting Power					
Number of Shares Beneficially Owned by			0					
		6	Shared Voting Power					
			13,592,098 (1)					
	Each	7	Sole Dispositive Power					
Reporting Person								
	With:	•						
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		8	Shared Dispositive Power					
			13,592,098 (1)					
9	9 Aggregate Amount Beneficially Owned by Each Reporting Person							
	13,592,098 (1)							
10								
	(-)(-) (-)							
11	Percent of class represented by amount in row (9)							
	22.00/ (2)							
12	33.9% (2) Type of Reporting Person (See Instructions)							
1-	- Type of responding 2 cross (see Mod decions)							
	CO							

- (1) Consists of 12,180,333 ordinary shares and 1,411,765 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer. The ordinary shares and the ADS are collectively referred to as the "**Ordinary Shares**".
- (2) Based on 40,146,182 Ordinary Shares outstanding as of September 30, 2018 as reported in the Issuer's Annual Report on Form 20-F, filed with the SEC on November 23, 2018.

CUSIP No. 05280R 100 Page 6 of 8

Item 1.

(a) Name of Issuer: Autolus Therapeutics plc

(b) Address of Issuer's principal executive offices: Forest House, 58 Wood Lane, London W12 7RZ, United Kingdom

Item 2.

(a) Name of reporting persons filing:

- (i) Syncona Portfolio Limited;
- (ii) Syncona Holdings Limited;
- (iii) Syncona Investment Management Limited; and
- (iv) Syncona Limited

(b) Address of principal business office or, if none, residence:

The address of the principal business office of Syncona Portfolio Limited, Syncona Holdings Limited and Syncona Limited is Arnold House, St Julian's Avenue, St Peter Port, Guernsey GY1 3RD, Channel Islands. The address of the principal business office of Syncona Investment Management Limited is 2nd Floor, 8 Bloomsbury Street, London WC1B 3SR, United Kingdom.

(c) Citizenship:

Syncona Portfolio Limited, Syncona Holdings Limited and Syncona Limited's citizenship is Guernsey. Syncona Investment Management Limited's citizenship is United Kingdom.

(d) Title and class of securities:

Ordinary Shares, nominal value 0.000042 GBP per share, and American Depository Shares ("ADS"). Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer.

(e) CUSIP No.:

There is no CUSIP number assigned to the ordinary shares. CUSIP number 05280R 100 has been assigned to the ADS, which are quoted on the Nasdaq Global Select Market under the symbol "AUTL."

Item 3. If this statement is filed pursuant to §§ 240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a:

Not applicable.

Item 4.

The following information with respect to the ownership of Ordinary Shares of the Issuer by the Reporting Persons filing this statement on Schedule 13G/A is provided as of December 31, 2018:

CUSIP No. 05280R 100 Page 7 of 8

	Ordinary Shares Held	Sole Power to Vote or Direct the	Shared Power to Vote or Direct the	Sole Power to Dispose or Direct the Disposition	Shared Power to Dispose or Direct the Disposition	Amount Beneficially	P
Reporting Persons	Directly (1)	Vote (1)	Vote (1)	(1)	(1)	Owned (1)	Percentage of Class (2)
Syncona Portfolio Limited	13,592,098	0	13,592,098	0	13,592,098	13,592,098	33.9%
Syncona Holdings Limited	0	0	13,592,098	0	13,592,098	13,592,098	33.9%
Syncona Investment Management Limited	0	0	13,592,098	0	13,592,098	13,592,098	33.9%
Syncona Limited	0	0	13,592,098	0	13,592,098	13,592,098	33.9%

- (1) Consists of 12,180,333 ordinary shares and 1,411,765 American Depository Share ("ADS") held directly by Syncona Portfolio Limited. Each ADS represents one ordinary share, nominal value 0.000042 GBP per share, of the Issuer. The ordinary shares and the ADS are collectively referred to as the "Ordinary Shares".
- (2) Based on 40,146,182 Ordinary Shares outstanding as of September 30, 2018 as reported in the Issuer's Annual Report on Form 20-F, filed with the SEC on November 23, 2018.

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

Item 5. Ownership of Five Percent or Less of a Class.

If this statement is being filed to report the fact that as of the date hereof the reporting person has ceased to be the beneficial owner of more than five percent of the class of securities, check the following \Box .

Item 6. Ownership of more than Five Percent on Behalf of Another Person.

Not applicable.

Item 7. Identification and classification of the subsidiary which acquired the security being reported on by the parent holding company or control person.

Not applicable.

Item 8. Identification and classification of members of the group.

Not applicable.

Item 9. Notice of Dissolution of Group.

Not applicable.

Item 10. Certifications.

Not applicable.

CUSIP No. 05280R 100

Page 8 of 8

SIGNATURE

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

Dated: February 14, 2019

SYNCONA PORTFOLIO LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director

SYNCONA HOLDINGS LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director

SYNCONA INVESTMENT MANAGEMENT LIMITED

By: /s/ Martin Murphy
Name: Martin Murphy
Title: Director

SYNCONA LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director

Exhibit(s):

Exhibit 99.1: <u>Joint Filing Statement</u>

AGREEMENT

In accordance with Rule 13d-1(k) under the Securities Exchange Act of 1934, as amended, the persons named below agree to the joint filing on behalf of each of them of a statement on Schedule 13G (including amendments thereto) with respect to the Ordinary Shares (including ADS, each of which represents one Ordinary Share) of Autolus Therapeutics plc and further agree that this Joint Filing Agreement be included as an Exhibit to such joint filings. It is understood and agreed that the joint filing of the Schedule 13G shall not be construed as an admission that the persons named herein constitute a group for purposes of Regulation 13D-G of the Securities Exchange Act of 1934, as amended.

Dated: February 14, 2019

SYNCONA PORTFOLIO LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director

SYNCONA HOLDINGS LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director

SYNCONA INVESTMENT MANAGEMENT LIMITED

By: /s/ Martin Murphy
Name: Martin Murphy
Title: Director

SYNCONA LIMITED

By: /s/ Nick Moss
Name: Nick Moss
Title: Director