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

SCHEDULE 13G

Under the Securities Exchange Act of 1934 (Original Filing)*

APREA THERAPEUTICS INC

(Name of Issuer)

COMMON STOCK

(Title of Class of Securities)

03836J102

(CUSIP Number)

DECEMBER 31, 2019

(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).

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).			
	<mark>New Emerg</mark> i	ing Medi	cal Opportunities Fund III, L.P., an exempted limited partnership	
2.	Check the A	ppropria	te Box if a Member of a Group (See Instructions)	
	(a)			
	(b)			
3.	SEC Use Only			
4.	Citizenship or Place of Organization : Cayman Islands			
		5.	Sole Voting Power 1,470,339	
Number of Shares Beneficially Owned by		6.	Shared Voting Power -0-	
Each Repo Person Wi	orting	7.	Sole Dispositive Power 1,470,339	
		8.	Shared Dispositive Power -0-	
9.	Aggregate A	mount B	Beneficially Owned by Each Reporting Person 1,470,339	
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).			
11.	Percent of Class Represented by Amount in Row (9) 7.0%			
12.	Type of Reporting Person (See Instructions) PN			

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).			
	<mark>Sectoral GP I</mark>	II, L.P., general partner of New Emerging Medical Opportunities Fund III, L.P		
2.	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 : Canada			
Number o	£	5. Sole Voting Power 1,470,339		
Shares Beneficial Owned by	lly	6. Shared Voting Power -0-		
Each Rep Person W	orting	7.Sole Dispositive Power1,470,339		
		8. Shared Dispositive Power -0-		
9.	Aggregate Ar	mount Beneficially Owned by Each Reporting Person 1,470,339		
10.	. Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).			
11.	Percent of Class Represented by Amount in Row (9) 7.0%			
12.		orting Person (See Instructions)		
	PN			

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).			
	<mark>New Emergir</mark>	<mark>ıg Medi</mark>	cal Opportunities Fund III, L.P.	
2.	Check the Ap	propriat	e Box if a Member of a Group (See Instructions)	
	(a)			
	(b)			
3.	SEC Use Only			
4.	Citizenship or Place of Organization : Cayman Islands			
Number of		5.	Sole Voting Power 1,470,339	
Number of Shares Beneficiall Owned by		6.	Shared Voting Power -0-	
Each Report Person Wit	-	7.	Sole Dispositive Power 1,470,339	
		8.	Shared Dispositive Power -0-	
9.	Aggregate A	nount B	eneficially Owned by Each Reporting Person 1,470,339	
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).			
11.	Percent of Class Represented by Amount in Row (9) 7.0%			
12.	Type of Reporting Person (See Instructions)		rson (See Instructions)	

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).				
	<mark>Sectoral GP I</mark>	III, L.P.			
2.	Check the Ap	opropriat	e Box if a Member of a Group (See Instructions)		
	(a)				
	(b)				
3.	SEC Use Only				
4.	Citizenship or Place of Organization : Canada				
		5.	Sole Voting Power 1,470,339		
Number of Shares Beneficiall Owned by	ly	6.	Shared Voting Power -0-		
Each Report Person Wit	orting	7.	Sole Dispositive Power 1,470,339		
		8.	Shared Dispositive Power -0-		
9.	Aggregate A	mount B	eneficially Owned by Each Reporting Person 1,470,339		
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).				
11.	Percent of Class Represented by Amount in Row (9) 7.0%				
12.	Type of Reporting Person (See Instructions) PN				

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).				
	Sectoral Asse	<mark>et Mana</mark> ş	gement Inc.		
2. Check the Appropriate Box if a Member of a Group (See Instructions)			e Box if a Member of a Group (See Instructions)		
	(a)				
	(b)				
3.	SEC Use Only				
4.	Citizenship or Place of Organization : Canada				
Number of	c.	5.	Sole Voting Power 1,470,339		
Number of Shares Beneficially Owned by		6.	Shared Voting Power -0-		
Each Repo Person Wi	orting	7.	Sole Dispositive Power 1,470,339		
		8.	Shared Dispositive Power -0-		
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,470,339				
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).				
11.	Percent of Class Represented by Amount in Row (9) 7.0%				
12.	Type of Repo	rting Pe	rson (See Instructions)		
	IA				

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).				
	Jérôme G. Pi	und			
2.	Check the A	opropria	te Box if a Member of a Group (See Instructions)		
	(a)				
	(b)				
3.	SEC Use Only				
4.	Citizenship or Place of Organization : Swiss				
Number of	c.	5.	Sole Voting Power 1,470,339		
Shares Beneficial Owned by	ly	6.	Shared Voting Power -0-		
Each Repo Person Wi	orting	7.	Sole Dispositive Power 1,470,339		
		8.	Shared Dispositive Power -0-		
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,470,339				
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).				
11.	Percent of Class Represented by Amount in Row (9) 7.0%				
12.	Type of Repo	orting Pe	rson (See Instructions)		
	IN				

1.	Names of Reporting Persons. I.R.S. Identification Nos. of above persons (entities only).					
	Michael L. Sj	öström				
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 : Swiss					
		5.	Sole Voting Power 1,470,339			
Number of Shares Beneficiall Owned by	у	6.	Shared Voting Power -0-			
Each Report Person Wit	rting	7.	Sole Dispositive Power 1,470,339			
		8.	Shared Dispositive Power -0-			
9.	Aggregate Amount Beneficially Owned by Each Reporting Person 1,470,339					
10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions).					
11.	Percent of Class Represented by Amount in Row (9) 7.0%					
12.	Type of Repo	rting Pei	rson (See Instructions)			
	IN					

- Item 1. (a) <u>Name of Issuer</u>: Aprea Therapeutics, Inc.
 - (b) <u>Address of Issuer's Principal Executive Offices</u>: 535 Boylston Street, Boston, MA 02116, United States
- Item 2. (a) <u>Name of Person(s) Filing</u>: New Emerging Medical Opportunities Fund III, L.P. Sectoral GP III, L.P. Sectoral Asset Management Inc. Jérôme G. Pfund Michael L. Sjöström
 - (b) <u>Address of Principal Business Office or, if none, Residence</u>: The principal business address of each of the Reporting Persons is: 1610-1010 Sherbrooke St. West, Montreal QC, H3A 2R7 Canada
 - (c) <u>Citizenship</u>: New Emerging Medical Opportunities Fund III, L.P is organized under the laws of the Cayman Islands Sectoral GP III, L.P. is organized under the laws of Canada Sectoral Asset Management Inc. is a Canadian corporation Jérôme G. Pfund is a Swiss citizen Michael L. Sjöström is a Swiss citizen
 - (d) <u>Title of Class of Securities</u>: Common Stock
 - (e) <u>CUSIP Number</u>: 03836J102

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:

- (a) \Box Broker or dealer registered under section 15 of the Act (15 U.S.C. 78o).
- (b) \square Bank as defined in section 3(a)(6) of the Act (15 U.S.C. 78c).
- (c) \Box Insurance company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c).
- (d) 🛛 Investment company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8).
- (e) \Box An investment adviser in accordance with §240.13d-1(b)(1)(ii)(E);
- (f) \Box An employee benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F);
- (g) \Box A parent holding company or control person in accordance with § 240.13d-1(b)(1)(ii)(G);

- (h) 🛛 A savings associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813);
- (i) A church plan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of 1940 (15 U.S.C. 80a-3);
- (j) \Box A non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J);
- (k) Group, in accordance with § 240.13d-1(b)(1)(ii)(K). If filing as a non-U.S. institution in accordance with § 240.13d-1(b)(1)(ii)(J), please specify the type of institution: ______

Item 4. <u>Ownership</u>.

New Emerging Medical Opportunities Fund III, L.P ("Nemo III") is record owner of 1,470,339 common shares of the Issuer ("Nemo III shares"). Sectoral Asset Management Inc. is the investment adviser of Nemo III, and by virtue of such status may be deemed to be the beneficial owner of the Nemo III shares (240.13d-3(a)). Sectoral Asset Management Inc, in its capacity as investment adviser to Nemo III, has the sole right to dispose of or vote the number of shares of common stock of the Issuer set forth in this filing, and is the owner of the general partner (Sectoral GP III L.P.) of Nemo III. Jérôme G. Pfund and Michael L. Sjöström, together, indirectly hold majority of shares of Sectoral Asset Management Inc.

- (a) <u>Amount beneficially owned</u>: New Emerging Medical Opportunities Fund III, L.P.: 1,470,339 shares Sectoral GP III, L.P.: 1,470,339 shares Sectoral Asset Management Inc.: 1,470,339 shares Jérôme G. Pfund: 1,470,339 shares Michael L. Sjöström: 1,470,339 shares
- (b) <u>Percent of class</u>: New Emerging Medical Opportunities Fund III, L.P.: 7.0% Sectoral GP III, L.P.: 7.0% Sectoral Asset Management Inc.: 7.0% Jérôme G. Pfund: 7.0% Michael L. Sjöström: 7.0%

CUSIP No. 503459604

(c) <u>Number of shares as to which the person has</u>:

(i)	Sole power to vote or to direct the vote:
	New Emerging Medical Opportunities Fund III, L.P.: 1,470,339 shares
	Sectoral GP III, L.P.: 1,470,339 shares
	Sectoral Asset Management Inc.: 1,470,339 shares
	Jérôme G. Pfund: 1,470,339 shares
	Michael L. Sjöström: 1,470,339 shares

- (ii) <u>Shared power to vote or to direct the vote</u>: Not applicable
- (iii) Sole power to dispose or to direct the disposition of:
 New Emerging Medical Opportunities Fund III, L.P.: 1,470,339 shares
 Sectoral GP III, L.P.: 1,470,339 shares
 Sectoral Asset Management Inc.: 1,470,339 shares
 Jérôme G. Pfund: 1,470,339 shares
 Michael L. Sjöström: 1,470,339 shares
- (iv) <u>Shared power to dispose or to direct the disposition of:</u> Not applicable.

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 □

- Item 6.Ownership of More than Five Percent on Behalf of Another Person.See Item 4.
- 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. <u>Notice of Dissolution of Group.</u> Not applicable.
- Item 10. <u>Certification</u>. Not applicable

SIGNATURE

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

Dated: February 11, 2020	SECTORAL ASSET MANAGEMENT INC.
	/s/Marc-Andre Marcotte By: Marc-Andre Marcotte Its: Chief Operating Officer
Dated: February 11, 2020	/s/Jérôme G. Pfund Jérôme G. Pfund
Dated: February 11, 2020	/s/Michael L. Sjöström Michael L. Sjöström

Exhibit A

AGREEMENT

Each of the undersigned, pursuant to Rule 13d-1(k)(l) under the Securities Exchange Act of 1934, as amended, hereby agrees that only one statement containing the information required by Schedule 13G needs be filed with respect to the ownership by each of the undersigned of the shares of common stock of Aprea Therapeutics, Inc. and that the Schedule 13G to which this Agreement is appended as <u>Exhibit A</u> is to be filed with the Securities and Exchange Commission on behalf of each of the undersigned on or about the date hereof.

EXECUTED as a sealed instrument this 11th day of February 2020.

SECTORAL ASSET MANAGEMENT INC.

/s/ Marc-Andre Marcotte By: Marc-Andre Marcotte Its: Chief Operating Officer /s/Jérôme G. Pfund

Jérôme G. Pfund

/s/Michael L. Sjöström Michael L. Sjöström