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

SCHEDULE 13D

(Rule 13d-102)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO RULE 13d-l(a) AND AMENDMENTS THERETO FILED PURSUANT TO RULE 13d-2(a)

(Amendment No.1)*

Aprea Therapeutics, Inc.

(Name of Issuer)

Common Stock, par value \$0.001 per share

(Title of Class of Securities)

03836J102

(CUSIP Number)

Rebecca Lucia 5AM Venture Management, LLC 501 2nd Street, Suite 350 San Francisco, CA 94107 (415) 993-8565

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

May 19, 2020

(Date of Event Which Requires Filing of this Statement)

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. o

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.

^{*} 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.

CUSII	USIP No. 03836J102			13D	Page 2 of 15
1.	Name of Reporti	ng Persor	ns		
	5AM Ventures I	V, L.P.			
2.	Check the Appro (a) (b)	priate Bo	ox if a Member of a Group (see instructions)		□ x(1)
3.	SEC USE ONLY				
4.	Source of Funds	(see instr	ructions)		
	WC				
5.	Check if Disclos	ire of Le	gal Proceedings Is Required Pursuant to Item 2(d) or 2(e))	0
6.	Citizenship or Pl	ace of Or	ganization		
	Delaware				
		7.	Sole Voting Power		
			0		
	Number of	8.	Shared Voting Power		
	Shares Beneficially		2,173,748 shares of common stock (2)		
	Owned by Each	9.	Sole Dispositive Power		
	Reporting Person With		0		
		10.	Shared Dispositive Power		
			2,173,748 shares of common stock (2)		
11.	Aggregate Amou	nt Benef	icially Owned by Each Reporting Person		
	2,173,748 shares	of comm	non stock (2)		
12.	Check if the Agg	regate Aı	mount in Row (11) Excludes Certain Shares (see instructi	ions)	0
13.	Percent of Class	Represen	ted by Amount in Row 11		
	10.3% (3)				
14.	Type of Reportin	g Person	(see instructions)		
	PN				
Co-Inv ("Diek Opport	estors IV"), 5AM Opp man"), Andrew J. Sch	portunitie wab ("Sc inities GF	M Partners IV, LLC ("5AM Partners IV"), 5AM Ventures is I, L.P. ("5AM Opportunities"), 5AM Opportunities I (Chwab") and Dr. Scott M. Rocklage ("Rocklage" and, wit P. Diekman and Schwab, collectively, the "Reporting Pers 13D.	GP), LLC ("5AM Opportuniti h 5AM Partners IV, 5AM IV,	es GP"), Dr. John D. Diekman 5AM Co-Investors IV, 5AM

(2) These shares are held by 5AM IV. Diekman, Schwab and Rocklage, as managing members of 5AM Partners IV, share voting and investment authority over the shares held by 5AM IV.
(3) Percentage based on 21,054,842 shares of Common Stock outstanding as of May 15, 2020 as disclosed in the Issuer's Form 10-Q filed with the

Securities and Exchange Commission on May 15, 2020.

1.	Name of Reporti	ng Person	as a second seco	
	5AM Co-Investo	ors IV, L.	P.	
2.	Check the Appro (a) (b)	priate Bo	x if a Member of a Group (see instructions)	o x(1)
3.	SEC USE ONLY	•		
4.	Source of Funds	(see instru	uctions)	
	WC			
5.	Check if Disclos	ure of Leg	gal Proceedings Is Required Pursuant to Item 2(d) or 2(e)	0
6.	Citizenship or Pl	ace of Org	ganization	
	Delaware			
		7.	Sole Voting Power	
			0	
	Number of	8.	Shared Voting Power	
	Shares Beneficially Owned by Each		90,572 shares of common stock (2)	
		9.	Sole Dispositive Power	
	Reporting Person With		0	
		10.	Shared Dispositive Power	
			90,572 shares of common stock (2)	
11.	Aggregate Amou	ınt Benefi	cially Owned by Each Reporting Person	
	90,572 shares of	common	stock (2)	
12.	Check if the Agg	regate An	nount in Row (11) Excludes Certain Shares (see instructions)	0
13.	Percent of Class	Represent	ted by Amount in Row 11	
	0.4% (3)			
14.	Type of Reportin	g Person	(see instructions)	
	PN			
(2) The investn	se shares are held by nent authority over the	5AM Co- shares he	Reporting Persons. The Reporting Persons expressly disclaim status as a "group" for purposes of this Investors IV. Diekman, Schwab and Rocklage, as managing members of 5AM Partners IV, share voticeld by 5AM Co-Investors IV.	ng and

CUSIP No. 03836J102

Page 3 of 15

13D

(3) Percentage based on 21,054,842 shares of Common Stock outstanding as of May 15, 2020 as disclosed in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on May 15, 2020.

COSIF	NO. 03836J102			13D	Page 4 01 15
1.	Name of Report	ing Persor	ıs		
	5AM Partners	IV, LLC			
2.	Check the Appro (a) (b)	opriate Bo	x if a Member of a Group (see instructions)		0 x(1)
3.	SEC USE ONLY	Y			
4.	Source of Funds	(see instr	uctions)		
	AF				
5.	Check if Disclos	sure of Le	gal Proceedings Is Required Pursuant to Item 2(d) or 2(e)		
6.	Citizenship or P	lace of Or	ganization		
	Delaware				
		7.	Sole Voting Power		
			0		
	Number of	8.	Shared Voting Power		
	Shares Beneficially		2,264,320 shares of common stock (2)		
	Owned by Each	9.	Sole Dispositive Power		
	Reporting Person With		0		
		10.	Shared Dispositive Power		
			2,264,320 shares of common stock (2)		
11.	Aggregate Amo	unt Benef	cially Owned by Each Reporting Person		
	2,264,320 shares	s of comm	on stock (2)		
12.	Check if the Ag	gregate A	nount in Row (11) Excludes Certain Shares (see instructions	5)	0
13.	Percent of Class	Represen	ted by Amount in Row 11		
	10.8% (3)				
14.	Type of Reporting	ng Person	(see instructions)		
	00				
(2) Incl membe (3) Pero	udes (i) 2,173,748 sh rs of 5AM Partners I	ares held V, share v 054,842 sl	Reporting Persons. The Reporting Persons expressly disclain by 5AM IV; and (ii) 90,572 shares held by 5AM Co-Investor or and investment authority over the shares held by 5AM hares of Common Stock outstanding as of May 15, 2020 as of May 15, 2020.	rs IV. Diekman, Schwab IV and 5AM Co-Investor	and Rocklage, as managing rs IV.

1.	Name of Reportin	ng Person	S							
	5AM Opportuni	ties I, L.	Р.							
2.	Check the Appropriate (a) (b)									
3.	SEC USE ONLY									
4.	Source of Funds ((see instr	actions)							
	WC									
5.	Check if Disclosu	ire of Leg	gal Proceedings Is Required Pursuant to Item 2(d) or 2(e)	0						
6.	Citizenship or Pla	ace of Org	ganization							
	Delaware									
		7.	Sole Voting Power							
			0							
	Number of Shares Beneficially Owned by Each Reporting Person With	8.	Shared Voting Power							
			333,333 shares of common stock (2)							
		9.	Sole Dispositive Power							
			0							
		10.	Shared Dispositive Power							
			333,333 shares of common stock (2)							
11.	Aggregate Amou	nt Benefi	cially Owned by Each Reporting Person							
	333,333 shares of	f commor	ı stock (2)							
12.	Check if the Agg	regate Ar	nount in Row (11) Excludes Certain Shares (see instructions)	0						
13.	Percent of Class l	Represen	ted by Amount in Row 11							
	1.6% (3)									
14.	Type of Reporting	g Person	(see instructions)							
	PN									
(2) The authori (3) Per	ese shares are held by 5 ty over the shares held	5AM Opp l by 5AM 154,842 sl	hares of Common Stock outstanding as of May 15, 2020 as disclosed in the Issuer's Form 10-Q filed with the							

13D

Page 5 of 15

CUSIP No. 03836J102

CUSI	P No. 03836J102			13D	Page 6 of 15		
1.	Name of Reportin	Name of Reporting Persons					
	5AM Opportuni	ties I (G	P), LLC				
2.	Check the Appro (a) (b)	priate Bo	x if a Member of a Group (see instructions)		0 x(1)		
3.	SEC USE ONLY				(-)		
4.	Source of Funds	(see instr	uctions)				
	AF						
5.	Check if Disclosu	ire of Le	gal Proceedings Is Required Pursuant to Item 2(d) or 2	2(e)	0		
6.	Citizenship or Pla	ace of Or	ganization				
	Delaware						
		7.	Sole Voting Power				
			0				
	Number of	8.	Shared Voting Power				
	Shares Beneficially		333,333 shares of common stock (2)				
	Owned by Each	9.	Sole Dispositive Power				
	Reporting Person With		0				
		10.	Shared Dispositive Power				
			333,333 shares of common stock (2)				
11.	Aggregate Amou	nt Benefi	cially Owned by Each Reporting Person				
	333,333 shares of	commo	n stock (2)				
12.	Check if the Agg	regate Aı	nount in Row (11) Excludes Certain Shares (see instr	uctions)			
13.	Percent of Class	Represen	ted by Amount in Row 11				
	1.6% (3)						
14.	Type of Reportin	g Person	(see instructions)				
	00						
(2) Inc investr (3) Per	ludes 333,333 shares hent authority over the	eld by 5. shares h 54,842 sl	Reporting Persons. The Reporting Persons expressly AM Opportunities. Schwab and Kush Parmar, as maneld by 5AM Opportunities. hares of Common Stock outstanding as of May 15, 20 on May 15, 2020.	naging members of 5AM Opport	runities GP, share voting and		

CUSII	P No. 03836J102			13D	Page 7 of 15
	Name of Reporti	ng Persoi	ns		
1.	Dr. John D. Diek	man			
2.	Check the Appro	priate Bo	ox if a Member of a Group (see instructions)		
	(a) (b)				o x(1)
3.	SEC USE ONLY	,			
4.	Source of Funds	(see instr	ructions)		
	AF				
5.	Check if Disclos	ure of Le	gal Proceedings Is Required Pursuant to Item 2(d) or 2(e)		0
6.	Citizenship or Pl	ace of Or	ganization		
	United States				
		7.	Sole Voting Power		
			0		
	Number of	8.	Shared Voting Power		
	Shares Beneficially		2,264,320 shares of common stock (2)		
	Owned by Each	9.	Sole Dispositive Power		
	Reporting Person With		0		
		10.	Shared Dispositive Power		
			2,264,320 shares of common stock (2)		
11.	Aggregate Amou	ınt Benef	icially Owned by Each Reporting Person		
	2,264,320 shares	of comm	non stock (2)		
12.	Check if the Agg	regate A	mount in Row (11) Excludes Certain Shares (see instructions)		0
13.	Percent of Class	Represen	nted by Amount in Row 11		
	10.8% (3)				
14.	Type of Reportin	g Person	(see instructions)		
	IN				
(2) Inc	ludes (i) 2,173,748 sha	ares held	Reporting Persons. The Reporting Persons expressly disclaim s by 5AM IV; and (ii) 90,572 shares held by 5AM Co-Investors I roting and investment authority over the shares held by 5AM IV	V. Diekman, Schwab a	and Rocklage, as managing

members of SAM Partners IV, share voting and investment authority over the shares held by SAM IV and SAM Co-Investors IV.

(3) Percentage based on 21,054,842 shares of Common Stock outstanding as of May 15, 2020 as disclosed in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on May 15, 2020.

CUSI	P No. 03836J102			13D	Page 8 of 15
1.	Name of Reporti	ng Persor	S		
	Andrew J. Schwa	ıb			
2.	Check the Appro (a) (b)	priate Bo	x if a Member of a Group (see instructions)		0 x(1)
3.	SEC USE ONLY	•			, ,
4.	Source of Funds	(see instr	actions)		
	AF				
5.	Check if Disclos	ure of Le	gal Proceedings Is Required Pursuant to Item 2((d) or 2(e)	0
6.	Citizenship or Pla	ace of Or	ganization		
	United States				
		7.	Sole Voting Power		
			0		
	Number of Shares Beneficially Owned by Each Reporting Person With	8.	Shared Voting Power		
			2,597,653 shares of common stock (2)		
		9.	Sole Dispositive Power		
			0		
		10.	Shared Dispositive Power		
			2,597,653 shares of common stock (2)		
11.	Aggregate Amou	nt Benefi	cially Owned by Each Reporting Person		
	2,597,653 shares	of comm	on stock (2)		
12.	Check if the Agg	regate Aı	nount in Row (11) Excludes Certain Shares (se	e instructions)	
13.	Percent of Class	Represen	ted by Amount in Row 11		
	12.3% (3)				
14.	Type of Reportin	g Person	(see instructions)		
	IN				
(2) Inc Diekm 5AM (3) Per (3) Per	cludes (i) 2,173,748 sha lan, Schwab and Rockl Co-Investors IV. Schw y 5AM Opportunities.	ares held age, as m ab and K 54,842 sl	Reporting Persons. The Reporting Persons exploy 5AM IV; (ii) 90,572 shares held by 5AM Colanaging members of 5AM Partners IV, share voush Parmar, as managing members of 5AM Ophares of Common Stock outstanding as of May on May 15, 2020.	o-Investors IV; and (iii) 333,333 shares hoting and investment authority over the portunities GP, share voting and investment	neld by 5AM Opportunities. shares held by 5AM IV and ment authority over the shares

CUSI	P No. 03836J102			13D	Page 9 of 15
1.	Name of Reportin	ng Perso	ns		
	Dr. Scott M. Roc	klage			
2.	Check the Appro (a) (b)	priate Bo	ox if a Member of a Group (see instructions)		0 x(1)
3.	SEC USE ONLY				(-)
4.	Source of Funds	(see inst	ructions)		
	AF				
5.	Check if Disclosu	ire of Le	gal Proceedings Is Required Pursuant to Item 2(d)	or 2(e)	0
6.	Citizenship or Pla	ace of O	rganization		
	United States				
		7.	Sole Voting Power		
			0		
	Number of	8.	Shared Voting Power		
	Shares Beneficially Owned by Each Reporting Person With		2,264,320 shares of common stock (2)		
		9.	Sole Dispositive Power		
			0		
		10.	Shared Dispositive Power		
			2,264,320 shares of common stock (2)		
11.	Aggregate Amou	nt Benef	icially Owned by Each Reporting Person		
	2,264,320 shares	of comn	non stock (2)		
12.	Check if the Agg	regate A	mount in Row (11) Excludes Certain Shares (see i	nstructions)	0
13.	Percent of Class	Represer	nted by Amount in Row 11		
	10.8% (3)				
14.	Type of Reporting	g Person	(see instructions)		
	IN				
(2) Incomember (3) Per	ludes (i) 2,173,748 sha ers of 5AM Partners IV	res held 7, share v 54,842 s	Reporting Persons. The Reporting Persons express by 5AM IV; and (ii) 90,572 shares held by 5AM (voting and investment authority over the shares held hares of Common Stock outstanding as of May 15 at on May 15, 2020.	Co-Investors IV. Diekman, Schwab a ld by 5AM IV and 5AM Co-Investors	and Rocklage, as managing s IV.

Explanatory Note: This Amendment No. 1 (the "Amendment") to that statement on Schedule 13D is being filed by 5AM Partners IV, LLC ("5AM Partners IV"), 5AM Ventures IV, L.P. ("5AM IV"), 5AM Co-Investors IV, L.P. ("5AM Co-Investors IV"), 5AM Opportunities I, L.P. ("5AM Opportunities"), 5AM Opportunities I (GP), LLC ("5AM Opportunities GP"), Dr. John D. Diekman ("Diekman"), Andrew J. Schwab ("Schwab") and Dr. Scott M. Rocklage ("Rocklage" and, with 5AM Partners IV, 5AM IV, Co-Investors IV, 5AM Opportunities, 5AM Opportunities GP, Diekman and Schwab, collectively, the "Reporting Persons") and amends and restates the Schedule 13D filed with the Commission on October 17, 2019 (the "Original Schedule 13D"), and relates to shares of Common Stock, \$0.001 par value per share of Aprea Therapeutics, Inc., a Delaware corporation (the "Issuer"). This Amendment is being filed by the Reporting Persons to report sales of Common Stock of the Issuer on May 19, 2020. Accordingly, the number of securities beneficially owned by the Reporting Persons has decreased.

Items 4, 5 and 7 of the Original Schedule 13D are hereby amended and supplemented to the extent hereinafter expressly set forth and, except as amended and supplemented hereby, the Original Schedule 13D remains in full force and effect. All capitalized terms used in this Amendment but not defined herein shall have the meanings ascribed thereto in the Original Schedule 13D.

Item 4. Purpose of Transaction

On May 19, 2020, 5AM IV sold an aggregate of 244,800 shares of Common Stock in an open market transaction at a price of \$35.15 per share, and 5AM Co-Investors IV sold an aggregate of 10,200 shares of Common Stock in an open market transaction at a price of \$35.15 per share.

Item 5. Interest in Securities of the Issuer

(a) — (b). The following information with respect to the ownership of the Common Stock of the Issuer by the persons filing this statement on Schedule 13D is provided as of May 19, 2020:

Reporting Persons	Shares Held Directly	Sole Voting Power	Shared Voting Power(1)	Sole Dispositive Power	Shared Dispositive Power (1)	Beneficial Ownership	Percentage of Class (3)
5AM IV	2,173,748	0	2,173,748	0	2,173,748	2,173,748	10.3%
5AM Co-Investors IV	90,572	0	90,572	0	90,572	90,572	0.4%
5AM Partners IV (1)	0	0	2,264,320	0	2,264,320	2,264,320	10.8%
5AM Opportunities	333,333	0	333,333	0	333,333	333,333	1.6%
5AM Opportunities GP (2)	0	0	333,333	0	333,333	333,333	1.6%
Diekman (1)	0	0	2,264,320	0	2,264,320	2,264,320	10.8%
Schwab (1) (2)	0	0	2,597,653	0	2,597,653	2,597,653	12.3%
Rocklage (1)	0	0	2,264,320	0	2,264,320	2,264,320	10.8%

⁽¹⁾ Includes 2,173,748 shares of Common Stock held by 5AM IV and 90,572 shares of Common Stock held by 5AM Co-Investors IV. Diekman, Schwab and Rocklage, as managing members of 5AM Partners IV, share voting and investment authority over the shares held by 5AM IV and 5AM Co-Investors IV.

⁽²⁾ Includes 333,333 shares of Common Stock held by 5AM Opportunities. Schwab and Parmar, as managing members of 5AM Opportunities GP, share voting and investment authority over the shares held by 5AM Opportunities.

- (3) Percentage based on 21,054,842 shares of Common Stock outstanding as of May 15, 2020 as disclosed in the Issuer's Form 10-Q filed with the Securities and Exchange Commission on May 15, 2020.
- (c) Except as set forth herein, none of the Reporting Persons has effected any transactions in shares of the Issuer's Common Stock during the last 60 days.
- (d) No other person is known to have the right to receive or the power to direct the receipt of dividends from, or any proceeds from the sale of, the shares of Common Stock beneficially owned by any of the Reporting Persons.
- (e) Not applicable.

Item 7. Materials to be Filed as Exhibits.

A. Joint Filing Agreement as required by Rule 13d-1(k)(1) under the Securities Exchange Act of 1934, as amended.

SIGNATURES

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.

Date: May 21, 2020

5AM Ventures IV, L.P.

By: 5AM Partners IV, LLC, Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Co-Investors IV, L.P.

By: 5AM Partners IV, LLC,

Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Partners IV, LLC

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Opportunities I, L.P.

By: 5AM Opportunities I (GP), LLC,

Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Opportunities I (GP), LLC

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

DR. JOHN D. DIEKMAN

By: /s/ Dr. John D. Diekman

Dr. John D. Diekman

ANDREW J. SCHWAB

By: /s/ Andrew J. Schwab

Andrew J. Schwab

DR. SCOTT M. ROCKLAGE

By: /s/ Dr. Scott M. Rocklage

Dr. Scott M. Rocklage

Exhibit 1

Joint Filing Agreement

The undersigned hereby agree that a single Schedule 13D (or any amendment thereto) relating to the Common Stock of Aprea Therapeutics, Inc. shall be filed on behalf of each of the undersigned and that this Agreement shall be filed as an exhibit to such Schedule 13D.

Date: May 21, 2020

5AM Ventures IV, L.P.

By: 5AM Partners IV, LLC, Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Co-Investors IV, L.P.

By: 5AM Partners IV, LLC,

Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Partners IV, LLC

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Opportunities I, L.P.

By: 5AM Opportunities I (GP), LLC,

Its General Partner

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member

5AM Opportunities I (GP), LLC

By: /s/ Andrew J. Schwab

Andrew J. Schwab Managing Member CUSIP No. 03836J102 13D Page 15 of 15

DR. JOHN D. DIEKMAN

By: /s/ Dr. John D. Diekman

Dr. John D. Diekman

ANDREW J. SCHWAB

By: /s/ Andrew J. Schwab

Andrew J. Schwab

DR. SCOTT M. ROCKLAGE

By: /s/ Dr. Scott M. Rocklage

Dr. Scott M. Rocklage