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

### SCHEDULE 13G

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

Axsome Therapeutics, Inc.

Common Stock, par value \$0.0001 per share (Title of Class of Securities)

05464T104 (CUSIP Number)

December 31, 2021 (Date of Event which Requires Filing of this Statement)

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

[	X ] 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 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 (however, see the Notes).

### SCHEDULE 13G CUSIP No. 05464T104

1. Names of Reporting Persons.

Iridian Asset Management LLC I.R.S. Identification Nos. of above persons (entities only).

- 2. Check the Appropriate Box if a Member of a Group (See Instructions)
  (a) [X] (b) [ ]
- 3. SEC USE ONLY
- Citizenship or Place of Organization Delaware
  - 5. Sole Voting Power N/A

Number of Shares Beneficially Owned by Each Reporting Person With:

- 6. Shared Voting Power N/A
- 7. Sole Dispositive Power N/A
- 8. Shared Dispositive Power N/A
- 9. Aggregate Amount Beneficially Owned by Each Reporting Person N/A

	10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) [ ]	
	11.	Percent of Class Represented by Amount in Row (9) N/A	
	12.	Type of Reporting Person IA	
		2	
		SCHEDULE 13G CUSIP No. 05464T104	
Number of Shares Beneficially Owned by Each Reportin Person With:	1.	Names of Reporting Persons.	
		David L. Cohen I.R.S. Identification Nos. of above persons (entities only).	
	2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) [ X ] (b) [ ]	
	3.	SEC USE ONLY	
	4.	Citizenship or Place of Organization United States	
		5. Sole Voting Power N/A	
		6. Shared Voting Power N/A	
	ng	7. Sole Dispositive Power N/A	
		8. Shared Dispositive Power N/A	
	9.	Aggregate Amount Beneficially Owned by Each Reporting Person N/A	
	10.	Check if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) [ ]	
	11.	Percent of Class Represented by Amount in Row (9) N/A	
	12.	Type of Reporting Person IN	
		3	
		SCHEDULE 13G CUSIP No. 05464T104	
	1.	Names of Reporting Persons.	
		Harold J. Levy I.R.S. Identification Nos. of above persons (entities only).	
	2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) [X] (b) [ ]	
	3.	SEC USE ONLY	
	4.	Citizenship or Place of Organization United States	
Number of Shares		5. Sole Voting Power 0	
Beneficially Owned by Each Reportin	ng	6. Shared Voting Power N/A	
Person With:		7. Sole Dispositive Power N/A	

			8.	Shared Dispositive Power N/A		
		9.	Aggre N/A	egate Amount Beneficially Owned by Each Reporting Person		
	10. Check if the Aggregate Amount in Rov			c if the Aggregate Amount in Row (9) Excludes Certain Shares (See Instructions) [ ]		
		11.	Perce N/A	nt of Class Represented by Amount in Row (9)		
		12.	Type (	of Reporting Person		
This	Amen	dment ame	ends in it	4 as entirety the Schedule 13G filed for the month ended December 31, 2020.		
Item 1. (a)		Name of	Issuer			
		Axsome	Therape	utics, Inc.		
(b) Address of Issuer's Principal Executive Offices 22 Cortlandt Street, New York, NY 10007			•			
Item 2. (a)		Name of Person Filing				
	(b)	("Levy") Iridian is Cohen, 12 liability c and 99%	(collecti majority 2.5% by company by a fan	s being filed by and on behalf of Iridian Asset Management LLC ("Iridian"), David L. Cohen ("Cohen") and Harold J. Levy (vely, the "Reporting Persons").  7 owned by Arovid Associates LLC, a Delaware limited liability company owned and controlled by the following: 12.5% by Levy, 37.5% by LLMD LLC, a Delaware limited liability company, and 37.5% by ALHERO LLC, a Delaware limited LLMD LLC is owned 1% by Cohen, and 99% by a family trust controlled by Cohen. ALHERO LLC is owned 1% by Levy (1) by trust controlled by Levy.  pal Business Office or, if none, Residence		
		The princ	ipal bus	iness address of the Reporting Persons is 276 Post Road West, Westport, CT 06880-4704.		
(c)		Citizenship or Place of Organization				
		Iridian is a Delaware limited liability company. Cohen and Levy are US citizens.				
	(d)	Title of Class of Securities				
		Common Stock, par value \$0.0001 per share				
	(e)	CUSIP Number				
		05464T10	04			
Item	(a) (b) (c) (d) (e) (f) (g) (h) (i)	[ ] Br [ ] Ba [ ] Ins [ ] Inv [ ] Ar [ ] Ar [ ] A [ ] A [ ] 19	oker or on the color of the col	is filed pursuant to §§240.13d-1(b) or 240.13d-2(b) or (c), check whether the person filing is a: dealer registered under section 15 of the Act (15 U.S.C. 78o). effined in section 3(a)(6) of the Act (15 U.S.C. 78c). company as defined in section 3(a)(19) of the Act (15 U.S.C. 78c). t company registered under section 8 of the Investment Company Act of 1940 (15 U.S.C 80a-8). nent adviser in accordance with §240.13d-1(b)(1)(ii)(E); we benefit plan or endowment fund in accordance with §240.13d-1(b)(1)(ii)(F); olding company or control person in accordance with §240.13d-1(b)(1)(ii)(G); associations as defined in Section 3(b) of the Federal Deposit Insurance Act (12 U.S.C. 1813); olan that is excluded from the definition of an investment company under section 3(c)(14) of the Investment Company Act of J.S.C. 80a-3); accordance with §240.13d-1(b)(1)(ii)(J).		
Item 4. (a) and (b)		Ownersh Amount b Not appli	peneficia	ally owned and Percent of Class:		
	(c)	Power to Not appli		dispose.		

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

percent of the class of securities, check the following [XX].

# **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 Not Applicable.

### Item 8. Identification and Classification of Members of the Group

Iridian is an investment adviser registered under Section 203 of the Investment Advisers Act of 1940, and its principal business is managing a number of accounts containing securities over which Iridian has voting and dispositive power.

Each of Messrs. Cohen and Levy has a controlling interest in Iridian and serves as Co-Chief Executive Officer of Iridian.

# Item 9. Notice of Dissolution of Group

Not Applicable

### Item 10. Certification

By signing below the undersigned certifies that, to the best of its or his knowledge and belief, the securities referred to above were acquired and are held in the ordinary course of business and were not acquired and are not held for the purpose of and do not have the effect of changing or influencing the control of the issuer of the securities and were not acquired and are not held in connection with or as a participant in any transaction having such purpose or effect.

### **SIGNATURE**

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

Date: January 18, 2022

IRIDIAN ASSET MANAGEMENT LLC

By: /s/ Jeffrey M. Elliott

Jeffrey M. Elliott

Title: Executive Vice President

David L. Cohen

By: /s/ Jeffrey M. Elliott

Jeffrey M. Elliott

Title: Agent

Harold J. Levy

By: /s/ Jeffrey M. Elliott

Jeffrey M. Elliott

Title: Agent