SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

SCHEDULE 13D/A

Under the Securities Exchange Act of 1934 (Amendment No. 5)*

Landos Biopharma, Inc.

(Name of Issuer)

Common Stock, \$0.01 par value (Title of Class of Securities)

515069201 (CUSIP Number)

Alexander Rakitin
Perceptive Advisors LLC
51 Astor Place, 10th Floor
New York, NY 10003
(646) 205-5340

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

March 24, 2024 (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. \Box

Note: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7 for other parties to whom copies are to be sent.

* 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.

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, as amended ("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 Dan	porting Dersons	
1.	. Names of Reporting Persons.			
	Perceptive Advisors LLC			
2.	^			
	(a) 🗆	(b)		
3.	SEC Us	e Only	y	
4		CE	1 (0 1 ()	
4.	Source	of Fun	ds (See Instructions)	
	AF			
5.				
	2. Check it Disclosure of Legal Proceedings is required 1 disdant to ftems 2(d) of 2(e)			
6.	Citizens	hip or	Place of Organization	
	D 1			
	Delawa	re 7.	Sole Voting Power	
		7.	Sole voting Power	
Nu	imber of		0	
	Shares	8.	Shared Voting Power	
	neficially wned by			
	Each		1,486,991	
	eporting	9.	Sole Dispositive Power	
	Person		0	
	With	10.	Shared Dispositive Power	
		10.	Sharea Dispositive I ower	
			1,486,991	
11.	Aggrega	ite An	nount Beneficially Owned by Each Reporting Person	
- 10	1,486,991			
12.	2. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent	of Cla	ass Represented by Amount in Row (11)	
	47.7%			
14.	Type of	Repor	rting Person (See Instructions)	
	T A			
	IA			

1.	. Names of Reporting Persons.			
	Joseph Edelman			
2.				
3.	SEC Us	e Only	y	
4.	Source of Funds (See Instructions)			
	AF			
5.	Check if Disclosure of Legal Proceedings Is Required Pursuant to Items 2(d) or 2(e)			
6.	6. Citizenship or Place of Organization			
	United S		of America	
		7.	Sole Voting Power	
	mber of		0	
	Shares neficially	8.	Shared Voting Power	
	vned by Each		1,486,991	
Re	eporting	9.	Sole Dispositive Power	
	Person With		0	
		10.	Shared Dispositive Power	
-			1,486,991	
11.	Aggrega	ate An	nount Beneficially Owned by Each Reporting Person	
	1,486,99			
12.	2. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent of Class Represented by Amount in Row (11)			
	47.7%			
14.	Type of	Repoi	rting Person (See Instructions)	
	IN			

1.	Names of Reporting Persons.			
	Perceptive Life Sciences Master Fund, Ltd.			
2.				
3.	SEC Us	e Only	y	
4.	4. Source of Funds (See Instructions)			
	WC			
5.				
6.	Citizens	ship or	Place of Organization	
	Caymar	ı Islan	ds	
	-	7.	Sole Voting Power	
	ımber of		0	
	Shares neficially	8.	Shared Voting Power	
Ov	wned by Each		729,975	
Re	eporting	9.	Sole Dispositive Power	
I	Person With		0	
	***************************************	10.	Shared Dispositive Power	
			729,975	
11.	Aggrega	ate An	nount Beneficially Owned by Each Reporting Person	
	729,975			
12.	Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent of Class Represented by Amount in Row (11)			
	23.4%			
14.	Type of	Repoi	rting Person (See Instructions)	
	СО			

1	Namas	of Dom	auting Daysons	
1.	. Names of Reporting Persons.			
	Perceptive Xontogeny Venture Fund, L.P.			
2.		he Ap	propriate Box if a Member of a Group (See Instructions)	
	(a) 🗆	(b)		
3.	SEC Us	e Only		
4.	Source	of Eur	ds (See Instructions)	
7.	Source (Ji T'UII	us (see manuemons)	
	WC			
5.				
	Cition	1	None of Owner institut	
6.	Citizens	nip or	Place of Organization	
	Delawa	re		
		7.	Sole Voting Power	
	1 2			
	mber of Shares			
	neficially	8.	Shared Voting Power	
Ov	wned by		579,956	
	Each	9.	Sole Dispositive Power	
	eporting Person		•	
	With		0	
		10.	Shared Dispositive Power	
			579,956	
11.	Aggrega	ite An	nount Beneficially Owned by Each Reporting Person	
	55 0 055			
12.	579,956			
12.	2. Check if the Aggregate Amount in Row (11) Excludes Certain Shares (See Instructions)			
13.	Percent	of Cla	ass Represented by Amount in Row (11)	
1.4	18.6%			
14.	Type of	кероі	rting Person (See Instructions)	
	PN			

1.	Names of Reporting Persons.			
	PX Venture (A), LLC			
2.	Check the Appropriate Box if a Member of a Group (See Instructions) (a) □ (b) ⊠			
3.	SEC Use Only			
4.	4. Source of Funds (See Instructions)			
	WC			
5.				
6.	Citigons	hin or	Place of Organization	
0.	Citizens	snip oi	Flace of Organization	
	Delawa			
		7.	Sole Voting Power	
Nu	ımber of		0	
	Shares	8.	Shared Voting Power	
Ov	neficially wned by Each		177,060	
	eporting	9.	Sole Dispositive Power	
I	Person		0	
	With	10.	Shared Dispositive Power	
			177,060	
11.	Aggrega	ate An	nount Beneficially Owned by Each Reporting Person	
	177,060			
12.				
13.	Descent of Class Parascented by Amount in Pay: (11)			
13.	B. Percent of Class Represented by Amount in Row (11)			
	5.7%			
14.	Type of	Repoi	rting Person (See Instructions)	
	00			

Item 4. Purpose of Transaction

Item 4 of the Schedule 13D is amended and supplemented as follows:

The information set forth below in Item 6 in this Amendment No. 5 is incorporated by reference to this Item 4.

Item 5. Interest in Securities of the Issuer

Item 5 of the Schedule 13D is amended and supplemented as follows:

- (a) The information set forth in rows 11 and 13 of the cover pages to this Schedule 13D is incorporated by reference. The percentage set forth in row 13 is based on 3,116,729 outstanding shares of Common Stock as reported by the Issuer in its Form 10-K filed with the Securities and Exchange Commission on March 21, 2024, and gives effect to the Issuer's 10-for-1 reverse stock split effected on May 25, 2023 (the "Reverse Stock Split").
- (b) The information set forth in rows 7 through 10 of the cover pages to this Schedule 13D is incorporated by reference, and give effect to the Issuer's Reverse Stock Split.

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Item 6 of the Schedule 13D is amended and supplemented as follows:

Voting Agreement

On March 24, 2024, the Issuer entered into an agreement and plan of merger (the "Merger Agreement") by and among the Issuer, Bespin Subsidiary, LLC, (the "Parent"), a Delaware corporation and a wholly owned subsidiary of AbbVie Inc., and Bespin Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent (the "Merger Sub"), providing for, among other things, the merger of Merger Sub with and into the Issuer (the "Merger"), with the Issuer surviving the Merger as a wholly owned subsidiary of the Parent. On March 24, 2024, concurrent with the execution and delivery of the Merger Agreement, Perceptive Advisors entered into a voting agreement (the "Voting Agreement") with the Issuer, Parent and Xontogeny, LLC, pursuant to which each of Perceptive Advisors and Xontogeny, LLC, including their respective affiliates, agreed to (i) vote their shares of Common Stock (such shares, the "Restricted Shares"), in favor of the adoption of the Merger Agreement and against any alternative acquisition proposals, (ii) refrain from engaging in certain solicitation activities that may be reasonably expected to constitute or result in any alternative acquisition proposal, and (iii) refrain from (a) transferring, selling, assigning, gifting, hedging, pledging or otherwise disposing of, or entering into any derivative arrangement with respect to their Restricted Shares, or any rights or interests therein (or consenting to any of the foregoing), (b) entering into any contract, option or other agreement, arrangement or understanding with respect to any transfer of Restricted Shares or any interests therein, (c) granting or permitting the grant of any proxy, power-of-attorney or other authorization or consent in or with respect to their Restricted Shares or (d) depositing or permitting the deposit of any of their Restricted Shares into a voting trust or enter into a voting agreement or arrangement with respect to any of such Restricted Shares, in a manner that would adversely affect their ability to perform their oblig

The description of the Voting Agreement set forth above in this Item 6 does not purport to be complete and is qualified in entirety by reference to the full text of the Voting Agreement, which is attached to this Amendment No. 5 as Exhibit 6, and incorporated by reference herein.

Item 7. Material to be Filed as Exhibits

Item 7 of the Schedule 13D is amended and supplemented as follows:

Exhibit 6 Voting Agreement, dated as of March 24, 2024, by and among Landos Biopharma, Inc., Xontogeny, LLC and Perceptive Advisors LLC (incorporated by reference to Exhibit 10.1 to the Issuer's Current Report on Form 8-K filed on March 25, 2024).

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.

Dated: April 10, 2024

PERCEPTIVE ADVISORS LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman
Title: Managing Member

/s/ Joseph Edelman

JOSEPH EDELMAN

PERCEPTIVE LIFE SCIENCES MASTER FUND, LTD.

By: Perceptive Advisors LLC

By: /s/ Joseph Edelman
Name: Joseph Edelman
Title: Managing Member

PERCEPTIVE XONTOGENY VENTURE FUND, L.P.

By: Perceptive Xontogeny Ventures GP, LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member

PX Venture (A), LLC

By: Perceptive Venture Advisors, L.P.

By: Perceptive Xontogeny Venture GP, LLC

By: /s/ Joseph Edelman

Name: Joseph Edelman Title: Managing Member