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

#### **SCHEDULE 13D**

(Rule 13d-101)

INFORMATION TO BE INCLUDED IN STATEMENTS FILED PURSUANT TO  $\S$  240.13d-1(a) AND AMENDMENTS THERETO FILED PURSUANT TO  $\S$  240.13d-2(a)

(Amendment No.)1

<u>Pieris Pharmaceuticals, Inc.</u> (Name of Issuer)

Common Stock, \$0.001 par value per share (Title of Class of Securities)

720795103 (CUSIP Number)

JAMES KRATKY BVF PARTNERS L.P. 44 Montgomery St., 40th Floor San Francisco, California 94104 (415) 525-8890

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

### May 11, 2023

(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  $\S$  240.13d-1(e), 240.13d-1(f) or 240.13d-1(g), check the following box  $\boxtimes$ .

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

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).

1	NAME OF REPORT	TING PERSON	
	Biotechnolog	y Value Fund, L.P.	
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
3	SEC USE ONLY		
4	SOURCE OF FUND	S	
	WC		i
5		SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
6	CITIZENSHIP OR F	PLACE OF ORGANIZATION	
	Delaware		
177 0757 05		Last P. Varra va Pavira	
NUMBER OF SHARES	7	SOLE VOTING POWER	=
SILICES			
BENEFICIALLY		0	İ
OWNED BY	8	SHARED VOTING POWER	
EACH			=
REPORTING		11,007,420	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
		0	
	10	SHARED DISPOSITIVE POWER	
		11,007,420	ļ
11	AGGREGATE AMO	DUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
11	AGGREGATE AWG	JOINT DEATH CHIEF OWNED DI EACH REFORTING LERSON	
	11,007,420		

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.

12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)	
	11.8%	
14	TYPE OF REPORTING PERSON	
	PN	

CUSIP No. 720795103

	-ti-		
1	NAME OF REPOR	TING PERSON	
[			
	BVF I GP LI		
2	CHECK THE APPE	ROPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
			(b) □
	and tian out to		
3	SEC USE ONLY		
4	SOURCE OF FUNI	ne	
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	AF		
5		ISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
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6	CITIZENSHIP OR	PLACE OF ORGANIZATION	
	Delaware		
NUMBER OF	7	SOLE VOTING POWER	
SHARES			
BENEFICIALLY OWNED BY	- 0	0	
EACH	8	SHARED VOTING POWER	
REPORTING		11,007,420	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
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	10	SHARED DISPOSITIVE POWER	
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		11,007,420	
11	AGGREGATE AM	OUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	11,007,420		
12	CHECK BOX IF TI	HE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	DED CENTE OF CLA	GC DEDDECENTED DV AMOUNT IN DOW (11)	
13	PERCENT OF CLA	ASS REPRESENTED BY AMOUNT IN ROW (11)	
	11.8%		
14	TYPE OF REPORT	TNG PERSON	
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1	NAME OF REPORTING	G PERSON	
	Biotechnology Va	alue Fund II, L.P.	
2	CHECK THE APPROPE	RIATE BOX IF A MEMBER OF A GROUP	(a) ⊠ (b) □
3	SEC USE ONLY		
4	SOURCE OF FUNDS		
	WC		
5	CHECK BOX IF DISCL	OSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
6	CITIZENSHIP OR PLA	CE OF ORGANIZATION	
	Delaware		
NUMBER OF	7	SOLE VOTING POWER	
SHARES BENEFICIALLY		0	
DENETICIALLI			

OWNED BY EACH	8	SHARED VOTING POWER
REPORTING		8,581,171
PERSON WITH	9	SOLE DISPOSITIVE POWER
		0
	10	SHARED DISPOSITIVE POWER
		8,581,171
11	AGGREGATE AMOU	NT BENEFICIALLY OWNED BY EACH REPORTING PERSON
	8,581,171	
12	CHECK BOX IF THE	AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES □
13	PERCENT OF CLASS	REPRESENTED BY AMOUNT IN ROW (11)
		i i i
	9.2%	
14	TYPE OF REPORTING	G PERSON
Ï		i
	PN	

CUSIP No. 720795103

1	NAME OF REPORT	TING PERSON	
	BVF II GP L		
2		OPRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
2	CHECK THE THIT IS	OTALITE BOX II TIMEMBER OF TI GROOT	(a) □ (b) □
	and tian out to		
3	SEC USE ONLY		
4	SOURCE OF FUND	OS .	
	AF		
5		SCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
6	CITIZENSHID OD I	PLACE OF ORGANIZATION	
0	CITIZENSIIII OKT	LACE OF ORGANIZATION	
	Delaware		
NUMBER OF SHARES	7	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY	8	SHARED VOTING POWER	
EACH REPORTING		8,581,171	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
	10	0 SHARED DISPOSITIVE POWER	
	10	SHARED DISPOSITIVE FOWER	
		8,581,171	
11	AGGREGATE AMO	OUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	8,581,171		
12	CHECK BOX IF TH	IE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLA	SS REPRESENTED BY AMOUNT IN ROW (11)	
	9.2%		
14	TYPE OF REPORT	ING PERSON	
	00		
	00		

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1	NAME OF REPORTING PERSON	
	Biotechnology Value Trading Fund OS LP	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠ (b) □
3	SEC USE ONLY	

4	SOURCE OF FUNDS		
5	WC CHECK BOX IE DISC	CLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
,	CHECK BOX IF DISC	CLOSURE OF LEGAL PROCEEDINGS IS REQUIRED FURSUANT TO ITEM 2(d) OR 2(e)	Ц
6	CITIZENSHIP OR PL	ACE OF ORGANIZATION	
	Cayman Island		
NUMBER OF	7	SOLE VOTING POWER	
SHARES			
BENEFICIALLY OWNED BY	8	0 SHARED VOTING POWER	
EACH	8	SHARED VOTING POWER	
REPORTING		744,966	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
	10	0 SHARED DISPOSITIVE POWER	
	10	SHARED DISTOSITIVE FOWER	
		744,966	
11	AGGREGATE AMOU	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	744,966		
12		AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
<u> </u>			_
- 12	DED GENERAL OF ALL		
13	PERCENT OF CLASS	S REPRESENTED BY AMOUNT IN ROW (11)	
	Less than 1%		
14	TYPE OF REPORTIN	IG PERSON	
	DNI		
	PN		

1	NAME OF REPOR	RTING PERSON	=======================================
	BVF Partner		
2	CHECK THE APP	ROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠
			(b) 🗆
3	SEC USE ONLY		_
4	SOURCE OF FUN	DC	
4	SOURCE OF FUN		
	AF		
5	CHECK BOX IF D	DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
6	CITIZENSHIP OR	PLACE OF ORGANIZATION	
NUMBER OF	Cayman Isla	ands SOLE VOTING POWER	
SHARES	/	SOLE VOTING POWER	
BENEFICIALLY		0	
OWNED BY	8	SHARED VOTING POWER	
EACH REPORTING		744,966	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
		0	
	10	SHARED DISPOSITIVE POWER	
	ACCRECATE AN	744,966 MOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	_
11	AGGREGATE AN	IOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	744,966		
12	CHECK BOX IF T	HE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLA	ASS REPRESENTED BY AMOUNT IN ROW (11)	
		· , ,	
	Less than 19		
14	TYPE OF REPORT	TING PERSON	

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CUSIP No. 720795103

1	NAME OF REPORTI	NG PERSON	
	BAE CD HOTAL	noc II C	
2	BVF GP Holdi	PRIATE BOX IF A MEMBER OF A GROUP	(a) 🗵
2	CHECK THE ATTRO	MATE BOX II A MEMBER OF A GROOT	(a) ⊠ (b) □
			(*) —
3	SEC USE ONLY		
4	SOURCE OF FUNDS		
4 	SOURCE OF FUNDS		
	AF		
5		CLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
	CITIZENGIUD OD DI	A CE OF OR CAME ATTOM	
6	CITIZENSHIP OR PL	ACE OF ORGANIZATION	
	Delaware		
NUMBER OF	7	SOLE VOTING POWER	
SHARES			
BENEFICIALLY		0	
OWNED BY EACH	8	SHARED VOTING POWER	-
REPORTING		19,588,591	
PERSON WITH	9	SOLE DISPOSITIVE POWER	
Ï		**	j
		0	
	10	SHARED DISPOSITIVE POWER	
		19,588,591	-
11	AGGREGATE AMOI	UNT BENEFICIALLY OWNED BY EACH REPORTING PERSON	
	19,588,591		
12	CHECK BOX IF THE	AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES	
13	PERCENT OF CLASS	S REPRESENTED BY AMOUNT IN ROW (11)	
	12.KCE/(1 Of CE/IO)	o kill killing in the man (11)	
	20.9%		
14	TYPE OF REPORTIN	IG PERSON	
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1	NAME OF REPOR	TING PERSON	
	BVF Partner	s L.P.	
2	CHECK THE APPI	ROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠ (b) □
3	SEC USE ONLY		-
4	SOURCE OF FUND	OS .	
5		ISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	
6	CITIZENSHIP OR  Delaware	PLACE OF ORGANIZATION	
NUMBER OF SHARES BENEFICIALLY	7	SOLE VOTING POWER 0	
OWNED BY EACH REPORTING	8	SHARED VOTING POWER 20,609,863	
PERSON WITH	9	SOLE DISPOSITIVE POWER 0	
	10	SHARED DISPOSITIVE POWER	

II .				
	20,609,863			
11	AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON			
	20,609,863			
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES □			
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)			
	22.0%			
14	TYPE OF REPORTING PERSON			
	PN, IA			

a

CUSIP No. 720795103

1	NAME OF REPORTING PERSON					
2	BVF Inc.					
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP  (a)   (b) □					
	(b) □					
3	SEC USE ONLY					
	COLUD CE OF FURN					
4	SOURCE OF FUNDS					
	AF					
5		ISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)				
6	CITIZENCIUD OD	PLACE OF ORGANIZATION				
0	CITIZENSHIP OR	PLACE OF ORGANIZATION				
	Delaware					
NUMBER OF	7	SOLE VOTING POWER				
SHARES						
BENEFICIALLY OWNED BY	8	0 SHARED VOTING POWER				
EACH	o	SHARED VOTING FOWER				
REPORTING		20,609,863				
PERSON WITH	9	SOLE DISPOSITIVE POWER				
	10	0 SHARED DISPOSITIVE POWER				
 	10	SHARED DISFOSITIVE FOWER				
		20,609,863				
11	11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON					
12	20,609,863  CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES					
12 CILCR BOX IF THE AGGREGATE AMOUNT IN NOW (11) EXCLUDES CERTAIN SHARES						
13	PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)					
	22.0%					
14	TYPE OF REPORT	TING PERSON				
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1	NAME OF REPORTING PERSON	
	Mark N. Lampert	
2	CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP	(a) ⊠ (b) □
3	SEC USE ONLY	
4	SOURCE OF FUNDS	
5	AF CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEM 2(d) OR 2(e)	

6	CITIZENSHIP OR PLACE OF ORGANIZATION				
	United States				
NUMBER OF	7	SOLE VOTING POWER			
SHARES BENEFICIALLY		0			
OWNED BY	8	SHARED VOTING POWER			
EACH					
REPORTING		20,609,863			
PERSON WITH	9	SOLE DISPOSITIVE POWER			
		0			
	10	SHARED DISPOSITIVE POWER			
		20,609,863			
11	11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON				
20.609.863					
12	CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES				
13	22.0%				
<u> </u>					
14	14 TYPE OF REPORTING PERSON				
	IN				

CUSIP No. 720795103

**Explanatory Note:** The following constitutes the Schedule 13D filed by the undersigned (the "Schedule 13D"). The Reporting Persons (as defined below) initially filed a Schedule 13G with respect to the securities of the Issuer pursuant to Rule 13d-1(c) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), on June 17, 2016 and subsequently filed amendments thereto. As of May 11, 2023, the Reporting Persons may be deemed to beneficially own in the aggregate in excess of 20% of the outstanding shares of Common Stock of the Issuer. Accordingly, the Reporting Persons are no longer eligible to report their beneficial ownership with respect to the securities of the Issuer on Schedule 13G and, in accordance with Rule 13d-1(f) of the Exchange Act, the Reporting Persons are transitioning to a Schedule 13D.

#### Item 1. Security and Issuer.

This statement relates to the shares of Common Stock, \$0.001 par value per share (the "Shares"), of Pieris Pharmaceuticals, Inc., a Nevada corporation (the "Issuer"). The address of the principal executive offices of the Issuer is 225 Franklin Street, 26<sup>th</sup> Floor, Boston, Massachusetts 02110.

#### Item 2. Identity and Background.

- (a) This statement is filed by:
  - (i) Biotechnology Value Fund, L.P., a Delaware limited partnership ("BVF");
  - (ii) BVF I GP LLC, a Delaware limited liability company ("BVF GP"), which serves as general partner of BVF;
  - (iii) Biotechnology Value Fund II, L.P., a Delaware limited partnership ("BVF2");
  - (iv) BVF II GP LLC, a Delaware limited liability company ("BVF2 GP"), which serves as general partner of BVF2;
  - (v) Biotechnology Value Trading Fund OS LP, a Cayman Islands limited partnership ("Trading Fund OS");
  - (vi) BVF Partners OS Ltd., a Cayman Islands limited liability company ("Partners OS"), which serves as general partner of Trading Fund OS;
  - (vii) BVF GP Holdings LLC, a Delaware limited liability company ("BVF GPH"), which is the sole member of each of BVF GP and BVF2 GP;
  - (viii) BVF Partners L.P., a Delaware limited partnership ("Partners"), which serves as the investment manager of each of BVF, BVF2, Trading Fund OS and certain managed accounts (the "Partners Managed Accounts"), and as the sole member of Partners OS;
  - (ix) BVF Inc., a Delaware corporation, which serves as general partner of Partners and the managing member of BVF GPH; and
  - (x) Mark N. Lampert, who serves as the sole officer and director of BVF Inc.

Each of the foregoing is referred to as a "Reporting Person" and collectively as the "Reporting Persons." Each of the Reporting Persons is party to that certain Joint Filing Agreement, as further described in Item 6. Accordingly, the Reporting Persons are hereby filing a joint Schedule 13D.

12

- (b) The business address of BVF, BVF GP, BVF2, BVF2 GP, BVF GPH, Partners, BVF Inc. and Mr. Lampert is 44 Montgomery St., 40<sup>th</sup> Floor, San Francisco, California 94104. The business address of Trading Fund OS and Partners OS is PO Box 309 Ugland House, Grand Cayman, KY1-1104, Cayman Islands.
- (c) The principal business of each of BVF, BVF2 and Trading Fund OS is investing in securities. The principal business of BVF GP, BVF2 GP and Partners OS is serving as the general partner of BVF, BVF2 and Trading Fund OS, respectively. The principal business of BVF GPH is serving as the sole member of each of BVF GP and BVF2 GP. The principal business of Partners is serving as the investment manager of each of BVF, BVF2, Trading Fund OS and the Partners Managed Accounts,

and as the sole member of Partners OS. The principal business of BVF Inc. is serving as the general partner of Partners and as the managing member of BVF GPH. Mr. Lampert is the sole officer and director of BVF Inc.

- (d) No Reporting Person has, during the last five years, been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors).
- (e) No Reporting Person has, during the last five years, been party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.
  - (f) Mr. Lampert is a citizen of the United States of America.

#### Item 3. Source and Amount of Funds or Other Consideration.

The securities of the Issuer purchased by each of BVF, BVF2 and Trading Fund OS, and held in the Partners Managed Accounts, were purchased with working capital (which may, at any given time, include margin loans made by brokerage firms in the ordinary course of business).

The aggregate purchase price of the 11,007,420 Shares owned directly by BVF is approximately \$12,275,047, including brokerage commissions. The aggregate cost basis of the 2,083 shares of Series B Preferred Stock (as defined below) owned directly by BVF, which were acquired pursuant to the Series B Exchange Agreement (as defined below), is approximately \$9,988,551. The aggregate cost basis of the 1,796 shares of Series C Preferred Stock (as defined below) owned directly by BVF, which were acquired pursuant to the Series C Purchase Agreement (as defined below), is approximately \$4,517,782. The aggregate cost basis of the 1,759 shares of Series D Preferred Stock (as defined below) owned directly by BVF, which were acquired pursuant to the Series D Exchange Agreement (as defined below), is approximately \$6,753,581. The aggregate cost basis of the 2,670 shares of Series E Preferred Stock (as defined below) owned directly by BVF, which were acquired pursuant to the Series C Purchase Agreement (as defined below) owned directly by BVF, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$1,858,018.

The aggregate purchase price of the 8,581,171 Shares owned directly by BVF2 is approximately \$9,692,336, including brokerage commissions. The aggregate cost basis of the 1,659 shares of Series B Preferred Stock owned directly by BVF2, which were acquired pursuant to the Series B Exchange Agreement, is approximately \$8,626,534. The aggregate cost basis of the 1,445 shares of Series C Preferred Stock owned directly by BVF2, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$3,634,853. The aggregate cost basis of the 1,078 shares of Series D Preferred Stock owned directly by BVF2, which were acquired pursuant to the Series D Exchange Agreement, is approximately \$3,324,351. The aggregate cost basis of the 1,867 shares of Series E Preferred Stock owned directly by BVF2, which were acquired pursuant to the Series E Exchange Agreement, is approximately \$6,449,830. The aggregate cost basis of the 1,445,000 C Warrants owned directly by BVF2, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$1,494,897.

13

#### CUSIP No. 720795103

The aggregate purchase price of the 744,966 Shares owned directly by Trading Fund OS is approximately \$766,203, including brokerage commissions. The aggregate cost basis of the 85 shares of Series A Preferred Stock (as defined below) owned directly by Trading Fund OS, which were acquired pursuant to the Series A Purchase Agreement (as defined below), is approximately \$164,900. The aggregate cost basis of the 284 shares of Series B Preferred Stock owned directly by Trading Fund OS, which were acquired pursuant to the Series B Exchange Agreement, is approximately \$1,141,356. The aggregate cost basis of the 265 shares of Series C Preferred Stock owned directly by Trading Fund OS, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$666,599. The aggregate cost basis of the 163 shares of Series D Preferred Stock owned directly by Trading Fund OS, which were acquired pursuant to the Series D Exchange Agreement, is approximately \$661,154. The aggregate cost basis of the 161 shares of Series E Preferred Stock owned directly by Trading Fund OS, which were acquired pursuant to the Series E Exchange Agreement, is approximately \$616,152. The aggregate cost basis of the 265,000 C Warrants owned directly by Trading Fund OS, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$274,151.

The aggregate purchase price of the 276,306 Shares held in the Partners Managed Accounts is approximately \$268,995, including brokerage commissions. The aggregate cost basis of the 302 shares of Series E Preferred Stock held in the Partners Managed Accounts, which were acquired pursuant to the Series E Exchange Agreement, is approximately \$984,268. The aggregate cost basis of the 16,000 C Warrants held in the Partners Managed Accounts, which were acquired pursuant to the Series C Purchase Agreement, is approximately \$16,552.

#### Item 4. <u>Purpose of Transaction</u>.

The Reporting Persons acquired the securities of the Issuer based on the Reporting Persons' belief that such securities, when acquired, were undervalued and represented an attractive investment opportunity. Depending upon overall market conditions, other investment opportunities available to the Reporting Persons, and the availability of securities of the Issuer at prices that would make the purchase or sale of such securities desirable, the Reporting Persons may endeavor to increase or decrease their position in the Issuer through, among other things, the purchase or sale of securities of the Issuer on the open market or in private transactions or otherwise, on such terms and at such times as the Reporting Persons may deem advisable.

14

#### CUSIP No. 720795103

The Reporting Persons remain passive investors in the Issuer and are filing the Schedule 13D solely as a result of beneficially owning in excess of 20% of the outstanding Shares of the Issuer (see Explanatory Note above). The Reporting Persons have not acquired the Shares with a purpose or effect of changing or influencing control of the Issuer and no Reporting Person has any present plan or proposal which would relate to or result in any of the matters set forth in subparagraphs (a) - (j) of Item 4 of Schedule 13D.

#### Item 5. <u>Interest in Securities of the Issuer.</u>

(a) The aggregate percentage of Shares reported owned by each person named herein is based on 93,647,010 Shares outstanding as of May 8, 2023, as disclosed by the Issuer to the Reporting Persons.

As of the close of business on the date hereof, (i) BVF beneficially owned 11,007,420 Shares, excluding (a) 2,083,000 Shares issuable upon the conversion of the Series B Preferred Stock held by it, (b) 1,796,000 Shares issuable upon the conversion of the Series C Preferred Stock held by it, (c) 1,759,000 Shares issuable upon the conversion of the Series E Preferred Stock held by it, and (e) 1,796,000 Shares issuable upon the exercise of the C Warrants held by it, (ii) BVF2 beneficially owned 8,581,171 Shares, excluding (a) 1,659,000 Shares issuable upon the conversion of the Series B Preferred Stock held by it, (b) 1,445,000 Shares issuable upon the conversion of the Series C Preferred Stock held by it, (c) 1,078,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (d) 1,867,000 Shares issuable upon the conversion of the Series E Preferred Stock held by it, and (e) 1,445,000 Shares issuable upon the conversion of the Series A Preferred Stock held by it, (d) 1,867,000 Shares issuable upon the conversion of the Series A Preferred Stock held by it, (b) 284,000 Shares issuable upon the conversion of the Series B Preferred Stock held by it, (b) 284,000 Shares issuable upon the conversion of the Series C Preferred Stock held by it, (d) 163,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon the conversion of the Series D Preferred Stock held by it, (e) 161,000 Shares issuable upon

do not beneficially own the Shares underlying the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock and C Warrants held by them as a result of the contractual ownership limitations discussed below.

BVF GP, as the general partner of BVF, may be deemed to beneficially own the 11,007,420 Shares beneficially owned by BVF.

BVF2 GP, as the general partner of BVF2, may be deemed to beneficially own the 8,581,171 Shares beneficially owned by BVF2.

Partners OS, as the general partner of Trading Fund OS, may be deemed to beneficially own the 744,966 Shares beneficially owned by Trading Fund OS.

BVF GPH, as the sole member of each of BVF GP and BVF2 GP, may be deemed to beneficially own the 19,588,591 Shares beneficially owned in the aggregate by BVF and BVF2.

15

CUSIP No. 720795103

Partners, as the investment manager of BVF, BVF2 and Trading Fund OS and the Partners Managed Accounts, and the sole member of Partners OS, may be deemed to beneficially own the 20,609,863 Shares beneficially owned in the aggregate by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Accounts, including 276,306 Shares held in the Partners Managed Accounts, and excluding (a) 302,000 Shares issuable upon the conversion of the Series E Preferred Stock held in the Partners Managed Accounts, and (b) 16,000 Shares issuable upon the exercise of C Warrants held in the Partners Managed Accounts.

BVF Inc., as the general partner of Partners, may be deemed to beneficially own the 20,609,863 Shares beneficially owned by Partners.

Mr. Lampert, as the sole director and officer of BVF Inc., may be deemed to beneficially own the 20,609,863 Shares beneficially owned by BVF Inc.

As of the close of business on the date hereof, the Reporting Persons hold an aggregate of 85 shares of Series A Convertible Preferred Stock (the "Series A Preferred Stock"), which are convertible into an aggregate of 85,000 Shares. Each share of the Series A Preferred Stock is convertible at any time, at the holder's option, into 1,000 Shares. The Series A Preferred Stock may not be converted, however, if, after such conversion, the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the Securities Exchange Act of 1934 (the "Exchange Act") and the applicable regulations of the Securities and Exchange Commission (the "SEC"), including any "group" of which the holder is a member) would beneficially own a number of Shares in excess of 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of the Shares (the "Conversion A Limitation"). As of the close of business on the date hereof, the Conversion A Limitation prohibits the conversion of all Series A Preferred Stock held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the Series A Preferred Stock.

As of the close of business on the date hereof, the Reporting Persons hold an aggregate of 4,026 shares of Series B Convertible Preferred Stock (the "Series B Preferred Stock"), which are convertible into an aggregate of 4,026,000 Shares. Each share of the Series B Preferred Stock is convertible at any time, at the holder's option, into 1,000 Shares. The Series B Preferred Stock may not be converted, however, if, after such conversion, the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the SEC, including any "group" of which the holder is a member) would beneficially own a number of Shares in excess of 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of the Shares (the "Conversion B Limitation"). As of the close of business on the date hereof, the Conversion B Limitation prohibits the conversion of all Series B Preferred Stock held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the Series B Preferred Stock.

As of the close of business on the date hereof, the Reporting Persons hold an aggregate of 3,506 shares of Series C Convertible Preferred Stock (the "Series C Preferred Stock"), which are convertible into an aggregate of 3,506,000 Shares. Each share of the Series C Preferred Stock is convertible at any time, at the holder's option, into 1,000 Shares. The Series C Preferred Stock may not be converted, however, if, after such conversion, the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the SEC, including any "group" of which the holder is a member) would beneficially own a number of Shares in excess of 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of the Shares (the "Conversion C Limitation"). As of the close of business on the date hereof, the Conversion C Limitation prohibits the conversion of all Series C Preferred Stock held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the Series C Preferred Stock.

16

CUSIP No. 720795103

As of the close of business on the date hereof, the Reporting Persons hold 3,000 shares of Series D Convertible Preferred Stock (the "Series D Preferred Stock"), which are convertible into an aggregate of 3,000,000 Shares. Each share of the Series D Preferred Stock is convertible at any time, at the holder's option, into 1,000 Shares. The Series D Preferred Stock may not be converted, however, if, after such conversion, the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the SEC, including any "group" of which the holder is a member) would beneficially own a number of Shares in excess of 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of the Shares (the "Conversion D Limitation"). As of the close of business on the date hereof, the Conversion D Limitation prohibits the conversion of all Series D Preferred Stock held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the Series D Preferred Stock.

As of the close of business on the date hereof, the Reporting Persons hold an aggregate of 5,000 shares of Series E Convertible Preferred Stock (the "Series E Preferred Stock"), which are convertible into an aggregate of 5,000,000 Shares. Each share of the Series E Preferred Stock is convertible at any time, at the holder's option, into 1,000 Shares. The Series E Preferred Stock may not be converted, however, if, after such conversion, the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the Exchange Act and the applicable regulations of the SEC, including any "group" of which the holder is a member) would beneficially own a number of Shares in excess of 9.99% of the number of Shares outstanding immediately after giving effect to the issuance of the Shares (the "Conversion E Limitation"). As of the close of business on the date hereof, the Conversion E Limitation prohibits the conversion of all Series E Preferred Stock held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the Series E Preferred Stock.

As of the close of business on the date hereof, the Reporting Persons hold an aggregate of 3,522,000 Tranche C Warrants (the "C Warrants"), which are exercisable into an aggregate of 3,522,000 Shares. The C Warrants have an exercise price of \$7.10 per Share (the "Exercise Price"). If (i) the Issuer's initial public disclosure of the phase 2a Study of PRS-060/AZD1402 that includes the "p" value achieved for the primary endpoint of such study reveals top-line data on the primary efficacy endpoint in the phase 2a Study with a "p" value below 0.05 (i.e., p < 0.05) in at least one dose level; and (ii) the 10-day volume weighted average Share price commencing on the trading day immediately after the initial public disclosure is at least three percent more than the Exercise Price (clauses (i) and (ii), collectively, the "Performance Condition"), then the C Warrants will be exercisable for a period of 60 days from the date of the initial data disclosure and may only be exercised for cash. Otherwise, the C Warrants will be exercisable for a period of five years from the date of issuance (such date, the "Expiration Date"). If the Performance Condition has not been met and the last reported sale price of the Shares immediately prior to the Expiration Date was greater than the Exercise Price, then the C Warrants shall be automatically deemed exercised on a cashless basis on the Expiration Date. The C Warrants may not be exercised, however, if, after such exercise, the total number of Shares then beneficially owned by the holder thereof (together with such holder's affiliates, and any other person whose beneficial ownership of Shares would be aggregated with the holder's ownership for purposes of Section 13(d) of the

Exchange Act and the applicable regulations of the SEC, including any "group" of which the holder is a member) would exceed 9.99% of the total number of Shares then issued and outstanding (including for such purpose the Shares issuable upon such exercise (the "C Warrants Blocker"). As of the close of business on the date hereof, the C Warrants Blocker prohibits the exercise of all C Warrants held by the Reporting Persons. Accordingly, the Reporting Persons do not beneficially own the Shares underlying the C Warrants.

17

CUSIP No. 720795103

The foregoing should not be construed in and of itself as an admission by any Reporting Person as to beneficial ownership of any Shares owned by another Reporting Person. BVF GP disclaims beneficial ownership of the Shares beneficially owned by BVF. BVF2 GP disclaims beneficial ownership of the Shares beneficially owned by Trading Fund OS. BVF GPH disclaims beneficial ownership of the Shares beneficially owned by BVF and BVF2. Each of Partners, BVF Inc. and Mr. Lampert disclaims beneficial ownership of the Shares beneficially owned by BVF, BVF2 and Trading Fund OS and held in the Partners Managed Accounts.

- (b) Each of BVF, BVF2 and Trading Fund OS shares with Partners voting and dispositive power over the Shares each such entity beneficially owns. BVF shares with BVF GP voting and dispositive power over the Shares beneficially owned by BVF. BVF2 shares with BVF2 GP voting and dispositive power over the Shares beneficially owned by BVF2. Each of BVF GP and BVF2 GP shares with BVF GPH voting and dispositive power over the Shares each such entity beneficially owns. Trading Fund OS shares with Partners OS voting and dispositive power over the Shares beneficially owned by Trading Fund OS. Partners, BVF Inc. and Mr. Lampert share voting and dispositive power over the 20,609,863 Shares they may be deemed to beneficially own with BVF, BVF GP, BVF2, BVF2 GP, Trading Fund OS, Partners OS and BVF GPH.
  - (c) Schedule A annexed hereto lists all transactions in securities of the Issuer by the Reporting Persons during the past sixty days.
- (d) No person other than the Reporting Persons is known to have the right to receive, or the power to direct the receipt of dividends from, or proceeds from the sale of, the Shares.
  - (e) Not applicable.

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

Reference is made to the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock, Series E Preferred Stock and C Warrants, each as defined and described above, the descriptions of which are incorporated herein by reference.

On May 22, 2023, the Reporting Persons entered into a Joint Filing Agreement in which the Reporting Persons agreed to the joint filing on behalf of each of them of statements on Schedule 13D with respect to securities of the Issuer to the extent required by applicable law. A copy of this agreement is attached hereto as Exhibit 99.1 hereto and is incorporated herein by reference.

On June 2, 2016, the Issuer, certain of the Reporting Persons and certain other parties (together with such Reporting Persons, "the Series A Investors") entered into a securities purchase agreement (the "Series A Purchase Agreement") pursuant to which, among other things, the Series A Investors purchased units of the Issuer at a price of \$2.015 per unit, each unit consisting of (i) one Share or 0.001 shares of Series A Preferred Stock, and (ii) warrants to purchase Shares consisting of (a) a warrant to purchase 0.40 Shares with an exercise price of \$3.00 per Share. The Reporting Persons purchased an aggregate of 4,963 units under the Series A Purchase Agreement. In connection with this transaction, the Issuer and the Series A Investors also entered into a registration rights agreement, dated June 2, 2016 (the "Series A Registration Rights Agreement"), requiring the Issuer to register the resale of these Shares and the Shares underlying the Series A Preferred Stock and warrants. The foregoing descriptions of the Series A Purchase Agreement and the Series A Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Series A Purchase Agreement and Series A Registration Rights Agreement, which are attached hereto as Exhibit 99.2 and Exhibit 99.3, respectively, and are incorporated herein by reference.

18

CUSIP No. 720795103

On January 30, 2019, certain of the Reporting Persons and the Issuer entered into an exchange agreement (the "Series B Exchange Agreement") pursuant to which such Reporting Persons agreed to exchange an aggregate of 5,000,000 Shares for 5,000 shares of Series B Preferred Stock. The foregoing description of the Series B Exchange Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Series B Exchange Agreement, which is attached hereto as Exhibit 99.4 and incorporated herein by reference.

On November 2, 2019, the Issuer, certain of the Reporting Persons and certain other parties (together with such Reporting Persons, "the Series C Investors") entered into a securities purchase agreement (the "Series C Purchase Agreement") pursuant to which, among other things, the Series C Investors purchased units of the Issuer at a price of \$3.55 per unit, each unit consisting of (i) one Share or 0.001 shares of Series C Preferred Stock and (ii) one C Warrant. The Reporting Persons purchased an aggregate of 3,522 units under the Series C Purchase Agreement. In connection with this transaction, the Issuer and the Series C Investors entered into a registration rights agreement, dated November 2, 2019 (the "Series C Registration Rights Agreement"), requiring the Issuer to register the resale of these Shares and the Shares underlying the Series C Preferred Stock and C Warrants. The foregoing descriptions of the Series C Purchase Agreement and the Series C Registration Rights Agreement do not purport to be complete and are qualified in their entirety by reference to the full text of the Series C Purchase Agreement and the Series C Registration Rights Agreement, which are attached hereto as Exhibit 99.5 and Exhibit 99.6, respectively, and are incorporated herein by reference.

On March 31, 2020, certain of the Reporting Persons and the Issuer entered into an exchange agreement (the "Series D Exchange Agreement") pursuant to which such Reporting Persons agreed to exchange an aggregate of 3,000,000 Shares for 3,000 shares of Series D Preferred Stock. The foregoing description of the Series D Exchange Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Series D Exchange Agreement, which is attached hereto as Exhibit 99.7 and incorporated herein by reference.

On May 20, 2021, certain of the Reporting Persons and the Issuer entered into an exchange agreement (the "Series E Exchange Agreement") pursuant to which such Reporting Persons agreed to exchange an aggregate of 5,000,000 Shares for 5,000 shares of Series E Preferred Stock. The foregoing description of the Series E Exchange Agreement does not purport to be complete and is qualified in its entirety by reference to the full text of the Series E Exchange Agreement, which is attached hereto as Exhibit 99.8 and incorporated herein by reference.

BVF GP and BVF2 GP are the general partners of each of BVF and BVF2, respectively, pursuant to their limited partnership agreements, which provide BVF GP and BVF2 GP with broad authority over the activities and assets of BVF and BVF2. Pursuant to such limited partnership agreements, BVF GP and BVF2 GP are entitled to allocations based on realized and unrealized gains on the respective assets of BVF and BVF2.

Partners is the sole member of Partners OS and the investment manager of BVF, BVF2 and Trading Fund OS pursuant to their respective investment management agreements which authorize Partners, among other things, to invest the funds of BVF, BVF2 and Trading Fund OS in the securities of the Issuer and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreements, Partners is entitled to receive fees based on assets under management and allocations based on realized and unrealized gains on such assets from each of BVF, BVF2 and Trading Fund OS.

CUSIP No. 720795103

Pursuant to investment management agreements with certain of the Partners Managed Accounts, Partners and BVF Inc. have authority, among other things, to invest funds of certain of the Partners Managed Accounts in the securities of the Issuer and other securities and to vote, exercise or convert and dispose of such securities. Pursuant to such investment management agreements, Partners and BVF Inc. receive fees based on realized and unrealized gains thereon.

Other than as described herein, there are no contracts, arrangements, understandings or relationships among the Reporting Persons, or between the Reporting Persons and any other person, with respect to the securities of the Issuer.

#### Item 7. Material to be Filed as Exhibits.

Exhibit No.	Description
99.1	Joint Filing Agreement by and among the Reporting Persons, dated May 22, 2023.
99.2	Series A Purchase Agreement, dated June 2, 2016, by and among the Issuer and the other parties thereto (incorporated by reference to Exhibit 10.1 of the Issuer's Current Report on Form 8-K, filed with the SEC on June 3, 2016).
99.3	Series A Registration Rights Agreement, dated June 2, 2016, by and among the Issuer and the other parties thereto (incorporated by reference to Exhibit 10.3 of the Issuer's Current Report on Form 8-K, filed with the SEC on June 3, 2016).
99.4	Series B Exchange Agreement, dated January 30, 2019, by and among the Issuer and certain of the Reporting Persons (incorporated by reference to Exhibit 10.1 of the Issuer's Current Report on Form 8-K, filed with the SEC on February 4, 2019).
99.5	Series C Purchase Agreement, dated November 2, 2019, by and among the Issuer and the other parties thereto (incorporated by reference to Exhibit 10.1 of the Issuer's Current Report on Form 8-K, filed with the SEC on November 4, 2019).
99.6	Series C Registration Rights Agreement, dated November 2, 2019, by and among the Issuer and the other parties thereto (incorporated by reference to Exhibit 10.3 of the Issuer's Current Report on Form 8-K, filed with the SEC on November 4, 2019).
99.7	Series D Exchange Agreement, dated March 31, 2020, by and among the Issuer and certain of the Reporting Persons (incorporated by reference to Exhibit 10.1 of the Issuer's Current Report on Form 8-K, filed with the SEC on April 6, 2020).
99.8	Series E Exchange Agreement, dated May 20, 2021, by and among the Issuer and certain of the Reporting Persons (incorporated by reference to Exhibit 10.1 of the Issuer's Current Report on Form 8-K, filed with the SEC on May 21, 2021).
	20

CUSIP No. 720795103

### **SIGNATURES**

After reasonable inquiry and to the best of his or its knowledge and belief, each of the undersigned certifies that the information set forth in this statement is true,

comp	After reasonable inquiry and to the best of his or its knowledge and belief, elete and correct.	each of	the undersigned certifies that the information set forth in this statement is true,	
Dated	: May 22, 2023			
BIOTECHNOLOGY VALUE FUND, L.P.		BIOTECHNOLOGY VALUE TRADING FUND OS LP		
By:	BVF I GP LLC, its general partner	By: By:	BVF Partners L.P., its investment manager BVF Inc., its general partner	
Ву:	/s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer	By:	/s/ Mark N. Lampert Mark N. Lampert President	
BVF	I GP LLC			
By:	/s/ Mark N. Lampert	BVF	GP HOLDINGS LLC	
•	Mark N. Lampert Chief Executive Officer	By:	/s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer	
BIOT	ECHNOLOGY VALUE FUND II, L.P.			
By:	BVF II GP LLC, its general partner	BVF	PARTNERS L.P.	
By:	/s/ Mark N. Lampert	By:	BVF Inc., its general partner	
·	Mark N. Lampert Chief Executive Officer	Ву:	/s/ Mark N. Lampert Mark N. Lampert President	
BVF II GP LLC				
By:	/s/ Mark N. Lampert Mark N. Lampert	BVF By:	INC. /s/ Mark N. Lampert	

BVF PARTNERS OS LTD.

Chief Executive Officer

/s/ Mark N. Lampert

Mark N. Lampert President

By: BVF Partners L.P., its sole member By: BVF Inc., its general partner

/s/ Mark N. Lampert Mark N. Lampert President

MARK N. LAMPERT

21

CUSIP No. 720795103

By:

# SCHEDULE A

# Transactions in the Securities of the Issuer During the Past Sixty Days

Class of Security	Securities Purchased	Price (\$)	<u>Date of</u> <u>Purchase</u>		
BIOTECHNOLOGY VALUE FUND, L.P.					
Common Stock Common Stock	1,594,060 6,873,306	0.7900 0.8600	05/03/2023 05/11/2023		
BIOTECHNOLOGY VALUE FUND II, L.P.					
Common Stock Common Stock	1,405,940 5,134,001	0.7900 0.8600	05/03/2023 05/11/2023		
BIOTECHNOLOGY VALUE TRADING FUND OS LP					
Common Stock	522,236	0.8600	05/11/2023		

## JOINT FILING AGREEMENT

In accordance with Rule 13d-1(k)(1)(iii) 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 13D dated May 22, 2023 (including amendments thereto) with respect to the shares of Common Stock, \$0.001 par value per share, of Pieris Pharmaceuticals, Inc. This Joint Filing Agreement shall be filed as an Exhibit to such Statement.

Dated: May 22, 2023

BIOTECHNOLOGY VALUE FUND, L.P.

By: BVF I GP LLC, its general partner

By: /s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer

BVF I GP LLC

By: /s/ Mark N. Lampert

Mark N. Lampert Chief Executive Officer

BIOTECHNOLOGY VALUE FUND II, L.P.

By: BVF II GP LLC, its general partner

By: /s/ Mark N. Lampert Mark N. Lampert Chief Executive Officer

BVF II GP LLC

By: /s/ Mark N. Lampert

Mark N. Lampert Chief Executive Officer

BVF PARTNERS OS LTD.

By: BVF Partners L.P., its sole member By: BVF Inc., its general partner

By: /s/ Mark N. Lampert Mark N. Lampert President BIOTECHNOLOGY VALUE TRADING FUND OS LP

By: BVF Partners L.P., its investment manager

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert President

BVF GP HOLDINGS LLC

By: /s/ Mark N. Lampert

Mark N. Lampert Chief Executive Officer

BVF PARTNERS L.P.

By: BVF Inc., its general partner

By: /s/ Mark N. Lampert

Mark N. Lampert President

BVF INC.

By: /s/ Mark N. Lampert

Mark N. Lampert

President

/s/ Mark N. Lampert

MARK N. LAMPERT