

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

SCHEDULE 13G/A

Under the Securities Exchange Act of 1934
(Amendment No. 3)

Acadia Pharmaceuticals Inc.

(Name of Issuer)

Common Stock

(Title of Class of Securities)

0042251084

(CUSIP Number)

December 31, 2009

(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 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).

CUSIP No. 0042251084

1 Name of Reporting Person
Sepracor Inc.

S.S. or I.R.S. Identification No. of Above Person
22-2536587

2 Check the Appropriate Box if a Member of a Group

- (a)
- (b)

3 SEC Use Only

4 Citizenship or Place of Organization
Delaware

Number of Shares Beneficially Owned by Reporting Person With

5

Sole Voting Power
1,890,422

6

Shared Voting Power
0

7 Sole Dispositive Power
1,890,422

8 Shared Dispositive Power
0

9 Aggregate Amount Beneficially Owned by Reporting Person
1,890,422

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11 Percent of Class Represented by Amount in Row (9)
4.9%

12 Type of Reporting Person
CO

2

CUSIP No. 0042251084

1 Name of Reporting Person
Dainippon Sumitomo Pharma America Holdings, Inc.

S.S. or I.R.S. Identification No. of Above Person
27-0534130

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization
Delaware

5 Sole Voting Power
1,890,422

Number of
Shares
Beneficially
Owned by
Reporting
Person With

6 Shared Voting Power
0

7 Sole Dispositive Power
1,890,422

8 Shared Dispositive Power
0

9 Aggregate Amount Beneficially Owned by Reporting Person
1,890,422

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11 Percent of Class Represented by Amount in Row (9)
4.9%

12 Type of Reporting Person
CO

3

CUSIP No. 0042251084

1 Name of Reporting Person
Dainippon Sumitomo Pharma Co. Ltd.

S.S. or I.R.S. Identification No. of Above Person
Not Applicable

2 Check the Appropriate Box if a Member of a Group

(a)

(b)

3 SEC Use Only

4 Citizenship or Place of Organization
Osaka, Japan

5 Sole Voting Power
1,890,422

Number of
Shares
Beneficially
Owned by
Reporting
Person With

6 Shared Voting Power
0

7 Sole Dispositive Power
1,890,422

8 Shared Dispositive Power
0

9 Aggregate Amount Beneficially Owned by Reporting Person
1,890,422

10 Check Box if the Aggregate Amount in Row (9) Excludes Certain Shares

11 Percent of Class Represented by Amount in Row (9)
4.9%

12 Type of Reporting Person
CO

4

Amendment No. 2 to Schedule 13G

Item 1

(a) Name of Issuer

Acadia Pharmaceuticals Inc. (the "Issuer")

(b) Address of Issuer's Principal Executive Office

Item 2

(a) Names of Persons Filing

This Statement is being filed on behalf of each of the following persons collectively, the "Reporting Persons"):

- (i) Sepracor Inc.
 - (ii) Dainippon Sumitomo Pharma America Holdings, Inc.
 - (iii) Dainippon Sumitomo Pharma Co., Ltd.
-

(b) Address of Principal Business Office

The address of the principal business offices of the Reporting Persons is:

Sepracor Inc.
84 Waterford Drive
Marlborough, MA 01752

Dainippon Sumitomo Pharma America Holdings, Inc.
One Bridge Plaza, Suite 510
Fort Lee, New Jersey 07024

Dainippon Sumitomo Pharma Co., Ltd.
6-8 Doshomachi 2-Chrome
Chu-Ku, Osaka 541-0045
Japan

(c) Citizenship

- (i) a Delaware corporation
 - (ii) a Delaware corporation
 - (iii) organized under the laws of Japan
-

(d) Title of Class of Securities

Common Stock, par value \$0.0001 per share (the "Common Stock")

(e) CUSIP Number

0042251084

Item 3 This statement is not being filed pursuant to either Rule 13d-1(b) or 13d-2(b) or (c).

CUSIP No. 0042251084

Item 4 **Ownership**

(a) Amount Beneficially owned:

1,890,422 shares of Common Stock

(b) Percent of class:

4.9%

(c) Number of Shares as to which each of the Reporting persons has:

- (i) Sole power to vote or to direct the vote
1,890,422 shares of Common Stock
 - (ii) Shared power to vote or to direct the vote
-

0 shares

(iii) Sole power to dispose or direct the disposition of
1,890,422 shares of Common Stock

(iv) shared power to dispose or to direct the disposition of
0 shares

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 persons have ceased to be the beneficial owners of more than five percent of the class of securities, check the following x.

Item 6 Ownership of More than Five Percent on Behalf of Another Person

Not applicable.

Item 7 Identification and Classification of 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 Notice of Dissolution of Group

Not applicable.

6

Item 10 Certification

By signing below I certify that, to the best of my knowledge and belief, the securities referred to above were not acquired and are not held for the purpose of or with 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 that purpose or effect.

SIGNATURES

In accordance with Rule 13(d)-1(k)(1) under the Securities Exchange Act of 1934, as amended, the undersigned hereby agree to the joint filing with each other of the attached statement on Schedule 13G and to all amendments to such statement. 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: May 11, 2010

SEPRACOR INC.

By: /s/ Mark Iwicki
Name: Mark Iwicki
Title: President and Chief Operating Officer

Dated: May 11, 2010

DAINIPPON SUMITOMO PHARMA AMERICA HOLDINGS, INC.

By: /s/ Nobuhiko Tamura
Name: Nobuhiko Tamura
Title: President

Dated: May 11, 2010

DAINIPPON SUMITOMO PHARMA CO., LTD.

By: /s/ Hiroshi Nomura
Name: Hiroshi Nomura
Title: Executive Officer

7