

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

**FORM S-8
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933**

ACADIA PHARMACEUTICALS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware
(State or Other Jurisdiction of
Incorporation or Organization)

06-1376651
(I.R.S. Employer
Identification No.)

**3911 Sorrento Valley Boulevard
San Diego, CA 92121
(858) 558-2871**
(Address of Principal Executive Offices, Including Zip Code)

**ACADIA Pharmaceuticals Inc.
2010 EQUITY INCENTIVE PLAN
2004 EMPLOYEE STOCK PURCHASE PLAN**
(Full Titles of the Plans)

**Uli Hacksell, Ph.D.
President and Chief Executive Officer
ACADIA Pharmaceuticals Inc.
3911 Sorrento Valley Boulevard
San Diego, CA 92121**
(Name and Address of Agent for Service)

(858) 558-2871
(Telephone Number, Including Area Code, of Agent for Service)

Copies to:

**Glenn F. Baity
Vice President, General Counsel & Secretary
ACADIA Pharmaceuticals Inc.
3911 Sorrento Valley Boulevard
San Diego, CA 92121
(858) 558-2871**

**L. Kay Chandler, Esq.
Sean M. Clayton, Esq.
Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
(858) 550-6000**

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Securities Exchange Act of 1934:

Large accelerated filer Accelerated filer
Non-accelerated filer (Do not check if a smaller reporting company) Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Securities to Be Registered	Amount to Be Registered (1)	Proposed Maximum Offering Price per Share(2)	Proposed Maximum Aggregate Offering Price(2)	Amount of Registration Fee
Common Stock issuable under the 2010 Equity Incentive Plan (par value \$0.0001 per share)	7,500,000 shares(3)	\$19.89	\$149,175,000	\$20,347.47
Common Stock issuable under the 2004 Employee Stock Purchase Plan (par value \$0.0001 per share)	150,000 shares(4)	\$19.89	\$2,983,500	\$406.95
Total	7,650,000 shares	N/A	\$152,158,500	\$20,754.42

(1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also registers any additional shares of the Registrant's common stock, par value \$0.0001 per share (the "Common Stock"), as may become issuable under the plans as a result of any stock split, stock dividend, recapitalization or similar event.

- (2) Estimated solely for the purpose of calculating the amount of the registration fee pursuant to Rule 457(h)(1) and Rule 457(c) under the Securities Act. The price per share and aggregate offering price are based upon the average of the high and low prices of Registrant's Common Stock on July 31, 2013, as reported on the NASDAQ Global Market.
 - (3) Represents shares of Common Stock that were added following the approval by the Registrant's stockholders at the 2013 annual meeting of stockholders held on June 7, 2013.
 - (4) Represents shares of Common Stock that were automatically added to the shares authorized for issuance under the Registrant's 2004 Employee Stock Purchase Plan (the "2004 ESPP") on June 7, 2013, pursuant to an "evergreen" provision contained in the 2004 ESPP. Pursuant to such provision, on the date of the Registrant's annual meeting of stockholders, the number of shares authorized for issuance under the 2004 ESPP is automatically increased by a number equal to the least of: one percent of the number of shares of Common Stock outstanding on the record date for the annual stockholders' meeting; 150,000 shares of Common Stock; or a lesser number of shares of Common Stock that may be determined by the Registrant's board of directors.
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PART II

**INCORPORATION BY REFERENCE OF CONTENTS OF
REGISTRATION STATEMENTS ON FORM S-8 NO. 333-168667, NO. 333-176212 AND
NO. 333-183151**

The contents of Registration Statements on Form S-8 No. 333-168667, as amended, No. 333-176212, and No. 333-183151 filed with the Securities and Exchange Commission on August 9, 2010, August 10, 2011, and August 8, 2012 respectively, are incorporated by reference herein.

EXHIBITS

Exhibit Number	Description
4.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q, filed August 10, 2011).
4.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed December 17, 2009).
4.3	Form of common stock certificate of the Registrant (incorporated by reference to Exhibit 4.1 to Registration Statement No. 333-52492, filed December 21, 2000).
5.1	Opinion of Cooley LLP.
23.1	Consent of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm.
23.2	Consent of Cooley LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney is contained on the signature pages.
99.1	2010 Equity Incentive Plan, as amended (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed June 12, 2013).
99.2	2004 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.4 to Registration Statement No. 333-113137, filed May 19, 2004).

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of San Diego, State of California, on August 6, 2013.

ACADIA PHARMACEUTICALS INC.

By: /s/ Uli Hacksell
Uli Hacksell, Ph.D.
President and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints ULI HACKSELL, PH.D. and THOMAS H. AASEN, and each of them, his or her true and lawful attorney-in-fact and agent, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this Registration Statement, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or either of them, or their or his substitutes or substitute, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this Registration Statement has been signed by the following persons in the capacities and on the date indicated.

Signature	Title	Date
<u>/s/ Uli Hacksell</u> ULI HACKSELL	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	August 6, 2013
<u>/s/ Thomas H. Aasen</u> THOMAS H. AASEN	Executive Vice President, Chief Financial Officer, Chief Business Officer and Treasurer <i>(Principal Financial and Accounting Officer)</i>	August 6, 2013
<u>/s/ Leslie L. Iversen</u> LESLIE L. IVERSEN	Chairman of the Board	August 6, 2013
<u>/s/ Stephen Biggar</u> STEPHEN BIGGAR	Director	August 6, 2013
<u>/s/ Michael T. Borer</u> MICHAEL T. BORER	Director	August 6, 2013
<u>/s/ Laura A. Brege</u> LAURA A. BREGE	Director	August 6, 2013
<u>/s/ Mary Ann Gray</u> MARY ANN GRAY	Director	August 6, 2013
<u>/s/ Lester J. Kaplan</u> LESTER J. KAPLAN	Director	August 6, 2013
<u>/s/ Torsten Rasmussen</u> TORSTEN RASMUSSEN	Director	August 6, 2013
<u>/s/ William M. Wells</u> WILLIAM M. WELLS	Director	August 6, 2013

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Sean M. Clayton
T: +1 858 550 6034
sclayton@cooley.com

August 6, 2013

ACADIA Pharmaceuticals Inc.
3911 Sorrento Valley Boulevard
San Diego, CA 92121

Ladies and Gentlemen:

You have requested our opinion with respect to certain matters in connection with the filing by ACADIA Pharmaceuticals Inc., a Delaware corporation (the "Company"), of a Registration Statement on Form S-8 (the "Registration Statement") with the Securities and Exchange Commission, covering the offering of an aggregate of up to 7,650,000 shares of the Company's common stock, \$0.0001 par value, including 7,500,000 shares (the "Incentive Plan Shares") issuable pursuant to the Company's 2010 Equity Incentive Plan (the "Incentive Plan") and 150,000 shares (the "ESPP Shares") issuable pursuant to the Company's 2004 Employee Stock Purchase Plan (the "ESPP").

In connection with this opinion, we have examined and relied upon the Registration Statement and related prospectuses, the Incentive Plan and the ESPP, the Company's Amended and Restated Certificate of Incorporation, as amended, its Amended and Restated Bylaws, and the originals or copies certified to our satisfaction of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinion expressed below. We have assumed the genuineness and authenticity of all documents submitted to us as originals, the conformity to originals of all documents submitted to us as copies thereof and the due execution and delivery of all documents where due execution and delivery are a prerequisite to the effectiveness thereof.

On the basis of the foregoing, and in reliance thereon, we are of the opinion that (i) the Incentive Plan Shares, when issued and sold in accordance with the Incentive Plan, the Registration Statement and related prospectus, will be validly issued, fully paid and nonassessable (except as to Incentive Plan Shares issued pursuant to certain deferred payment arrangements, which will be fully paid and nonassessable when such deferred payments are made in full) and (ii) the ESPP Shares, when issued and sold in accordance with the ESPP, the Registration Statement and related prospectus, will be validly issued, fully paid and nonassessable.

We consent to the filing of this opinion as an exhibit to the Registration Statement.

Sincerely,

Cooley LLP

By: /s/ Sean M. Clayton
Sean M. Clayton

4401 EASTGATE MALL, SAN DIEGO, CA 92121 T: (858) 550-6000 F: (858) 550-6420 WWW.COOLEY.COM

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated March 12, 2013 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in ACADIA Pharmaceuticals Inc.'s Annual Report on Form 10-K for the year ended December 31, 2012.

/s/PricewaterhouseCoopers LLP

San Diego, California
August 6, 2013