
**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

D. Bradley Peck, Esq.
J. Patrick Loofbourrow, Esq.
Cooley LLP
4401 Eastgate Mall
San Diego, CA 92121
(858) 550-6000

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)	8,314,234 shares(3)	\$1.155	\$9,602,940	\$685
Common Stock issuable under the 2004 Employee Stock Purchase Plan (par value \$0.0001 per share)	150,000 shares(4)	\$1.155	\$173,250	\$12
Total	8,464,234 shares	N/A	\$9,776,190	\$697

- (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(e) 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 August 6, 2010, as reported on the Nasdaq Global Market.
- (3) Represents (i) 802,809 shares of Common Stock that remained available for future grant under the ACADIA Pharmaceuticals Inc. 2004 Equity Incentive Plan (the "2004 EIP") as of June 11, 2010 (the "Available Reserve"), the date of adoption of the Company's 2010 Equity Incentive Plan (the "2010 EIP") by the Registrant's stockholders, (ii) 4,261,425 shares of Common Stock reserved for issuance upon the exercise of outstanding options granted under the 2004 EIP and the ACADIA Pharmaceuticals Inc. 1997 Stock Option Plan (together with the 2004 EIP, the "Prior Plans") as of June 11, 2010 (the "Outstanding Awards") and (iii) 3,250,000 shares of Common Stock reserved for future grant under the 2010 EIP. The Prior Plans have been terminated, no further stock awards will be made under the Prior Plans and the Available Reserve, plus any shares underlying the Outstanding Awards that expire or are forfeited, have been allocated to the 2010 EIP.
- (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 11, 2010, pursuant to an "evergreen" provision contained in the 2004 ESPP. Pursuant to such provision, on the date of the Registrant's annual stockholders' meeting, 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.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Certain Documents by Reference.

The following documents filed by ACADIA Pharmaceuticals Inc. (the "Company" or the "Registrant") with the Securities and Exchange Commission are incorporated by reference into this Registration Statement:

(a) The Company's annual report on Form 10-K for the fiscal year ended December 31, 2009 filed pursuant to Sections 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act").

(b) All other reports filed pursuant to Sections 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the annual report referred to in (a) above.

(c) The description of the Company's Common Stock which is contained in a registration statement filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All reports and other documents subsequently filed by the Company pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act prior to the filing of a post-effective amendment which indicates that all securities offered have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference herein and to be a part of this Registration Statement from the date of the filing of such reports and documents.

Item 4. Description of Securities.

Not applicable.

Item 5. Interests of Named Experts and Counsel.

Not applicable.

Item 6. Indemnification of Directors and Officers.

We are incorporated under the laws of the State of Delaware. Section 102 of the Delaware General Corporation Law allows a corporation to eliminate the personal liability of directors of a corporation to the corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit.

Section 145 of the Delaware General Corporation Law provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against amounts paid and expenses incurred in connection with an action or proceeding to which he was or is a party or is threatened to be made a party by reason of such position, if such person shall have acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal proceeding, if such person had no reasonable cause to believe his conduct was unlawful; provided that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the adjudicating court determines that such indemnification is proper under the circumstances.

The Registrant's amended and restated certificate of incorporation and bylaws include provisions that indemnify directors and officers of the corporation for actions taken in such capacity, if the actions were taken in good faith and in a manner reasonably believed to be in the best interests of the corporation and, in a criminal proceeding, the director or officer had no reasonable cause to believe that his conduct was unlawful. A director or officer who is successful in defending a claim will be indemnified for all expenses incurred in connection with his defense. In connection with the Offering, the Registrant will enter into indemnification agreements with its officers and directors that require the Registrant to indemnify such persons against any and all expenses (including attorneys' fees), witness fees, damages, judgments, fines, settlements and other amounts incurred in connection with any action, suit or proceeding, whether actual or threatened, to which any such person may be made a party by reason of the fact that such person is or was or at any time becomes a director, an officer or an employee of the Registrant or any of its affiliated enterprises, provided that such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to our best interests and, with respect to any criminal proceeding, had no reasonable cause to believe his or her conduct was unlawful.

At present, there is no pending litigation or proceeding involving any of our directors or executive officers as to which indemnification is required or permitted, and we are not aware of any threatened litigation or proceeding that may result in a claim for indemnification. We have an insurance policy covering our officers and directors with respect to certain liabilities, including liabilities arising under the 1933 Act or otherwise.

Item 7. Exemption from Registration Claimed.

Not applicable

EXHIBITS

<u>Exhibit Number</u>	<u>Description</u>
4.1	Registrant's Amended and Restated Certificate of Incorporation. (1)
4.2	Registrant's Amended and Restated Bylaws, as currently in effect. (2)
4.3	Form of Registrant's common stock certificate. (3)
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. (4)
99.2	2004 Employee Stock Purchase Plan. (1)

(1) Filed as an exhibit to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-113137), filed with the Commission on February 27, 2004, and incorporated herein by reference.

(2) Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed December 17, 2009, and incorporated herein by reference.

(3) Filed as Exhibit 4.1 to Registration Statement on Form S-1 (File No. 333-52492), filed with the Commission on December 21, 2000, and incorporated herein by reference.

(4) Filed as Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed August 9, 2010, and incorporated herein by reference.

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 9, 2010.

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.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Uli Hacksell</u> ULI HACKSELL	President, Chief Executive Officer and Director <i>(Principal Executive Officer)</i>	August 9, 2010
<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 9, 2010
<u>/s/ Leslie Iversen</u> LESLIE L. IVERSEN	Chairman of the Board	August 9, 2010
<u>/s/ Michael Borer</u> MICHAEL T. BORER	Director	August 9, 2010
<u>/s/ Laura Brege</u> LAURA A. BREGE	Director	August 9, 2010
<u>/s/ Mary Ann Gray</u> MARY ANN GRAY	Director	August 9, 2010
<u>/s/ Lester Kaplan</u> LESTER J. KAPLAN	Director	August 9, 2010
<u>/s/ Torsten Rasmussen</u> TORSTEN RASMUSSEN	Director	August 9, 2010

EXHIBIT INDEX

<u>Exhibit Number</u>	<u>Description</u>
4.1	Registrant's Amended and Restated Certificate of Incorporation. (1)
4.2	Registrant's Amended and Restated Bylaws, as currently in effect. (2)
4.3	Form of Registrant's common stock certificate. (3)
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. (4)
99.2	2004 Employee Stock Purchase Plan. (1)

(1) Filed as an exhibit to the Registrant's Registration Statement on Form S-1, as amended (File No. 333-113137), filed with the Commission on February 27, 2004, and incorporated herein by reference.

(2) Filed as Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed December 17, 2009, and incorporated herein by reference.

(3) Filed as Exhibit 4.1 to Registration Statement on Form S-1 (File No. 333-52492), filed with the Commission on December 21, 2000, and incorporated herein by reference.

(4) Filed as Appendix A to the Registrant's Quarterly Report on Form 10-Q, filed August 9, 2010, and incorporated herein by reference.

D. Bradley Peck
(858) 550-6012
bpeck@cooley.com

[Cooley Letterhead]

August 9, 2010

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 8,464,234 shares of the Company's common stock, \$0.0001 par value, including 8,314,234 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 and 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.

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

ACADIA Pharmaceuticals Inc.

August 9, 2010

Page Two

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

Very truly yours,

Cooley LLP

By: /s/ D. Bradley Peck

D. Bradley Peck

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 9, 2010 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, 2009.

/s/ PricewaterhouseCoopers LLP

San Diego, California

August 9, 2010