

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

**FORM 8-K**

**CURRENT REPORT  
PURSUANT TO SECTION 13 OR 15(D) OF THE  
SECURITIES EXCHANGE ACT OF 1934**

Date of Report (Date of earliest event reported): April 19, 2006

**ACADIA PHARMACEUTICALS INC.**

(Exact name of registrant as specified in its charter)

**DELAWARE**  
(State or other jurisdiction of incorporation)

**000-50768**  
(Commission File Number)

**06-1376651**  
(IRS Employer Identification No.)

**3911 SORRENTO VALLEY BOULEVARD  
SAN DIEGO, CALIFORNIA**  
(Address of principal executive offices)

**92121**  
(Zip Code)

**(858) 558-2871**  
Registrant's telephone number, including area code

**N/A**  
(Former name or former address, if changed since last report.)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

**Item 8.01 Other Events.**

On April 19, 2006, ACADIA Pharmaceuticals Inc. issued a press release announcing the results of its proof-of-concept clinical trial that assessed the effect of ACP-103 on deep, or slow wave, sleep. A copy of the press release is attached as Exhibit 99.1.

**Item 9.01 Financial Statements and Exhibits.**

(c) Exhibits

| <u>Exhibit Number</u> | <u>Description</u>                  |
|-----------------------|-------------------------------------|
| 99.1                  | Press release dated April 19, 2006. |

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: April 19, 2006

ACADIA Pharmaceuticals Inc.

By: /s/ Thomas H. Aasen

Thomas H. Aasen  
Vice President, Chief Financial Officer,  
Treasurer and Secretary

**EXHIBIT INDEX**

**Exhibit Number**

**Description**

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99.1

Press release dated April 19, 2006.

## Contacts:

ACADIA Pharmaceuticals Inc.

Lisa Barthelemy, Director, Investor Relations

Uli Hacksell, Ph.D., Chief Executive Officer

(858) 558-2871

**ACADIA PHARMACEUTICALS ANNOUNCES POSITIVE CLINICAL TRIAL  
RESULTS DEMONSTRATING THAT ACP-103 INCREASES SLOW WAVE SLEEP**

**SAN DIEGO, CA April 19, 2006** – ACADIA Pharmaceuticals Inc. (Nasdaq: ACAD) today reported top-line results from a proof-of-concept clinical study that assessed the effect of ACP-103 on deep, or slow wave, sleep in healthy older volunteers using polysomnography (PSG). Results of the study demonstrated that ACP-103 induced a robust and statistically significant increase in slow wave sleep that was dose-related. ACP-103 treatment also had a positive impact on measures for sleep maintenance, including decreases in the number of awakenings after sleep onset and in the time awake after sleep onset. ACP-103 is ACADIA's proprietary serotonin 5-HT<sub>2A</sub> inverse agonist that blocks the activity of this key receptor.

“These data provide a proof-of-concept of the ability of ACP-103 to improve the quality of sleep by increasing slow wave sleep,” said Uli Hacksell, Ph.D., Chief Executive Officer of ACADIA. “This suggests that ACP-103 has potential as a novel treatment for sleep maintenance insomnia. ACADIA is currently in Phase II clinical development with ACP-103 for use in schizophrenia and treatment-induced dysfunctions in Parkinson’s disease, two indications with patients who frequently suffer from sleep disturbances. The trial results provide an excellent demonstration of the relationship between doses of ACP-103, plasma levels and effects of 5-HT<sub>2A</sub>-receptor antagonism on slow wave sleep, and, therefore, these data also will be helpful in the design of future ACP-103 clinical trials.”

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### *Clinical Trial Design*

The clinical trial was a double-blind, placebo-controlled study involving 45 healthy volunteers ranging in age from 40 to 64. The subjects were randomized to one of five treatment arms, including placebo and four different doses (1 mg, 2.5 mg, 5 mg, and 20 mg) of ACP-103. Each group was administered placebo or the specified dose of ACP-103 once-daily each morning for 14 consecutive days. All subjects underwent a two-night screening and baseline PSG evaluation. Additional PSG measurements were performed on the evening of study days 1 and 13. The subjects also completed a Continuous Performance Test (CPT) to assess the potential impact on daytime functioning. Blood samples were collected at the beginning and end of the 14-day period to determine ACP-103 levels in plasma. Of the 45 subjects, 20 of them also underwent a positron emission tomography (PET) study to measure 5-HT<sub>2A</sub> brain receptor occupancy. The PET data are currently being analyzed.

### *Clinical Trial Results*

The PSG data demonstrated that once-daily administration of 5 mg and 20 mg of ACP-103, the two highest doses used in this study, induced statistically significant increases in slow wave sleep ( $p < 0.001$ ) as defined by the time spent in Stage 3 and Stage 4 sleep. These stages are commonly referred to as deep, or slow wave, sleep. This robust effect was demonstrated both acutely (on study day 1) and after chronic administration (on study day 13). The two lower doses of ACP-103 were less effective than the two higher doses, demonstrating that the sleep effects of ACP-103 were dose-related.

*Change in Slow Wave Sleep From Baseline in Minutes, Percentage, and Statistical Significance  
Between Each Dose and Placebo (n.s. = not significant)*

|                  | N | Day 1                |            |         | Day 13               |            |         |
|------------------|---|----------------------|------------|---------|----------------------|------------|---------|
|                  |   | Change From Baseline |            | p-value | Change From Baseline |            | p-value |
|                  |   | Minutes              | Percentage |         | Minutes              | Percentage |         |
| ACP-103 (20 mg)  | 9 | 46.0                 | 55%        | p<0.001 | 39.0                 | 46%        | p<0.001 |
| ACP-103 (5 mg)   | 9 | 37.3                 | 65%        | p<0.001 | 41.9                 | 73%        | p<0.001 |
| ACP-103 (2.5 mg) | 9 | 21.8                 | 40%        | p<0.05  | 19.6                 | 36%        | n.s.    |
| ACP-103 (1 mg)   | 9 | 6.4                  | 10%        | n.s.    | 5.4                  | 9%         | n.s.    |
| Placebo          | 9 | -11.2                | -17%       | n/a     | -3.1                 | -4.6%      | n/a     |

Results of the clinical trial also showed that treatment with ACP-103 produced trends for improvement on measures for sleep maintenance, including decreases in the number of awakenings (p=0.04) and in time awake after sleep onset (p=0.09). Importantly, in contrast to most currently marketed insomnia drugs, which are sedative, sleep-inducing agents and have the potential to impair daytime functioning, ACP-103 did not alter latency to sleep onset and did not impair daytime functioning.

ACP-103 was safe and well tolerated in the study subjects and there were no serious adverse events reported. All adverse events were mild to moderate in nature and were comparable across the placebo and ACP-103-treated groups.

*About Sleep Maintenance Insomnia*

Sleep maintenance insomnia (SMI) is the inability to stay asleep or to resume sleep after waking and is a major unmet medical need. Deep, or slow wave, sleep decreases with age, which leads to superficial sleep and difficulty staying asleep. There is also an increased incidence of SMI in medical, neurological and psychiatric conditions. Patients with SMI complain of frequent awakenings and difficulty staying asleep after falling asleep. Patients with these symptoms also frequently report impairments of daytime functioning. Most available sleep agents are sedatives that are ineffective in treating the symptoms of SMI. The mechanism of action of ACP-103, as a 5-HT<sub>2A</sub> inverse agonist, provides the opportunity to effectively treat the symptoms of SMI without causing sedation.

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### *About ACP-103*

ACP-103 is a proprietary, potent and selective 5-HT<sub>2A</sub> receptor inverse agonist, which acts to block the activity of this key serotonin receptor. ACADIA has demonstrated that ACP-103 is safe and well tolerated in preclinical studies and in Phase I and initial Phase II clinical trials. ACADIA is developing ACP-103 as a new therapy for treatment-induced dysfunctions in patients with Parkinson's disease and as an adjunctive therapy for schizophrenia. ACADIA believes that ACP-103 may also have the potential to treat sleep maintenance insomnia.

### *About ACADIA Pharmaceuticals*

ACADIA Pharmaceuticals is a biopharmaceutical company utilizing innovative technology to fuel drug discovery and clinical development of novel treatments for central nervous system disorders. ACADIA currently has five Phase II-stage clinical programs as well as a portfolio of preclinical and discovery assets directed at large unmet medical needs, including schizophrenia, Parkinson's disease, sleep maintenance insomnia, and neuropathic pain. All of the drug candidates in ACADIA's product pipeline emanate from discoveries made using its proprietary drug discovery platform. ACADIA's corporate headquarters is located in San Diego, California and it maintains research and development operations in both San Diego and Malmö, Sweden.

### *Forward-Looking Statements*

Statements in this press release that are not strictly historical in nature are forward-looking statements. These statements include, but are not limited to, statements related to the potential for ACP-103 as a therapy for sleep maintenance insomnia and improving sleep quality and the utility of the trial data for future trial design. These statements are only predictions based on current information and expectations and involve a number of risks and uncertainties. Actual events or results may differ materially from those projected in any of such statements due to various factors, including the risks and uncertainties inherent in drug discovery, development, and commercialization. In particular, results from Phase I, proof-of-concept, and Phase II clinical trials are not guarantees of results in any future trials or of ACADIA's ability to obtain regulatory approval for ACP-103. For a discussion of these and other factors, please refer to ACADIA's annual report on Form 10-K for the year ended December 31, 2005 filed with the



United States Securities and Exchange Commission as well as other subsequent filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. This caution is made under the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. All forward-looking statements are qualified in their entirety by this cautionary statement and ACADIA undertakes no obligation to revise or update this press release to reflect events or circumstances after the date hereof.