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 30, 2008

ALEXION PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**000-27756**	**13-3648318**
(State or other jurisdiction of incorporation or organization)	**(Commission File Number)**	**(I.R.S. Employer Identification No.)**

352 Knotter Drive, Cheshire, Connecticut 06410
(Address of Principal Executive Offices) (Zip Code)

Registrant's telephone number, including area code: (203) 272-2596

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 (see General Instruction A.2. below):

☐ 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 2.02 Results of Operations and Financial Condition.

On April 30, 2008, Alexion issued a press release relating to its results of operations and financial conditions for the quarter ended March 31, 2008. A copy of the press release is furnished as Exhibit 99.1 to this form 8-K.

The attached press release contains both U.S. Generally Accepted Accounting Principles ("GAAP") and non-GAAP financial measures. The non-GAAP financial measures exclude share-based compensation expenses. Reconciliations between non-GAAP and GAAP financial measures are included in the press release set forth as Exhibit 99.1 furnished to this form 8-K. The Company's management utilizes non-GAAP financial information to provide a useful measure of comparative operating performance of the Company. The non-GAAP financial measures are supplemental to and not a substitute for, measures of financial performance prepared in accordance with GAAP.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

99.1 Press Release issued by Alexion Pharmaceuticals, Inc. on April 30, 2008 relating to its results of operations and financial conditions for the quarter ended March 31, 2008.

Signature

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 30, 2008

ALEXION PHARMACEUTICALS, INC.

By: /s/ Thomas I. H. Dubin
Name: Thomas I. H. Dubin
Title: Senior Vice President and General Counsel

Exhibit 99.1

Contact:

Alexion Pharmaceuticals, Inc.
Irving Adler
Sr. Director, Corporate Communications
203-271-8210

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ALEXION REPORTS FIRST QUARTER 2008 RESULTS

Growing Awareness of PNH Drives Strong Demand for Soliris® in U.S. and Europe

First Non-GAAP Profit; Sales Guidance Revised Upward

Pipeline Progress in Neurology and Cancer

First Quarter 2008 Financial Highlights:

- Soliris® (eculizumab) net product sales were $45.5 million in Q1 2008, compared to net product sales of $33.9 million in Q4 2007.
- Q1 GAAP net loss was $4.2 million, or $0.11 net loss per share, compared to a GAAP net loss of $12.3 million, or $0.33 net loss per share, in Q4 2007.
- Q1 non-GAAP net income was $1.6 million, or $0.04 net income per share, compared to a non-GAAP net loss of $8.5 million, or $0.23 net loss per share, in Q4 2007.

Cheshire, CT, April 30, 2008 – Alexion Pharmaceuticals, Inc. (NASDAQ: ALXN) today announced financial results for the quarter ended March 31, 2008.

First Quarter 2008 Financial Results:

For the three months ended March 31, 2008, Alexion Pharmaceuticals, Inc. ("Alexion" or the "Company") reported total revenues of $45.6 million compared to total revenues of $6.3 million for the same period in 2007. First quarter 2008 revenues were primarily from net product sales of Soliris® (eculizumab): $45.5 million, compared to $1.0 million in the first quarter of 2007 and $33.9 million in the fourth quarter of 2007. Soliris, approved by the U.S. Food and Drug Administration (FDA) in March 2007 and the European Commission (EC) in June 2007, is the only drug specifically indicated for the treatment of patients with paroxysmal nocturnal hemoglobinuria ("PNH"), a rare, debilitating and life-threatening blood disease.

The Company reports both GAAP results and non-GAAP results. Non-GAAP results are equal to GAAP results excluding the impact of share-based compensation. The following summary table is provided for investors'

convenience. A further reconciliation and explanation of the GAAP to non-GAAP figures appears at the end of this announcement.

(Millions of U.S. dollars, except per-share data)

	Quarter Ended March 31,	
	2008	2007
Net Product Sales	$ 45.5	$ 1.0
Contract Revenues	$ 0.1	$ 5.3
Total Revenues	$ 45.6	$ 6.3
GAAP Net Loss	(4.2)	(32.7)
Share-Based Compensation	5.9	5.0
Non-GAAP Net Income (Loss)	$ 1.6	$ (27.7)
GAAP Net Loss Per Share - Diluted	$ (0.11)	$ (0.92)
Non-GAAP Net Income (Loss) Per Share - Diluted	$ 0.04	$ (0.78)
Shares Used in Determining GAAP Loss Per Share	37,514	35,361
Shares Used in Determining Non-GAAP Income (Loss) Per Share	39,081	35,361

First Quarter 2008 (Q1 2008) Non-GAAP Financial Results

The Company reported non-GAAP net income for Q1 2008 of $1.6 million, or $0.04 per share, compared to a non-GAAP net loss of $27.7 million, or $0.78 per share, in the year-ago quarter, Q1 2007. Alexion incurred a non-GAAP net loss of $8.5 million, or $0.23 per share, in the prior quarter, Q4 2007.

Alexion's non-GAAP operating expenses for Q1 2008 were $39.5 million, compared to $36.1 million for Q1 2007. Non-GAAP research and development ("R&D") expenses for Q1 2008 were $14.0 million, compared to $18.8 million for the year-ago quarter. The lower R&D costs in Q1 2008 were the result of the non-recurrence of expenses associated with drug development, including Soliris registration and the Soliris extension study. Non-GAAP selling, general, and administrative ("SG&A") expenses for Q1 2008 were $25.5 million, compared to $17.2 million for Q1 2007. The increase in non-GAAP SG&A expenses primarily reflected costs associated with the expansion of the Company's commercial operations in the U.S. and Europe.

First Quarter 2008 GAAP Financial Results

On a GAAP basis, operating expenses for Q1 2008 were $45.4 million, compared to $41.1 million for Q1 2007. R&D expenses for Q1 2008 were $15.6 million, compared to $21.2 million for the year-ago quarter. The lower R&D costs in Q1 2008 were the result of the non-recurrence of expenses associated with drug development, including Soliris registration and the Soliris extension study. SG&A expenses were $29.8 million for Q1 2008, compared to $19.8 million for Q1 2007. The increase in GAAP SG&A expenses primarily reflected costs associated with the expansion of the Company's commercial operations in the U.S. and Europe. Operating expenses for Q1 2008 included $5.9 million of share-based compensation expense, compared to $5.0 million in Q1 2007.

The Company recorded investment income of $0.8 million for Q1 2008, compared to $2.8 million in the same period last year. Interest expense in the first quarter was $0.6 million, compared to $0.7 million for the same period last year.

Alexion incurred a GAAP net loss for the first quarter of 2008 of $4.2 million, or $0.11 per share, compared to a GAAP net loss of $32.7 million, or $0.92 per share, for Q1 2007. The GAAP net loss in Q1 2008 was reduced from a GAAP net loss of $12.3 million, or $0.33 per share in the prior quarter, Q4 2007.

Balance Sheet:

As of March 31, 2008, the Company had $107.0 million in cash, cash equivalents, restricted cash, and marketable securities, compared to $106.7 million at December 31, 2007. During the quarter, the Company drew down $18 million from its recently arranged credit facility for working capital purposes.

“Demand for Soliris increased significantly in both the United States and Europe, as we educated more physicians, patients and payors about PNH and the compelling data from Soliris clinical trials,” said Leonard Bell, M.D., Chief Executive Officer of Alexion. “Our non-GAAP profit in the first quarter resulted from continued strong momentum in the Soliris launch, combined with the rigorous financial discipline we have applied as our organization has grown. The scientific, commercial and financial success of Alexion makes it possible for us to help more patients with PNH and research promising therapies for other serious and rare diseases.”

Research and Development:

Soliris as a Treatment for Patients with PNH

As previously announced, the Company has completed enrolling patients in its AEGIS study, a single registration study to evaluate the safety, efficacy and pharmacology of Soliris as a treatment for Japanese patients with PNH. After the last patient has completed the study’s 12-week regimen of Soliris therapy, researchers will collect and analyze data later this year.

Soliris as a Treatment for Patients with Rare and Severe Diseases

With the FDA approval of Soliris as a treatment for PNH in 2007, Alexion became the first company to discover and develop a terminal complement inhibitor into a viable commercial product. The Company anticipates investigating the use of Soliris as a treatment for patients with other complement-mediated disorders. For example, Alexion has submitted an Investigational New Drug application (IND) to commence a clinical study of Soliris as a treatment for patients with myasthenia gravis, a disabling and sometimes life-threatening neurologic disorder.

Other Studies of Soliris

The Company continues to evaluate proposals from researchers with respect to investigator-sponsored trials of Soliris as a treatment for patients with other conditions. The Company is aware that an investigator-sponsored clinical trial evaluating the use of short-term Soliris therapy in a population of kidney transplant patients who are known to have a higher risk of organ rejection is commencing.

Anti-CD200 Monoclonal Antibody for Cancer

Alexion is developing its novel and proprietary anti-CD200 monoclonal antibody, which is designed to enhance the immune response to several types of malignant tumors. The FDA has authorized the Company’s IND for the use of this antibody as a therapy for patients with chronic lymphocytic leukemia (CLL). Alexion expects to begin a clinical trial in patients with CLL during 2008.

Q1 2008 Soliris Commercial Update:

In the first quarter, the Company continued to convert clinical trial patients to full commercial status in European countries and also added significant numbers of patients newly identified during the quarter in the U.S., as well as in Europe.

“Our commercial teams remain focused on helping physicians improve the diagnosis and treatment of PNH and helping patients obtain access to Soliris. Overall, the result has been steady growth in new patient starts and high levels of access and compliance with Soliris therapy,” said David Keiser, President and Chief Operating Officer of Alexion. “As in the past, we will expand our commercial team selectively when we see an opportunity to further educate physicians and support patients. All of these activities are in line with our objective that every patient who can benefit from Soliris will have access to it.”

Financial Guidance:

As a result of the Company's strong sales performance in the first quarter, Alexion is revising its previously announced guidance for worldwide Soliris net product sales upward, from a range of $200 to $215 million to a range of $215 to $225 million for 2008.

Further, the cost of sales, including actual and estimated royalties, is now expected to be improved to a range of 12 percent to 14 percent of net product sales, as compared to the previous estimate of 14 percent to 16 percent.

Prior financial guidance in other expense areas remains unchanged: excluding share-based compensation of $26 to $28 million, R&D expenses in 2008 are anticipated to be in the range of $65 to $75 million and SG&A expenses in the range of $115 to $125 million.

The Company expects to report a non-GAAP profit for the full year 2008.

Conference Call/Web Cast Information

Alexion will host a conference call/webcast to discuss matters mentioned in this release. The call is scheduled for today, April 30, 2008, at 10:00 a.m., Eastern Time. To participate in this call, dial 719-325-4776 confirmation code 3348104, shortly before 10:00 a.m., Eastern Time. A replay of the call will be available for a limited period following the call, beginning at 1:00 p.m. Eastern Time today. The replay number is 719-457-0820, confirmation code 3348104. The audio webcast can be accessed at www.alexionpharma.com.

About Soliris

Soliris is the first product approved for the treatment of patients with PNH in the U.S. and Europe. PNH is a rare, debilitating, and life-threatening blood disorder defined by the destruction of red blood cells, or hemolysis. In patients with PNH, hemolysis can cause life-threatening thromboses, recurrent pain, kidney disease, disabling fatigue, impaired quality of life, severe anemia, pulmonary hypertension, shortness of breath and intermittent episodes of dark-colored urine (hemoglobinuria). Soliris, or eculizumab, is the only treatment that blocks this hemolysis.

About Alexion

Alexion Pharmaceuticals, Inc. is a biopharmaceutical company working to develop and deliver life-changing drug therapies for patients with serious and life-threatening medical conditions. The Company is engaged in the discovery, development and commercialization of therapeutic products aimed at treating patients with a wide array of severe disease states, including hematologic diseases, cancer and autoimmune disorders. In March 2007, the FDA granted marketing approval for the Company's first product, Soliris for all patients with PNH, and the Company began commercial sale of Soliris in the U.S. during April 2007. In June 2007, the European Commission granted marketing approval for Soliris in the European Union for all patients with PNH. The Company is evaluating other potential indications for Soliris as well as other formulations of eculizumab for additional clinical indications, and is pursuing development of other antibody product candidates in early stages of development. This press release and further information about Alexion Pharmaceuticals, Inc. can be found at: http://www.alexionpharma.com.

This press release includes certain non-GAAP financial measures that involve adjustments to GAAP figures. Alexion believes that these non-GAAP financial measures, when considered together with the GAAP figures, can enhance an overall understanding of Alexion's past financial performance and its prospects for the future. The non-GAAP financial measures are included with the intent of providing both management and investors with a more complete understanding of underlying operational results and trends. In addition, these non-GAAP financial measures are among the primary indicators Alexion management uses for planning and forecasting purposes and measuring the company's performance. These non-GAAP financial measures are not intended to be considered in isolation or as a substitute for GAAP figures. A reconciliation of the non-GAAP to GAAP figures follows this press release.

[ALXN-E]

This news release contains forward-looking statements, including statements related to guidance regarding anticipated financial results for 2008, potential benefits and commercial potential for Soliris, timing and effect of sales of Soliris in the United States and various European markets, status of reimbursement, price approval and funding processes in Europe, progress in developing commercial infrastructure, interest regarding Soliris in the patient, physician and payor

communities and expectations about commencement of clinical trials and studies. Forward-looking statements are subject to factors that may cause Alexion's results and plans to differ from those expected, including for example, decisions of regulatory authorities regarding marketing approval or material limitations on the marketing of Soliris, delays in arranging satisfactory manufacturing capability and establishing commercial infrastructure, delays in developing or adverse changes in commercial relationships, the possibility that results of clinical trials of Soliris are not predictive of safety and efficacy and Soliris is found to be less safe or effective when utilized in broader patient populations, the possibility that initial results of commercialization are not predictive of future rates of adoption of Soliris, the risk that third parties won't agree to license any necessary intellectual property to us on reasonable terms or at all, the risk that third party payors (including governmental agencies) will not reimburse for the use of Soliris at acceptable rates or at all, the risk that estimates regarding the number of PNH patients are inaccurate, the risk that ongoing litigation may be resolved adversely, and a variety of other risks set forth from time to time in Alexion's filings with the Securities and Exchange Commission, including but not limited to the risks discussed in Alexion's Annual Report on Form 10-K for the period ended December 31, 2007 and in our other filings with the Securities and Exchange Commission. Alexion does not intend to update any of these forward-looking statements to reflect events or circumstances after the date hereof, except when a duty arises under law.

(Financial Tables Follow)

ALEXION PHARMACEUTICALS, INC.
Selected Financial Data
(Unaudited)
(Amounts in thousands, except per share amounts)

Consolidated Statements of Operations Data:

	Three Months Ended March 31	
	2008	**2007**
Revenues:		
Net product sales	$45,546	$ 974
Contract research revenues	95	5,343
Total revenues	45,641	6,317
Cost of sales	5,464	85
Operating expenses:		
Research and development	15,609	21,219
Selling, general and administrative	29,781	19,838
Total operating expenses	45,390	41,057
Operating loss	(5,213)	(34,825)
Other income (expense):		
Investment income	767	2,769
Interest expense	(596)	(700)
Foreign currency gain(loss)	703	(27)
	874	2,042
Income tax benefit	90	90
Net loss	$ (4,249)	$ (32,693)
Net loss per share - basic and diluted	$ (0.11)	$ (0.92)
Shares used in computing basic and diluted net loss per common share	37,514	35,361

Consolidated Balance Sheet Data:

	As of	
	March 31, 2008	**December 31, 2007**
Cash, cash equivalents and marketable securities (a)	$106,964	$ 106,712

Total assets	363,994	334,357
Total stockholders' equity	108,039	101,556

(a) Amount includes restricted cash of $417 and $958 at March 31, 2008 and December 31, 2007, respectively.

ALEXION PHARMACEUTICALS, INC.
Selected Financial Data
(Unaudited)
(Amounts in thousands, except per share amounts)

Non-GAAP financial information is adjusted to exclude the impact of share-based compensation. The following table represents a reconciliation of GAAP to non-GAAP financial information for the three months ended March 31, 2008 and 2007, as well as the three months ended December 31, 2007:

	Reported GAAP Amounts	Share-Based Compensation Adjustment	Non-GAAP Excluding Share-Based Compensation
Three Months Ended March 31, 2008			
Research and development	$ 15,609	$ (1,625)	$ 13,984
Selling, general and administrative	29,781	(4,260)	25,521
Operating expense	45,390	(5,885)	39,505
Operating income (loss)	(5,213)	5,885	672
Net income (loss)	(4,249)	5,885	1,636
Basic and diluted net income (loss) per share	$ (0.11)	$ 0.16	$ 0.04
Three Months Ended March 31, 2007			
Research and development	$ 21,219	$ (2,385)	$ 18,834
Selling, general and administrative	19,838	(2,596)	17,242
Operating expenses	41,057	(4,981)	36,076
Operating loss	(34,825)	4,981	(29,844)
Net loss	(32,693)	4,981	(27,712)
Basic and diluted net loss per share	$ (0.92)	$ 0.14	$ (0.78)
Three Months Ended December 31, 2007			
Research and development	$ 15,643	$ (989)	$ 14,654
Selling, general and administrative	28,570	(2,799)	25,771
Operating expenses	44,213	(3,788)	40,425
Operating loss	(13,746)	3,788	(9,958)
Net loss	(12,330)	3,788	(8,542)
Basic and diluted net loss per share	$ (0.33)	$ 0.10	$ (0.23)

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