SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

X - Quarterly report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934:
For the quarterly period ended January 31, 2001

OR

_ Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934:
For the transition period from _____ to _____

Commission file number: 0-27756

Alexion Pharmaceuticals, Inc.
(Exact name of registrant as specified in its charter)

Delaware	13-3648318
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

352 Knotter Drive, Cheshire, Connecticut 06410
(Address of principal executive offices) (Zip Code)

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

N/A
(Former address of principal executive offices) (Zip Code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes X No _____

Common Stock, $0.0001 par value	18,074,655 shares
Class	Outstanding at March 13, 2001

ALEXION PHARMACEUTICALS, INC.

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ALEXION PHARMACEUTICALS, INC.

Consolidated Balance Sheets
(amounts in thousands)

	Janaury 31, 2001	July 31, 2000
ASSETS	(UNAUDITED)	
Current Assets:		
Cash and cash equivalents	$ 260,669	$ 91,858
Marketable securities	109,235	82,671
Reimbursable contract costs: billed	3,033	3,660
unbilled	2,499	1,435
Prepaid expenses	534	456
Total current assets	375,970	180,080
Property, plant, and equipment, net	12,627	8,213
Purchased intangible assets, net	21,940	-
Deferred financing costs, net	3,558	3,752
Other assets	420	657
TOTAL ASSETS	$ 414,515	$192,702
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current Liabilities:		
Current portion of notes payable	$ 191	$ 369
Accounts payable	2,826	2,100
Accrued expenses	1,988	1,229
Accrued interest	2,588	2,730
Deferred revenue	788	750
Total current liabilities	8,381	7,178
Notes payable, less current portion included above	3,920	3,920
Convertible subordinated notes	120,000	120,000
Stockholders' Equity:		
Common stock $.0001 par value; 150,000 shares authorized; 18,057 and 15,146 shares issued at January 31, 2001 and July 31, 2000, respectively	2	2
Additional paid-in capital	383,604	128,836
Accumulated deficit	(101,435)	(67,214)
Other comprehensive gain (loss)	43	(20)
Treasury stock, at cost; 12 shares	-	-
Total stockholders' equity	282,214	61,604
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 414,515	$192,702

The accompanying notes are an integral part of these consolidated financial statements.

ALEXION PHARMACEUTICALS, INC.

Consolidated Statements of Operations
(UNAUDITED)
(amounts in thousands, except per share amounts)

	Three months ended January 31,		Six months ended January 31,	
	2001	2000	2001	2000
CONTRACT RESEARCH REVENUES	$ 3,027	$ 6,679	$ 6,279	$12,967
OPERATING EXPENSES:				
Research and development	9,399	9,840	20,322	20,980
General and administrative	1,971	1,150	3,349	1,765
In-process research and development	-	-	21,000	-
Amortization of purchased intangible assets	878	-	1,227	-
Total operating expenses	12,248	10,990	45,898	22,745
OPERATING LOSS	(9,221)	(4,311)	(39,619)	(9,778)
OTHER INCOME AND EXPENSE:				
Interest income	6,536	747	9,344	1,109
Interest expense	(1,948)	(75)	(3,946)	(147)
Total other income, net	4,588	672	5,398	962
NET LOSS	$(4,633)	$(3,639)	$(34,221)	$(8,816)
BASIC AND DILUTED NET LOSS PER COMMON SHARE (Note 4)	$ (0.26)	$ (0.26)	$ (2.05)	$ (0.69)
SHARES USED IN COMPUTING BASIC AND DILUTED NET LOSS PER COMMON SHARE	17,999	14,239	16,661	12,779

The accompanying notes are an integral part of these consolidated financial statements.

ALEXION PHARMACEUTICALS, INC.

Consolidated Statements of Cash Flows
(UNAUDITED)
(amounts in thousands)

	Six months ended January 31	
	2001	2000
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$(34,221)	$ (8,816)
Adjustments to reconcile net loss to net cash used in operating activities:		
In-process research and development	21,000	-
Depreciation and amortization	1,188	720
Amortization of purchased intangible assets	1,227	-
Compensation expense related to grant of stock options	315	99
Change in assets and liabilities:		
Reimbursable contract costs	(394)	(308)
Prepaid expenses	229	(1,657)
Accounts payable	315	(710)
Accrued expenses	216	(1,281)
Accrued interest	(142)	-
Deferred revenue	38	300
Net cash used in operating activities	(10,229)	(11,653)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of marketable securities, net	(26,501)	(4,860)
Purchases of property, plant and equipment	(4,738)	(1,066)
Patent costs	(29)	-
Cash paid for transaction costs, net of cash received in acquistion of Prolifaron	(118)	-
Net cash used in investment activities	(31,386)	(5,926)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Net proceeds from issuance of common stock	210,508	46,548
Deferred financing costs	(98)	-
Repayments of notes payable	(178)	(184)
Security deposits and other assets	194	288
Net cash provided by financing activities	210,426	46,652
NET INCREASE IN CASH AND CASH EQUIVALENTS	168,811	29,073
CASH AND CASH EQUIVALENTS, beginning of period	91,858	24,238
CASH AND CASH EQUIVALENTS, end of period	$260,669	$ 53,311
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION		
Cash paid for interest expense	$ 3,718	$ 147
SUPPLEMENTAL DISCLOSURE OF NONCASH FINANCING ACTIVITIES		
Acquisition of Prolifaron through the issuance of common stock and stock options	$ 43,945	-

The accompanying notes are an integral part of these consolidated financial statements.

ALEXION PHARMACEUTICALS, INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Operations and Basis of Presentation -

Alexion Pharmaceuticals, Inc. ("Alexion" or the "Company") was organized in 1992 and is engaged in the discovery and development of therapeutic products aimed at treating patients with a wide array of severe disease states, including cardiovascular and autoimmune disorders, inflammation and cancer. The Company's two lead product candidates are currently in eight clinical development programs. For one of its lead antibody candidates, pexelizumab (5G1.1-SC), a large Phase IIb clinical study in cardiopulmonary bypass ("CPB") patients was completed and two additional large Phase II studies in myocardial infarction (heart attack) patients are in progress. For the Company's other lead antibody product candidate, 5G1.1, a large Phase II clinical study in rheumatoid arthritis patients was completed and clinical trials are on-going in four additional diseases, including a Phase II study in membranous nephritis patients, as well as open label extension trials in rheumatoid arthritis and membranous nephritis patients.

In September 2000, the Company acquired Prolifaron, Inc. ("Prolifaron"), a privately held biopharmaceutical company with extensive combinatorial human antibody library technologies and expertise (the Prolifaron Acquisition) (See Note 2). Prolifaron was merged into a subsidiary of Alexion to form Alexion Antibody Technologies which provides capabilities to discover and develop additional antibody product candidates for the treatment of inflammatory diseases and cancer.

The Company is also developing Apogen immunotherapeutic products to target T-cell related disorders and is developing therapies employing the transplantation of cells from other species into humans, known as xenotransplantation.

In October 2000, the Company filed a shelf registration statement to offer up to $300 million of equity securities. In November 2000, the Company sold 2.3 million shares of common stock to U.S. Bancorp Piper Jaffray, Inc. resulting in proceeds of approximately $208.5 million, net of fees and other expenses of approximately $201,000 related to the transaction (See Notes 3 and 9).

In October 2000, the Company agreed to contribute certain technology to a newly formed company, Arradial, Inc. ("Arradial"), in exchange for a 15% equity interest in Arradial and a $200,000 license fee (See Note 5). The cost of the contributed technology had been previously expensed by the Company as research and development expenditures and therefore, there is no value assigned to the investment in Alexion's consolidated financial statements. Arradial is an informatics and instrumentation company that applies diverse proprietary technologies to provide to drug discovery scientists high throughput bench top tools that accelerate the discovery and validation of therapeutic compounds. The Company accounts for its investment in Arradial under the cost method of accounting.

The accompanying consolidated financial statements include Alexion Pharmaceuticals, Inc. and its wholly-owned subsidiaries, Alexion Antibody Technologies ("AAT") and Columbus Farming Corporation ("Columbus"). Results of operations of AAT are included in the Company's consolidated statements of operations since September 23, 2000, the effective date of the Prolifaron acquisition (See Note 2). All significant inter-company balances and transactions have been eliminated in consolidation. Columbus was formed on February 9, 1999 to acquire certain manufacturing assets from United States Surgical Corporation ("US Surgical") (See Note 8).

The Company has incurred consolidated losses since inception and has made no product sales to date. The Company may need additional financing to obtain regulatory approvals for its product candidates, fund operating losses, and if deemed appropriate, establish manufacturing, sales, marketing and distribution capabilities.

The Company expects to incur substantial expenditures in the foreseeable future for the research and development and commercialization of its products. The Company will seek to raise necessary funds through public or private equity or debt financings, bank loans, collaborative or other arrangements with corporate sources, or through other sources of financing.

The consolidated financial statements included herein have been prepared by the Company, without audit, pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") and include, in the opinion of management, all adjustments, consisting of normal, recurring adjustments, necessary for a fair presentation of interim period results. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted pursuant to such rules and regulations. The results for the interim periods

presented are not necessarily indicative of results to be expected for any future period. These consolidated condensed financial statements should be read in conjunction

with the audited financial statements and notes thereto included in the Company's Form 10-K Annual Report for the fiscal year ended July 31, 2000.

2. Prolifaron Acquisition -

On September 23, 2000, the Company acquired Prolifaron, Inc. ("Prolifaron"), a privately-held biopharmaceutical company with extensive combinatorial human antibody library technologies and expertise. The acquisition was accomplished when Prolifaron was merged with a wholly owned subsidiary of Alexion and renamed Alexion Antibody Technologies, Inc. In consideration thereof, the Company issued 355,594 shares of the Company's common stock and fully vested options to purchase 44,364 shares of the Company's common stock at a weighted average exercise price of $44.35 per share, in exchange for all of the outstanding equity of Prolifaron including fully vested options under their stock option plan. The fair value of the Company's common stock and stock options issued at the date of the acquisition was approximately $43.9 million.

The Prolifaron acquisition has been accounted for as a purchase and, accordingly, the purchase price has been allocated to the assets acquired and liabilities assumed based on their estimated fair values at the date of the acquisition. The Company allocated $21.0 million of the purchase price to in-process research and development projects. This allocation represented the estimated fair value based on risk-adjusted cash flows related to the incomplete research and development projects. At the date of the acquisition, development of these projects had not yet reached technological feasibility and the research and development in progress had no alternative future uses. Accordingly, these costs were expensed as of the acquisition date. The excess cost over the fair value of the net assets acquired, which amounted to approximately $23.2 million, is reflected as purchased intangible assets and is being amortized over approximately 7 years. The following table summarizes the allocation of the purchase price to the net assets acquired (dollars in thousands):

Cash and cash equivalents acquired	$ 771
Reimbursable contract costs	43
Prepaid expenses and other current assets	307
Property, plant and equipment	493
Other	7
Purchased intangible assets	23,167
In-process research & development	21,000
Accounts payable and accrued expenses	(540)
Accrued transaction costs	(1,303)
Total fair value of equities issued	$ 43,945

The following unaudited pro forma condensed consolidated information has been prepared to give effect to the acquisition as if such transaction had occurred at the beginning of the periods presented. The historical results have been adjusted to reflect: i) elimination of the one-time charge to operations for the purchase of acquired in-process research and development, ii) amortization of purchased intangible assets arising from the transaction, and iii) elimination of income tax benefits or expenses that would not have been realized on a combined basis (dollars in thousands, except per share data).

	Three months ended January 31	Six months ended January 31	
	2000	2001	2000
Contract research revenues	$ 7,461	$ $7,400	$ 14,322
Net loss	$(4,346)	$(14,020)	$(10,204)
Basic and diluted net loss per common share	$ (0.30)	$ (0.83)	$ (0.78)
Shares used in computing basic and diluted net loss per common share	14,595	16,765	13,135

The unaudited pro forma condensed consolidated financial information is not necessarily indicative of what actual results would have been had the transaction occurred on the dates indicated and do not purport to indicate the results of future operations.

3. Cash and Cash Equivalents and Marketable Securities -

Cash and cash equivalents are stated at cost, which approximates market, and include short-term highly liquid investments with original maturities of less than three months.

The Company invests in marketable securities of highly rated financial institutions and investment-grade debt instruments and limits the amount of credit exposure with any one entity. The Company has classified its marketable securities as "available for sale" and, accordingly, carries such securities at aggregate fair value. Unrealized gains or losses are included in other comprehensive loss as a component of stockholders' equity.

4. Net Loss Per Share -

The Company computes and presents net loss per common share in accordance with Statement of Financial Accounting Standard (SFAS) No. 128, "Earnings Per Share". Basic net loss per common share is based on the weighted average shares of common stock outstanding during the period. Diluted net loss per common share assumes in addition to the above, the dilutive effect of common share equivalents outstanding during the period. Common share equivalents represent dilutive stock options, warrants, and convertible subordinated debt. These outstanding stock options, warrants, and convertible subordinated debt entitled holders to acquire 3,682,847 shares of common stock at January 31, 2001. There is no difference in basic and diluted net loss per common share for the three and six months ended January 31, 2001 and 2000 as the effect of common share equivalents is anti-dilutive.

5. Revenues -

Contract research revenues recorded by the Company consist of research and development support payments, license fees, and milestone payments under collaborations with third parties and amounts received from various government grants.

Research and development support revenues are recognized as the related work and expenses are incurred under the terms of the contracts for development activities. Revenues derived from the achievement of milestones are recognized when the milestone is achieved. Non-refundable license fees received in exchange for specific rights to the Company's technologies, research, potential products and markets are recognized as revenues as earned in accordance with the terms of the contracts (See Note 6).

Unbilled reimbursable contract costs as shown on the accompanying consolidated balance sheets represent reimbursable costs incurred in connection with research contracts which have not yet been billed. The Company bills these costs and recognizes the costs and related revenues in accordance with the terms of the contracts.

Deferred revenue results from cash received in advance of revenue recognition under research and development contracts.

Revenues recorded during the three and six months ended January 31, 2001 and 2000 consist of license fees, research and development support, reimbursement of costs related to clinical development and manufacturing of clinical supplies under the collaboration agreement with Procter & Gamble Pharmaceuticals Inc. ("P&G"). Revenues also include funding from the Commerce Department's National Institute of Standards and Technology ("NIST") through grants from the Advanced Technology Program, and the National Institutes of Health/Small Business Innovation Research ("NIH-SBIR") program.

In November 1997, the Company and US Surgical were awarded a three-year, $2 million cooperative agreement from NIST to fund a joint xenotransplantation project; it was modified in February 1999 as a single entity (Alexion only) agreement. In October 1998, the Company was awarded another three-year $2 million agreement from NIST to fund a xenotransplantation project. In November 1999, the Company was awarded a three-year $2 million agreement from NIST to fund another xenotransplantation project.

In January 1999, the Company entered into an exclusive collaboration with P&G to develop and commercialize pexelizumab or 5G1.1-SC. Under this collaboration, the Company will initially pursue the development of pexelizumab for the treatment of inflammation caused by CPB surgery, myocardial infarction (heart attack) and angioplasty. The Company has granted P&G an exclusive license to the Company's intellectual property related to

pexelizumab, with the right to sublicense. P&G has agreed to fund all clinical development and manufacturing costs relating to pexelizumab for these indications. In addition, under this agreement, P&G has agreed to pay the Company up to $95 million in payments, which include a $10 million non-refundable up-front license fee (See Note 6), as well as milestone and non-clinical research and development support payments. In addition, the Company would receive royalties on worldwide sales of pexelizumab for all indications. The Company has a preferred position relative to third-party manufacturers to manufacture pexelizumab worldwide. The Company shares co-promotion rights with P&G to sell, market and distribute pexelizumab in the United States, and has granted P&G the exclusive rights to sell, market and distribute pexelizumab outside of the United States.

In September 2000, the Company was awarded a two year grant of $250,000 from the Small Business Innovative Research/Center for Disease Control to fund a research project for humanization of anti-viral antibodies. In addition, in July 2000, the Company was awarded a one year grant of $100,000 from the NIH-SBIR to fund a research project for Type I diabetes. As of January 31, 2001, the Company received $40,000 from the NIH-SBIR grant.

In October 2000, the Company entered into a license agreement with Arradial (See Note 1), in exchange for a 15% equity interest in Arradial and a $200,000 license fee. The license fee will be recognized as license revenue over the estimated life of the agreement. Revenues of $16,667 have been recognized under this agreement as of January 31, 2001.

A summary of revenues generated from contract research collaboration and grant awards is as follows for the three and six months ended January 31 (dollars in thousands):

	Three months ended January 31		Six months ended January 31	
Collaboration/Grant Awards	2001	2000	2001	2000
P&G	$2,716	$6,031	$5,518	$12,069
NIST and NIH	257	648	675	898
Other	54	-	86	-
	$3,027	$6,679	$6,279	$12,967

6. Recently Issued Accounting Standards -

Staff Accounting Bulletin No. 101 (SAB 101), Revenue Recognition, was issued in December 1999. SAB 101 requires companies to recognize certain up-front non-refundable fees over the life of the related collaboration agreement when such fees are received in conjunction with collaboration agreements which have multiple elements. The Company is required to adopt this new accounting principle through a cumulative charge to retained earnings through the statement of operations, in accordance with the provisions of APB Opinion No. 20, no later than the fourth quarter of fiscal 2001 with the adoption effective as of August 1, 2000. The adoption of SAB 101 will have a material impact on the Company's future operating results as it applies to the $10.0 million up-front non-refundable payment received by it in connection with its collaboration with Procter & Gamble. The Company's historical financial statements reflect this payment as revenue in the year ended July 31, 1999. Under SAB 101, the Company will record the $10.0 million fee as revenue over the 17 year estimated life of the licensed technologies. Accordingly, the Company will record a one-time non-cash charge to reflect the cumulative charge as of August 1, 2000. As of January 31, 2001, the Company had not yet adopted this new accounting principle. The Company anticipates adoption of SAB 101 in the quarter ended April 30, 2001.

7. Convertible Subordinated Notes -

In March 2000, the Company completed a $120 million private placement of 5.75% Convertible Subordinated Notes due March 15, 2007. The notes bear interest payable semi-annually on September 15 and March 15 of each year, beginning September 15, 2000. The holders may convert all or a portion of the notes into common stock at any time on or before March 15, 2007 at a conversion price of $106.425 per common share. The Company incurred interest expense of approximately $1.7 million and $3.5 million for the three and six months ended January 31, 2001, respectively, related to these notes.

The Company incurred deferred financing costs related to this offering of approximately $4.0 million which are recorded in the consolidated balance sheet and are being amortized as a component of interest expense over the seven-year term of the notes. Amortization expense associated with the financing costs was $148,000 and $292,000 for the three and six months ended January 31, 2001, respectively.

8. Notes Payable -

In November 1997, a term loan was used to finance the purchase of capital equipment. The term loan requires quarterly principal payments of $92,000 commencing August 3, 1998 and payable through August 2001. The balance on the note was $191,000 at January 31, 2001. The term loan agreement requires the Company to maintain a restricted cash balance equal to the outstanding loan balance divided by 85% plus accrued interest in an interest bearing account as collateral for the note. This restricted cash balance is included in other assets in the accompanying consolidated balance sheets.

In February 1999, the Company acquired manufacturing assets for the xenotransplantation program developed by US Surgical, a subsidiary of Tyco International Ltd., and financed the purchase with a note payable bearing interest at 6% per annum, in the amount of approximately $3.9 million due in May 2005. The note is secured by certain manufacturing assets of Columbus. Interest on the note is payable quarterly.

9. Stockholders' Equity -

In November 2000, the Company sold 2.3 million shares of common stock at a price of $90.75 per share to U.S. Bancorp Piper Jaffray Inc. resulting in net proceeds of approximately $208.5 million to the Company.

In September 2000, in connection with the Prolifaron acquisition, the Company issued 355,594 shares of common stock and fully vested options to purchase 44,364 shares of the Company's common stock at a weighted average exercise price of $44.35 (See Note 2).

10. Comprehensive Income (Loss) -

SFAS No. 130 "Reporting Comprehensive Income" establishes standards for reporting and display of comprehensive income (loss) and its components in a full set of general purpose financial statements. Comprehensive loss is comprised of net loss, unrealized gains and losses on marketable securities and cumulative translation adjustments. The Company's other comprehensive loss arises from net unrealized gains (losses) on marketable securities.

A summary of total comprehensive loss is as follows (dollars in thousands):

	Six months ended January 31,	
	2001	2000
Net loss	$(34,221)	$(8,816)
Other comprehensive income (loss)	63	(21)
Total comprehensive loss	$(34,158)	$(8,837)

11. Rights to Purchase Preferred Stock -

On September 18, 2000, the Board of Directors of the Company amended the purchase price under Alexion's Shareholder Rights Plan ("Rights Plan"). Such purchase price, for each one one-hundredth of a share of Junior Participating Cumulative Preferred Stock of the Company to be issued upon the exercise of each preferred stock purchase right under that certain Rights Agreement, dated as of February 14, 1997, was increased from $75.00 to $725.00. Except for the increase in the purchase price, the terms and conditions of the Rights Plan remain unchanged from the description contained in the Form 8-A filed on February 21, 1997.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This report contains forward-looking statements which involve risks and uncertainties. Such statements are subject to certain factors which may cause our plans and results to differ significantly from plans and results discussed in the forward-looking statements. Factors that might cause or contribute to such differences include, but are not limited to those discussed in Exhibit 99.1 to our Annual Report on Form 10-K for the fiscal year ended July 31, 2000.

Overview

We are engaged in the development of therapeutic products aimed at treating patients with a wide array of severe disease states, including cardiovascular and autoimmune disorders, inflammation and cancer. Since our inception in January 1992, we have devoted substantially all of our resources to drug discovery, research, product and clinical development. Since mid-1996, we have focused our resources increasingly to clinical manufacturing and clinical development. We are currently examining our two lead genetically altered or "humanized" antibody product candidates in eight different clinical development programs.

We recently completed a Phase IIb study of one of our lead antibody product candidates, 5G1.1-SC, also known as pexelizumab, which is in development in collaboration with Procter & Gamble for the treatment of inflammation caused by cardiopulmonary bypass surgery or CPB. Pending a full evaluation of the data, and in conjunction with planned discussions with the FDA or Food and Drug Administration, we expect to initiate a Phase III efficacy trial with pexelizumab in coronary artery bypass graft surgery or CABG patients at the earliest possible opportunity.

Two additional Phase II studies with pexelizumab are on-going in myocardial infarction or MI patients; one study in patients receiving thrombolytic therapy, and the other in patients receiving angioplasty. In September 2000, the FDA granted Fast Track status for the development of pexelizumab in CPB.

Our other lead antibody product candidate, 5G1.1, is in clinical development for the treatment of a variety of chronic autoimmune diseases. We completed a Phase II clinical study in rheumatoid arthritis patients and a Phase II study in membranous nephritis patients, a kidney disease, is on-going. Pending a full evaluation of the interim data and final six-month safety data from this trial, and in conjunction with planned discussions with the FDA, we expect to initiate a Phase III efficacy trial with 5G1.1 in rheumatoid arthritis at the earliest possible opportunity. In both rheumatoid arthritis and membranous nephritis, enrollment has commenced in an additional 12 month open-label extension study to test long-term safety. In addition, we have three separate Phase Ib pilot on-going trials to study 5G1.1 in patients with psoriasis, dermatomyositis, a muscle disorder, and bullous pemphigoid, a severe inflammatory skin disorder. In October 2000, the FDA granted us orphan drug status for the development of 5G1.1 for the treatment of dermatomyositis.

To date, we have not received any revenues from the sale of products. We have incurred operating losses since our inception. As of January 31, 2001, we had an accumulated deficit of $101.4 million. We expect to incur substantial and increasing operating losses for the next several years due to expenses associated with product research and development, pre-clinical studies and clinical testing, regulatory activities, manufacturing development, scale-up and commercial manufacturing and developing a sales and marketing force.

In September 2000, we acquired Prolifaron, Inc., a privately held biopharmaceutical company located in San Diego, California, through the issuance of common stock and fully vested options having an aggregate fair value of approximately $43.9 million. Prolifaron was developing therapeutic antibodies addressing multiple diseases, including cancer. The acquisition was in the form of a merger with a wholly owned subsidiary of Alexion to form Alexion Antibody Technologies, Inc. We accounted for the acquisition of Prolifaron using the purchase method of accounting. Through Alexion Antibody Technologies, we have developed the important additional capabilities to discover and develop additional antibody product candidates for the treatment of inflammatory diseases and cancer. Antibodies in preclinical development include a platelet targeting antibody, a antagonist of a specific growth factor for brain cancers, an antibody that specifically targets a subset of leukemia tumor cells, as well as a catalytic antibody for broad-based prodrug chemotherapy of many types of cancers. The catalytic antibody was exclusively licensed from The Scripps Research Institute.

In October 2000, we contributed technology to form a new company, Arradial, Inc., which is aimed at commercializing our novel, desktop silicon-based microarray assay technology. The technology is expected to have applications in

genomics and drug discovery. We are a minority shareholder of the new company.

We plan to develop and commercialize on our own those product candidates for which the clinical trials and marketing requirements can be funded by our own resources. For those products for which greater resources will be required, our strategy is to form corporate partnerships with major pharmaceutical companies for product development and commercialization.

Results of Operations
- ---------------------

Three Months Ended January 31, 2001
Compared with Three Months January 31, 2000

We earned contract research revenues of $3.0 million for the three months ended January 31, 2001 and $6.7 million for the same period ended January 31, 2000. Contract revenues were lower in the reporting period, reflecting lower reimbursement of clinical manufacturing costs from our collaborative agreement with P&G, due to the completion of the Phase IIb pexelizumab studies in CPB.

We incurred research and development expenses of $9.4 million for the three months ended January 31, 2001 and $9.8 million for the three months ended January 31, 2000. The decrease resulted primarily from lower clinical manufacturing and clinical trial costs associated with one of our lead C5 inhibitor, pexelizumab, due to the completion in the cardiopulmonary bypass Phase IIb trial. These lower costs were offset by increased clinical trial costs associated with our other lead C5 inhibitor, 5G1.1, which is in clinical studies in rheumatoid arthritis, membranous nephritis, psoriasis, dermatomyositis, and pemphigoid patients. In addition, we incurred higher research costs in the three months ended January 31, 2001 due to the consolidation of ongoing research costs of Alexion Antibody Technologies as a result of our acquisition of Prolifaron in September 2000.

Our general and administrative expenses were $2.0 million for the three months ended January 31, 2001 and $1.2 million for the three months ended January 31, 2000. This increase resulted principally from additional legal fees related to intellectual property and patents as well as increased rents and higher payroll costs. Higher rents resulted from the lease for our new headquarters and research and development facility in Cheshire, Connecticut.

Total operating expenses were further impacted by a $878,000 non-cash charge for the amortization of purchased intangible assets related to the Prolifaron acquisition.

Other income, net, was $4.6 million for the three months ended January 31, 2001 and $672,000 for the three months ended January 31, 2000. The increase in interest income of $5.8 million resulted from higher cash balances resulting from the net proceeds from the sale of the $120 million of 5.75% Subordinated Convertible Notes in March 2000 and the net proceeds from the sale of common stock of $208.5 million in November 2000. This increase in interest income was partially offset primarily by the increase in interest expense of $1.9 million resulting primarily from the Convertible Notes.

As a result of the above factors, we incurred a net loss of $4.6 million or $0.26 basic and diluted net loss per common share for the three months ended January 31, 2001 and a net loss of $3.6 million or $0.26 basic and diluted net loss per common share for the three months ended January 31, 2000. Excluding the impact of the non-cash charges related to the acquisition of Prolifaron, we incurred a pro forma net loss of $3.8 million or $0.21 basic and diluted pro forma net loss per common share for the three months ended January 31, 2001. See pro forma statement of operations below.

Six Months Ended January 31, 2001
Compared with Six Months January 31, 2000

We earned contract research revenues of $6.3 million for the six months ended January 31, 2001 and $13.0 million for the same period ended January 31, 2000. The lower contract revenues reflect the lower reimbursements of clinical manufacturing and clinical trial costs from our collaborative agreement with P&G due to the completion of the Phase IIb pexelizumab study and the completion of the manufacturing of the clinical supplies for the Phase IIb study.

We incurred research and development expenses of $20.3 million for the six months ended January 31, 2001 and $21.0 million for the six months ended January 31, 2000. The decrease resulted primarily from lower clinical manufacturing and clinical trial costs associated with one of our lead C5 inhibitor, pexelizumab, due to the

completion in the cardiopulmonary bypass Phase IIb trial. These lower costs were offset by increased clinical trial costs associated with our other lead C5 inhibitor, 5G1.1, which is in clinical studies in rheumatoid arthritis, membranous nephritis, psoriasis, dermatomyositis, and pemphigoid patients. In addition, we incurred higher research costs in the six months ended January 31, 2001 due to the consolidation of ongoing research costs of Alexion Antibody Technologies as a result of our acquisition of Prolifaron in September 2000.

Our general and administrative expenses were $3.3 million for the six months ended January 31, 2001 and $1.8 million for the six months ended January 31, 2000. This increase resulted principally from additional legal fees related to intellectual property and patents and other professional fees as well as increased rents and higher payroll costs. Higher rents resulted from our lease for our new headquarters and research and development facility in Cheshire, Connecticut.

Total operating expenses were substantially higher in the six months ended January 31, 2001 due principally to the one-time non-cash in-process research and development charge of $21.0 million and the non-cash amortization of purchased intangibles charge of $1.2 million.

Other income, net, was $5.4 million for the six months ended January 31, 2001 and $962,000 for the six months ended January 31, 2000. The increase in interest income of $8.2 million resulted from higher cash balances resulting from the net proceeds from the sale of Convertible Notes in March 2000 and the net proceeds from the sale of common stock in November 2000. This increase in interest income was partially offset by the increase in interest expense of $3.8 million resulting from the Convertible Notes.

As a result of the above factors, we incurred a net loss of $34.2 million or $2.05 basic and diluted net loss per common share for the six months ended January 31, 2001 and a net loss of $8.8 million or $0.69 basic and diluted net loss per common share for the six months ended January 31, 2000. Excluding the one-time non-cash in-process research and development charge of $21 million and the amortization charge of $1.2 million for purchased intangibles related to the Prolifaron acquisition, we incurred a pro forma net loss of $12.0 million or $0.72 basic and diluted pro forma net loss per common share for the six months ended January 31, 2001.

The pro forma statements of operations below exclude the non-cash charges associated with our acquisition of Prolifaron in September 2000. Excluded are the one-time non-cash in-process research and development charge ("IPRD") of $21 million for the three months ended October 31, 2000 and the non-cash amortization charge of $878,000 and $1.2 million for purchased intangibles for the three and six months ended January 31, 2001, respectively. Pro forma statement of operations for the current fiscal periods as compared to the same period a year ago is shown below.

	Three months ended Jan.31		Six months ended Jan.31	
	2001	2000	2001	2000
	pro forma		pro forma	
Contract Research Revenues	$ 3,027	$ 6,679	$ 6,279	$12,967
Operating Expenses				
Research and development	9,399	9,840	20,322	20,980
General and administrative	1,971	1,150	3,349	1,765
Total operating expenses	11,370	10,990	23,671	22,745
Operating loss, excluding purchased intangibles	(8,343)	(4,311)	(17,392)	(9,778)
Other Income and Expense				
Interest income	6,536	747	9,344	1,109
Interest expense	(1,948)	(75)	(3,946)	(147)
Total other income, net	4,588	672	5,398	962
Net loss, excluding IPRD and amortization of purchased intangibles	$(3,755)	$(3,639)	$(11,994)	$(8,816)
Net loss per share, excluding IPRD and amortization of purchased intangibles	$ (0.21)	$ (0.26)	$ (0.72)	$ (0.69)

Liquidity and Capital Resources

As of January 31, 2001, we had working capital of $367.6 million, including $369.9 million of cash, cash equivalents and marketable securities. This compares with working capital at July 31, 2000 of $172.9 million, including $174.5 million of cash, cash equivalents and marketable securities. This increase in working capital was primarily due to the receipt by us of the proceeds from the sale of common stock in November 2000 of $208.5 million, net of expenses.

Cash used in operations for the six months ended January 31, 2001 was $10.2 million compared with $11.7 for the same period in 2000. During the six months ended January 31, 2001, we had invested $26.5 million in marketable securities and $4.7 million in property, plant and equipment additions, principally leasehold improvements related to our new facility in Cheshire discussed below. We also received net proceeds of $210.5 million from the issuance of common stock related to a sale of 2.3 million shares (see below) and for stock option and warrant exercises during the six months ended January 31, 2001.

Interest on our $120 million 5.75% convertible subordinated notes due March 15, 2007 is payable semi-annually in September and March of each year. The holders may convert all or a portion of the notes into common stock any time on or before March 15, 2007 at a conversion price of $106.425 per common share. Interest on our $3.9 million note due in May 2005, bearing interest at 6.0% per annum, is payable quarterly. This note was used to finance certain manufacturing assets for our xenotransplantation program.

In October 2000, we filed a shelf registration statement to offer up to $300 million of equity securities. On November 1, 2000, we sold 2.3 million shares of our common stock to US Bancorp Piper Jaffray, Inc. resulting in net proceeds to us of approximately $208.5 million, net of estimated fees and other expenses of approximately $201,000 related to the transaction.

With our cash, cash equivalents, and marketable securities totaling $369.9 million on January 31, 2001 and the potential funding from our Procter & Gamble collaboration along with our potential interest income, we should have sufficient resources to fund our operating expenses and capital requirements as currently planned for at least the next thirty-six months. This should provide us adequate funding for the clinical testing of our C5 inhibitor products and support our broad research and development of antibody candidates. Our lead C5 inhibitor products and their respective indications are: pexelizumab in cardiopulmonary bypass and acute coronary syndromes, and 5G1.1 for the treatment of chronic immune diseases, rheumatoid arthritis, membranous nephritis, psoriasis, dermatomyositis, and pemphigoid.

We currently have no material commitments for capital expenditures, other than the leasehold improvements at the Cheshire facility discussed below. Our future capital requirements will depend on many factors, including the progress of our research and development programs, progress and results of clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in obtaining and enforcing patents and any necessary licenses, our ability to establish development and commercialization relationships, and the costs of clinical manufacturing, manufacturing scale-up, and commercial manufacturing.

We expect to incur substantial additional costs for research, pre-clinical and clinical testing, manufacturing process development, additional capital expenditures related to personnel and facilities expansion, clinical and commercial manufacturing requirements, and marketing and sales in order to commercialize our products currently under development. In addition to funds we may receive from our collaboration with Procter & Gamble, we may need to raise or generate substantial additional funding in order to complete the development and commercialization of our product candidates. Our additional financing may include public or private debt or equity offerings, equity line facilities, bank loans and/or collaborative research and development arrangements with corporate partners. There can be no assurance that funds will be available on terms acceptable to us, if at all, or that discussions with potential strategic or collaborative partners will result in any agreements on a timely basis, if at all. The unavailability of additional financing could require us to delay, scale back or eliminate certain research and product development programs or to license third parties to commercialize products or technologies that we would otherwise undertake itself, any of which could have a material adverse effect.

We lease our headquarters and research and development facility in Cheshire, Connecticut. The lease has a term of ten years and six months. At this site, we lease a total of 82,000 square feet of space, which includes approximately 62,000 square feet related to research and laboratories. We have incurred initial leasehold improvements and relocation costs aggregating approximately $4.1 million. In addition, we will be required to pay a pro rata percentage of real estate taxes and operating expenses. Our pilot manufacturing plant, which may be used for producing compounds for some of our current and anticipated

clinical trials, is expected to remain in New Haven,

Connecticut encompassing approximately 24,000 square feet of labs and offices at 25 Science Park. We are currently negotiating a longer-term arrangement for our facilities in New Haven. We believe the new space and our pilot manufacturing facility will be adequate for our current clinical activities. Alexion Antibody Technologies, Inc. leases approximately 7,500 square feet of labs and office space in San Diego, California.

Item 3. Quantitative and Qualitative Disclosure about Market Risks.

We account for its marketable securities in accordance with Statement of Financial Accounting Standards No. 115, "Accounting for Certain Investments in Debt and Equity Securities" ("SFAS 115"). All of the cash equivalents and marketable securities are treated as available-for-sale under SFAS 115.

Investments in fixed rate interest earning instruments carry a degree of interest rate risk. Fixed rate securities may have their fair market value adversely impacted due to a rise in interest rates. Due in part to these factors, our future investment income may fall short of expectations due to changes in interest rates or we may suffer losses in principal if forced to sell securities which have seen a decline in market value due to changes in interest rates. Our marketable securities are held for purposes other than trading and we believe that we currently have no material adverse market risk exposure. The marketable securities as of January 31, 2001, had maturities of less than two years. The weighted-average interest rate on marketable securities at January 31, 2001 was approximately 6.4%. The fair value of marketable securities held at January 31, 2001 was $109.2 million.

PART II. OTHER INFORMATION

Item 4. Submission of Matters to a Vote of Security Holders

At the Company's Annual Meeting of Stockholders held on December 8, 2000, the stockholders voted to elect the following directors by the votes indicated:

John H. Fried, Ph.D.:	13,283,746 For, 100,812 Against or Withheld, 0 Abstaining
Leonard Bell, M.D.:	12,859,760 For, 524,798 Against or Withheld, 0 Abstaining
Jerry T. Jackson:	13,284,146 For, 100,412 Against or Withheld, 0 Abstaining
Max Link, Ph.D.:	13,284,246 For, 100,312 Against or Withheld, 0 Abstaining
Joseph A. Madri, Ph.D., M.D.:	13,284,346 For, 100,212 Against or Withheld, 0 Abstaining
R. Douglas Norby:	13,283,746 For, 100,812 Against or Withheld, 0 Abstaining
Alvin S. Parven:	13,284,146 For, 100,412 Against or Withheld, 0 Abstaining

At the Company's annual Meeting of Stockholders held on December 8, 2000, the stockholders voted to approve an amendment to the Company's 1992 Stock Option Plan for Outside Directors; ratified the adoption of the Company's 2000 Stock Option Plan; approved an amendment to the Company's Certificate of Incorporation to increase the Company's authorized shares from 30,000,000 shares to 150,000,000 shares; and ratified the appointment of Arthur Anderson LLP as the Company's independent public accounts. The votes were:

Amend 1992 Stock Option Plan	
for Outside Directors:	8,290,804 For, 2,050,081 Against, 28,864 Abstain, 3,014,809 Not Voted
Adopt 2000 Stock Option Plan:	6,972,132 For, 3,365,008 Against, 32,609 Abstain, 3,014,809 Not Voted
Increase number of authorized shares:	9,572,251 For, 3,791,295 Against, 21,012 Abstain
Appointment of independent public accountants:	13,345,424 For, 23,652 Against, 15,481 Abstain

Item 5. The 2001 Annual meeting of stockholders of the Company will be held on or about December 7, 2001. All stockholder proposals which are intended to be presented at the 2001 annual meeting of stockholders of the Company must be received by the Company no later that July 7, 2001 for inclusion in the Board of Directors' proxy statement and form of proxy relating to that meeting.

Item 6. Exhibits and Reports

(a) Exhibits

(b) Form 8-K

Report on Form 8-K/A, filed on November 20, 2000, relating to the completion of the acquisition of Prolifaron, Inc.

Report on Form 8-K, filed on January 23, 2001, relating to press release on the initial analysis of clinical safety and efficacy data from the Company's Phase IIb cardiopulmonary bypass trial.

Report on form 8-K, filed on January 29, 2001, relating to the press releases on January 26, 2001 and January 29, 2001. Press release on January 26, 2001 disclosed additional information regarding the Company's Phase IIb cardiopulmonary bypass trial and availability of January 23 webcast on the Company's website. The press release on January 29, 2001 disclosed the interim analysis of clinical safety and efficacy data from the Company's Phase II rheumatoid arthritis trial.

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 thereunto duly authorized.

ALEXION PHARMACEUTICALS, INC.

Date: March 13, 2001 By: /s/ Leonard Bell, M.D.

Leonard Bell, M.D.
President and Chief Executive Officer, Secretary and Treasurer (principal executive officer)

Date: March 13, 2001 By: /s/ David W. Keiser

David W. Keiser
Executive Vice President and Chief Operating Officer (principal financial officer)

Date: March 13, 2001 By: /s/ Barry P. Luke

Barry P. Luke
Vice President of Finance and Administration (principal accounting officer)