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* No information provided due to inapplicability of item.
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PART I. FINANCIAL INFORMATIONVICAL INCORPORATEDBALANCE SHEETS
<CAPTION>
<S>
ASSETSCurrent Assets:
Cash and cash equivalents

| \$ | 10,146,005 | \$ | 12,157,149 |
| :---: | :---: | :---: | :---: |
|  | 33,523,536 |  | 33,397,482 |
|  | 1,189,361 |  | 1,566,532 |
|  | 44,858,902 |  | 47,121,163 |Property and Equipment:

Leasehold improvements
Less--accumulated depreciation and amortization
Patent costs, net of accumulated amortization
Other assets

LIABILITIES AND STOCKHOLDERS' EQUITY
Current Liabilities:
Accounts payable and accrued expenses
Current portion of capital lease obligations
Current portion of notes payable
Deferred revenue
Total current liabilities
-_--
4,966,955
5,012,675
Marketable securities - available-for-sale
Receivables and other
Total current assets

June 30
December 31,
$\quad 1997$
---------------
<C>

,392,436
449,457
213,773
2,805,666
2,264,898
Long-Term Obligations:


3

VICAL INCORPORATED
STATEMENTS OF OPERATIONS
(UNAUDITED)
<TABLE>
<CAPTION>


4

VICAL INCORPORATED STATEMENTS OF CASH FLOWS
(UNAUDITED)

<TABLE>
<CAPTION>
<S>
OPERATING ACTIVITIES:
Net loss
Adjustments to reconcile net loss to net cash provided from (used in) operating activities: Depreciation and amortization
\begin{tabular}{|c|c|c|}
\hline & 1998 & 1997 \\
\hline <C> & & <C> \\
\hline & \((3,655,816)\) & \$ (4,269,156) \\
\hline & 467,202 & 449,207 \\
\hline
\end{tabular}

Write-off of abandoned patent costs
Change in operating assets and liabilities:
Receivables and other
Accounts payable and accrued expenses
Deferred revenue

Net cash used in operating activities
INVESTING ACTIVITIES:
Marketable securities
Capital expenditures
Deposits and other
Patent expenditures
Net cash used in investment activities

</TABLE>
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## VICAL INCORPORATED NOTES TO FINANCIAL STATEMENTS

June 30, 1998<br>(unaudited)

## 1. ORGANIZATION AND BASIS OF PRESENTATION

ORGANIZATION
Vical was incorporated in April 1987 and has devoted substantially all of its resources since that time to its research and development programs. The Company is currently focusing its resources on the development of its direct gene transfer and related technologies.

## BASIS OF PRESENTATION

The information contained herein has been prepared in accordance with instructions for Form 10-Q. The information at June 30, 1998, and for the three-month and six-month periods ended June 30, 1998 and 1997, is unaudited. In the opinion of management, the information reflects all adjustments necessary to make the results of operations for the interim periods a fair statement of such operations. All such adjustments are of a normal recurring nature. Interim results are not necessarily indicative of results for a full year. The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. For a presentation including all disclosures required by generally accepted accounting principles, these financial statements should be read in conjunction with the audited financial statements for the year ended December 31, 1997, included in the Vical Incorporated Form $10-\mathrm{K}$ filed with the Securities and Exchange Commission.

## 2. NET LOSS PER SHARE

Net loss per share (basic and diluted) for the three-month and six-month periods ended June 30, 1998 and 1997, has been computed using the weighted average number of common shares outstanding during the respective periods. Diluted loss per share does not include any assumed exercise of stock options as the effect would be antidilutive.

The Company implemented Statement of Financial Accounting Standards No. 130 "Comprehensive Income" effective January 1, 1998. This statement requires that all items that are required to be recognized under accounting standards as components of comprehensive income be reported in a financial statement that is displayed with the same prominence as other financial statements. Accordingly, in addition to reporting net income (loss) under the current rules, the Company is required to display the impact of any unrealized gain or loss on marketable securities as a component of comprehensive income and to display an amount representing total comprehensive income for each period presented. In interim financial results, this information is allowed to be presented in the notes to the financial statements. For the three-month periods ended June 30, 1998 and 1997, other comprehensive (loss) income was $(\$ 19,061)$ and $\$ 127,426$, respectively, and total comprehensive loss was $\$ 2,953,779$ and $\$ 2,139,522$, respectively. For the six-month periods ended June 30, 1998 and 1997, other comprehensive (loss) income was $(\$ 19,756)$ and $\$ 9,990$, respectively, and total comprehensive loss was $\$ 3,675,572$ and $\$ 4,259,166$, respectively.

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ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

## OVERVIEW

Vical was incorporated in April 1987 and has devoted substantially all of its resources since that time to its research and development programs. The Company is focusing its resources on the development of its direct gene transfer and related technologies. Currently, the Company is developing its ALLOVECTIN-7, LEUVECTIN and VAXID cancer product candidates internally, while developing vaccine product candidates for infectious diseases primarily in collaboration with corporate partners Merck \& Co., Inc. ("Merck") and Pasteur Merieux Connaught ("PMC"). In February 1998, the Company and Centocor, Inc. entered into a license agreement allowing Centocor, Inc. to use Vical's naked DNA technology to develop and market certain gene-based vaccines for the potential treatment of certain types of cancer. To date, the company has not received revenues from the sale of products. The Company expects to incur substantial operating losses for at least the next several years, due primarily to expansion of its research and development programs and the cost of preclinical studies and clinical trials. As of June 30, 1998, the Company's accumulated deficit was approximately $\$ 33.9$ million.

Vical has formulated ALLOVECTIN-7, a complex containing the gene encoding a particular human histocompatibility antigen, HLA-B7, and a lipid material to facilitate gene uptake. After direct injection of ALLOVECTIN-7 into a tumor, the Company believes that the HLA-B7 gene will cause the tumor cells to produce the HLA-B7 antigen. This gene expression may then trigger a potent cellular immune response against the tumor cells.

In May 1998, the Company initiated registration-supportive expanded Phase II and Phase III multi-center clinical trials in certain patients with metastatic melanoma. Either or both of the pivotal trials could support initial product registration if endpoints are achieved. The FDA has reviewed data from previous studies and has confirmed acceptability of the designs, endpoints, and analysis plans for both new trials. The open-label, multi-center Phase II trial is designed to confirm the efficacy of ALLOVECTIN-7 in the defined patient population which appeared to benefit most in earlier Phase II trials. Enrollment will be open to patients with metastatic (spread beyond the initial site), refractory (unresponsive to standard therapy), Stage III or IV disease that has not yet spread to multiple internal organs. Up to 70 advanced melanoma patients will be enrolled at approximately 15 leading cancer treatment centers throughout North America.

The objective is a clinical partial or complete response in at least 15 percent of the evaluable patients, persisting with a median duration of at least four months. The open-label, multi-center, randomized, controlled Phase III trial is designed to determine the efficacy of ALLOVECTIN-7 when combined with standard chemotherapy in patients with unresectable, metastatic melanoma not previously treated with chemotherapy. In prior trials, ALLOVECTIN-7 was used only after standard therapies had failed. In the new trial, patients may be enrolled upon diagnosis or upon progression to Stage III or Stage IV disease when surgery or radiation therapy are usually no longer curative. Because ALLOVECTIN-7 is intended to trigger an immune response against tumor cells, the Company believes the treatment may be more effective in patients whose immune systems have not been compromised.

Approximately 140 patients per group, randomized by sex, age, and extent of disease spread, will be enrolled into a chemotherapy-plus-ALLOVECTIN-7 experimental group or a chemotherapy-only control group. The objective is a greater relative clinical benefit for the experimental group than for the

Results from another Phase I/II trial of ALLOVECTIN-7 suggested potential efficacy in certain patients with unresectable head and neck cancer. A multi-center Phase II trial with ALLOVECTIN-7 in approximately 25 patients with unresectable head and neck cancer began in September 1997. Preliminary results released in May 1998 for 23 evaluable patients in a company-sponsored multi-center Phase II trial yielded one clinical complete response lasting 4 months and continuing, and 10 patients with stable disease after 2 to 4 months and continuing.

Vical is developing its second gene-based product candidate, LEUVECTIN, also intended for direct injection into tumor lesions of cancer patients. LEUVECTIN contains a gene that encodes the potent immunostimulator IL-2 and a lipid material to facilitate gene uptake. The Company expects that LEUVECTIN, when injected into tumors, will cause the malignant cells to produce and secrete IL-2 in the vicinity of the tumor, stimulating the patient's immune system to attack and destroy tumor cells. Because LEUVECTIN is designed to deliver IL-2 only at the site of tumor lesions, the Company believes that it may provide similar efficacy with fewer side effects than systemic IL-2 therapy.

Phase I/II clinical trials testing the safety of LEUVECTIN at varying dosage levels were completed in patients with advanced melanoma, renal cell carcinoma, and soft-tissue sarcoma. The Phase I/II results presented in May 1998 indicated that of the 14 evaluable patients in the renal cell carcinoma trial, two patients achieved clinical partial responses persisting for 13 to 14 months and continuing, and two achieved stable disease, yielding a total of four out of 14 evaluable patients ( 29 percent) deriving clinical benefit from treatment. Among 16 evaluable patients in the melanoma trial, one achieved a clinical partial response persisting for 11 months and continuing, and three achieved stable disease. Among 15 evaluable patients in the sarcoma trial, six patients achieved stable disease. The results of these trials indicated that the treatment is safe and well-tolerated, with no serious treatment-related adverse events reported. Responses appeared to be dose-related, with all clinical responses occurring in the two highest dosing groups. In May 1998 the Company initiated a multicenter Phase II clinical trial in patients with metastatic renal cell carcinoma. The open-label, multi-center Phase II trial is designed to evaluate the safety and efficacy of LEUVECTIN in up to 80 patients with metastatic kidney cancer and determine response rate and duration.

In June 1997, the Company initiated a Phase I/II clinical trial with LEUVECTIN in approximately 18 prostate cancer patients. The trial was designed to test the safety and efficacy of LEUVECTIN as a potential therapy for patients with tumors apparently confined to the prostate capsule, but with a high likelihood of metastatic disease recurrence. Treatment with LEUVECTIN was intended to stimulate a localized immune response against the primary tumor and a systemic immune response against any tumor cells that may have escaped from the capsule.

Data measurement and analysis focused on reductions in the patients' serum levels of prostate-specific antigen (PSA) following treatment with LEUVECTIN. PSA is a biochemical substance produced exclusively by prostate cancer cells and used as a marker to detect and monitor the disease. Recent studies have confirmed that PSA levels, in combination with several other factors, are highly predictive of disease progression in post-surgical and post-radiation patients.

Results of the trial were presented in June 1998, and indicated that LEUVECTIN was well-tolerated and may be successful in casing targeted immune response against prostate cancer cells. In five of 11 patients scheduled for radical prostatectomy (complete removal of the prostate gland), serum PSA levels decreased by at least 50 percent prior to surgery, and remained at undetectable levels following surgery for up to 11 months and continuing. Two additional patients experienced serum PSA reductions between 25 percent and 50 percent prior to surgery and undetectable levels following surgery for up to 6 months and continuing. In four of eight patients with recurrent disease following radiation therapy, serum PSA levels decreased by at least 50 percent. Three additional patients experienced serum PSA reductions between 25 percent and 50 percent.

In collaboration with Dr. Ronald Levy of Stanford University Medical Center, the Company is developing a naked DNA anti-idiotype vaccine, VAXID, against low-grade non-Hodgkin's B-cell lymphoma. VAXID is a DNA plasmid that encodes the patient-specific idiotype of the B-cell tumor immunoglobulin. The Company believes that immunization of post-chemotherapy patients with VAXID could result in the elimination of residual disease and the prevention of the
relapse of disease. In October 1997, a Phase I/II clinical trial of VAXID began at the Stanford University Medical Center under the direction of Dr. Levy.

In July 1998, the Company announced the initiation of a Phase I/II clinical trial to study the safety and potential efficacy of an experimental DNA vaccine for patients with metastatic melanoma. The trial is being sponsored by the National Cancer Institute under the direction of Dr. Steven A. Rosenberg, M.D., Ph.D., Chief of Surgery. The experimental vaccine contains a gene which may cause cells at the injection site to produce a modified gp100 melanoma antigen. The antigen is expected to trigger an immune response against melanoma tumor cells. In earlier studies, Dr. Rosenberg tested a vaccine using peptides (portions of the modified antigen) in combination therapy with interleukin (IL-2), a naturally occurring protein that stimulates the immune system. A DNA vaccine may be more generally applicable and may provide advantages in manufacturing and product handling.

In July 1997, the Company and PMC began a Phase I clinical trial of an experimental naked DNA vaccine against the parasite that causes malaria. The Company and PMC are sponsoring the trial under their Research, Collaboration and License Agreement. The trial is being conducted by the U.S. Naval Medical Research Institute. In April 1998, the Company released preliminary results from approximately 20 human participants in the trial which indicated that the vaccine was well-tolerated and safe. Preliminary analysis of specimens from trial participants suggested a good cellular immune response with features that the physicians conducting the trial believe may be important in preventing the disease,

There can be no assurance that the Company's product candidates will prove to be safe and effective in clinical trials or that any commercially successful products will ultimately be developed by the Company.

This Form 10-Q contains, in addition to historical information, forward-looking statements. When used in this discussion, the words "expects," "anticipated" and similar expressions are intended to identify forward-looking statements. Such statements are subject to certain risks and uncertainties, including whether the Company's product candidates will be shown to be safe or efficacious in clinical trials, whether the Company's corporate collaborations will be successful, and whether the Company's product candidates will ultimately be successfully developed or receive necessary regulatory approvals and other matters discussed in Item 1 under the caption "Risk Factors" in the Company's Form 10-K for the year ended December 31, 1997 filed with the Securities and Exchange Commission, which could cause actual results to differ materially from those projected. These forward-looking statements speak only as of the date hereof. The Company undertakes no obligation to update these forward-looking statements to reflect events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.

## RESULTS OF OPERATIONS

Revenues of $\$ 560,000$ were recorded for the quarter ended June 30, 1998. License revenue primarily consisted of payments under existing agreements with Cardiogene and Merial and royalty revenue of $\$ 183,000$. The Company received $\$ 1,000,000$ from Merial for the extension of the option on five vaccine targets. The Company recognized as revenue $\$ 250,000$ of this payment and reflected $\$ 750,000$ as current deferred revenue in the balance sheet. This deferred revenue will be recognized over the remaining nine month option period. The Company had revenues of $\$ 867,000$ for the quarter ended June 30 , 1997, consisting of license revenue of $\$ 329,000$ primarily derived from the PMC and Merial agreements, contract revenue of $\$ 393,000$ from PMC and royalties amounting to $\$ 145,000$.

Revenues for the six months ended June 30, 1998, were $\$ 3,292,000$. In addition to the revenue recognized in the second quarter, revenue for the six months ended June 30,1998 also included $\$ 2,200,000$ of license revenue from Centocor, Inc., $\$ 178,000$ of license revenue from amortization of deferred revenue from PMC and Merial, contract revenue from PMC and royalty revenue of $\$ 154,000$. Revenues for the six months ended June 30, 1997, were $\$ 1,993,000$ and, in addition to contract and license revenue from PMC and Merial, and royalty revenue, included a grant from the Department of Defense of \$209,000.

The Company's total operating expenses for the quarter ended June 30, 1998, were $\$ 4,072,000$ compared with $\$ 3,678,000$ for the second quarter of 1997 . Total operating expenses for the six months ended June 30, 1998, were $\$ 8,134,000$ compared with $\$ 7,369,000$ for the same period in 1997 .

Research and development expenses increased to $\$ 3,058,000$ for the three months ended June 30, 1998, from $\$ 2,797,000$ for the same period in 1997. For the six months ended June 30, 1998, research and development expenses were $\$ 6,153,000$ compared with $\$ 5,591,000$ in the same period of 1997 . These
increases in research and development expenses were generally due to increased clinical trial costs partially offset by lower spending on external research. An additional contributing factor for the increase for the six months ended June 30, 1998 was royalties due to the Wisconsin Alumni Research Foundation on the license agreement signed with Centocor, Inc. in the first quarter of 1998.

General and administrative expenses increased to $\$ 1,014,000$ for the three months ended June 30, 1998, from $\$ 881,000$ for the same period in 1997. General and administrative expenses for the six months ended June 30, 1998, increased to $\$ 1,981,000$ from $\$ 1,777,000$ for the same period in 1998. The increases are attributable to increasing operational expenses within the administrative area in support of the Company's expanding research and development activities.

Investment income for the three-month and six-month periods ended June 30, 1998, was $\$ 620,000$ and $\$ 1,271,000$, respectively. Investment income for the three-month and six-month periods ended June 30, 1997, was \$597,000 and $\$ 1,207,000$, respectively. The increases are primarily a result of higher rates of return on investments.

The net loss was $\$ .19$ per share for the three months ended June 30, 1998, compared with net loss per share of $\$ .15$ for the same period of 1997 . For the six months ended June 30 , 1998 , the net loss was $\$ .23$ per share compared with a net loss of $\$ .28$ per share for the same period in the prior year. The Company expects to incur losses throughout the remainder of 1998 and to report a net loss per share for the year ended December 31, 1998.

## LIQUIDITY AND CAPITAL RESOURCES

Since its inception, Vical has financed its operations primarily through private placements of preferred and common stock, three public offerings of common stock and revenues from collaborative agreements. As of June 30, 1998, the Company had working capital of approximately $\$ 42.1$ million compared with $\$ 44.9$ million at December 31, 1997. Cash and marketable securities totaled approximately $\$ 43.7$ million at June 30,1998 , compared with $\$ 45.6$ million at December 31, 1997.

The Company expects to incur substantial additional research and development expense including continued increases in personnel costs and costs related to preclinical testing and clinical trials. The Company's future capital requirements will depend on many factors, including continued scientific progress in its research and development programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting and enforcing patent claims, competing technological and market developments, the cost of manufacturing and scale-up, and commercialization activities and arrangements. The Company intends to seek additional funding through research and development relationships with suitable potential corporate collaborators or through public or private financing. Additional funding may not be available on favorable terms or at all.

If additional funding is not available, Vical anticipates that its available cash and existing sources of funding will be adequate to satisfy its operating needs through 1999.

YEAR 2000 ISSUES
The Company is currently developing a plan to insure that its system and software infrastructure are Year 2000 compliant. Key financial information and operational systems will be assessed and plans will be developed to address required systems modifications. Given the relatively small size of the Company's systems and the predominantly new hardware, software and operating systems, management does not anticipate any significant delays in becoming Year 2000 compliant. However, the Company is unable to control whether its current and future strategic partners systems are Year 2000 compliant. To the extent that strategic partners would be unable to procure clinical materials or services provided by the Company, or otherwise manage their clinical trials and research and development activities, or to pay invoices owed to the Company, or to the extent that suppliers are unable to manufacture and ship materials or provide requested contract services, the Company's operations could be affected. However, at this time management has no reason to believe that Year 2000 changes will have a material impact on the Company's business, financial condition or results of operations.

PART II. OTHER INFORMATION
ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS
On May 28, 1998, the Company held its Annual Meeting of Stockholders. The
following actions were taken at the annual meeting.

1. The following Class III directors were elected:
a. Patrick F. Latterell -- $13,975,330$ shares voted in favor of the nominee, 69,740 withheld their vote.
b. Gary A. Lyons -- $13,975,980$ shares voted in favor of the nominee, 69,090 withheld their vote.
c. Dale A. Smith -- $13,970,530$ shares voted in favor of the nominee, 75,540 withheld their vote.

The Company's Class I directors, Alain B. Schreiber, M.D., and Philip M. Young, will continue in office until 1999, and the Company's Class II directors, Robert C. Bellas, Jr., Dr. M. Blake Ingle and Fred A. Middleton will continue in office until 2000.
2. The amendment and restatement of the Stock Incentive Plan of Vical Incorporated was approved. Shares voted for the proposal were 11,898,814, with 2,074,568 shares voted against the proposal and 71,688 shares abstained.
3. The selection of the Company's independent auditors was ratified. Shares voted in favor of the proposal were $14,200,616$, with 18,440 shares voted against the proposal and 24,014 shares abstained.

ITEM 6. EXHIBITS AND REPORTS ON FORM 8-K

1. Exhibits

EXHIBIT 27 Financial Data Schedule
2. Reports on Form 8-K

None

VICAL INCORPORATED

## SIGNATURES

Pursuant to the requirements of the securities and Exchange Act of 1934, the registrant has duly caused this report to be signed in its behalf by the undersigned thereunto duly authorized.

Date: August 12, 1998 By /s/ MARTHA J. DEMSKI

Martha J. Demski
Vice President and
Chief Financial Officer
(on behalf of the registrant and
as the registrant's Principal
Financial and Accounting
Officer)

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<TABLE>
<CAPTION>
EXHIBIT
NUMBER DESCRIPTION OF DOCUMENT
<S>
1. Exhibit 27 Financial Data Schedule
</TABLE>


