FORM 10-K

Annual report pursuant to section 13 and 15(d)

Filing Date: **1999-03-26** | Period of Report: **1998-12-31**
SEC Accession No. 0000352331-99-000003

FILER

RIBI IMMUNOCHEM RESEARCH INC

CIK:**352331**| IRS No.: **810394349** | State of Incorp.:**DE** | Fiscal Year End: **1231**
Type: **10-K** | Act: **34** | File No.: **000-11094** | Film No.: **99573744**
SIC: **2836** Biological products, (no disgnostic substances)

Mailing Address
553 OLD CORVALLIS ROAD
HAMILTON MT 59840-3131

Business Address
553 OLD CORVALLIS RD
HAMILTON MT 59840
4063636214

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

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FORM 10-K

[x] ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d)
OF THE SECURITIES EXCHANGE ACT OF 1934
For the Fiscal Year Ended December 31, 1998

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 0-11094

RIBI IMMUNOCHEM RESEARCH, INC.
(Exact name of Registrant as specified in its charter)

Delaware	81-0394349
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

553 Old Corvallis Road, Hamilton, MT 59840-3131
(Address of principal executive offices and zip code)

Registrant's telephone number, including area code (406) 363-6214

Securities registered pursuant to Section 12(b) of the Act: None
Securities registered pursuant to Section 12(g) of the Act:

Common Stock, $.001 par value
(Title of Class)

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___.

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the

best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ___

The aggregate market value of Registrant's voting and non-voting common equity held by nonaffiliates of the Registrant was $43,106,000 based upon the last sale price of such stock on March 4, 1999, as reported by The Nasdaq Stock Market.

As of March 4, 1999, Registrant had 20,323,373 shares of common stock, $.001 par value, outstanding.

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DOCUMENTS INCORPORATED BY REFERENCE

Portions entitled "Election of Directors," "Compliance with Section 16(a) of the Exchange Act," "Committees and Meetings," "Principal Shareholders and Management's Shareholdings," "Executive Compensation" and "Directors Compensation" from the Definitive Proxy Statement for the Annual Meeting of Shareholders to be held April 26, 1999. . . . . Part III

Such Definitive Proxy Statement for Annual Meeting of Shareholders to be held April 26, 1999, except for portions thereof which have been specifically incorporated by reference, shall not be deemed "filed" as part of this Annual Report on Form 10-K.

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PART I

Item 1. BUSINESS

GENERAL

The Company was incorporated on January 9, 1981, under the laws of Delaware and is engaged in the development of biopharmaceutical products that stimulate the immune system to generate a cascade of natural agents and signals to prevent and treat human disease. Ribi immunostimulants can be combined with disease-specific antigens which may direct the immune system to respond to a particular cancer or infectious disease or can be used to modulate the immune response which may prevent or ameliorate conditions such as ischemia-reperfusion injury. The Company is engaged in the research, development, production and marketing of these products, some of which are under investigation by other companies for use as adjuvants. In addition, the Company engages in related activities such as the custom formulation and sale of research products.

The Company has an active research and development program for new products and the improvement of its existing products. The Company manufactures all of its clinical products and has developed and continues to develop processes for the commercial-scale production of its compounds. The Company protects its proprietary products and processes through the filing of patent applications and the use of confidentiality agreements. The Company has 22 issued United States patents covering its compounds, processes and certain uses of its products. The expiration dates for United States patents held by the Company range from 2001 to 2015. Patents have also been applied for or issued on a selected basis in foreign countries.

The Company is headquartered near Hamilton, Montana, in a modern facility housing approximately 60,000 square feet of laboratory, administrative, marketing, pilot plant and commercial-scale production functions. In addition to the plant and equipment, the Company owns approximately 35 acres allowing for

potential future expansion. To date most of the Company's revenues have been from investment income earned on cash balances and investments, product license and contract research fees, and sales of research and animal health products. Products for use as human biopharmaceuticals have not yet been approved for sale.

THE COMPANY'S TECHNOLOGY

The technology of the Company is based on the potent capacities of certain microbial products to modulate the cascade of cytokines (regulatory substances produced by cells) in man and other animals. Slight modifications of these products and/or their physical and biological delivery to the immune system profoundly influence the qualitative and quantitative natures of the subsequent cytokine modulation and the physiological responses. The Company believes that appropriate delivery of products of this core technology can be used to enhance a protective response or to suppress an unwanted immunological or inflammatory response.

The Company believes it has developed a distinct approach to immune modulation. The Company's materials activate macrophages, lymphocytes and other cells relating to the immune system. This activation stimulates an immunological cascade of cytokine production which complements the normal, protective responses that are initiated during infection or injury. Furthermore, this type of stimulation results in an individually tailored response, similar to the manner in which the body would respond to natural stimuli.

The concept of using microbial products to provide a general immune modulation as a therapeutic approach dates back to the late 1800s. However, little progress was made in exploiting the therapeutic potentials of these products until the 1980s. First of all, much reliance had been placed on chemotherapeutics, antibiotics and radiation as panaceas for infectious and neoplastic (abnormal tissue growth) diseases. Secondly, there appeared to be unsolvable toxicity problems associated with the microbial immunotherapeutic products. In 1981 the late Dr. Edgar Ribi, a cofounder of the Company, and his colleagues discovered a reproducible process which led to the detoxification of endotoxin, a bacterial cell-wall component and one of the most potent known stimulators of the immune system. By separating and isolating selected portions of bacterial cell walls, Dr. Ribi and his colleagues were able to define chemically the precise structure of the endotoxin molecule which possessed immunomodulatory activities and to attenuate the toxicity of this molecule without destroying its beneficial biological properties. The result was a chemical entity referred to as monophosphoryl lipid A, trademarked by the Company as MPL immunomodulator. In addition to attenuating toxicity of the endotoxin molecule, the Company's scientists have extracted biologically active components from the cell walls of MYCOBACTERIUM BOVIS or M. PHLEI and have formulated combinations of these components as potential immunomodulatory agents.

Knowledge of the structures of MPL and other immunomodulators now makes it possible to prepare these compounds and related small molecules by synthetic

methods. Comparison of the biological activities of these synthetic compounds with their structures is allowing the development of a detailed picture of the relationships between structures and activities. This has led to the identification of molecules that may have unique uses as new immunomodulatory products.

The core of the Company's product development is the use of MPL immunomodulator by itself or in combination with other immunomodulators and appropriate delivery vehicles to modify selectively the immunological status of an individual. This is accomplished primarily through precise enhancement or suppression of cellular hormones called cytokines.

Modulation of the cascade of cytokines, both enhancement and suppression, is an extremely complicated process. The particular roles played by the cytokines, alone and in combination with others, have not yet been defined completely. Furthermore, it is unlikely that it will ever be possible to assess the immune status of a patient to such an extent that treatment with exogenous cytokines can be tailored to the patient's exact needs. Poor distribution of cytokines from the bloodstream to desired target tissues also limits their utility as drug products. By studying the structure-function relationships of natural and synthetic immunomodulators, Company scientists hope to discover ways to selectively stimulate or suppress cytokine responses in various tissues naturally. Information from these studies may provide new insights about how the beneficial effects of cytokine modulation can be exploited in the treatment of disease.

The Company's products are in various stages of development. Other than supplying clinical materials to corporate partners and selling certain laboratory research products which presently generate limited sales revenue, the Company has no commercial products. There is no assurance that the products under development, including MELACINE melanoma theraccine, the synthetic cardioprotectant, or any adjuvants, vaccines or other immunological agents, will be commercially successful. While there is evidence that the immunomodulators produced by the Company and others may provide treatment for certain cancers, infectious or other diseases, the workings of the immune system, particularly in conjunction with immunomodulators, are not yet fully understood. As a result, the Company's research and development activities, as well

as those of its competitors, are based on theories and concepts that may not have been completely proven or defined. The Company has been testing certain of its compounds on humans in the United States pursuant to Investigational New Drug ("IND") applications filed with the United States Food and Drug Administration ("FDA"). To date preclinical and clinical data indicate product activity, and there have been no significant unexpected, untoward effects associated with the administration of the Company's products. However, considerable additional testing in human subjects is required to demonstrate efficacy and confirm product safety for most of the Company's products. If results are successful, there is no assurance that the Company will receive the necessary governmental approvals for its products, that additional satisfactory

collaborative or licensing arrangements will be available to the Company, or that any of the Company's products will be accepted by the medical community.

THE COMPANY'S PRODUCTS

In the United States human biopharmaceutical products are regulated by the FDA. The FDA requires every new drug intended for human use to be tested under strictly regulated treatment protocols, all of which require substantial time and cost. (See "Government Regulation - FDA Approvals" on page 13 of this report on Form 10-K).

The table below summarizes the current status of the Company's product development programs, which are discussed in more detail beginning on page 5. Results that have been reported in Phase 1 and Phase 2 trials involving the Company's products do not establish product efficacy, and there can be no assurance that any of the listed products will progress beyond their current state of development or ultimately receive necessary regulatory approval from the FDA or comparable agencies in foreign countries or be accepted by the medical community.

<TABLE>
<CAPTION>

Product	Proposed Application	Status	Collaborator/Licensee
<S>	<C>	<C>	<C>
Adjuvants - Natural	Enhancement of infectious disease vaccines	Phase 1, 2, & 3 (herpes simplex, hepatitis B, human papilloma-virus, influenza, malaria, strepto-coccal infections, Epstein-Barr respiratory syncytial virus and AIDS)	SmithKline Beecham ("SB") - exclusive rights for herpes; hepatitis A, B and C; influenza A and B; Lyme disease; malaria; human papillomavirus; among others - co-exclusive rights for DPT; HAEMOPHILUS INFLUENZA b; otitis media; polio; tuberculosis; among others - nonexclusive rights for AIDS and others Wyeth-Lederle Vaccines and Pediatrics - co-exclusive rights for DPT; HAEMOPHILUS IN-FLUENZA b; otitis media; polio; among others
Adjuvants - Synthetic	Enhancement of infectious disease vaccines	Preclinical	None (1)

Product	Proposed Application	Status	Collaborator/Licensee
Adjuvants - Natural	Enhancement of allergy vaccines	Phase 2	Allergy Therapeutics Ltd - exclusive rights in the European Community, Eastern Europe and Canada - co-exclusive for the rest of the world
Adjuvants - Natural	Enhancement of cancer vaccines	Phase 1	SB - nonexclusive rights for cancer vaccines
MELACINE melanoma theraccine	Stage IV (advanced) malignant melanoma	Product license application filed in Canada. Application being prepared for the U.S.	Schering-Plough Corporation - exclusive worldwide rights
	Stage II (early) stage) malignant melanoma (prevention of recurrence after surgery)	Phase 3	Schering-Plough Corporation - exclusive worldwide rights
MELACINE melanoma theraccine + inter-feron-alfa 2b	Stage IV (advanced) malignant melanoma	Phase 3	Schering-Plough Corporation - exclusive worldwide rights
RC-552 cardio-protectant	Prevention of ischemia-reperfusion injury in coronary artery bypass graft patients	Preclinical, Planning Phase 2 and/or 3	None (1)
DETOX adjuvant	Enhancement of therapeutic vaccines (theraccines) for breast, lung, gastrointestinal and colon cancers	Phase 1, 2 & 3 and pre-clinical	Biomira (exclusive to specific antigens) National Cancer Institute - collaboration

</TABLE>
(1) See "Marketing" on page 12

Cancer Theraccines

A. MELACINE Melanoma Theraccine

Melanoma is a cancer of the skin cells that produce the dark pigment melanin. While early stage melanoma is limited to the skin, it spreads to the liver, lungs and other organs in later stages. Prognosis is dire for patients with advanced disease. Median survival for advanced-disease patients is approximately eight months using currently available forms of treatment. In 1998 there were 41,600 new cases of melanoma diagnosed in the United States and 7,300 deaths. Over the past 15 years the incidence of malignant melanoma in the United States has risen steadily. The rate of increase in incidence is second only to that of lung cancer in women. Increased exposure to ultraviolet rays may be an important factor contributing to the increase in new cases of melanoma.

The Company is developing MELACINE, a therapeutic vaccine to treat melanoma. MELACINE uses melanoma tumor-associated antigens and DETOX immunostimulant to help the melanoma patient slow or stop the natural progression of the disease. In 1996 the Company completed a meta-analysis of published survival data for patients with disseminated melanoma who received various available therapies. The meta-analysis, a recognized statistical method for combining results of several independent studies of a particular subject, among other things, reviewed the survival characteristics of 5,392 patients with disseminated melanoma from 74 clinical studies published between 1974 and 1995 by leading melanoma researchers of various available therapies, including chemotherapy, interferon, interleukin-2, lymphokine-activated killer cells and other melanoma vaccines. The results of this meta-analysis were then compared with the median survival for a similar cohort of patients treated with MELACINE melanoma theraccine. A significant difference in median survival was observed with 11 months for evaluable MELACINE patients compared to 7.9 months for evaluable patients receiving other therapies included in the meta-analysis.

Survival data for late-stage patients treated with MELACINE was determined in 1996 in an analysis of final data collected from the Company's first MELACINE Phase 3 study, which compared MELACINE therapy with an aggressive, experimental four-drug chemotherapy regimen. The study found that during the treatment period, patients receiving MELACINE experienced significantly better quality of life compared to patients receiving chemotherapy and that there was no statistically significant difference in median survival results between the two modalities (11 months for evaluable patients receiving MELACINE vs. 12.4 months for evaluable chemotherapy patients). Additionally, a significantly longer median survival of 18.2 months was observed in patients who experienced clinical responses to therapy with MELACINE ("responders") as compared to the entire group receiving MELACINE (p=0.016). In contrast, the data suggested that while chemotherapy caused tumor shrinkage in some patients, this shrinkage was not

associated with a significant survival advantage. Patients who experienced a clinical response to chemotherapy only had a median survival of 15.2 months, which was not statistically different when compared to the evaluable patients as a group who were treated with chemotherapy (p=0.53). Responders to MELACINE can be identified after one course (14 weeks) of therapy, giving physicians the opportunity to switch nonresponders to alternative therapeutic modalities relatively early in the disease management process. The only drugs currently approved by the FDA for melanoma are dacarbazine ("DTIC"), hydroxyurea, interferon alfa-2b ("INTRON A," Schering-Plough Corporation), which was approved in 1995 for post-operative therapy in patients whose tumors can be surgically removed and are at high risk of recurrence, and interleukin-2 ("PROLEUKIN," Chiron Corporation), which was approved in early 1998 in the United States for Stage IV (late stage) melanoma. All of these drugs are quite toxic and have limited efficacy.

Based on the comparative information, the lack of good treatment alternatives, plus the fact that the cost of treatment with MELACINE is expected to be less than most other forms of treatment, the Company filed a New Drug Submission ("NDS") with the Canadian Health Protection Branch ("HPB") in 1997. The NDS is presently in regulatory review. The Company has answered all questions submitted to date by the HPB and addressed all issues identified during a manufacturing facility inspection by the HPB last summer. The Company continues to work with the HPB to expedite successful conclusion of the necessary regulatory approval process for MELACINE.

The Company filed a license application for MELACINE with the European Agency for the Evaluation of Medicinal Products ("EMEA") in the first quarter of 1998. However, the application was withdrawn in November 1998 after the EMEA requested the submission of additional clinical and product data by January 1999. As these data would not be available within that time period and following the advice of the EMEA, the Company withdrew the application, preserving the right to submit the requested clinical data at a later date. The Company has been working closely with the FDA to define the data package required for submission of a license application in the United States.

A second Phase 3 clinical trial, which is sponsored by the National Cancer Institute ("NCI") and being conducted by the Southwest Oncology Group ("SWOG"), is designed to determine the ability of MELACINE to prevent recurrence of melanoma in Stage II (early stage) patients. These patients had their melanoma lesions surgically removed. In this study, MELACINE was given to half of the patients, and they are being compared to the other half of the patients in the study who did not receive vaccine treatment but were only observed. This study of 689 patients reached full accrual in late 1996 with final analysis of disease recurrence expected between late 1999 and late 2000, depending on the actual number of recurrences.

In 1995 the FDA allowed the Company to begin a third Phase 3 clinical trial. This study compares patients with Stage IV melanoma receiving the combined therapy of MELACINE and a low-dose regimen of Schering-Plough Corporation's

INTRON A (interferon alfa-2b) with a control arm of patients receiving only INTRON A. Results of this study are expected in late 1999. In a pilot study of treatment with MELACINE followed by INTRON A, seven patients who responded to INTRON A had previously had an increase in a certain type of white blood cells as a result of previous immunotherapy with MELACINE. White blood cell response data was not available for the eighth responding patient. The data suggested there may be synergy between the two drugs as indicated by a 44% overall clinical response rate (tumor regression) and extended survival in the responding melanoma patients in comparison to nonresponders. The 44% response rate (8 of 18 patients) was higher than that obtained previously with either agent alone.

In 1998 the Company granted worldwide marketing rights for MELACINE to Schering-Plough Corporation. In addition to license fees, the Company will receive transfer payments for supplies of MELACINE and will be entitled to royalties upon commercial sale of MELACINE. The Company had in 1992 licensed the rights to market MELACINE in Canada to Biomira, Inc. ("Biomira") of Edmonton, Alberta, Canada. During 1998 the Company reacquired those rights from Biomira and granted them to Schering-Plough Corporation.

MELACINE was given Orphan Drug status by the FDA in 1989, which provides seven years of marketing exclusivity from the date of marketing approval.

The Company has exclusive marketing rights for MELACINE through an agreement with the University of Southern California where the melanoma tumor associated antigens were developed through the work of Dr. Malcolm S. Mitchell. The University is entitled to royalty payments from the Company upon commercial sale of MELACINE melanoma theraccine.

B. Other Theraccines

In addition to MELACINE, the Company has participated in research programs and has established relationships to evaluate therapies that incorporate the Company's immunostimulants with tumor-associated antigens for the treatment of other types of cancers. In 1990 the Company entered into a collaboration with Biomira. Biomira produces synthetic carbohydrate antigens, which can be combined with the Company's adjuvants to produce theraccines with potential application against breast, lung and gastrointestinal cancers. Human clinical data have been published which demonstrate that the Company's DETOX B-SE adjuvant plays a key role in generating a significant immune response with Biomira's line of THERATOPE cancer theraccines. Biomira has licensed DETOX B-SE adjuvant from the Company for the clinical development and potential commercialization of THERATOPE theraccines. In 1996 Biomira announced final Phase 2 clinical data showing that its THERATOPE theraccine for metastatic breast cancer provides a median survival of more than 26 months as compared to less than 10 months achieved historically with chemotherapy. Biomira, in collaboration with Chiron Corporation, announced in November 1998 the start of a pivotal Phase 3 trial to evaluate the effectiveness of THERATOPE theraccine in treating metastatic breast cancer. The study, believed to be the largest of its kind in this patient

cohort, will include 75 to 80 centers worldwide studying approximately 900 evaluable patients. Primary endpoints for the study are time to disease progression and survival. The study is expected to reach full accrual after 18 months, with submission for regulatory approval to follow, assuming favorable study results.

During 1995 the Company completed a license and supply agreement with SB covering the use of the Company's adjuvants in cancer theraccines under development by SB. Under the license/supply agreement, the Company granted SB a nonexclusive, worldwide license to use its adjuvants commercially upon regulatory approval of SB's cancer vaccines. The Company will receive an annual license fee and milestone payments for each SB vaccine incorporating the Company's adjuvants that is submitted for regulatory review and subsequent milestone payments upon regulatory approval of each vaccine incorporating a Company adjuvant. In addition to transfer payments for commercial quantities of adjuvant, the Company will also receive royalties on any commercial sales of approved vaccines incorporating its adjuvants. In late 1997, SB began a Phase 1 trial with a cancer vaccine that utilized the Company's adjuvants and is continuing development in 1998.

Infectious Disease Vaccines

The Company's immunostimulant technology appears to have beneficial application in the creation of vaccines for the prevention of viral and bacterial infections. The Company believes that current emphasis on preventive health care, the recent resurgence of certain previously controlled infectious diseases and the continued emergence of new diseases, such as AIDS and Lyme disease, will lead to greater use of prophylactic vaccines. The immunostimulating characteristics of MPL make it well suited for use as an adjuvant with various specific antigens for the creation of vaccines. Alum, the adjuvant historically used in approved vaccines, is proving to be inadequate for many new vaccine antigens, particularly those created with advanced DNA and subunit technology.

The Company has licensed certain of its adjuvants to SmithKline Beecham ("SB") in three separate agreements for use in vaccines for infectious diseases that SB is developing. The first agreement, signed in 1991, provides for exclusive, worldwide use in defined SB vaccines for a number of primarily adult viral vaccines. The Company receives transfer payments for supplies of adjuvant and will receive royalties upon commercialization. SB is conducting human clinical testing with the Company's

adjuvants for vaccines against herpes, hepatitis B, malaria, human papilloma virus and respiratory syncytial virus. During 1998 SB continued to advance the development of several vaccines covered by this agreement. In December 1998 SB announced Phase 3 safety and efficacy results of a new, more powerful hepatitis B vaccine containing the Company's MPL immunomodulator. This new vaccine was developed to address low or nonresponding patients to SB's current hepatitis B vaccine, ENGERIX-B. ENGERIX-B is the world's leading hepatitis B vaccine with

over 450 million doses distributed worldwide. While the three-dose ENGERIX-B regimen is effective in most people, certain segments of the population, including the elderly with decreased immune function and hemodialysis patients, do not receive adequate protection. In addition, some healthy young individuals require additional doses to achieve sufficient buildup of antibody levels. The new vaccine combines the antigen in ENGERIX-B with SB's novel adjuvant, SBAS4, which contains the Company's MPL. In the clinical trial in nonresponders comparing ENGERIX-B with the new vaccine, seroconversion rates (protective antibody levels) were measured one month after each of three vaccine doses; at zero, one and six months. After the first dose, 78% of the group given the new vaccine seroconverted versus 59% of the ENGERIX-B group. After two doses, 96% versus 76% seroconverted. After the third and final treatment, 98% of patients receiving the vaccine containing MPL seroconverted compared to only 81% of the patients given ENGERIX-B. SB has indicated that it plans to file for registration of the new hepatitis B vaccine for use in low and nonresponders by the end of 2000.

SB is also conducting a clinical trial using MPL, which is designed to test the efficacy of a novel herpes vaccine in a study using a selected consort design. In the trial one partner in a couple has herpes and the other does not. The vaccine is being tested for its ability to prevent the spread of herpes between partners.

The second license agreement with SB was signed in 1992 for a group of bacterial infectious disease vaccines, including some pediatric vaccines. Under this agreement SB has rights to develop a new generation of combination vaccines containing diphtheria, pertussis, tetanus, HAEMOPHILUS INFLUENZA b (meningitis) and polio antigens and is in early research with several other bacterial vaccines that include the Company's adjuvants. Pursuant to this agreement, the Company granted SB a co-exclusive, worldwide license to use certain of the Company's adjuvants commercially upon regulatory approval. In addition to an annual license fee, the Company receives transfer payments for supplies of the adjuvants and will be entitled to royalties from SB upon commercial sale of the vaccines.

Effective December 31, 1996, the Company entered into a third infectious disease vaccine license agreement granting SB an exclusive license to use certain of the Company's adjuvants in a human papillomavirus ("HPV") (genital warts) vaccine, a co-exclusive license for a tuberculosis vaccine, and a nonexclusive license to use the Company's adjuvants in the development of additional infectious disease as well as other vaccines. In addition to annual license fees, the Company will receive transfer payments for clinical and commercial quantities of adjuvant and royalties on any commercial sales of vaccines incorporating the Company's adjuvants. Vaccines under this agreement are in early stages of development.

Effective in 1993, the Company entered into license and supply agreements with Wyeth-Lederle Vaccines and Pediatrics ("WLV&P"), a business unit of Wyeth-Ayerst Laboratories, which is a division of American Home Products Corporation, for the co-exclusive use of certain of the Company's adjuvants in the development of prophylactic vaccines, including pertussis, HAEMOPHILUS INFLUENZA b and STREPTOCOCCUS PNEUMONIAE and for supply by the Company of commercial quantities of adjuvants. The agreements with WLV&P provide for an annual license fee, transfer payments for supplies of adjuvants and for royalty payments upon

commercial sale of vaccines. During 1998 WLV&P

continued clinical development of a pediatric combination vaccine containing MPL immunomodulator as an adjuvant.

Additionally, Merck & Co., Inc. and CEL-SCI Corporation have both entered into option agreements with the Company to use MPL in AIDS vaccines each is developing.

In the course of product development, the Company has extensively studied the structure/function relationships of its complex immunostimulant molecules derived from bacterial sources. With this information, Company scientists designed synthetic small molecules with a broad spectrum of properties. These compounds should result in an expanding product pipeline that will include the next generation of novel adjuvants for broad use in therapeutic and prophylactic vaccine applications. The Company's second-generation adjuvant technology platform is based on novel AGP (aminoalkyl glucosamine phosphate) adjuvants. In animal models these new synthetic compounds display potent bioactivity, possess an excellent safety profile and are amenable to alternative methods for vaccine delivery, such as intranasal delivery. Synthetic AGP compounds may also provide advantages in ease of formulation, manufacturing scale-up and simplified quality assurance. It has been shown in animal models that mucosal immunity is stimulated using intranasal delivery of vaccines containing the Company's synthetic adjuvants. The ability to stimulate mucosal immunity, considered an important early defense mechanism against respiratory, gastrointestinal and sexually transmitted diseases, presents the opportunity to develop a new line of prophylactic and therapeutic vaccines. Company scientists have successfully used AGPs in preclinical testing of tetanus, hepatitis B and influenza vaccines. Plans are underway to initiate human clinical trials of AGPs to generate safety data which will be important in attracting future collaborators.

In 1998 the Company announced it acquired exclusive worldwide rights to a novel molecular adjuvant technology developed at the Eppley Institute for Cancer Research at the University of Nebraska. This molecular adjuvant technology includes a class of synthetic molecules that have the unique, dual ability to both target and stimulate specific immune system cells. The broad-based technology has potential application in vaccines against certain cancers and chronic infectious diseases, including hepatitis B and CHLAMYDIA TRACHOMATIS, a highly prevalent sexually transmitted disease which can lead to pelvic inflammatory disease, sterility and blindness. Company scientists are evaluating the molecular adjuvant technology in cancer vaccine models as well.

Additional business opportunities are represented by the AGP and molecular adjuvant technologies. Since both are unencumbered by licensing arrangements, the Company has the potential to realize new revenue streams by establishing corporate collaborations.

Other Vaccines

Another significant opportunity was added in 1996 to the Company's vaccine adjuvant franchise with the signing of a license/supply agreement covering the use of its adjuvants in allergy vaccines under development by SmithKline Beecham Pharma, a subsidiary of SB. This agreement provided SB Pharma with the right to use certain of the Company's adjuvants commercially upon regulatory approval of SB Pharma's allergy vaccines. In 1998 development of SB Pharma's allergy vaccines was assumed by Allergy Therapeutics Ltd. ("ATL"). Under the agreement between ATL and the Company, ATL has rights to MPL immunomodulator for use in a generation of allergy desensitization products. Current allergy desensitization involves a series of injections of allergen extracts administered by a health care professional initially weekly, later monthly, for up to three years. Early Phase 2 clinical studies have shown that with the addition of MPL, ATL's new generation of allergy vaccines may provide desensitization

with fewer immunizations. In addition a new sublingual delivery system under development at ATL may increase patient compliance by allowing self-administration of these novel vaccines. ATL has a very aggressive clinical trial program underway. Should trials go as planned, MPL may be included in a new allergy desensitization product, initially on a named-patient basis in the second half of 1999.

Under the agreement with ATL, the Company will receive an annual license fee prior to, and minimum annual royalties subsequent to, regulatory approval of any ATL allergy vaccines incorporating a Company adjuvant. The Company will also receive supply payments for clinical and commercial quantities of its adjuvants and royalties on any commercial sales of approved allergy vaccines incorporating the Company's adjuvants.

Cardioprotectant

Ischemia-reperfusion injury is damage that can occur in tissue during the oxygen deprivation of ischemia and when blood flow is restored after such events as a heart attack or a planned event such as cardiovascular surgery, angioplasty or organ transplantation. Paradoxically, restoring blood flow to ischemic tissue may induce a complex series of events leading to both reversible and irreversible cardiac tissue damage beyond any damage that may have occurred during the ischemic period. It is believed that a significant factor in reperfusion injury is the generation of "free radical" molecules, which attack and damage cardiac tissue. The injury can result in a number of complications: infarction (tissue death), myocardial stunning (depression of heart function), arrhythmias (irregular heart beats) and in some cases, death.

It is well established in animal models that a phenomenon termed "ischemic preconditioning" can protect heart tissue from ischemia-reperfusion injury. Short periods of ischemia followed by reperfusion can protect a heart which is subsequently subjected to prolonged ischemia (as in surgical procedures). This activity elicits both a window of immediate protection that lasts for up to two

hours as well as a second window of protection that begins approximately 12 hours later. Most physicians do not consider it desirable to mechanically induce short periods of ischemia in patients prior to a surgical procedure to precondition and protect the heart. The Company had previously pursued development of a natural compound, MPL-C cardioprotectant, that was found to pharmaceutically mimic certain aspects of ischemic preconditioning. Subsequently, the Company's synthetic chemistry program discovered a novel cardioprotectant that is fast acting, with high potency and an improved therapeutic index, as compared to MPL-C.

In 1997 the Company prioritized its cardiology program on development of the new synthetic compound, RC-552 cardioprotectant. Since then, preclinical studies of RC-552 have been conducted in several animal heart models (including dog, rabbit, mouse and pig) by Company and collaborating scientists in leading research institutions. Results indicate the drug possesses a unique profile in that it reduces infarct size, reduces stunning and lowers the incidence of arrhythmias caused by ischemia-reperfusion injury. Dr. Dipak Das of the University of Connecticut College of Medicine studied RC-552 in a canine cardiopulmonary bypass model. In this model RC-552 was administered in a single dose prior to surgery, followed by continuous infusion of a smaller dose throughout a one-hour and forty-minute ischemic period and a subsequent three-hour reperfusion period. The results showed that RC-552 reduced damage to the heart by 65 to 70 percent.

The findings of Dr. Das and other investigators that RC-552 provides protection in a model of severe cardiac ischemia during cardiopulmonary bypass, and that it provides rapid and continuous protection with drug infusion, have important implications for

its clinical use. It may now be possible to protect surgery patients immediately after giving drug, during the entire operation and through the post-surgical periods, when they are still at risk for complications of ischemia-reperfusion injury. There currently is no drug approved to prevent this condition, which occurs in approximately 25% of coronary artery bypass graft ("CABG") surgeries based upon a composite endpoint of infarction, severe stunning and death. Because of the Company's experience with MPL-C, the FDA has determined that RC-552 can proceed directly into advanced clinical studies in open heart bypass and aortic valve replacement surgery patients following filing of an IND.

Potential clinical applications for RC-552 cardioprotectant may include CABG surgery, aortic valve replacement, angioplasty, non-cardiac surgery in high risk patients, unstable angina, acute MI thrombolytic therapy and organ transplantation.

Research Products

The Company currently produces approximately 20 research products. These products, which include adjuvants, are used in various research projects by

industrial, academic and government research laboratories and clinics. Additionally, physicians and veterinarians use the products in the development of treatments for a variety of diseases and to study the body's immune responses. The Company also uses some of the research products it produces in its efforts to develop immunotherapeutic agents capable of treating infectious diseases, malignant tumors and other diseases.

Contract Services

The Company from time to time engages in contract services, whereby it conducts specialized projects on behalf of others utilizing the expertise of its research and production teams.

Sources and Availability of Raw Materials

Materials for producing the Company's pharmaceutical products come from a number of sources. Most of its products are derived from biological organisms, which are grown and maintained within the Company's facilities. Critical organisms, not readily available from other sources, are stored in secure locations outside of the Company's facilities. Chemicals and agents used in the manufacturing process are generally fairly common and are readily available from several different vendors.

COMPETITION

The biotechnology and pharmaceutical industries are characterized by rapidly evolving technology and intense competition. The Company's products under development are expected to address a broad range of markets. The Company's competition will be determined in part by the potential indications for which the Company's products are developed and ultimately approved by regulatory authorities. The first pharmaceutical product to reach the market in a therapeutic or preventive area is often at a significant competitive advantage relative to later entrants to the market. Accordingly, the relative speed with which the Company or its corporate partners can develop products, complete the clinical trials and approval processes and supply commercial quantities of the products to the market are expected to be important competitive factors. The Company's competitive position will also depend on, among other things, its ability to attract and retain qualified scientific and other personnel, develop effective proprietary products, develop and implement production and marketing plans, obtain and maintain patent protection, and secure adequate capital resources. The Company expects its products, if approved for sale, to compete

primarily on the basis of product efficacy, safety, patient convenience, reliability, value and patent position. In addition to potential competition from other biopharmaceutical products, the products presently under development by the Company may compete with nonbiologic drugs and other therapies. The Company's competitors include major pharmaceutical, chemical and specialized

biotechnology companies, many of which have financial, technical and marketing resources significantly greater than those of the Company.

The Company is aware that research is being conducted by others in areas in which the Company is seeking to establish commercial products. The Company's competitors might offer products which, by reason of price or efficacy, may be superior to any products that may be developed by the Company. There can be no assurance that the discovery and introduction of products by others will not render the Company's current or future products obsolete, or that the Company will otherwise be able to effectively compete with such competitors.

MARKETING

The Company's revenues were derived from the following sources:

<TABLE>
<CAPTION>

	1998	1997	1996
		(In Thousands)	
<S>	<C>	<C>	<C>
Sales:			
Research products	$ 481	484	502
Custom adjuvants and research products	2,057	2,259	1,046
Other	-	-	11
Total sales	2,538	2,743	1,559
Investment income, net	746	942	1,017
Fees from licenses and contracts	2,841	2,834	2,042
Other	(2)	11	5
Total revenues	$ 6,123	6,530	4,623
Export sales	$ 2,099	2,262	1,205

</TABLE>

The Company plans to license its products to marketing partners for all applications. It filed for marketing approval of MELACINE in Canada in 1997 and plans to file in the United States later. The Company has granted worldwide marketing rights for MELACINE to Schering-Plough Corporation in exchange for license fees, milestone payments, transfer payments and royalties. The Company will manufacture MELACINE to supply potential worldwide demand and transfer finished product to its partner. In the area of vaccine adjuvants the Company has several license agreements in place. In the areas of synthetic adjuvants and cardioprotection, if preclinical and clinical trial data are favorable, the

Company intends to grant additional licenses to marketing partners in exchange for license fees, transfer payments and royalties on commercial sales, or a combination thereof. For vaccine adjuvant applications, the Company would manufacture its products as bulk intermediates for transfer to marketing partners for finishing and distribution. The Company is currently preparing to conduct a Phase 2 or 3 human clinical trial with its synthetic cardioprotectant, RC-552, in the prevention of heart damage associated with heart surgery. The Company will seek a corporate partner to assist in the clinical trial and share the substantial financial risk of final development of the cardioprotectant.

In the United States the Company markets its research products through direct mail, scientific journal and trade show advertising and markets them worldwide, generally to nonexclusive distributors. Export sales, consisting mainly of custom adjuvants for the Company's corporate partners' premarketing needs and research products, were shipped primarily to Europe, Japan and Canada. Note 10 of the Notes to Financial Statements on page 45 of this report on Form 10-K contains information about the Company's major customers.

RESEARCH AND DEVELOPMENT

The primary source of new product candidates is internal research. Additionally, cell lines for the MELACINE melanoma theraccine antigens have been licensed from the University of Southern California for a royalty fee from commercial sales of MELACINE, and certain molecular adjuvant technology has been licensed from the University of Nebraska in consideration for the payment of royalties upon commercialization. Costs and expenses for research and development activities were $7,872,000 in 1998, $8,184,000 in 1997 and $6,203,000 in 1996.

GOVERNMENT REGULATION

Regulation by governmental authorities in the United States and other countries is a significant factor in the research, preclinical development, clinical trials, production and marketing of the Company's human biopharmaceutical products.

FDA Approvals

In order to produce and market human biopharmaceuticals, the Company must satisfy mandatory procedures and meet safety and efficacy standards established by the FDA and equivalent foreign regulatory authorities. The process of seeking and obtaining FDA approval for the manufacturing and marketing of a new human biopharmaceutical product may require a number of years and substantial funding. The steps required before a human biopharmaceutical can be produced and marketed include preclinical studies, the filing of an Investigational New Drug ("IND") application, human clinical trials and approval of a Biologic License Application ("BLA") or a Product License Application ("PLA") and an Establishment License Application ("ELA"). (The BLA and PLA are both referred to as BLA in the following paragraphs.) For synthetic drugs that might be

developed, the Company would request approval of a New Drug Application ("NDA") rather than a BLA.

Preclinical studies are conducted in the laboratory and in animal model systems to gain preliminary information on a product's activity and to identify major safety problems. The results of these studies are submitted to the FDA as part of the IND application before allowance can be obtained to begin testing in humans. Protocols for the human trials, outlines for production of the materials and statements describing the testing facilities are also included in the IND.

The clinical testing program required for a new biopharmaceutical product principally involves three phases. However, in conducting actual clinical trials, the demarcation between phases at times becomes indistinct. Phase 1 studies are conducted with human volunteer patients to determine the maximum tolerated dose and to discover the possible side effects of the substance. Phase 2 studies are conducted with groups of patients having a specific disease in order to determine the most effective doses and schedules of administration. Phase 3 involves wide-scale studies that are adequately controlled in order to provide statistically valid data on response rates which can be compared with current therapies, including drugs or biologics.

In the United States data from Phase 1, 2 and 3 trials are submitted in a BLA to the FDA. The BLA involves considerable data collection, verification and analysis. It also includes the preparation of summaries of the manufacturing and testing processes, preclinical studies and clinical trials. BLA approval by the FDA is necessary before the product may be marketed in the United States.

During the BLA review period, in addition to consideration of the safety and efficacy data, the FDA also determines what labeling it will require and permit for marketing of the product. The agency may also require post-marketing testing and surveillance for possible adverse reactions as a condition of its approval.

The Company obtained Orphan Drug designation for MELACINE in 1989 and, if appropriate, may request Orphan Drug designation for other products. Under the Orphan Drug Act the FDA may grant Orphan Drug status to drugs intended to treat a "rare disease or condition," which is a disease or condition that affects less than 200,000 individuals in the United States or more than 200,000 persons in the United States if there is no reasonable expectation that sales will be sufficient to recover the costs of developing and making available the drug. If a product is designated an Orphan Drug, then the sponsor is entitled to receive certain incentives to undertake the development and marketing of the product, including limited tax credits, where applicable. In addition, the sponsor that obtains the first marketing approval for a designated Orphan Drug for a given indication is eligible to receive marketing exclusivity for a period of seven years. There may be multiple designations of Orphan Drug status for a given biologic (or drug) and indication; however, only the sponsor of the first approved BLA (or NDA) for a given biologic (or drug) for its use in treating a given rare disease may receive marketing exclusivity. There is no assurance that any additional products of the Company will receive Orphan Drug status. While it

may be advantageous to obtain Orphan Drug status of eligible products, there can be no assurance that the precise scope of protection that is currently afforded by Orphan Drug status or the current level of economic benefits and incentives will remain in effect in the future.

Governmental Reforms

In the past few years health care reform has received considerable attention. While it appears that federal governmental intervention is not imminent at this time, certain reform measures currently being considered by various state governments and certain related market restructuring could adversely affect the pricing of therapeutic or prophylactic products or the amount of reimbursement available. Such events could have an adverse impact on the profitability of companies developing, manufacturing or marketing pharmaceutical products. The Company cannot predict the extent of possible future governmental reforms or the effect such reforms or other measures may have on its business.

Other Governmental Regulations

In addition to the foregoing, the Company is and will be subject to various regulations relating to the maintenance of safe working conditions, good laboratory and manufacturing practices and the use and disposal of harmful or potentially harmful substances.

There can be no assurance that any required approvals will be granted on a timely basis, if at all, or that such approvals, once granted, will not be withdrawn. Furthermore, there is no assurance that additional regulation will not be imposed on the Company's activities or products in the future.

PATENTS AND PROPRIETARY PROTECTION

The Company has obtained and applied for patents in the United States and several foreign countries. The Company has 22 issued United States patents with expiration dates ranging from 2001 to 2015. There is no assurance that patents applied for by the Company will be obtained, and there can be no assurance that the claims embodied in existing patents to which the Company has rights will not be challenged. The issuance of a patent to the Company or to a licensor of the Company is not conclusive as to validity or as to the enforceable scope of claims therein. The validity and enforceability of a patent can be challenged by a request for re-examination or litigation after its issuance and, if the outcome of such litigation is adverse to the owner of the patent, other parties may be free to use the subject matter covered by the patent.

There can be no assurance that additional patents will be obtained by the Company in the United States or in other jurisdictions, or that any patents will provide substantial protection, or be of commercial benefit to the Company. The cost of enforcing the Company's patent rights in lawsuits which the Company may

bring against infringers or which may be brought challenging the Company's patents may be high and could interfere with the Company's operations. The patent laws of other countries may differ from those of the United States as to the patentability of the Company's products and processes. Moreover, the degree of protection afforded by foreign patents may be different from that in the United States. On an ongoing basis, the Company reviews its patent portfolio and has abandoned and may in the future abandon patents or patent applications for reasons including limited protection, lack of commercial importance and limited enforceability, among other considerations.

Although the Company attempts to protect its products and processes by seeking patent protection when deemed appropriate, it also relies upon trade secrets, proprietary know-how and continuing technological innovation to develop and maintain its competitive position. Product development contracts and relationships between the Company, its consultants and other pharmaceutical companies may provide access to the Company's know-how. The Company requires such parties to execute confidentiality agreements. Insofar as the Company relies on confidentiality arrangements, there can be no assurance that others may not independently develop similar technology or that secrecy will not be breached.

All employees are required to sign a confidential information agreement that contains terms assigning patent rights to the Company as well as obligations not to use or disclose any such information during and for a period of two years following termination of their employment.

The Company maintains an active trademark protection program in the United States and in those foreign countries where it expects to market its products. MELACINE melanoma theraccine, MPL immunomodulator and the Company's logo are registered trademarks in the United States. INTRON-A is a registered trademark of Schering-Plough Corporation and THERATOPE is a registered trademark of Biomira, Inc. DETOX adjuvant is a trademark of the Company. In this document trademarks are designated with capital letters.

EMPLOYEES, CONSULTANTS AND COLLABORATORS

As of December 31, 1998 the Company had 107 full-time and 5 part-time employees. The Company also uses outside consultants and collaborators to support and complement the activities of its scientific staff. The Company utilizes such persons to aid in specific research and development projects, rather than to act as a general scientific advisory board.

Item 2. PROPERTIES

The Company's facilities are located near Hamilton, Montana, on a 35-acre complex owned by the Company. Its buildings contain approximately 60,000 square feet of laboratory, pilot plant, commercial-scale manufacturing, marketing and administrative facilities. The manufacturing facility has been built to FDA standards for Good Manufacturing Practices. The Company believes that its

present facility will meet its manufacturing and other requirements for the foreseeable future.

Item 3. LEGAL PROCEEDINGS

The Company, the National Institutes of Health ("NIH") and the Bitterroot Valley Sanitary Landfill ("Landfill") were notified by the Montana Department of Health and Environmental Sciences (now known as the Department of Environmental Quality ["DEQ"]) in March 1991 that they had been identified as potentially responsible parties ("PRPs") and as such are jointly and severally liable for groundwater contamination located at and near the site of the Landfill in Ravalli County, Montana. The Company's involvement arises out of waste materials which it generated and were subsequently deposited at the Landfill from 1982 to 1985 which the Landfill had permits to receive. The NIH unilaterally and voluntarily initiated and completed work pursuant to an interim remediation plan approved by the DEQ to remove and decontaminate the believed source of contamination and treat the aquifers, which tests have shown contain contaminants. Although decontamination of the soil at and around the Landfill has been completed, treatment of the groundwater in the proximity of the disposal site continues utilizing carbon filtering and air sparging, and it is anticipated such treatment will continue through 1999 and possibly longer. The DEQ conducted a "Risk Assessment" and issued a "Draft Final Feasibility Study" in October 1994 that discussed possible final remediation alternatives. In August 1995 the DEQ announced that it had approved a second interim action in the vicinity of the Landfill being unilaterally and voluntarily conducted by the NIH and which involved installing individual replacement and new wells to provide both an alternate water supply for the affected residents and to develop additional information on the site hydrogeology. Information collected from these wells through a multi-year monitoring program are being used by the DEQ to evaluate the effectiveness of the remediation efforts to date. The second interim action plan calls for the wells to be installed in three phases: Phase I included occupied properties with the highest remaining contamination levels; Phase II included occupied properties with lesser degrees of contamination; and Phase III consisted largely of vacant properties. Preliminary studies completed in 1994 estimated the cost of the wells to be approximately $1,400,000. Information indicates that a total of 19 alternate water supply wells have been installed at a cost of approximately $1,000,000. The DEQ could require the PRPs to implement further remediation should these wells not provide sufficient quality or quantity of water. Additionally, the NIH has indicated it is undertaking Phase II groundwater remediation to intercept and treat contaminated groundwater near the eastern Landfill boundary. The NIH has projected costs for this Phase II groundwater remediation to be in excess of $1,000,000 through 1999. The NIH, which has taken the lead and incurred substantially all of the remediation costs, has represented publicly that it would continue to work with the DEQ toward an acceptable final remediation plan.

The DEQ initiated an action in 1997 against the Company, the Landfill and the owners of the Landfill seeking recovery of past alleged costs associated with its oversight activities in the amount of $238,000, as well as a declaratory judgment finding the parties liable for future oversight costs, plus civil penalties in the event the parties fail to comply. Since the action was initiated, the Company and the NIH jointly have received statements requesting payment of an additional $27,000. In May 1998 the Company was informed that the

DEQ had entered into a settlement agreement

with the Landfill and its owners, whereby the Landfill and its owners agreed to collectively pay the DEQ approximately $35,000. The Company believes that it has meritorious defenses to the claim, including the amount thereof, and that there are other responsible parties. The Company has filed a response to the action, including a counterclaim and motions for a change in venue and to dismiss. Recently, the Court granted the Company's motion for a change of venue to Ravalli County where the Company is located. The Court did not rule on the motion to dismiss, which motion will now be acted upon by the Court in Ravalli County. Recently the DEQ filed a Motion for Stay of Proceedings pending the outcome of the action in Federal District Court discussed below in which the DEQ is a plaintiff. The Court granted the motion which the Company did not oppose.

On April 21, 1998, the Company received notice that the United States of America (U.S.), acting on behalf of the Department of Health and Human Services, which oversees the NIH, filed suit in United States District Court seeking contribution from the Company of an "equitable share" of past and future response costs incurred by the NIH in connection with the remediation at and near the Landfill. The complaint alleges that as of September 30, 1997, the U.S. had incurred response costs in excess of $3,400,000 and that it expects to incur more than $1,000,000 in additional response costs. The Company filed a response to the action. On or about June 4, 1998 the Company received notice that the U.S. had entered into a settlement agreement with the Landfill and the Landfill owners pursuant to which the settling parties agreed to make payment in the amount of $440,000. In view of the settlement, the U.S. filed with the Court a Joint Motion for Stay of Proceedings between the U.S., the Landfill and Landfill owners. Assuming the settlement is completed, the action against the Landfill and the Landfill owners would be dismissed. Although the Company believes it has meritorious defenses to the cost recovery claim, including the amount thereof, and that there are other responsible parties, there can be no assurance that the Company will be successful in its defenses to claims arising out of the Landfill, including the claims made by the U.S.

On or about June 6, 1998 the DEQ filed a complaint in the United States District Court against the Company, the Landfill and the owners of the Landfill seeking recovery of past alleged costs associated with its oversight activities in the amount of $258,000, of which it indicated not more than $154,000 had been reimbursed, plus interest and attorneys' fees and costs as well as a declaratory judgment finding the parties liable for future response costs. This action is similar to that filed in the State District Court where further action has been deferred pending the outcome of the Federal action. The Company has filed a response to the action, including a counterclaim against the DEQ. The DEQ has initiated discovery. The Company responded to a discovery request. The Company believes that is has meritorious defenses to the claim, including the amount thereof, and that there are other responsible parties. There can be no assurance that the Company's defenses and counterclaim will be successful.

Depending upon the eventual outcome of the above discussed litigation and when

in time the litigation is concluded and the success of the Company in pursuing defense and indemnity with insurance carriers, the outcome may or may not have a material adverse effect on the Company's financial condition. Accordingly, it is not possible at present to accurately predict whether an adverse outcome will have a material adverse effect on the Company's financial condition. The Company is unable to determine its overall potential liability with respect to the Landfill at this time. As of December 31, 1998, the Company has accrued a reserve of approximately $290,000 to cover legal, consulting and DEQ reimbursement costs associated with the Company as a PRP. Net costs charged against operations in 1998, 1997 and 1996 were $104,000, $42,000 and $13,000, respectively.

In June 1997 a complaint was filed in District Court in Ravalli County against the Company by a former employee who was discharged for cause in June 1996. The plaintiff alleges discharge in violation of the Montana Wrongful Discharge from Employment Act ("Act") and further, that discharge was for refusal to violate public policy. The Court granted dismissal with respect to that portion of the complaint which alleges termination for refusal to violate public policy. Plaintiff filed a motion for reconsideration asking the Court to reverse its decision with respect to the issue of termination for refusal to violate public policy and requested the Court for permission to amend the complaint to include additional allegations relative to the public policy issue. On April 6, 1998 the Court allowed plaintiff to amend the complaint as requested. If plaintiff should ultimately prevail on the issue of discharge in violation of the Act, the potential liability of the Company would be approximately $320,000, exclusive of the Company's attorneys' fees and related costs. If the plaintiff prevails on the public policy issue, the Company could be subject to punitive damages of an unknown amount in addition to the potential liability for violation of the Act. The Company believes that it has a meritorious defense and plans to vigorously defend the suit. However, it is not possible to reliably assess the outcome. Depending upon the eventual outcome of this litigation and when in time the litigation is concluded, the outcome may or may not have a material adverse effect on the Company's financial condition. It is possible the case may go to trial during 1999.

The plaintiff also filed a petition for Judicial Review in District Court in Missoula County naming the Company and the State of Montana Department of Labor and Industry respondents and asking the Court to review and overturn the Department of Labor's decision finding plaintiff was terminated for misconduct as defined in MCA Section 39-51-2303 and, therefore, not allowing plaintiff to collect unemployment benefits. The Company filed a response arguing the correctness of the Department of Labor's decision. The Court remanded the matter to the Department of Labor for further testimony, which was taken. The Department of Labor recently issued a Findings of Fact; Conclusions of Law; and Order in which it confirmed its previous findings that the plaintiff willfully and purposefully failed to follow the reasonable instructions of the Company and, therefore, was discharged for misconduct connected with his work and directly affecting his employment. Accordingly, the Department confirmed its previous findings that the plaintiff is not eligible to receive unemployment

insurance benefits. It is not known at this time what further action, if any, the plaintiff may take with respect to his claim for unemployment insurance benefits.

Item 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

There were no matters submitted to a vote of shareholders during the fourth quarter of 1998.

EXECUTIVE OFFICERS OF THE REGISTRANT

The following table sets forth the names, ages and positions of all executive officers of the Company. All executive officers are serving a current term of office which continues until the next Annual Meeting of Directors, which is expected to be held on or about April 26, 1999.

<TABLE>
<CAPTION>

Name	Age	Position and Period Served
<S>	<C>	<C>
Robert E. Ivy	65	President, Chief Executive Officer and director of the Company since 1987; Chairman of the Board of Directors since 1989; member of the Board of Directors of The International Heart Institute of Montana Foundation since 1995 and Sonus Pharmaceuticals, Inc., since February 1999.
John L. Cantrell, Ph.D.	60	Executive Vice President and director of the Company since 1981.
Vern D. Child, C.P.A.	54	Vice President-Finance of the Company since 1988; Treasurer since 1986; Assistant Secretary since 1989.
Gary T. Elliott, Pharm.D.,	42	Vice President-Pharmaceutical Development of the Company since 1994; Director of Pharmaceutical Sciences from 1992 to 1994.
Ronald H. Kullick, R.Ph., J.D.	56	Vice President-Legal Counsel and Secretary of the Company since 1989.

Charles E. Richardson, Ph.D.	47	Vice President-Pharmaceutical Discovery of the Company since 1994; Director of Production, Engineering and Technical Services from 1989 to 1994.
Kenneth B. Von Eschen, Ph.D.	50	Vice President-Clinical and Regulatory Affairs of the Company since 1994; Director of Clinical and Regulatory Affairs from 1992 to 1994.

</TABLE>

PART II

Item 5. MARKET FOR REGISTRANT'S COMMON EQUITY AND RELATED SHAREHOLDER MATTERS

The Company's common stock trades on The Nasdaq Stock Market under the Symbol: RIBI. The high and low sales prices shown below were compiled from information provided by The Nasdaq Stock Market. The prices represent interdealer prices, without retail mark-up, mark-down or commission, and may not represent actual transactions. As of March 4, 1999 the Company had approximately 1,499 shareholders of record.

<TABLE>
<CAPTION>

	1998		1997	
	High	Low	High	Low
<S>	<C>	<C>	<C>	<C>
First quarter	$ 6.25	3.50	5.63	3.75
Second quarter	6.19	4.75	4.88	3.38
Third quarter	5.31	2.25	4.69	3.44
Fourth quarter	3.19	1.81	4.75	3.50

</TABLE>

The Company has not declared any cash dividends with respect to its common stock. The Company does not intend to declare or pay any cash dividends on its common stock, and there can be no assurance that the Company will ever declare or pay cash dividends on its common stock.

Item 6. SELECTED FINANCIAL DATA

The selected financial information below should be read in conjunction with the

Company's historical financial statements and notes. Such information may not be indicative of the Company's future financial condition or results of operations.

<TABLE>
<CAPTION>

	1998	1997	1996	1995	1994
	(In Thousands Except Per Share Data)				
<S>	<C>	<C>	<C>	<C>	<C>
Year Ended December 31,					
Sales & other revenues	$ 2,536	2,754	1,564	959	1,019
Licenses and contracts	2,841	2,834	2,042	1,848	2,075
Investment income, net	746	942	1,017	1,216	1,460
Net loss	(7,633)	(6,417)	(5,589)	(5,317)	(3,790)
Net loss per common share	(.38)	(.32)	(.30)	(.28)	(.20)
Dividends per common share	-	-	-	-	-
Research & development expenses	7,872	8,184	6,203	5,530	4,993
Average number of shares outstanding	20,318	20,072	18,890	18,877	18,657
December 31,					
Cash, cash equivalents & investments	$ 13,225	13,370	14,512	19,824	25,967
Total assets	29,828	27,770	28,298	33,911	38,824
Long-term debt	-	-	-	-	-
Shareholders' equity	25,600	25,415	26,847	32,427	37,338

</TABLE>

Item 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

GENERAL

Since its inception in 1981, the Company has been engaged primarily in the research and development of immunostimulants for use in preventing and treating human diseases. To date the Company has received limited revenues from commercial sales and sales of clinical supplies. The Company has incurred net operating losses in each year since its inception and expects to incur additional losses for the next year, and probably longer.* At December 31, 1998 the Company's accumulated deficit was approximately $49,874,000.

The Company's results of operations can vary significantly from quarter to quarter and depend, among other factors, on costs related to the progress of its research and development, including the preparation of commercial license applications and, to a lesser extent, on revenues and costs associated with manufacturing. To date, research and development expenses, together with manufacturing costs, have exceeded product and other revenues in all periods.

The Company is not able to estimate with certainty the amount of cash and working capital that may be needed for operations. Such requirements typically vary depending upon the results of basic research and clinical trials, the time and expense required for governmental approval of products, and competitive and technical developments, most of which are beyond management's control. There is no assurance that the Company will be able to obtain the necessary funding in sufficient amounts or at the appropriate time for its planned activities. In the event the Company may require additional funding and is not successful in obtaining additional funding, it might not be able to proceed as rapidly as it would like, if at all, with the development and commercialization of its products, which would have a material adverse effect on its future financial condition and results of operations.

In computer systems and applications developed in the 1970s and 1980s, years were often stored in a 2-digit rather than 4-digit format to save expensive computer storage and processing space. These systems correctly assumed the 2-digit year in data storage was preceded by the digits "19." At Year 2000, a 2-digit date of "00" may not be interpreted correctly by these systems, which could lead to incorrect or inadequate results, or equipment failure in cases where computer chips regulate equipment operation. The Company established a committee, which made a preliminary assessment, and hired an outside firm which determined in reasonable detail the Company's exposure to the "Year 2000" problem. Systems that may require remediation have been identified and prioritized. Remediation of identified systems, including contingency planning, is approximately 90% complete with completion targeted for May 1, 1999.* The Company has identified what it considers to be critical vendors. A survey to determine the level of vendor compliance is in progress with a targeted completion date of July 1, 1999.* Depending upon the results of the vendor survey, appropriate contingency plans will be developed prior to January 1, 2000.* The Company expects to continue to incur both internal staffing costs, as well as consulting and other expenses related to these issues. These costs will be expensed as incurred. The Company expects that solutions will involve a mix of purchasing new systems and modifying existing systems. The Company is not yet able to estimate the potential costs associated with the Year 2000 problem. At December 31, 1998 approximately $67,000 has been spent for assessment and remediation. Additionally, approximately $170,000 has been spent for the acquisition and implementation of software for tracking and managing manufacturing and for new accounting systems that, under other circumstances, would have been purchased at a later time. The Company has allocated additional funds of approximately

$200,000 to complete its identification, necessary remediation and contingency planning. Although the Company is working to solve these issues in a timely manner, there can be no assurance that all of the Year 2000 problems will be resolved before the end of 1999 or that all of the Company's vendors and customers will be Year 2000 compliant. At the present time the Company does not expect Year 2000 issues to have a major impact on its operation. Most of its raw materials are fairly common and are available from several different suppliers. The Company is developing some contingency plans to control the impact of an unforeseen failure. Depending upon the nature and length of a possible Year 2000 compliance failure by the Company and/or its vendors, the result could be a minor delay in the production of one or more of the Company's products with little, if any, financial impact; or, in a worst case scenario, for example, in the event of a long-term disruption of electrical and/or natural gas service, the result could be partial or complete cessation of operations of the Company pending restoration of service. Depending upon the event, it could impact the ability of the Company to produce product in response to potential orders from its customers and otherwise effect the normal day-to-day operations of the Company, which could have a material adverse financial effect upon the Company.

Pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995, several forward-looking statements that involve a number of risks and uncertainties are included within this Management's Discussion and Analysis of Financial Condition and Results of Operations. In addition to the risks and uncertainties discussed with the forward-looking statements, there are a number of other factors that could cause actual results to differ materially from projected results, including but not limited to the following: levels of expenditure on and results of the Company's research and the impact of those results on milestone and transfer payments from partners, research results of other companies using the Company's products, competition from other companies, changes in government regulation, including price controls for newly developed drugs, and risk factors listed from time to time in the Company's reports to the Securities and Exchange Commission. Forward-looking statements herein are followed by an asterisk ("*").

RESULTS OF OPERATIONS

Revenues

The Company has received limited revenues from commercial sales and sales of clinical supplies. The balance of its revenues has been from contracts and licenses and investment income earned on cash balances and investments. The Company anticipates that its revenues from operations, which increased from approximately $4,623,000 in 1996 to approximately $6,530,000 in 1997 and decreased slightly to approximately $6,123,000 in 1998, will continue to be limited for the next year, and probably longer.*

Fees from licenses and contracts increased from $2,042,000 in 1996 to $2,834,000 in 1997 and remained level at $2,841,000 in 1998. In January 1997 a fifth agreement was signed with SmithKline Beecham ("SB") granting them use of the Company's adjuvants in various vaccines being developed by SB. This most recent agreement, effective as of December 31, 1996, grants SB an exclusive license to use the Company's adjuvants in a human papillomavirus vaccine, a co-exclusive

license for a tuberculosis vaccine and a nonexclusive license to use the Company's adjuvants in the development of additional infectious disease vaccines as well as other vaccines. In addition to annual license fees, the Company will receive transfer payments for clinical and commercial quantities of adjuvant and royalties on any commercial sales of vaccines incorporating the Company's adjuvant.* To date there have been no commercial sales of adjuvants pursuant to licensing agreements.

Investment income decreased from $1,017,000 in 1996 to $942,000 in 1997 and $746,000 in 1998. The year-to-year reduction in investment income has been due substantially to reductions in the amount of funds available for investment during those periods. The average interest rate in the investment portfolio increased from approximately 6.03% at December 31, 1996, to 6.14% at December 31, 1997, and decreased to 5.35% at December 31, 1998. Additionally, losses, net of gains, realized from sales of investments were approximately $11,000 in 1997 and $20,000 in 1998.

Purchases and Production

Purchases and production costs increased from $988,000 in 1996 to $1,337,000 in 1997 and to $1,836,000 in 1998. Such costs, as a percentage of sales, declined from 1996 to 1997 as the volume of products manufactured in the manufacturing facility increased. The costs increased, as a percentage of sales, from 1997 to 1998. In 1998 the manufacturing plant underwent additional validation testing necessary as part of the MELACINE commercial licensing activities, resulting in a decrease in plant throughput for the year.

Research and Development

The Company incurred research and development expenses of approximately $6,203,000, $8,184,000 and $7,872,000 in 1996, 1997 and 1998, respectively. The increase in 1997 principally reflects, in addition to ongoing preclinical and clinical programs for the Company's products under development, costs of preparing and filing commercial license applications. Research and development expenses consisted primarily of salaries, contract consulting costs and laboratory supplies. Labor costs decreased from approximately 43% of total research and development costs in 1996 to 36% in 1997 and increased to 41% in 1998. Supply costs have ranged from 21% to 23% of total research and development expenses throughout the three-year period. Contract consulting costs increased from approximately 27% of total research and development expenses in 1996 to 36% in 1997 and decreased to 29% in 1998. The year-to-year variance in expense can be attributed to the level of activity in clinical, preclinical and commercial licensing projects. The Company expects research and development expenses to be lower from 1998 to 1999.* While the Company plans to continue its preclinical development programs and complete patient accrual in its Phase 3 clinical trial testing MELACINE administered in conjunction with interferon alfa-2b to treat patients with late-stage melanoma, much of the work for the preparation of a

commercial licensing application for MELACINE in the United States has been completed.* Lower research and development expenses are dependent, among other things, on the rate at which patients are attracted to the Company's clinical trials, the results experienced in trials and other research activities, and the acceptance of regulatory filings by various regulatory agencies.

Selling, General and Administrative

Selling, General and Administrative expenses increased from $3,021,000 in 1996 to $3,426,000 in 1997 to $4,048,000 in 1998. During this three-year period, labor costs increased from $1,591,000 in 1996 to $1,692,000 in 1997 and to $1,754,000 in 1998. In addition to labor costs, the increase in costs in 1997 is mainly attributable to greater investor relations efforts, higher maintenance costs and added depreciation. In 1998 the increase in costs, other than labor costs, is primarily attributable to costs associated with litigation and the landfill located in Ravalli County, Montana (see Item 3, "Legal Proceedings," page 16 of this report on Form 10-K). Additionally, other increases pertain to Year 2000 assessment and remediation expenses, depreciation expense and maintenance costs. The Company allocates part of its administrative and depreciation costs, which are directly related to manufacturing, to the cost of

producing products for sale and for use in clinical trials. Such costs allocated in each year 1996, 1997 and 1998 were $808,000, $837,000 and $907,000, respectively.

Net Loss

The Company's net loss increased from $5,589,000 in 1996 to $6,417,000 in 1997 and to $7,633,000 in 1998. Its net loss per share over the same period was $.30 per share in 1996, $.32 per share in 1997 and $.38 per share in 1998. The weighted average number of shares outstanding increased approximately 6% from 1996 to 1997. The increase reflects shares issued in a sale of stock and warrants to SB in January 1997 and the exercise of unrelated warrants in July 1997.

LIQUIDITY AND CAPITAL RESOURCES

The Company has financed its operations primarily from the issuance and sale of equity securities, limited sales of products, interest earned on investments, and payments under contract research and license agreements. The financing sources have, to date, enabled the Company to maintain adequate liquidity. Cash, cash equivalents and investments totaled approximately $13,225,000 at December 31, 1998, as compared to approximately $13,370,000 at December 31, 1997.

The principal uses of cash during 1998 were approximately $4,966,000 for operations, approximately $1,660,000 for deposits and other assets and approximately $1,280,000 for plant and equipment. The Company used approximately

5% less cash in operations in 1998 than in 1997, reflecting on a cash basis increased revenues. Increased cash basis revenues include cash collected under a marketing license agreement, which may have to be returned if certain product approval goals are not met (see Note 10 of the Notes to Financial Statements). Cash requirements for operating activities in 1999 are expected to decrease below 1998 levels as work is completed for clinical trials and commercial licensing applications.* Additionally, revenues are expected to increase slightly in 1999.* Projected cash requirements are dependent upon the Company receiving the revenues that are anticipated and conducting the research, particularly the clinical trials and commercial regulatory filings, that are projected. It is possible that sales could be lower because customers may not order as much material as expected. It is also possible that patient accrual within planned clinical trials will be slower than anticipated or the results of the trials or other research will not be as expected.

In 1998 the Company obtained additional working capital from the sale of convertible preferred stock for net proceeds of $7,714,000. Note 6 of the Notes to Financial Statements contains more information about the sale. In 1997 the Company's primary sources of cash were approximately $3,963,000 from the sale of approximately 1,103,000 shares of common stock to SB and $963,000 from the exercise of outstanding warrants and stock options. The Company has outstanding warrants to purchase 500,000 shares at $5.00 per share that were issued to SB in 1997 as part of its stock purchase agreement. These warrants expire if not exercised by January 1, 2000.

The Company will require substantial additional funds to continue its research and development programs and to commercialize its products under development. Future capital requirements will depend upon a number of factors, including the rate of expenditure on and the progress of the Company's research and development programs, the time and cost to obtain regulatory approvals, and demand for products based on the Company's technology. The Company believes that presently its available cash, cash equivalents and investments, together with funds from licensing agreements and product sales should be sufficient to meet its capital requirements through 2002.*

Item 3, "Legal Proceedings," on page 16 of this report on Form 10-K contains a discussion of contingencies related to the Company's identification as a Potentially Responsible Party for groundwater contamination at and near the Bitterroot Valley Sanitary Landfill, the Company being a named defendant in suits brought by the Montana Department of Environmental Quality seeking to recover alleged costs associated with its oversight activities of the Landfill, and a request for contribution of remediation costs incurred by the NIH. Item 3 also contains information regarding a suit filed by a former employee.

Item 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest earned on the Company's investment portfolio is affected by changes in the general level of interest rates in the United States. The following table provides information about the Company's investment portfolio including

principle cash flows and related weighted average interest rates by anticipated maturity dates. At December 31, 1998 the Company's available-for-sale investment securities, comprising primarily of debt instruments of major corporations and the United States Government and its agencies, are substantially similar in nature and have been combined for this presentation.

<TABLE>
<CAPTION>

Year Ended December 31,	Principal Maturing	Average Interest Rate
	(In Thousands)	
<S>	<C>	<C>
1999	$ 6,849	5.34%
2000	5,640	5.37%
2005	5	5.42%
	$12,494	
Fair Value at December 31, 1998	$12,501	

</TABLE>

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

RIBI IMMUNOCHEM RESEARCH, INC.

INDEPENDENT AUDITORS' REPORT

KPMG
P.O. Box 7108
Billings, MT 59103

The Board of Directors and Shareholders
Ribi ImmunoChem Research, Inc.:

We have audited the accompanying balance sheets of Ribi ImmunoChem Research, Inc. as of December 31, 1998 and 1997, and the related statements of operations, shareholders' equity and comprehensive income and cash flows for each of the years in the three-year period ended December 31, 1998. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Ribi ImmunoChem Research, Inc. at December 31, 1998 and 1997, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 1998 in conformity with generally accepted accounting principles.

/s/ KPMG LLP

Billings, Montana
January 22, 1999

RIBI IMMUNOCHEM RESEARCH, INC.

BALANCE SHEETS
(In Thousands Except Share Data)

<TABLE>

<CAPTION>

	December 31,	
	1998	1997
Assets		
<S>	<C>	<C>
Current assets:		
Cash and cash equivalents	$ 458	1,224
Available-for-sale investment securities and accrued interest	12,767	12,146
Accounts receivable	1,302	870
Inventories	1,185	1,250
Other current assets	213	234
Total current assets	15,925	15,724
Property, plant and equipment, net	11,738	11,453
Deposits	1,568	-
Other assets, net	597	593
Total assets	$ 29,828	27,770
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	$ 275	611
Accrued liabilities	793	614
Deferred revenue	3,160	1,130
Total current liabilities	4,228	2,355
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, $.10 par, 10,000,000 authorized shares; Series A convertible; stated value $8,240,000; 8,240 shares issued and outstanding in 1998 (aggregate liquidation preference $8,429,000)	1	-
Common stock, $.001 par; 30,000,000 authorized shares; 20,322,873 and 20,311,623 issued and outstanding in 1998 and 1997, respectively	20	20
Additional paid-in capital	75,446	67,485
Accumulated other comprehensive income (loss)	7	(37)

Accumulated deficit	(49,874)	(42,053)
Total shareholders' equity	25,600	25,415
Total liabilities and shareholders' equity	$ 29,828	27,770

</TABLE>

See accompanying notes to financial statements.

RIBI IMMUNOCHEM RESEARCH, INC.

STATEMENTS OF OPERATIONS
(In Thousands Except Per Share Data)

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
<S>	<C>	<C>	<C>
Revenues:			
Sales	$ 2,538	2,743	1,559
Contracts and licenses	2,841	2,834	2,042
Investment income, net	746	942	1,017
Other, net	(2)	11	5
	6,123	6,530	4,623
Costs and expenses:			
Purchases and production	1,836	1,337	988
Research and development	7,872	8,184	6,203
Selling, general and administrative	4,048	3,426	3,021
	13,756	12,947	10,212
Net loss	$ (7,633)	(6,417)	(5,589)
Net loss per common share	$ (.38)	(.32)	(.30)

</TABLE>
See accompanying notes to financial statements.

RIBI IMMUNOCHEM RESEARCH, INC.

STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME
(In Thousands Except Share Data)

<TABLE>
<CAPTION>

	Pre-ferred Stock	Common Stock	Addi-tional Paid-in Capital	Accumu-lated Other Compre-hensive Income (Loss)	Accumu-lated Deficit	Total Share-holders' Equity
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Balance at December 31, 1995	$ -	19	62,460	(5)	(30,047)	32,427
Comprehensive loss:						
Net loss	-	-	-	-	(5,589)	(5,589)
Other comprehensive loss:						
Unrealized investment losses	-	-	-	(23)	-	(23)
Total	-	-	-	-	-	(5,612)
Issuance of 1,400 common shares under stock grant program	-	-	6	-	-	6
Issuance of 1,800 common shares upon exercise of options	-	-	6	-	-	6
Compensation relating to stock options	-	-	20	-	-	20
Balance at December 31, 1996	-	19	62,492	(28)	(35,636)	26,847
Comprehensive loss:						
Net loss	-	-	-	-	(6,417)	(6,417)
Other comprehensive loss:						
Realized and unrealized investment losses	-	-	-	(20)	-	(20)
Investment losses included in net loss	-	-	-	11	-	11
	-	-	-	(9)	-	(9)
Total	-	-	-	-	-	(6,426)

Issuance of 3,000 common shares under stock grant program	-	-	13	-	-	13
Issuance of 22,400 common shares upon exercise of options	-	-	89	-	-	89
Sale of 1,103,448 common shares in a private placement, net	-	1	3,962	-	-	3,963
Issuance of 291,332 common shares upon exercise of warrants	-	-	874	-	-	874
Compensation relating to stock options	-	-	55	-	-	55
Balance at December 31, 1997	-	20	67,485	(37)	(42,053)	25,415

</TABLE>

RIBI IMMUNOCHEM RESEARCH, INC.

STATEMENTS OF SHAREHOLDERS' EQUITY AND COMPREHENSIVE INCOME (continued)
(In Thousands Except Share Data)

<TABLE>
<CAPTION>

	Pre-ferred Stock	Common Stock	Addi-tional Paid-in Capital	Accumu-lated Other Compre-hensive Income (Loss)	Accumu-lated Deficit	Total Share-holders' Equity
<S>	<C>	<C>	<C>	<C>	<C>	<C>
Comprehensive loss:						
Net loss	-	-	-	-	(7,633)	(7,633)
Other comprehensive income:						
Realized and unrealized investment gains	-	-	-	24	-	24
Investment losses included in net loss	-	-	-	20	-	20
	-	-	-	44	-	44
Total	-	-	-	-	-	(7,589)
Issuance of 1,400 common shares under stock grant program	-	-	5	-	-	5
Issuance of 9,850 common shares						

upon exercise of options	-	-	36	-	-	36
Sale of 8,240 preferred shares in a private placement, net	1	-	7,713	-	-	7,714
Accretion of liquidation preference on preferred stock	-	-	188	-	(188)	-
Compensation relating to stock options	-	-	19	-	-	19
Balance at December 31, 1998	$ 1	20	75,446	7	(49,874)	25,600

</TABLE>

See accompanying notes to financial statements.

RIBI IMMUNOCHEM RESEARCH, INC.

STATEMENTS OF CASH FLOWS
(In Thousands)

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
<S>	<C>	<C>	<C>
Cash flows from operating activities:			
Net loss	$ (7,633)	(6,417)	(5,589)
Adjustments to reconcile net loss to net cash used by operating activities:			
Depreciation and amortization	1,054	1,002	935
Common stock grants	5	13	6
Compensation relating to stock options	19	55	20
Discount accretion and investment losses	39	(17)	(415)
Abandoned patents and asset sales	23	18	18
Changes in operating assets and liabilities:			
Accounts receivable	(432)	(818)	673
Inventories	65	18	(285)
Other current assets	21	39	(23)
Accounts payable	(336)	293	65
Accrued liabilities	179	44	(31)
Deferred revenue	2,030	567	(67)
Net cash used by operating			

activities	(4,966)	(5,203)	(4,693)
Cash flows from investing activities:			
Capital expenditures	(1,280)	(796)	(924)
Payments for other assets and deposits	(1,660)	(78)	(93)
Proceeds from sale of assets	5	1	-
Proceeds from maturities of held-to-maturity securities	-	-	3,121
Proceeds from maturities and sales of available-for-sale securities	15,694	8,214	4,784
Purchases of available-for-sale securities	(16,309)	(6,272)	(1,956)
Purchases of held-to-maturity securities	-	-	(97)
Net cash provided (used) by investing activities	(3,550)	1,069	4,835
Cash flows from financing activities:			
Sale of common stock, net	-	3,963	-
Sale of preferred stock, net	7,714	-	-
Proceeds from exercise of warrants	-	874	-
Proceeds from exercise of options	36	89	6
Net cash provided by financing activities	7,750	4,926	6
Increase (decrease) in cash and cash equivalents	(766)	792	148
Cash and cash equivalents at beginning of year	1,224	432	284
Cash and cash equivalents at end of year	$ 458	1,224	432

</TABLE>

See accompanying notes to financial statements.

RIBI IMMUNOCHEM RESEARCH, INC.

NOTES TO FINANCIAL STATEMENTS

(1) Summary of Significant Accounting Policies

OPERATIONS. Ribi ImmunoChem Research, Inc. (the "Company") was incorporated on January 9, 1981, and is principally engaged in the development of biopharmaceutical products that stimulate the immune system to generate a cascade of natural agents and signals to prevent and treat human disease. The Company also engages in related activities such as the custom formulation and sale of research products and contract research.

REVENUE RECOGNITION. Revenues from the sale of research products are recognized when products are shipped to customers. Revenues from contract research are recognized as related expenses are incurred. Nonrefundable license fees received in connection with product license agreements are recognized over the term of the contract.

CASH EQUIVALENTS. In the statement of cash flows, the Company considers all highly liquid debt instruments with a maturity on the date of acquisition of three months or less to be cash equivalents.

INVESTMENT SECURITIES. Investment securities consist of marketable debt securities and, in 1997, mutual funds that have invested in marketable debt securities. All investment securities are available to support current operations and are, therefore, classified as "available-for-sale." These available-for-sale securities are recorded at fair value, which is based on quoted market prices.

Any gains and losses from the sale of investment securities are computed under the specific identification method. Unrealized holding gains and losses, net of related tax effect, on available-for-sale securities are excluded from earnings and are reported as other comprehensive income until realized. Unrealized losses, if any, for all investment securities that are other than temporary are charged against earnings.

INVENTORIES. Inventories are stated at the lower of cost or market on a specific identification basis. Cost is based on the actual costs associated with producing the inventories, which include direct labor and materials, quality control and manufacturing overhead.

PROPERTY, PLANT AND EQUIPMENT. Property, plant and equipment are stated at cost and depreciated on a straight-line basis over estimated useful lives of 25 to 40 years for buildings and 3 to 12 years for equipment, furniture and fixtures. Maintenance and repairs are charged to expense as incurred. Significant betterments are capitalized.

NET LOSS PER COMMON SHARE. Net loss per common share is based on the weighted average number of shares outstanding and takes into consideration the liquidation preference of the preferred stock. Diluted net loss per common share is not presented, as the effect is antidilutive.

COMPREHENSIVE INCOME. Statement of Financial Accounting Standard No. 130 entitled "Reporting Comprehensive Income" ("FAS 130") was issued in 1997 and adopted by the Company in 1998 on a retroactive basis as permitted by the

RIBI IMMUNOCHEM RESEARCH, INC.

NOTES TO FINANCIAL STATEMENTS - continued

standard. FAS 130 requires that changes in shareholders' equity that result from transactions and economic events other than those with shareholders be included with net income or loss to arrive at "comprehensive income or loss." The Company has reported comprehensive loss, net of income taxes, in the Statements of Shareholders' Equity and Comprehensive Income.

PATENTS AND OTHER ASSETS. Other assets consist principally of the costs of patents filed, deferred patent application costs and patent maintenance costs. Such costs are amortized on a straight-line basis over the estimated remaining useful lives of the patented technology ranging from less than one year to nearly 17 years. Unsuccessful patent application costs are expensed when the patent is denied or abandoned.

INCOME TAXES. The Company accounts for certain income and expense items differently for financial reporting and income tax purposes. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities and are measured by applying enacted tax rates to taxable years in which such differences are expected to reverse. The current and noncurrent portions of these deferred tax assets and liabilities are classified in the balance sheet based on the respective classification of the assets and liabilities which give rise to such deferred income taxes. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in tax expense in the period that includes the enactment date.

STOCK-BASED EMPLOYEE COMPENSATION. From time to time the Company grants to its employees stock and/or options to purchase stock. In the case of stock grants, compensation expense is recognized by the Company at the time of the grant in the amount of the market value of the stock on the grant date. Compensation expense for the grant of stock options is recognized only when the market value of the underlying stock exceeds the exercise price of the stock option on the grant date. Any such compensation expense is charged to expense over the term that the options vest to the optionee.

FAIR VALUE OF CERTAIN FINANCIAL INSTRUMENTS. The carrying amounts for cash, cash equivalents, accounts receivable, accounts payable and accrued expenses approximate fair value because of the short duration of those instruments.

ESTIMATES. Management of the Company has made certain estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities to prepare these financial statements in conformity with generally accepted accounting principles. Actual results could differ from those estimates.

RIBI IMMUNOCHEM RESEARCH, INC.

NOTES TO FINANCIAL STATEMENTS - continued

(2) Investment Securities

The following is a summary of the Company's investment securities:

<TABLE>
<CAPTION>

December 31, 1998	Amortized Cost	Fair Market Value	Unrealized Gains	Unrealized Losses
		(In Thousands)		
<S>	<C>	<C>	<C>	<C>
Securities of the U.S. Government and its agencies	$ 4,644	4,653	13	4
Corporate mid-term notes	7,373	7,372	8	9
Insured certificates of deposit	477	476	-	1
	12,494	12,501	21	14
Accrued interest	266	266	-	-
	$ 12,760	12,767	21	14
December 31, 1997				
Mutual funds investing primarily in short to intermediate term securities of the U.S. Government and its agencies	$ 4,717	4,661	-	56
Securities of the U.S. Government and its agencies	3,453	3,470	17	-
Corporate mid-term notes	3,367	3,369	3	1
Insured certificates of deposit	508	508	-	-
	12,045	12,008	20	57
Accrued interest	138	138	-	-
	$ 12,183	12,146	20	57

</TABLE>

Substantially all debt securities at December 31, 1998 mature within two years.

During 1998 the Company sold shares of two debt mutual funds and one corporate mid-term note for $5,793,000. Book gains realized on the sales totaled approximately $17,000, and book losses realized totaled approximately $37,000. During 1997 the Company sold shares of a debt mutual fund for $500,000 and realized a book loss of approximately $11,000. During 1996 the Company sold shares of debt mutual funds for $425,000. Book gains realized on the sales totaled approximately $3,000, and book losses realized totaled approximately $3,000.

(3) Inventories

Inventories are as follows:

<TABLE>
<CAPTION>

	December 31,	
	1998	1997
	(In Thousands)	
S>	<C>	<C>
Raw materials	$ 112	132
Work in process	1,024	1,053
Finished goods	49	65
	$ 1,185	1,250

</TABLE>

(4) Property, Plant and Equipment

Property, plant and equipment consist of the following:

<TABLE>
<CAPTION>

	December 31,	
	1998	1997

	(In Thousands)	
S>	<C>	<C>
Buildings	$ 9,737	9,629
Equipment, furniture and fixtures	8,008	7,149
	17,745	16,778
Less accumulated depreciation	6,545	5,598
	11,200	11,180
Construction in progress	349	84
Land	189	189
	$ 11,738	11,453

</TABLE>

(5) Net Loss per Common Share

Net loss per common share is computed as follows:

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
	(In Thousands Except Per Share Data)		
<S>	<C>	<C>	<C>
Net loss	$ (7,633)	(6,417)	(5,589)
Accretion of liquidation preference on preferred stock	188	-	-
Net loss applicable to common stock	$ (7,821)	(6,417)	(5,589)
Weighted average number of common shares outstanding	20,318	20,072	18,890
Net loss per common share	$ (.38)	(.32)	(.30)

</TABLE>

The Company has convertible preferred stock, warrants and stock options outstanding that are described in Notes 6 and 7 of the Notes to Financial Statements that could potentially dilute earnings per share in the future.

(6) Shareholders' Equity

In July 1998 RGC International Investors, LDC, ("Holder") purchased 8,240 shares of convertible preferred stock of the Company for gross proceeds of $8,240,000 ("stated value"). The preferred stock's liquidation preference equals its stated value plus an amount equal to 5% per annum. Beginning the 91st day after the July 17 closing, the preferred stock is convertible into shares of common stock of the Company. From the 91st day until 120 days after the closing, the conversion price was fixed at $6.04. After 120 days the conversion price floats at the lesser of the fixed conversion price or a market price based on average market bid prices for a defined period prior to the conversion date. The actual number of shares of common stock that will be issued will depend upon the preferred stock's liquidation preference and the actual conversion price when the preferred stock is converted. Beginning with the 91st day from the closing date, each thirty days thereafter, on a cumulative basis, a maximum amount of 15% of the preferred stock may be converted into shares of common stock if the conversion price is less than $4.00. The Holder may not control more than 4.9% of the Company's outstanding common stock at any given time. In addition, except for block trades of not less than 15,000 shares of converted common stock, there are restrictions on the number of converted common shares that may be traded on any given trading day. Subject to certain conditions, the Company has the right to redeem all or a portion of the preferred stock at a premium over the purchase price paid by the Holder. In the event the Company fails to meet certain obligations under the agreement with the Holder, the Holder can require the Company to redeem the preferred stock at a premium over the purchase price paid by the Holder. The Company's obligations under this provision generally include maintaining an adequate number of authorized but not issued common shares for conversion purposes, maintaining a current registration statement for the converted common stock, and maintaining a listing for the Company's common stock on the stock market. Certain liquidation or bankruptcy procedures would also trigger the mandatory redemption provisions. Any shares not converted or redeemed will automatically be converted into common stock in July 2001.

In early 1997, effective December 31, 1996, SmithKline Beecham ("SB") purchased 1,103,448 shares of common stock for $4,000,000. With the stock purchase SB acquired warrants to purchase 500,000 shares of stock at $5.00 per share. The warrants expire if not exercised by January 1, 2000.

During 1997 warrants to purchase 291,332 shares of common stock at $3.00 per share were exercised for $874,000. These warrants were issued in connection with a sale of common stock in 1991.

(7) Stock Compensation Plans

The Company has a stock grant program under which common stock may be issued to key employees, consultants and other persons providing services deemed important to the Company. The program requires the employee to assign to the Company all know-how, patents and proprietary information developed while employed by, or developed as a result of employment with the Company and to agree not to engage in any activity which could be considered to be in competition with the Company's proposed business while

employed by the Company. If the employee violates any one of these conditions, the shares issued pursuant to the program shall revert to the Company. Nonemployees receiving grants are not subject to the conditions imposed on employees receiving grants. Additionally, the Company grants 100 shares of stock to each employee who is not an officer of the Company after completion of one year of employment. Such 100 share grants are not subject to the forfeiture conditions described above.

The following table sets forth the activity in the stock grant program for the years ended December 31, 1998, 1997 and 1996:

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
<S>	<C>	<C>	<C>
Shares available at beginning of year	24,968	27,968	29,368
Shares granted	1,400	3,000	1,400
Shares available at end of year	23,568	24,968	27,968
Weighted average grant date fair value	$ 3.57	4.13	4.57

</TABLE>

The Company has a stock option plan called the 1996 Stock Option Plan ("Plan"). Under the Plan all full- or part-time employees are eligible to receive incentive stock options and nonqualified stock options, and certain directors

and consultants are eligible to receive nonqualified stock options. Any option granted under the Plan may include a stock appreciation right (SAR) to surrender to the Company all, or a portion, of the option in exchange for cash or stock, the sum of which is equal to the value of the excess of fair market value of the common stock over the option price. The Plan provides for awarding options for a maximum of 900,000 shares with an exercise price not less than fair market value at the date of grant, except for options awarded to certain directors. Options are nontransferable and expire if not exercised within ten years from the date of the grant. Options can be exercised in cumulative installments over a vesting schedule set by the Company's Board of Directors. Through December 31, 1998 all options granted from the Plan to employees can be exercised in cumulative installments of 20% per year beginning on the date of the grant. Vesting of discounted stock options issued to certain directors is discussed below.

The Company also has a stock option plan that was approved by shareholders in 1986. The 1986 Plan expired in 1996, and no new options can be granted under it. However, options already granted (908,000 shares, net of options that have been exercised or forfeited) can be exercised for a period of ten years from the date of grant. The terms of the 1986 Plan were very similar to the ones described for the 1996 Plan. All options granted under the 1986 Plan, except for discounted stock options issued to certain directors as discussed below, can be exercised in cumulative installments of 20% per year beginning on the date of the grant.

Both stock option plans provide for the issuance of nonqualified stock options with an exercise price which is 20% below the market price of the Company's common stock on the grant date. The discounted stock options may be awarded to directors who are

not employees of the Company who elect to receive the discounted stock options rather than cash for all or a portion of their director fees. The directors are required to make the voluntary election at least six months prior to the beginning of each calendar year. The number of options to be granted is determined by dividing the amount of the foregone cash compensation by the amount of the per share price discount on the grant date. Such options are granted at the end of each calendar quarter and are fully vested on the grant date. The options, which expire if not exercised within ten years from the grant date, are exercisable after a six month period following the grant date.

During 1996 the Company's Board of Directors adopted the 1996 Directors' Stock Option Plan ("Directors' Plan") for directors who are not employees of the Company. The Directors' Plan was approved by shareholders in 1997. The Directors' Plan provides for the grant of nonqualified options to purchase a maximum of 210,000 shares of common stock. Each director who is not an employee was granted options to purchase 30,000 shares on the later of the date the Directors' Plan was adopted or on the date he first became a director. In

addition, immediately following each annual meeting of the Company's shareholders, each director who is not an employee who continues as a director after the meeting will be granted options to purchase 500 shares. The exercise price of the options is the market price on the date of the grant. The options vest and can be exercised at the rate of 50% on the date of grant and 25% on each anniversary of the grant date. The options expire if not exercised within ten years of the grant date. During 1996 options to purchase 150,000 shares at $4.00 per share were granted under the Directors' Plan. During each year 1997 and 1998 options were granted to purchase 2,500 shares at prices of $3.63 and $5.75 per share, respectively.

The following table sets forth the activity in the 1986 and 1996 stock option plans and the 1996 Directors' Plan for the years ended December 31, 1996, 1997 and 1998. There were no SARs outstanding under the plans during the three year period ended December 31, 1998.

<TABLE>
<CAPTION>

	Options for Employees and Directors		Discounted Options for Directors		
<S>	<C> Common Shares	<C> Average Exercise Price	<C> Common Shares	<C> Average Exercise Price	<C> Total Common Shares
Shares under option:					
Outstanding at December 31, 1995	946,050	$ 5.90	58,396	$ 4.35	1,004,446
Granted	432,779	5.26	9,568	3.34	442,347
Exercised	(1,800)	3.19	-	-	(1,800)
Canceled	(33,100)	6.24	(7,694)	4.42	(40,794)
Outstanding at December 31, 1996	1,343,929	5.44	60,270	4.18	1,404,199
Granted	128,500	3.65	13,864	3.32	142,364
Exercised	(22,400)	3.96	-	-	(22,400)
Canceled	(80,400)	7.16	-	-	(80,400)

Outstanding at December 31, 1997	1,369,629	5.20	74,134	4.02	1,443,763
Granted	192,750	5.04	26,250	3.22	219,000
Exercised	(9,850)	3.61	-	-	(9,850)
Canceled	(50,650)	5.38	-	-	(50,650)
Outstanding at December 31, 1998	1,501,879	$ 5.18	100,384	$ 3.81	1,602,263
Options exercisable at:					
December 31, 1996	864,506	$ 5.71	53,369	$ 4.31	917,875
December 31, 1997	1,032,372	5.49	65,181	4.14	1,097,553
December 31, 1998	1,159,472	5.35	83,044	4.05	1,242,516
Ranges of exercise prices and average months (mo) to expiration of:					
Options outstanding at December 31, 1998					
$1.50-$1.85 (105 mo)	2,000	$ 1.50	10,810	$ 1.85	12,810
$2.95-$4.90 (41 mo)	675,850	3.93	80,940	3.78	756,790
$5.75-$7.50 (61 mo)	795,779	6.15	8,634	6.49	804,413
$8.00-$8.63 (50 mo)	28,250	8.32	-	-	28,250
	1,501,879		100,384		1,602,263
Options exercisable at December 31, 1998					
$1.50 (22 mo)	2,000	$ 1.50	-	$ -	2,000
$2.95-$4.90 (78 mo)	453,555	3.91	74,410	3.76	527,965
$5.75-$7.50 (53 mo)	675,667	6.21	8,634	6.49	684,301
$8.00-$8.63 (50 mo)	28,250	8.32	-	-	28,250
	1,159,472		83,044		1,242,516

</TABLE>

The Company has entered into a Stock Option Agreement with its Chief Executive Officer, President and Chairman ("CEO"). Pursuant to the 1987 agreement, and later agreements, the CEO was granted options, which are currently outstanding and exercisable, to purchase 50,000 shares of common stock at $3.00 per share. All of the CEO's options under this agreement expire if not exercised by June 30, 2000. The CEO did not exercise any options in 1996, 1997 or 1998. Additionally, the CEO has been granted options to purchase stock under the Company's stock option plans described above.

The Company applies the intrinsic value-based method of accounting prescribed by Accounting Principles Board Opinion No. 25 in accounting for stock options. As a result, no compensation expense has been recognized relative to its employees where the exercise price of the option equaled or exceeded the stock's market value on the grant date. Compensation expense recognized relative to directors who receive discounted stock options rather than cash for directors' fees totaled $19,000, $12,000 and $8,000 in 1998, 1997 and 1996, respectively. Compensation expense recognized from grants of stock totaled $5,000, $13,000 and $6,000 in 1998, 1997 and 1996, respectively. Compensation expense recognized from the extension of the expiration date of the CEO's stock options in 1997 totaled $31,000. If compensation cost for the stock option plans would have been determined for employees and directors, other than directors receiving discounted options, consistent with the fair value method, the Company's net loss and basic loss per common share would have been increased to the pro forma amounts indicated below:

<TABLE>
<CAPTION>

	Years Ended December 31,		
	1998	1997	1996
<S>	<C>	<C>	<C>
Net loss (In Thousands)			
As reported	$ 7,633	6,417	5,589
Pro forma	8,116	6,818	6,018
Basic loss per common share			
As reported	$ .38	.32	.30
Pro forma	.41	.34	.32
Weighted average fair value of options granted during the year	$ 3.17	2.13	2.93

</TABLE>

The pro forma amounts in the preceding table only include the vested portion of the fair value of stock options granted after December 31, 1994. Because some of the options granted prior to December 31, 1994 vest during this phase-in period and the value is not included, the pro forma amounts are not likely to be representative of the effects on future reported net loss and net loss per share. The fair value has been determined using the Black-Scholes formula, which requires the Company to make several assumptions, some of which are listed

below.

RIBI IMMUNOCHEM RESEARCH, INC.

NOTES TO FINANCIAL STATEMENTS - continued

<TABLE>
<CAPTION>

	Options Granted In		
	1998	1997	1996
<S>	<C>	<C>	<C>
Average risk-free interest rate	5.5%	6.6%	6.2%
Average expected life (years)	7.0	5.6	6.5
Average annualized expected volatility	.557	.556	.573
Expected dividends	None	None	None

</TABLE>

(8) Commitments and Contingencies

The Company has an employment agreement with its CEO, which currently provides for an annual salary of $275,000. The agreement may be terminated by the Company by giving notice one year prior to expiration of the contract, which otherwise automatically extends for one-year periods, unless there is termination for "cause." The CEO will be paid his salary until the agreement expires.

The Company carries $10 million in product liability insurance for its products which are being used in clinical trials and for commercial sales, when approved, of MELACINE melanoma theraccine. The Company is self-insured for product liability for research products being marketed. In addition, the Company has agreed to indemnify its directors and officers for liabilities incurred as a result of their positions with the Company.

The Company, the National Institutes of Health ("NIH") and the Bitterroot Valley Sanitary Landfill ("Landfill") were notified by the Montana Department of Health and Environmental Sciences (now known as the Department of Environmental Quality ["DEQ"]) in March 1991 that they had been identified as potentially responsible parties ("PRPs") and as such are jointly and severally liable for groundwater contamination located at and near the site of the Landfill in Ravalli County, Montana. The Company's involvement arises out of waste materials which it generated and were subsequently deposited at the Landfill from 1982 to 1985 which the Landfill had permits to receive. The NIH unilaterally and voluntarily initiated and completed work pursuant to an interim remediation plan approved by the DEQ to remove and decontaminate the believed source of contamination and

treat the aquifers, which tests have shown contain contaminants. Although decontamination of the soil at and around the Landfill has been completed, treatment of the groundwater in the proximity of the disposal site continues utilizing carbon filtering and air sparging, and it is anticipated such treatment will continue through 1999 and possibly longer. The DEQ conducted a "Risk Assessment" and issued a "Draft Final Feasibility Study" in October 1994 that discussed possible final remediation alternatives. In August 1995 the DEQ announced that it had approved a second interim action in the vicinity of the Landfill being unilaterally and voluntarily conducted by the NIH and which involved installing individual replacement and new wells to provide both an alternate water supply for the affected residents and to develop additional information on the site hydrogeology. Information collected from these wells through a multi-year monitoring program are being used by the DEQ to evaluate the effectiveness of the remediation efforts to date. The second interim action plan calls for the wells to be installed in three phases: Phase I included occupied properties with the highest remaining contamination levels; Phase II included occupied properties with lesser degrees of contamination;

and Phase III consisted largely of vacant properties. Preliminary studies completed in 1994 estimated the cost of the wells to be approximately $1,400,000. Information indicates that a total of 19 alternate water supply wells have been installed at a cost of approximately $1,000,000. The DEQ could require the PRPs to implement further remediation should these wells not provide sufficient quality or quantity of water. Additionally, the NIH has indicated it is undertaking Phase II groundwater remediation to intercept and treat contaminated groundwater near the eastern Landfill boundary. The NIH has projected costs for this Phase II groundwater remediation to be in excess of $1,000,000 through 1999. The NIH, which has taken the lead and incurred substantially all of the remediation costs, has represented publicly that it would continue to work with the DEQ toward an acceptable final remediation plan.

The DEQ initiated an action in 1997 against the Company, the Landfill and the owners of the Landfill seeking recovery of past alleged costs associated with its oversight activities in the amount of $238,000, as well as a declaratory judgment finding the parties liable for future oversight costs, plus civil penalties in the event the parties fail to comply. Since the action was initiated, the Company and the NIH jointly have received statements requesting payment of an additional $27,000. In May 1998 the Company was informed that the DEQ had entered into a settlement agreement with the Landfill and its owners, whereby the Landfill and its owners agreed to collectively pay the DEQ approximately $35,000. The Company believes that it has meritorious defenses to the claim, including the amount thereof, and that there are other responsible parties. The Company has filed a response to the action, including a counterclaim and motions for a change in venue and to dismiss. Recently, the Court granted the Company's motion for a change of venue to Ravalli County where

the Company is located. The Court did not rule on the motion to dismiss, which motion will now be acted upon by the Court in Ravalli County. Recently the DEQ filed a Motion for Stay of Proceedings pending the outcome of the action in Federal District Court discussed below in which the DEQ is a plaintiff. The Court granted the motion which the Company did not oppose.

On April 21, 1998, the Company received notice that the United States of America (U.S.), acting on behalf of the Department of Health and Human Services, which oversees the NIH, filed suit in United States District Court seeking contribution from the Company of an "equitable share" of past and future response costs incurred by the NIH in connection with the remediation at and near the Landfill. The complaint alleges that as of September 30, 1997, the U.S. had incurred response costs in excess of $3,400,000 and that it expects to incur more than $1,000,000 in additional response costs. The Company filed a response to the action. On or about June 4, 1998 the Company received notice that the U.S. had entered into a settlement agreement with the Landfill and the Landfill owners pursuant to which the settling parties agreed to make payment in the amount of $440,000. In view of the settlement, the U.S. filed with the Court a Joint Motion for Stay of Proceedings between the U.S., the Landfill and Landfill owners. Assuming the settlement is completed, the action against the Landfill and the Landfill owners would be dismissed. Although the Company believes it has meritorious defenses to the cost recovery claim, including the amount thereof, and that there are other responsible parties, there can be no assurance that the Company will be successful in its defenses to claims arising out of the Landfill, including the claims made by the U.S.

On or about June 6, 1998 the DEQ filed a complaint in the United States District Court against the Company, the Landfill and the owners of the Landfill seeking recovery of

past alleged costs associated with its oversight activities in the amount of $258,000, of which it indicated not more than $154,000 had been reimbursed, plus interest and attorneys' fees and costs as well as a declaratory judgment finding the parties liable for future response costs. This action is similar to that filed in the State District Court where further action has been deferred pending the outcome of the Federal action. The Company has filed a response to the action, including a counterclaim against the DEQ. The DEQ has initiated discovery. The Company responded to a discovery request. The Company believes that is has meritorious defenses to the claim, including the amount thereof, and that there are other responsible parties. There can be no assurance that the Company's defenses and counterclaim will be successful.

Depending upon the eventual outcome of the above discussed litigation and when in time the litigation is concluded and the success of the Company in pursuing defense and indemnity with insurance carriers, the outcome may or may not have a

material adverse effect on the Company's financial condition. Accordingly, it is not possible at present to accurately predict whether an adverse outcome will have a material adverse effect on the Company's financial condition. The Company is unable to determine its overall potential liability with respect to the Landfill at this time. As of December 31, 1998, the Company has accrued a reserve of approximately $290,000 to cover legal, consulting and DEQ reimbursement costs associated with the Company as a PRP. Net costs charged against operations in 1998, 1997 and 1996 were $104,000, $42,000 and $13,000, respectively.

In June 1997 a complaint was filed in District Court in Ravalli County against the Company by a former employee who was discharged for cause in June 1996. The plaintiff alleges discharge in violation of the Montana Wrongful Discharge from Employment Act ("Act") and further, that discharge was for refusal to violate public policy. The Court granted dismissal with respect to that portion of the complaint which alleges termination for refusal to violate public policy. Plaintiff filed a motion for reconsideration asking the Court to reverse its decision with respect to the issue of termination for refusal to violate public policy and requested the Court for permission to amend the complaint to include additional allegations relative to the public policy issue. On April 6, 1998 the Court allowed plaintiff to amend the complaint as requested. If plaintiff should ultimately prevail on the issue of discharge in violation of the Act, the potential liability of the Company would be approximately $320,000, exclusive of the Company's attorneys' fees and related costs. If the plaintiff prevails on the public policy issue, the Company could be subject to punitive damages of an unknown amount in addition to the potential liability for violation of the Act. The Company believes that it has a meritorious defense and plans to vigorously defend the suit. However, it is not possible to reliably assess the outcome. Depending upon the eventual outcome of this litigation and when in time the litigation is concluded, the outcome may or may not have a material adverse effect on the Company's financial condition. It is possible the case may go to trial during 1999.

The plaintiff has also filed a petition for Judicial Review in District Court in Missoula County naming the Company and the State of Montana Department of Labor and Industry respondents and asking the Court to review and overturn the Department of Labor's decision finding plaintiff was terminated for misconduct as defined in MCA Section 39-51-2303 and, therefore, not allowing plaintiff to collect unemployment benefits. The Company filed a response arguing the correctness of the Department of Labor's decision. Recently, the Court rendered a decision remanding the matter to the

Department of Labor for further testimony. Pursuant to the order of the Court, additional testimony was recently completed. A decision by the Department is expected by the end of March 1999. However, in the event plaintiff is

successful, it would not have a material adverse effect on the financial condition of the Company.

(9) Income Taxes

The net operating loss carryforwards and tax credits available to reduce future federal taxable income or related taxes and the year of expiration are approximately as follows:

<TABLE>
<CAPTION>

Expires December 31,	Net Operating Loss	Investment Credit	Orphan Drug Credit	Research and Development Credit
	(In Thousands)			
<S>	<C>	<C>	<C>	<C>
1998	$ 254	7	-	31
1999	328	3	-	50
2000	529	9	-	58
2001	251	-	-	76
2002	821	-	-	82
2003	2,272	-	-	128
2004	2,751	-	-	106
2005	2,606	-	-	115
2006	3,595	-	-	154
2007	4,488	-	-	198
2008	4,238	-	-	243
2009	4,574	-	-	343
2010	5,445	-	-	163
2011	5,391	-	242	173
2012	5,813	-	622	406
2018	7,240	-	315	423
	$ 50,596	19	1,179	2,749

</TABLE>

The tax effects of temporary differences that give rise to federal and state deferred tax assets and liabilities consist of the following:

<TABLE>
<CAPTION>

	December 31,	
	1998	1997
	(In Thousands)	
<S>	<C>	<C>
Gross deferred tax assets:		
Net operating loss carryforwards	$ 20,698	17,929
General business credit carryforwards	3,955	3,235
Loss contingency reserve	121	79
Employee benefits	123	109
Other	35	28
	24,932	21,380
Valuation allowance	(24,381)	(20,873)
	551	507
Gross deferred tax liabilities:		
Depreciation	487	422
Inventories	64	85
	551	507
Net	$ -	-

</TABLE>

The Company has provided a valuation allowance for deferred tax assets which management believes are not currently assured of being realized. The ultimate realization of deferred tax assets is dependent upon the existence of, or generation of, taxable income in the periods in which those temporary differences are deductible.

The net increase in the valuation allowance for the years ended December 31, 1998, 1997 and 1996 was $3,508,000, $3,593,000 and $2,108,000, respectively. Additionally, when subsequently recognized, approximately $861,000 of the valuation allowance will be credited to additional paid-in capital.

(10) International Sales and Major Customers

The Company markets its research products worldwide, generally to nonexclusive distributors. During 1998, 1997 and 1996, export sales were 83%, 82% and 77% of total sales, respectively. Export sales were primarily to Europe, Japan and Canada.

The Company has a total of four license agreements with SmithKline Beecham ("SB") for use of defined adjuvants in various vaccines being developed by SB. SB is developing vaccines, which include these adjuvants, for indications in infectious diseases and cancer. The agreements generally provide for payment to the Company of license fees and supply payments, as well as royalties upon commercialization of SB's vaccines. The agreements grant SB exclusive rights to these adjuvants for use in vaccines for some diseases and co-exclusive or nonexclusive rights for others. The Company also sells adjuvants and research products to SB. Revenues from all transactions with SB were 59% of total revenue in 1998, 63% in 1997 and 48% in 1996. At December 31, 1998

SB owed the Company approximately $1,039,000 in trade accounts receivable, none of which are delinquent.

As of December 31, 1998, SB and S.R. One Limited, a subsidiary of SB, held 1,254,056 shares, or 6.2% of the Company's outstanding common stock. Additionally, SB has warrants to purchase 500,000 shares of common stock at $5.00 per share. The warrants expire if not exercised by January 1, 2000.

The Company has granted Wyeth-Lederle Vaccines and Pediatrics ("WLV&P") (a business unit of Wyeth-Ayerst Laboratories, which is a division of American Home Products Corporation) a worldwide co-exclusive license to use the Company's adjuvants commercially upon regulatory approval of certain vaccines being developed by WLV&P. In addition to an annual license fee, the Company will receive transfer payments for supplies of adjuvant and will be entitled to royalties upon commercial sale of vaccines. Revenues received from WLV&P were 15% of the Company's total revenue in 1998, 12% in 1997 and 17% in 1996.

During 1998 the Company entered into a marketing agreement with Schering-Plough ("SP"), which provides SP with worldwide marketing rights for the Company's MELACINE melanoma theraccine. At December 31, 1998, the Company has $2,068,000 in deferred license revenues, the proceeds of which would be returned to SP if certain product goals are not achieved by December 31, 1999. SP has the option to extend the goal deadline. Of the total potential refund, $500,000 would require the use of current investments and the balance would come from noncurrent deposits, which are restricted from use in the Company's operations.

(11) Employee Benefits

The Company provides an employee savings plan under Section 401(k) of the Internal Revenue Code. This plan covers substantially all regular employees. The Company matches 30% of employee contributions of up to 6% of compensation. The amount charged against income in 1998, 1997 and 1996 was $73,000, $69,000 and $58,000, respectively.

Additionally, the Company provides other employee benefits, including health insurance for employees who are actively employed. The Company is self-insured for health insurance up to a predetermined amount above which third party insurance applies. For 1998 the maximum exposure to health claims totaled $278,000. Charges against income for health insurance, including claims and insurance, were approximately $274,000, $207,000 and $168,000 in 1998, 1997 and 1996, respectively.

(12) Future Accounting Changes

During 1998 the Financial Accounting Standards Board released Statement of Financial Accounting Standards ("FAS") No. 133, which the Company will be required to adopt in 1999. FAS No. 133 requires uniform accounting for derivative instruments and hedging activities. While the Company is still evaluating FAS No. 133, it does not expect the Standard to have a material impact on the Company's financial position or results of its operations.

Item 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

The Company has not changed independent auditors and has not had any disagreements with its independent auditors.

PART III

Item 10. DIRECTORS AND EXECUTIVE OFFICERS OF THE REGISTRANT

Item 11. EXECUTIVE COMPENSATION

Item 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

Item 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

The Company has filed with the Securities and Exchange Commission a Definitive Proxy Statement for the Company's Annual Meeting of Shareholders to be held on April 26, 1999. The information required by Items 10, 11, 12 and 13 of this Annual Report on Form 10-K is set forth in such Definitive Proxy Statement in the sections entitled "Election of Directors," "Compliance with Section 16(a) of the Exchange Act," "Committees and Meetings," "Principal Shareholders and Management's Shareholdings," "Executive Compensation" and "Directors Compensation" on pages 1 through 11. Those portions of such Definitive Proxy Statement containing such information are incorporated herein by this reference. Information regarding the Company's executive officers is set forth in Part I of this Annual Report on Form 10-K under the heading "Executive Officers of the Registrant."

PART IV

Item 14. EXHIBITS, FINANCIAL STATEMENT SCHEDULES AND REPORTS ON FORM 8-K

(a) 1. Financial Statements

The following financial statements of Ribi ImmunoChem Research, Inc., are filed with this Report on Form 10-K under Item 8 of Part II on pages 26 through 46:

Independent Auditors' Report

Balance Sheets as of December 31, 1998 and 1997

Statements of Operations for the years ended December 31, 1998, 1997 and 1996

Statements of Shareholders' Equity and Comprehensive Income for the years ended December 31, 1998, 1997 and 1996

Statements of Cash Flows for the years ended December 31, 1998, 1997 and 1996

Notes to Financial Statements

2. Financial Statement Schedules

All schedules have been omitted as the required information is inapplicable or the information is presented in the financial statements or related notes.

3. Exhibits

The following exhibits are filed as part of this report:

<TABLE>
<CAPTION>

Exhibit No.	Description and Incorporation by Reference
<S>	<C>
3.1	Restated Certificate of Incorporation. This certificate was filed June 22, 1992, as Exhibit 4.1 to Registrant's registration statement on Form S-3, Registration No. 33-48713. Said Exhibit 4.1 is incorporated herein by this reference.
**3.2	Amended Bylaws of the Company.
*10.1	Employment Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on July 10, 1987, as Exhibit 10.1 to

Registrant's report on Form 8-K dated June 30, 1987, File No.0-11094. Said Exhibit 10.1 is incorporated herein by this reference.

*10.2 Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on July 10, 1987, as Exhibit 10.2 to Registrant's report on Form 8-K dated June 30, 1987, File No. 0-11094. Said Exhibit 10.2 is incorporated herein by this reference.

*10.3 Amendment dated November 1, 1988, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 13, 1989, as Exhibit 10.3 to Registrant's report on Form 10-K dated December 31, 1988, File No. 0-11094. Said Exhibit 10.3 is incorporated herein by this reference.

*10.4 Amendment dated January 30, 1989, to the Employment Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 13, 1989, as Exhibit 10.4 to Registrant's report on Form 10-K dated December 31, 1988, File No. 0-11094. Said Exhibit 10.4 is incorporated herein by this reference.

*10.5 Second amendment dated March 5, 1990, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on May 4, 1990, as Exhibit 10.1 to Registrant's report on Form 10-Q dated March 31, 1990, File No. 0-11094. Said Exhibit 10.1 is incorporated herein by this reference.

*10.6 Third amendment dated April 25, 1991, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on August 9, 1991, as Exhibit 10.3 to Registrant's report on Form 10-Q dated June 30, 1991, File No. 0-11094. Said Exhibit 10.3 is incorporated herein by this reference.

*10.7 1986 Stock Option Plan (as amended and restated effective April 29, 1992). This plan was filed on August 5, 1992, as Exhibit 10.2 to Registrant's report on Form 10-Q dated June 30, 1992, File No. 0-11094. Said Exhibit 10.2 is incorporated herein by this reference.

Exhibit No. Description and Incorporation by Reference - continued

*10.8 1996 Stock Option Plan adopted by stockholders on April 24, 1996. This plan was filed on March 18, 1996, as Appendix A to Registrant's definitive proxy statement for the Annual Stockholders' Meeting held on April 24, 1996, File No. 0-11094.

Said Appendix A is incorporated herein by this reference.

*10.9	1996 Directors' Stock Option Plan adopted by stockholders on April 30, 1997. This plan was filed on March 19, 1997, as Appendix A to Registrant's definitive proxy statement for the Annual Stockholders meeting held on April 30, 1997, File No. 0-11094. Said Appendix A is incorporated herein by this reference.
*10.10	Fourth amendment dated April 30, 1997, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 25, 1998, as Exhibit 10.10 to Registrant's report on Form 10-K dated December 31, 1997, File No. 0-11094. Said Exhibit 10.10 is incorporated herein by this reference.
**24	Consent of independent accountants.
***27	Financial Data Schedule.

</TABLE>

---

*Management contract or compensatory plan or arrangement
**Filed herewith
***Filed only electronically

(b) Reports on Form 8-K

On November 5, 1998 Registrant filed a report on Form 8-K reporting under Item 5 the withdrawal of the Marketing Authorization Application for MELACINE melanoma theraccine for the treatment of Stage IV melanoma in Europe.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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.

RIBI IMMUNOCHEM RESEARCH, INC.

Date: March 26, 1999 By: /s/ Robert E. Ivy

Robert E. Ivy, Chief Executive Officer, President and Chairman of the Board

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

Date:	March 26, 1999	By:	/s/ Robert E. Ivy
			Robert E. Ivy, Chief Executive Officer, President and Chairman of the Board (principal executive officer)
Date:	March 26, 1999	By:	/s/ Vern D. Child
			Vern D. Child, Vice President Finance and Treasurer (principal financial and accounting officer)
Date:	March 26, 1999	By:	/s/ John L. Cantrell
			John L. Cantrell, Executive Vice President and Director
Date:	March 26, 1999	By:	/s/ Philipp Gerhardt
			Philipp Gerhardt, Director
Date:	March 26, 1999	By:	/s/ Paul Goddard
			Paul Goddard, Director
Date:	March 26, 1999	By:	/s/ Mark I. Greene
			Mark I. Greene, Director
Date:	March 26, 1999	By:	/s/ Thomas N. McGowen, Jr.
			Thomas N. McGowen, Jr., Director
Date:	March 26, 1999	By:	/s/ Frederick B. Tossberg
			Frederick B. Tossberg, Director

RIBI IMMUNOCHEM RESEARCH, INC.

EXHIBIT INDIX

<TABLE>
<CAPTION>

Exhibit No.	Description and Incorporation by Reference	Page
<S>	<C>	<C>
3.1	Restated Certificate of Incorporation. This certificate was filed June 22, 1992, as Exhibit 4.1 to Registrant's registration statement on Form S-3, Registration No. 33-48713. Said Exhibit 4.1 is incorporated herein by this reference.	
**3.2	Amended Bylaws of the Company.	53
*10.1	Employment Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on July 10, 1987, as Exhibit 10.1 to Registrant's report on Form 8-K dated June 30, 1987, File No.0-11094. Said Exhibit 10.1 is incorporated herein by this reference.	
*10.2	Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on July 10, 1987, as Exhibit 10.2 to Registrant's report on Form 8-K dated June 30, 1987, File No. 0-11094. Said Exhibit 10.2 is incorporated herein by this reference.	
*10.3	Amendment dated November 1, 1988, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 13, 1989, as Exhibit 10.3 to Registrant's report on Form 10-K dated December 31, 1988, File No. 0-11094. Said Exhibit 10.3 is incorporated herein by this reference.	
*10.4	Amendment dated January 30, 1989, to the Employment Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 13, 1989, as Exhibit 10.4 to Registrant's report on Form 10-K dated December 31, 1988, File No. 0-11094. Said Exhibit 10.4 is incorporated herein by this reference.	
*10.5	Second amendment dated March 5, 1990, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on May 4, 1990, as Exhibit 10.1 to Registrant's report on Form 10-Q dated March 31, 1990, File No. 0-11094. Said Exhibit 10.1 is incorporated herein by this reference.	
*10.6	Third amendment dated April 25, 1991, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on August 9, 1991, as Exhibit 10.3 to Registrant's report on Form 10-Q dated June 30, 1991, File No. 0-11094. Said Exhibit 10.3 is incorporated herein by this reference.	

RIBI IMMUNOCHEM RESEARCH, INC.

EXHIBIT INDIX

Exhibit No.	Description and Incorporation by Reference - continued	Page
*10.7	1986 Stock Option Plan (as amended and restated effective April 29, 1992). This plan was filed on August 5, 1992, as Exhibit 10.2 to Registrant's report on Form 10-Q dated June 30, 1992, File No. 0-11094. Said Exhibit 10.2 is incorporated herein by this reference.	
*10.8	1996 Stock Option Plan adopted by stockholders on April 24, 1996. This plan was filed on March 18, 1996, as Appendix A to Registrant's definitive proxy statement for the Annual Stockholders' Meeting held on April 24, 1996, File No. 0-11094. Said Appendix A is incorporated herein by this reference.	
*10.9	1996 Directors' Stock Option Plan adopted by stockholders on April 30, 1997. This plan was filed on March 19, 1997, as Appendix A to Registrant's definitive proxy statement for the Annual Stockholders meeting held on April 30, 1997, File No. 0-11094. Said Appendix A is incorporated herein by this reference.	
*10.10	Fourth amendment dated April 30, 1997, to the Stock Option Agreement with Mr. Robert E. Ivy dated July 1, 1987. This agreement was filed on March 25, 1998, as Exhibit 10.10 to Registrant's report on Form 10-K dated December 31, 1997, File No. 0-11094. Said Exhibit 10.10 is incorporated herein by this reference.	
**24	Consent of independent accountants.	
***27	Financial Data Schedule.	63

</TABLE>

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*Management contract or compensatory plan or arrangement
**Filed herewith
***Filed only electronically

Exhibit No. 3.2

RIBI IMMUNOCHEM RESEARCH, INC.
AMENDED BYLAWS
AS OF JANUARY 25, 1999

ARTICLE I
OFFICES

SECTION 1. The registered office shall be in the City of Wilmington, County of New Castle, State of Delaware.

SECTION 2. The corporation may also have offices at such other places, both within and without the State of Delaware, as the Board of Directors may, from time to time, determine, or the business of the corporation may require.

ARTICLE II
MEETINGS OF STOCKHOLDERS

SECTION 1. All meetings of the stockholders for the election of directors shall be held in the Town of Hamilton, State of Montana, at such place as may be fixed from time to time by the Board of Directors, or at such other place either within or without the State of Delaware as shall be designated from time to time by the Board of Directors and stated in the Notice of the meeting. Meetings of stockholders for any other purpose may be held at such time and place within or without the State of Delaware, as shall be stated in the Notice of the meeting, or in a duly executed Waiver of Notice thereof.

SECTION 2. Annual Meetings of stockholders, commencing with the year 1982, shall be held on such date and at such time as shall be designated from time to time by the Board of Directors and stated in the Notice of the meeting, at which the stockholders shall elect by a plurality vote a Board of Directors, and transact such other business as may properly be brought before the meeting.

To be properly brought before an annual meeting, business must be specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, otherwise properly brought before the meeting by or at the direction of the Board of Directors or otherwise properly brought before the meeting by a stockholder. In addition to any other applicable requirements, for business to be properly brought before an annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation, not less than 60 days nor more than 90 days prior to the date on which the corporation first mailed its proxy materials for the previous year's annual meeting of stockholders (or the date on which the corporation mails its proxy materials for the current year if during the prior year the corporation did not hold an annual meeting or if the date of the annual meeting was changed more than 30 days from the prior year). A stockholder's notice to the secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the

annual meeting, (ii) the name and record address of the stockholder proposing such business, (iii) the class and number of shares of the corporation which are beneficially owned by the stockholder, and (iv) any material interest of the stockholder in such business.

Notwithstanding anything in the bylaws to the contrary, no business shall be conducted at the annual meeting except in accordance with the procedures set forth in this SECTION 2, provided, however, that nothing in this SECTION 2 shall be deemed the annual meeting in accordance with said procedure.

The Chairman of an annual meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the provisions of this SECTION 2, and if he should so determine he shall so declare to the meeting, and any such business not properly brought before the meeting shall not be transacted.

Nothing in this SECTION 2 shall affect the right of a stockholder to request inclusion of a proposal in the corporation's proxy statement to the extent that such right is provided by an applicable rule of the Securities and Exchange Commission.

SECTION 3. Written Notice of the Annual Meeting stating the place, date and hour of the meeting shall be given to each stockholder entitled to vote at such meeting not less than ten (10) nor more than sixty (60) days before the date of the meeting.

SECTION 4. The officer who has charge of the stock ledger of the corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, during ordinary business hours, for a period of at least ten (10) days prior to the meeting, either at a place within the city where the meeting is to be held, which place shall be specified in the Notice of the meeting, or, if not so specified, at the place where the meeting is to be held. The list shall also be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

SECTION 5. Special Meetings of the stockholders, for any purpose or purposes, unless otherwise prescribed by statute or by the Certificate of Incorporation, may be called by the president and shall be called by the president or secretary at the request in writing of a majority of the Board of Directors, or at the request in writing of stockholders owning a majority in amount of the entire capital stock of the corporation issued and outstanding and entitled to vote. Such request shall state the purpose or purposes of the proposed meeting.

SECTION 6. Written Notice of a Special Meeting stating the place, date and hour of the meeting and the purpose or purposes for which the meeting is called, shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting, to each stockholder entitled to vote at such meeting.

SECTION 7. Business transacted at any Special Meeting of stockholders shall be limited to the purposes stated in the Notice.

SECTION 8. The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business, except as otherwise provided by statute, or by the Certificate of Incorporation. If, however, such quorum shall not be present or represented at any meeting of the stockholders, the stockholders entitled to vote thereat, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without Notice other than announcement at the meeting, until a quorum shall be present or represented. At such

adjourned meeting at which a quorum shall be present or represented, any business may be transacted which might have been transacted at the meeting as originally notified. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a Notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

SECTION 9. When a quorum is present at any meeting, the vote of the holders of a majority of the stock having voting power present in person, or represented by proxy, shall decide any question brought before such meeting, unless the question is one upon which by express provision of the statutes or of the Certificate of Incorporation, a different vote is required in which case such express provision shall govern and control the decision of such question.

ARTICLE III
DIRECTORS

SECTION 1. The number of Directors which shall constitute the whole board shall be not less than one (1) or more than nine (9). The first board shall consist of five (5) directors. Thereafter, within the limits above specified, the number of directors shall be determined by resolution of the Board of Directors, or by the stockholders at the Annual Meeting. The directors shall be elected at the Annual Meeting of the stockholders, except as provided in SECTION 2 of this Article, and each director elected shall hold office until his successor is elected and qualified. Directors need not be stockholders.

The directors will, by majority vote, at each Annual Meeting of the Board, where a quorum exists, elect the Chairman of the Board who will serve as Chairman until the next Annual Meeting of the Board or until his successor is elected and qualified. The Chairman of the Board shall preside at all meetings of the stockholders and the Board of Directors. The remuneration of the Chairman

of the Board shall be fixed by the Board of Directors, if it so determines.

SECTION 2. Vacancies and newly created directorships resulting from any increase in the authorized number of directors may be filled by a majority of the directors then in office, though less than a quorum, or by a sole remaining director, and the directors so chosen shall hold office until the next Annual Election and their successors are duly elected and shall qualify, unless sooner displaced. If there are no directors in office, then an election of directors may be held in the manner provided by statute. If, at the time of filling any vacancy or any newly created directorship, the directors then in office shall constitute less than a majority of the whole board (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least ten percent (10%) of the total number of the shares at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office.

SECTION 3. The business of the corporation shall be managed by or under the direction of its Board of Directors which may exercise all such powers of the corporation and do all such lawful acts and things as are not by statute or by the Certificate of Incorporation, or by these bylaws directed or required to be exercised or done by the stockholders.

MEETINGS OF THE BOARD OF DIRECTORS

SECTION 4. The Board of Directors of the corporation may hold meetings, both Regular and Special, either within or without the State of Delaware.

SECTION 5. The Board of Directors shall meet for the purpose of organization, the election of officers, the election of a chairman and the transaction of other business, as soon as practicable after each Annual Meeting of Stockholders, on the same day and at the same place where such Annual Meeting shall be held. Notice of such meeting need not be given. In the event such Annual Meeting is not so held, the Annual Meeting of the Board of Directors may be held at such place, either within or without the State of Delaware, on such date and at such time as shall be specified in a notice thereof given as hereinafter provided in Section 1, Article IV or in a waiver of notice thereof.

SECTION 6. Regular Meetings of the Board of Directors may be held with Notice at such time and at such place as shall from time to time be determined by the board.

SECTION 7. Special Meetings of the board may be called by the president on two (2) days Notice to each director, either personally or by mail or by telegram; Special Meetings shall be called by the president or secretary in like manner and on like Notice on the written request of two (2) directors unless the board consists of only one (1) director; in which case, Special Meetings shall be called by the president or secretary in like manner and on like Notice on the

written request of the sole director.

SECTION 8. At all meetings of the board, a majority of the board members shall constitute a quorum for the transaction of business and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board of Directors, except as may be otherwise specifically provided by statute or by the Certificate of Incorporation. If a quorum shall not be present at any meeting of the Board of Directors, the directors present thereat may adjourn the meeting from time to time, without Notice other than announcement at the meeting, until a quorum shall be present.

SECTION 9. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, any action required or permitted to be taken at any meeting of the Board of Directors, or of any committee thereof, may be taken without a meeting, if all members of the board or committee, as the case may be, consent thereto in writing, and the writing or writings are filed with the minutes of proceedings of the board or committee.

SECTION 10. Unless otherwise prohibited by the Certificate of Incorporation or these bylaws, members of the Board of Directors, or any committee designated by the Board of Directors, may participate in a meeting of the Board of Directors, or any committee, by means of conference telephone or similar communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

COMMITTEES OF DIRECTORS

SECTION 11. The Board of Directors may, by resolution passed by a majority of the whole board, designate one (1) or more committees, each committee to consist of one (1) or more of the directors of the corporation. The board may designate one (1) or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee.

In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, or they, constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

Any such committee, to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the Seal of the corporation to be affixed to all papers which may require it; but, no such committee shall have the power or authority in reference to amending the Certificate of Incorporation, adopting an agreement of merger or consolidation, recommending to the stockholders the sale, lease or exchange of all, or substantially all, of the corporation's property and assets, recommending to the stockholders a dissolution of the corporation,

or a revocation of a dissolution, or amending the bylaws of the corporation; and, unless the resolution or the Certificate of Incorporation expressly so provide, no such committee shall have the power or authority to declare a dividend or to authorize the issuance of stock. Such committee or committees shall have such name or names as may be determined from time to time by resolution adopted by the Board of Directors.

SECTION 12. Each committee shall keep regular minutes of its meetings and report the same to the Board of Directors when required.

COMPENSATION OF DIRECTORS

SECTION 13. Unless otherwise restricted by the Certificate of Incorporation or these bylaws, the Board of Directors shall have the authority to fix the compensation of directors. The directors may be paid their expenses, if any, of attendance at each meeting of the Board of Directors, and may be paid a fixed sum for attendance at each meeting of the Board of Directors, or a stated salary as director. No such payment shall preclude any director from serving the corporation in any other capacity and receiving compensation therefore. Members of special or standing committees may be allowed like compensation for attending committee meetings.

REMOVAL OF DIRECTORS

SECTION 14. Unless otherwise restricted by the Certificate of Incorporation or by statute, any director or the entire Board of Directors may be removed, with or without cause, by the holders of a majority of shares entitled to vote at an election of directors.

ARTICLE IV
NOTICES

SECTION 1. Whenever, under the provisions of the statutes or of the Certificate of Incorporation, or of these bylaws, Notice is required to be given to any director or stockholder, it shall not be construed to mean personal Notice, but such Notice may be given in writing, by mail, addressed to such director or stockholder, at his address as it appears on the records of the corporation, with postage thereon prepaid, and such Notice shall be deemed to be given at the time when the same shall be deposited in the United States mail. Notice to directors may also be given by telegram.

SECTION 2. Whenever any Notice is required to be given under the provisions of the statutes or of the Certificate of Incorporation, or of these bylaws, a waiver

thereof, in writing, signed by the proper person or persons entitled to said Notice, whether before or after the time stated therein, shall be deemed equivalent thereto.

ARTICLE V
OFFICERS

SECTION 1. The officers of the corporation shall be a president, a treasurer, a secretary, and one or more vice presidents. No officer need be a member of the Board. Two or more offices, except those of president and vice president and those of president and secretary, may be held by the same person. but no officer shall execute, acknowledge or verify any instrument in more than one capacity. The officers of the corporation shall be elected annually by the Board of Directors at its Annual Meeting.

OTHER OFFICERS AND AGENTS

SECTION 2. The Board of Directors may also elect such other officers and agents, designating the authority and prescribing the duties thereof, as the Board may, from time to time, determine to be advisable.

TENURE, REMOVAL AND VACANCIES

SECTION 3. The officers of the corporation shall hold office until their successors are chosen and qualify. Any officer elected or appointed by the Board of Directors may be removed at any time by the affirmative vote of a majority of the Board of Directors. Any vacancy occurring in any office of the corporation shall be filled by the Board of Directors.

COMPENSATION

SECTION 4. The compensation of all officers of the corporation shall be fixed by the Board of Directors.

AUTHORITY AND DUTIES

SECTION 5. All officers as between themselves and the corporation shall have such authority and perform such duties in the management of the corporation as may be provided in these bylaws, or, to the extent not provided, as may be prescribed by the Board of Directors.

THE PRESIDENT

SECTION 6. The president shall be the chief executive officer of the corporation. He shall have general and active management of the business of the corporation and shall see to it that all resolutions and orders of the Board of Directors are carried into effect, and, in connection therewith, shall be authorized to delegate to the other officers such of his powers and duties as president at such time and in such manner as he may deem to be advisable. The president and chief executive officer will prepare an annual business plan including operating budget, capital budget, headcount and compensation plan for presentation to and approval by the Board of Directors. This plan will be reviewed and as necessary renewed at each regular Board Meeting. The president and chief executive officer shall, from time to time, inform the Board of new opportunities and strategies which could further the mission of the corporation and, as appropriate, seek their approval to pursue such opportunities and strategies. In the absence or disability of the chairman, he shall

preside at all meetings of the stockholders and directors, and he shall have such other powers and duties as the Board of Directors may from time to time prescribe.

THE VICE PRESIDENTS

SECTION 7. In the absence of the president, or in the event of his inability or refusal to act, the vice president (or in the event there be more than one (1) vice president, the vice presidents in the order designated by the directors, or in the absence of any designation, then in the order of their election) shall perform the duties of the president, and when so acting, shall have all the powers of, and be subject to, all the restrictions upon the president. The vice president shall perform such other duties and have such other powers as the Board of Directors may, from time to time, prescribe.

THE SECRETARY AND ASSISTANT SECRETARY

SECTION 8. The secretary shall attend all meetings of the Board of Directors and all meetings of the stockholders and record all the proceedings of the meetings of the corporation and of the Board of Directors in a book to be kept for that purpose and shall perform like duties for the Standing Committees when required. He shall give, or cause to be given, Notice of all meetings of the stockholders and Special Meetings of the Board of Directors, and shall perform such other duties as may be prescribed by the Board of Directors or president, under whose supervision he shall be. He shall have custody of the Corporate Seal of the Corporation and he, or an assistant secretary, shall have authority to affix the same to any instrument requiring it and when so affixed, it may be attested by his signature or by the signature of such assistant secretary. The Board of Directors may give general authority to any other officer to affix the Seal of the corporation and to attest the affixing by his signature.

SECTION 9. The assistant secretary, or if there be more than one (1), the assistant secretaries in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election), shall, in the absence of the secretary, or in the event of his inability or refusal to act, perform the duties and exercise the powers of the secretary and shall perform such other duties and have such other powers as the Board of Directors may, from time to time, prescribe.

THE TREASURER AND ASSISTANT TREASURERS

SECTION 10. The treasurer shall have the custody of the corporate funds and securities and shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation and shall deposit all moneys and other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the Board of Directors.

SECTION 11. He shall disburse the funds of the corporation as may be ordered by the Board of Directors, taking proper vouchers for such disbursements, and shall render to the president and the Board of Directors, at its regular meetings, or when the Board of Directors so requires, an account of all his transactions as treasurer and of the financial condition of the corporation.

SECTION 12. If required by the Board of Directors, he shall give the corporation a bond (which shall be renewed every six [6] years) in such sum and with such surety or sureties as shall be satisfactory to the Board of Directors for the faithful performance of the duties of his office and for the restoration to the corporation,

in case of his death, resignation retirement or removal from office, of all books, papers, vouchers, money and other property of whatever kind in his possession or under his control belonging to the corporation.

SECTION 13. The assistant treasurer, or if there shall be more than one (1), the assistant treasurers in the order determined by the Board of Directors (or if there be no such determination, then in the order of their election), shall, in the absence of the treasurer or in the event of his inability or refusal to act, perform the duties and exercise the powers of the treasurer and shall perform such other duties and have such other powers as the Board of Directors may, from time to time, prescribe.

ARTICLE VI
CERTIFICATE OF STOCK

SECTION 1. Every holder of stock in the corporation shall be entitled to have a certificate, signed by, or in the name of the corporation by the chairman or vice chairman of the Board of Directors, or the president or vice president and the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation, certifying the number of shares owned by him in the corporation.

Certificates may be issued for partly paid shares and in such case upon the face or back of the certificates issued to represent any such partly paid shares, the total amount of the consideration to be paid therefore, and the amount paid thereon shall be specified.

SECTION 2. Any of or all the signatures on the certificate may be facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if he were such officer, transfer agent or registrar at the date of issue.

LOST CERTIFICATES

SECTION 3. The Board of Directors may direct a new certificate or certificates to be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen or destroyed. When authorizing such issue of a new certificate or certificates, the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost, stolen or destroyed certificate or certificates, or his legal representative, to advertise the same in such manner as it shall require and/or to give the corporation a bond in such sum as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen or destroyed.

TRANSFER OF STOCK

SECTION 4. Upon surrender to the corporation or the transfer agent of the corporation of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer, it shall be the duty of the corporation to issue a new certificate to the person entitled thereto, cancel the old certificate and record the transaction upon its books.

FIXING RECORD DATE

SECTION 5. In order that the corporation may determine the stockholders entitled to Notice of or to vote at any meeting of stockholders or any adjournment thereof, or to express consent to corporate action in writing without a meeting, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or entitled to exercise any rights in respect of any change, conversion or exchange of stock or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which shall not be more than sixty (60) nor less than ten (10) days before the date of such meeting, nor more than sixty (60) days prior to any other action. A determination of stockholders of record entitled to Notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

REGISTERED STOCKHOLDERS

SECTION 6. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and to hold liable for calls and assessments a person registered on its books as the owner of shares, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other Notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII

GENERAL PROVISIONS

DIVIDENDS

SECTION 1. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation, if any, may be declared by the Board of Directors at any regular or special meeting, pursuant to law. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation.

SECTION 2. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the directors shall think conducive to the interest of the corporation, and the directors may modify or abolish any such reserve in the manner in which it was created.

ANNUAL STATEMENT

SECTION 3. The Board of Directors shall present at each Annual Meeting, and at any Special Meeting of the stockholders when called for by vote of the stockholders, a full and clear statement of the business and condition of the corporation.

CHECKS

SECTION 4. All checks or demands for money and notes of the corporation shall be signed by such officer or officers or such other person or persons as the Board of Directors may from time to time designate.

FISCAL YEAR

SECTION 5. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

SEAL

SECTION 6. The corporate Seal shall have inscribed thereon the name of the corporation, the year of its organization and the words "Corporate Seal, Delaware." The Seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise used.

INDEMNIFICATION

SECTION 7. The Corporation shall:

(a) Indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit, or proceeding,

whether civil, criminal, administrative or investigative (other than an action by or in the right of the Corporation), by reason of the fact that he is or was a director, officer or employee of the Corporation, is or was serving at the request of the Corporation as a director, officer or employee of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgements, fines and amounts paid in settlement actually and reasonably incurred by him in connection with any such action, suit, or proceeding, in each such case to the fullest extent permissible under subsections (a) through (e) of Section 145 of General Corporation Law of the State of Delaware or the indemnification provisions of any successor statute.

(b) Indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Corporation to procure a judgement in its favor by reason of the fact that he is or was a director, officer or employee of the Corporation, or is or was serving at the request of the corporation as a director, officer or employee of another corporation, partnership, joint venture, trust or other enterprise, against expenses, (including attorneys' fees) actually and reasonably incurred by him in connection with the defense or settlement of such action or suit.

The foregoing right of indemnification shall in no way be exclusive of any other rights of indemnification to which any such person may be entitled under any bylaw, agreement, vote of shareholders or disinterested directors or otherwise, and shall inure to the benefit of the heirs, personal representatives, executors and administrators of such a person.

ARTICLE VIII
AMENDMENTS

SECTION 1. These bylaws may be altered, amended or repealed by a majority vote of either the shareholders or a majority of the Board of Directors. Any bylaw adopted, amended or repealed by the shareholders may be amended or repealed by the Board.

Exhibit 24

KPMG
P.O. Box 7108
Billings, MT 59103

Accountants' Consent

The Board of Directors
Ribi ImmunoChem Research, Inc.:

We consent to incorporation by reference in the registration statements No. 33-6513, No. 333-18341 and No. 33-73478 filed on Form S-8 and registration statements No. 333-32943, No. 33-44391, No. 33-48713, No. 33-69984 and No. 333-61435 filed on Form S-3 of Ribi ImmunoChem Research, Inc. of our report dated January 22, 1999, relating to the balance sheets of Ribi ImmunoChem Research, Inc. as of December 31, 1998 and 1997, and the related statements of operations, stockholders' equity and comprehensive income, and cash flows for each of the years in the three-year period ended December 31, 1998, which report appears in the December 31, 1998 annual report on Form 10-K of Ribi ImmunoChem Research, Inc.

/s/ KPMG LLP

Billings, Montana
March 24, 1999

<TABLE> <S> <C>

<ARTICLE> 5
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THIS SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE COMPANY'S BALANCE SHEET AT DECEMBER 31, 1998, AND STATEMENTS OF OPERATIONS FOR THE THREE YEARS ENDED DECEMBER 31, 1998, 1997, AND 1996, AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.
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<CIK> 0000352331
<NAME> RIBI IMMUNOCHEM RESEARCH, INC.
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