

FORM 10-KSB

SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

ANNUAL REPORT UNDER SECTION 13 OR 15(D) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For the Fiscal Year Ended December 31, 1998

TRANSITION REPORT UNDER SECTION 13 OR 15(D) OF  
THE SECURITIES EXCHANGE ACT OF 1934  
For the transition period from \_\_\_ to \_\_\_

Commission file number: 001-13467

COMMONWEALTH BIOTECHNOLOGIES, INC.

(Name of small business issuer in its charter)

VIRGINIA 54-1641133

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

601 BIOTECH DRIVE  
RICHMOND, VIRGINIA 23235  
(Address of principal executive offices) (Zip Code)

Issuer's telephone number: (804) 648-3820

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

Securities registered pursuant to Section  
12(g) of the Act:  
COMMON STOCK, WITHOUT PAR  
VALUE PER SHARE

Check whether the issuer (1) filed all reports required to be filed by  
Section 13 or 15(d) of the Exchange Act during the past 12 months (or for such  
shorter period that the issuer was required to file such reports), and (2) has  
been subject to such filing requirements for the past 90 days. Yes X No \_\_\_

Check if there is no disclosure of delinquent filers in response to Item  
405 of Regulation S-B contained in this form, and no disclosure will 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-KSB  
or any amendment to this Form 10-KSB [ ].

The issuer's revenues for the year ended December 31, 1998 were  
\$1,604,267.

The aggregate market value of the shares of common stock, without par  
value ("Common Stock"), of the registrant held by non-affiliates on March 21,  
1999 was approximately \$10,756,745, based upon the closing sales price of these  
shares of \$8.281 per share, as reported on the Nasdaq SmallCap Market on  
March 21, 1999.

As of March 21, 1999 there were 1,638,464 shares of Common Stock  
outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its Annual  
Meeting of Shareholders to be held on April 15, 1999 are incorporated by  
reference into Part III of this Form 10-KSB.

Portions of the registrant's 1998 Annual Report to Shareholders are  
incorporated by reference into Part II of this Form 10-KSB.

Transitional Small Business Disclosure Format (check one:) Yes \_\_\_ No X.

PART I

ITEM 1. DESCRIPTION OF BUSINESS

OVERVIEW

Commonwealth Biotechnologies, Inc (the "Company") was founded in 1992 to  
provide sophisticated research and development support services on a contract  
basis to the biotechnology industry. The Company's customers consist of private  
companies, academic institutions and government agencies, all of which use  
biological processes to develop products for health care, agricultural and other  
purposes. The Company's revenues are derived principally from providing  
macromolecular synthetic and analytical services to researchers in the  
biotechnology industry or to researchers who are engaged in life sciences  
research in government or academic labs throughout the world.

The Company provides these services to customers on a contract basis and  
derives its revenues from these services, and not only from sales of commercial  
products resulting from the research. This arrangement distinguishes the Company  
from many other biotechnology companies in that the Company's revenues are not  
derived from successful commercialization of a new biotechnology product. The

Company has developed a strong reputation as a leading provider of biotechnology research and development analytical services. The Company is focusing its expansion efforts on the maintenance and expansion of long term relationships with customers in the biotechnology industry and in establishing new customer relationships. The Company has implemented new technologies to provide new services to its customers, and is continuing to develop new products and services to meet the changing needs of its customers.

In general terms, the Company serves two types of customers; those who require a discrete set of analyses ("short-term projects"), and those who contract with the Company on an extended basis for performance of a variety of integrated analytical services ("long-term projects"). More often than not, short-term and long-term project customers send the Company repeat business.

The Company also derives a portion of its revenues from research grants funded by various Federal agencies. These research grants support the bulk of the Company's research efforts on its own in-house proprietary technologies. The Company is developing its own technologies in the general areas of anti-coagulation, genomic sequence analysis, and development of diagnostic test kits.

In January, 1999, the Company began sales of a new reagent (AccuTrac™) which facilitates the process of automated DNA sequence analysis. In this respect, the Company hopes to broaden its revenue base by direct sales of this reagent to its clients. AccuTrac was developed within the Company and stems directly from the Company's in-house R&D programs.

#### GROWTH STRATEGY

The Company's strategy for growth includes:

**EXPANSION OF ITS ANALYTICAL INSTRUMENTATION CAPACITY.** The Company believes there is significant demand for additional services of the type the Company currently offers. The Company's capacity to service this demand has been constrained by the limitations of its facilities and need to make significant capital expenditures on equipment. Having secured a significantly larger laboratory facility and additional research equipment, the Company has the capacity to generate substantially greater revenues from its core services, to offer new technologies, and to improve profit margins through more efficient operations.

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**EXPANSION OF ITS MARKETING CAPABILITIES.** The Company has expanded its customer base primarily through placement of print-ads in several periodicals and industry sourcebooks, by attendance at a limited number of trade shows, seminars and meetings, through its own World Wide Web Home Page, and by word-of-mouth recommendations. The Company has increased its print-ad marketing and will continue to utilize these other strategies to attract customers. However, the Company will also expand its sales and marketing capabilities in these areas:

The Company hired an Account Executive for the Eastern Region who worked throughout 1998 to identify new clients and to bring additional work to the Company. In March, 1999, the Company hired an Account Executive for the Western Region, who will primarily serve clients in California. This individual will be primarily targeting biotechnology companies and government agencies.

The Company has engaged the services of Ballas and Partners, Richmond, VA, a media relations firm, to assist the Company in design and implementation of new marketing strategies, to enhance the Company's visibility, and to aide the Company in identifying and reaching new customers.

**REGULATORY COMPLIANCE.** The Company has been registered under the Clinical Laboratories Improvement Act (CLIA), with pending accreditation by the Virginia Department of Health. Registration under the CLIA guidelines enables the Company to accept human samples for analysis and to perform analysis of human clinical samples for the presence of known genetic markers.

The Company was accredited in 1998 under the guidelines of the National Forensic Science Technology Center, (NFSTC), to perform DNA identity testing for submission of data into the Combined DNA Index System (CODIS) data base, and is one of only eight commercial facilities nationwide accredited by the NFSTC to perform criminal (felony) DNA database testing for submission into the FBI CODIS database.

The Company expects accreditation soon from the American Association of Blood Banks (AABB) and the Company has participated in a validation study through the College of American Pathologists (CAP). The Company operates under GLP (Good Laboratory Practices) and has been accredited by the United States Department of Agriculture to receive bovine DNA

samples from Europe to perform genetic, lineage, and identity analysis. The Company participated in an international study to validate bovine DNA identity testing in conjunction with a study group located in Denmark, and in addition, is establishing DNA identity testing in horses.

EXPANSION INTO NEW SERVICE TECHNOLOGIES. The Company continues to critically examine new technologies with a view towards expanding its customer base and sources of revenue. Already, the Company has made inroads in establishing new service technologies and in offering these services to its customers. In 1999, the Company will increase its capacity or improve its analytical service offerings in the following areas:

DNA SEQUENCE ANALYSIS. The Company has positioned itself to be at the forefront in the development and application of new genome based technologies. We have expanded our contract DNA sequencing services and offer sophisticated sequence data analysis. We will continue to expand these services in 1999.

GENOME SEQUENCING. We have developed comprehensive sequencing capabilities of human, animal, plant, and microbial pathogen genomes.

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GENETIC ANALYSIS. The Company has established a Genetic Testing Group and is now positioned to begin analysis of human samples for the presence of genetic markers of known human pathologies. We have already begun analysis for a long-term contract client, for example, of human samples for the presence of the "p53 gene," a marker for cancer.

CBI is also ready to begin analysis of samples for the presence of many other marker genes. In 1999, we will focus new marketing efforts on our capabilities in this area, and are striving to make Genetic Analysis a larger revenue producing technology for the Company.

IDENTITY TESTING AND PATERNITY TESTING BY GENETIC ANALYSIS. In our new facility, the Company has established a DNA Reference Laboratory containing all the necessary work areas required to provide genetic identity and paternity testing. The Company is thus ready to begin offering paternity testing and DNA fingerprinting to the general public and to various state and federal agencies, and already has submitted bids for performing DNA fingerprint analysis for the Departments of Criminal Justice of different States.

In February, 1999, the Company hired a new Director of Human Genetics and Genetic Analysis. This scientist has many years experience in growing genetic analysis and paternity testing as a revenue source for his former employer, and the Company expects that his presence will bring immediate visibility to the Company in these important areas.

MOLECULAR BIOLOGY. While not truly a new technology at the Company, we have made a concerted effort to identify clients who contract with the Company to pursue comprehensive molecular biology projects. In the last quarter of 1998, more than 15 individual molecular biology projects were initiated at the Company and throughout 1999, we intend to expand these services even more by offering large scale bacterial fermentation to our clients.

CENTRALIZED COMPUTER FACILITIES. The Company has acquired a more centralized server for databasing and analysis, and has established a sophisticated company-wide intranet in our new facility. New software packages have been installed to upgrade our accounting capabilities, and to permit more efficient data handling, storage, backup, and analysis.

EXPANDED DNA SYNTHESIS SERVICES. The Company provides "protein nucleic acids" (PNAs) to numerous clients under a broad licensing agreement with Perseptive Biosystems, Inc., Framingham, MA. In addition, demand for DNA/RNA synthesis continues to increase, and in particular, the Company is one of the few offering commercial RNA synthesis.

EXPANDED CELL CULTURE AND BACTERIAL CULTURE SERVICES. The Company has established a state-of-the-art cell culture facility in its new facility and offers large scale cell culture services to its clients. In 1999, the Company will establish large scale bacterial fermentation capabilities for overexpression of target proteins.

EXPANDED MASS SPECTRAL ANALYSIS SERVICES. The Company has installed and now operates a MALDI-TOF mass spectrometer and so can offer mass spectral analysis of virtually all macromolecules, including proteins, peptides, DNA, RNA, and PNAs. MALDI-TOF analysis complements electrospray (ES) mass spec and HPLC-ES-mass spec analyses also offered by the Company.

#### ANALYTICAL SUPPORT SERVICES

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In order to analyze and experiment with cell components and macromolecules, researchers need to analyze, sequence, purify, synthesize, and characterize those components. Thus, the Company's business is dependent upon the use of sophisticated, analytical equipment. In light of increasing cost pressures, many companies, universities, and research institutions seek to avoid incurring the costs to equip and staff laboratories which can perform these analytical services. Instead, they choose to contract with the Company for these services.

The Company is a fee-for-service contractor and typically takes no ownership position in the intellectual property rights resulting from services it performs under contract for either short-term or long-term contract customers. A key to the growth of the Company has been to integrate a number of foundation technologies and provide a broad range of capabilities to customers who otherwise must go to several different sources for their needs. Since commencing operations, the Company has become noted for providing a wide range of services relating to design, synthesis, purification, and analysis of peptides, proteins, and oligonucleotides.

Providing a wide range of services is an important element of the Company's competitive strategy. Virtually all of its closest competitors provide either DNA level technologies or protein/peptide level technologies. There are few major competitors which offer integrated DNA/RNA and protein/peptide technologies and none that offer these technologies combined with sophisticated biophysical analytical techniques, such as calorimetry, spectroscopy, and mass spectral analysis. Thus, the Company can provide complete research programs to its customers. "One stop biotechnology shopping" has proved attractive in securing long-term contracts with customers ranging from major pharmaceutical industry researchers to major government sponsors of research, such as the National Institutes of Health. The Company believes it has earned a reputation as a leading provider of high quality DNA sequencing - a reputation which has enabled it to obtain key contracts with universities, major pharmaceutical, and biotechnology companies throughout the world.

The services offered by the Company are fully detailed in its promotional brochures, and on its World Wide Web page. A new, one page promotional brochure has been compiled and is sent to all potential customers. The Company has instituted "fax-on-demand" for customers who seek technology descriptions and pricing information.

#### CUSTOMERS

Our customers are private companies, academic institutions and government agencies throughout the world. Virtually all our clients are engaged in life sciences research, and use our technologies to provide data and results which support their individual research programs. As of December, 1998, the Company's client lists exceeded 700 customers world-wide.

#### SHORT-TERM RESEARCH PROJECTS.

On average, in 1998, the Company added 24 new customers per month. Of its domestic customers, 53.3 % are private companies, and 46.7% are university or governmental labs. The Company added 31 new foreign clients in 1998, from such places as Argentina, Australia, Canada, China, Columbia, Denmark, Germany, Greece, Hong Kong, India, Israel, Italy, Japan, Korea, Mexico, Malaysia, Norway, Spain, Sweden, Switzerland, the United Kingdom, and Uruguay.

The Company's customers come to us from many sources. The Company advertises in the professional journals, exhibits at trade shows, and has its own Web page from which a potential customers may directly download order forms and place an order, if desired. The Company is also cross listed on several biotechnology, biochemistry, and molecular biology search services, so that potential customers may find us using simple key word search terms. Of course, favorable word-of-mouth advertising is key to our

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success, and has brought us many new investigators within a single research based institution. All inquiries to the Company receive immediate and personal attention.

#### LONG-TERM RESEARCH PROJECTS

CBI is committed to identifying long-term contractual clients. During 1998, one of our major long-term contractual clients brought much of their work back "in-house" due to a change in their corporate philosophy. Loss of this revenue stream affected the bottom line of CBI throughout 1998. However, CBI signed 9 new long-term contracts or agreements in the last quarter of 1998 and as of December 1998, the Company had many long-term contract proposals pending with many different potential customers.

#### OPERATIONS

Requests for quotes from potential customers are received via phone, e-mail, from the Company's World Wide Web page, or by hard copy directed to the Company's business coordinator or laboratory manager. All inquiries are answered by direct mail of the Company brochure and price lists, with follow up phone calls, where appropriate. Price quotes for small projects or routine analytical procedures are generated by scientists who possess the expertise necessary to respond appropriately. Quotes for more complex projects are developed collaboratively by the Company personnel having the requisite expertise. Most quotations are sent back to the inquiring scientist within one working day.

Incoming orders are logged onto the Company's project management system, assigned a work order number, and delivered to the appropriate scientist designated to oversee and coordinate all aspects of the particular project. The work to be done is scheduled on the appropriate instruments, and all necessary reagents or other supplies needed to complete the project are ordered as needed. Every customer is required to sign a service agreement prior to the Company initiating any requested work.

As a long-term project is completed, progress reports are usually sent to the customer detailing the results found to date, and the conclusions to be drawn. If the project is relatively straight-forward, such as an amino acid analysis, spectroscopy, or DNA sequence analysis, the results are faxed or e-mailed to the customer prior to sending the customer the hard copy of the results. If the project involves a synthesis of a peptide or oligonucleotide, for example, the product is sent to the customer by express mail service. Every product is accompanied by a data sheet, which details the physicochemical properties of the compound, including the results of all analytical tests performed which support the claimed purity and composition. The customer is invoiced upon completion of the work, or at particular points in the work program. The customer pays for the analytical services provided in accordance with the Company's standard fee structure and typically retains all rights to any intellectual property resulting from the analysis.

All data generated at the Company are archived for the customer. Where appropriate, the data are archived on selected storage media, such as back up tapes or computer disks. A file is maintained for every customer, and these files are also archived. The Company employs appropriate security measures to ensure the confidentiality of customer information.

The Company operates under strict Standard Operating Protocols ("SOPs") which detail the particular technologies used to complete the work in progress. SOPs are made available to the customer upon request. In addition, the Company's technical team follows standard operating procedures which help to produce consistent, high quality results.

#### PROPRIETARY RESEARCH AND DEVELOPMENT.

The Company generally does not retain intellectual property rights on work done for its customers. In contrast, in its proprietary research and development programs, the Company is developing its own

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technologies, the intellectual property rights to which the Company will own. Usually, the goal of these research efforts is to bring a particular technology to a patentable stage, and then license the technology to another company. If the technology is commercialized, the Company may realize licensing and/or royalty fees. However, in some instances, the Company is both the manufacturer and distributor of its own products.

In 1998, the Company completed a Phase I Small Business Innovative Research Award ("SBIR") from the United States Department of Agriculture, (USDA) in the amount of \$55,000, and was awarded a new Phase I SBIR grant from the National Institutes of Health totaling \$100,000, and a Phase II SBIR award from the USDA (\$ 200,000). The Company is in the second and final year of its Phase II Small Business Technology Transfer Award (\$500,000) from the National Institutes of Health and currently has several other grant applications pending with various Federal and State agencies. Revenues from federally funded contracts are recognized on a cost reimbursement basis.

#### INTELLECTUAL PROPERTY

HEPARREST (TM)

US Patent #5,877,153, was issued March 2, 1999 to the Company and a Continuation in Part to the same patent has been filed and is pending. Both patents relate to an anti-coagulation technology the Company is developing. A PCT patent based on the US patent will issue shortly, and national patents on this technology have also been filed and are pending in Europe, Japan, and Canada.

The Company's anti-coagulation technology is an experimental new compound that counteracts the effects of heparin, which is used to prevent blood clotting during open heart surgery and other surgical procedures involving significant intervention into the circulatory system. The only drug currently available to counteract heparin exhibits toxicity and other adverse side effects, so its use is primarily restricted to open heart surgery and emergencies. However, the inability to counteract the effects of heparin can result in bleeding complications. Initial tests indicate that compounds the Company has developed can neutralize heparin's anticoagulant activity without displaying the toxicity associated with the existing drug.

The compound has been trademarked as HepArrest(TM). The Company commissioned an independent consulting firm, the Mattson Jack Group, Mendon, NY, to assess the market potential of HepArrest, if our compound were to receive approval from the Food and Drug Administration as a human pharmaceutical. Mattson Jack determined that there would be a substantial market for a safe and effective drug with a proven clinical profile of HepArrest.

The Company's strategy will be to license this technology to a creditable corporate partner(s) who are well positioned to take HepArrest through all the laboratory and clinical trials necessary to commercialize the compound. In exchange, the Company expects a licencing fee and subsequent royalties against sales. To this end, the Company has contracted with the Mattson Jack Group to help identify and negotiate with likely strategic corporate partners. In the meantime, the Company will continue to compile preclinical data on the efficacy and safety of HepArrest.

To yield a commercial product, HepArrest will require extensive additional testing and government approval. As a result, there can be no assurance that commercial products will result from these technologies, all of which should be considered highly speculative.

#### A REAGENT TO AID AUTOMATED DNA SEQUENCE ANALYSIS, ACCUTRAC(TM)

The Company developed a novel laboratory reagent that markedly improves the accuracy and reliability of automated DNA sequence analysis protocols. Such protocols are in-use world-wide, and the Company believes that its reagent will be adopted for use by many of the facilities that currently perform

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DNA sequence analysis. The Company filed for US patent protection for its reagent, termed AccuTrac (TM). The Company announced the implementation of AccuTrac at the Institute for Genome Research meeting in January 1999, and presented additional products based on AccuTrac at the Human Genome meeting, March 1999. The Company is aggressively marketing AccuTrac over the internet and with print ads in the professional journals. Initially, for a limited time, AccuTrac was given to qualified investigators at no cost, but the Company has already begun selling this reagent.

#### OTHER TECHNOLOGIES

The Company is actively pursuing development of an immunoassay for equine infectious anemia. All equids are at risk for equine infectious anemia (EIA). All animals must be tested for the virus, and any animal found positive must be destroyed. Current tests for the presence of the virus are subject to false positive (and false negative) results. False positive results are unacceptable because valuable animals (for instance, race horses), may be put-down. False negative results are potentially devastating because infected animals could then move freely amongst equine populations. The work is funded by SBIR awards from the USDA totaling \$250,000. The Company has developed a novel test which should effectively eliminate false positive and false negative reactions, and at the same time, afford a greater level of testing sensitivity. The Company is pursuing field trials of this test, and hopes to gain USDA approval for its use. The Company hopes to enter into negotiations with a corporate partner interested in commercializing this diagnostic assay.

The Company is developing a rapid assay for detecting the presence of the botulism bacteria in foodstuffs. Under a Phase I SBIR award from the National Institutes of Health (\$100,000), the Company is developing novel enzyme substrates to detect the presence of botulinum toxins.

The Company anticipates that its ability to secure and protect patents and other intellectual property rights will become increasingly important to the business of the Company in the event its proprietary research programs yield technologies which can be commercialized. There can be no assurance that the

Company will be successful in securing and protecting intellectual property rights, or that its activities will not infringe on the intellectual property rights of others.

The Company takes appropriate steps to protect its intellectual property rights and those of its customers. The Company's practice is to require its employees and consultants to execute non-disclosure and proprietary rights agreements upon commencement of employment or consulting arrangements with the Company. These agreements acknowledge the Company's exclusive ownership of all intellectual property developed by the individual during the course of his work with the Company and require that all proprietary information disclosed to the individual by the Company or its customers remain confidential.

#### MARKETING

The Company has expanded its customer base primarily through word-of-mouth referrals and attendance at a limited number of trade shows, seminars and meetings. Because of its ability to offer a wide range of biotechnology research services, the Company enjoys a favorable reputation among its customers, and many new customers come to the Company by word-of-mouth recommendation. The Company has constructed its own World Wide Web Home Page ([www.cbi-biotech.com](http://www.cbi-biotech.com)) and is listed with several biotechnical and biomedical oriented sites on the World Wide Web.

#### HUMAN RESOURCES

The Company currently has 34 full time and 1 part time employees, including 10 employees in administration, marketing, sales, and customer relations, 1 computer network specialist, 11 employees in research and development, and 24 employees in laboratory operations; some employees in research and development also participate in laboratory operations. Nine of the Company's employees hold doctorate

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degrees, and 7 have Master's degrees. None of the Company's employees are represented by a labor union. The Company has experienced no work stoppages and believes its relations with its employees to be good.

#### COMPETITION

The Company faces several types of competition. The Company believes there are between 12 and 15 companies concentrating on peptide synthesis and about 20 other companies offering DNA related services in the United States. Very few companies offer both DNA/RNA and protein/peptide analysis. Other competition comes from divisions of larger research oriented companies or university core facilities. The principal competitive factors are pricing, expertise, and range of services offered, and that it competes effectively on all of these factors.

#### GOVERNMENT REGULATION

The Company does not require government regulatory approvals to provide its current services. Numerous federal, state and local agencies, such as environmental, working condition and other similar regulators, have jurisdiction to take action that could have a material adverse effect upon the Company's ability to do business. The Company believes that it is in general compliance with existing federal, state and local laws and regulations and does not anticipate that continuing compliance will have any material effect upon the capital expenditures, earnings or competitive position of the Company.

The Company anticipates that its pursuit of its growth strategy will subject the Company to a heightened level of government regulation of its operations. For example, in pursuing opportunities to provide analytical services to customers seeking the approval of the United States Food and Drug Administration (the "FDA") of products, the Company's operations will become subject to compliance with standards established by the FDA, including inspections by the FDA and other federal, state and local agencies regarding work performed by the Company on specific FDA submission projects. If significant violations are discovered during an inspection, the Company may be restricted from undertaking additional work on projects until the violations are remedied. The Company has a license from the Nuclear Regulatory Commission ("NRC") for the operation of its laboratory facility.

The commercialization of the Company's proprietary technologies would also be subject to extensive government regulation and approval requirements, including the need for pre-clinical laboratory and animal tests and human clinical trials. The Company does not have, and does not anticipate developing, the facilities and expertise necessary to obtain FDA approval for or to manufacture any pharmaceutical products that may result from its technologies. Instead, the Company would license these technologies to third parties having the necessary facilities and expertise, which would assume responsibility for and control of regulatory matters.

## ITEM 2. DESCRIPTION OF PROPERTY

## FACILITIES

Construction of our new facility was completed in November, 1998 at an overall cost of about \$ 5.1 million dollars financed primarily through the Virginia Small Business Financing Authority (the "VSBFA") which issued \$ 4,000,000 in tax exempt Industrial Revenue Bonds ("IRBs") for the benefit of the Company. The Company's new facility encompasses 32,000 square feet of state-of-the-art laboratory and administrative space. The building is designed to facilitate movement of samples throughout each laboratory, and where necessary, to maintain and ensure custody of samples. The building houses expansion space which was purposefully left undeveloped to accommodate new technologies as they come on board.

The Company took possession of its new facility in late November, 1998, and all labs were fully operational in the new facility by mid December, 1998.

## ITEM 3. LEGAL PROCEEDINGS

The Company is not presently involved in any litigation nor, to the knowledge of the Company's management, is any litigation threatened against the Company.

## ITEM 4. SUBMISSION OF MATTERS TO A VOTE OF SECURITY HOLDERS

No matter was submitted to a vote of security holders during the fourth quarter of 1998.

## PART II

## ITEM 5. MARKET FOR COMMON EQUITY AND RELATED STOCKHOLDER MATTERS.

## MARKET INFORMATION

The information set forth on page 10 of the Company's 1999 Annual Report to Shareholders under the caption "Market for Common Equity" is incorporated herein by reference.

## USE OF PROCEEDS OF IPO

From October 1, 1998 through December 31, 1998, the Company spent approximately \$1,605,187 of the net proceeds of the initial public offering as follows: (1) \$1,184,136 on facility expenditures, (2) \$227,951 on capital expenditures, (3) \$163,639 on marketing, (4) \$22,998 on sales and, (5) \$6,463 on production operating expenditures. Through 1998, the Company spent approximately \$3,429,330 of the net proceeds of the initial public offering. The remaining proceeds are invested in an interest-bearing account at a commercial bank.

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## ITEM 6. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS.

The information set forth on pages 10 through 18 of the Company's 1998 Annual Report to Shareholders under the caption "Management's Discussion and Analysis of Financial Condition and Results of Operations" is incorporated herein by reference.

## ITEM 7. FINANCIAL STATEMENTS

The Company's financial statements and the related notes thereto, together with the report of McGladrey & Pullen, LLP, set forth on pages 19 through 29 of the Company's 1998 Annual Report to Shareholders are incorporated herein by reference.

## ITEM 8. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE.

Goodman & Company, L.L.P. ("Goodman") served as the Company's independent public accountants for the fiscal years ended December 31, 1995, December 31, 1996 and December 31, 1997. For various business reasons, the Audit Committee recommended the dismissal of Goodman to the Company's Board of Directors, and on February 23, 1998, the Board officially terminated its business relationship with Goodman. Goodman's reports on the Company's financial statements for each of the last two fiscal years did not contain an adverse opinion or disclaimer of opinion. Similarly, Goodman did not modify either such report as to uncertainty, audit scope or accounting principles. There were no



disagreements between the Company and Goodman regarding any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure.

Upon the recommendation of the Audit Committee of the Company's Board of Directors, the Board of Directors of the Company appointed on February 23, 1998, subject to the approval of the Company's shareholders, the firm McGladrey & Pullen, LLP as independent public accountants to audit the Company's consolidated financial statements for the fiscal year ended December 31, 1998. If the appointment of McGladrey & Pullen, LLP is not approved by the shareholders, the matter will be referred to the Audit Committee for further review.

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### PART III

ITEM 9. DIRECTORS, EXECUTIVE OFFICERS, PROMOTERS AND CONTROL PERSONS;  
COMPLIANCE WITH SECTION 16(A) OF THE EXCHANGE ACT.

#### DIRECTORS

The information relating to the directors of the Company set forth in the Company's definitive proxy statement relating to the Company's Annual Meeting of Shareholders to be held on April 15, 1998 (the "Proxy Statement") under the caption "Proposal 1: Election of Directors" is incorporated herein by reference.

#### EXECUTIVE OFFICERS

The information relating to the executive officers of the Company set forth in the Proxy Statement under the caption "Executive Compensation - Executive Officers of the Company" is incorporated herein by reference.

#### COMPLIANCE WITH SECTION 16(A) OF THE SECURITIES EXCHANGE ACT OF 1934

The information relating to compliance with Section 16(a) of the Securities Exchange Act of 1934, as amended, is set forth in the Proxy Statement under the caption "Section 16(a) Beneficial Ownership Reporting Compliance" is incorporated herein by reference.

ITEM 10. EXECUTIVE COMPENSATION.

The information set forth in the Proxy Statement under the caption "Executive Compensation" is incorporated herein by reference.

ITEM 11. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT.

The information set forth in the Proxy Statement under the caption "Voting Securities and Principal Holders Thereof" is incorporated herein by reference.

ITEM 12. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS.

The information set forth in the Proxy Statement under the caption "Certain Relationships and Related Transactions" is incorporated herein by reference.

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ITEM 13. EXHIBITS AND REPORTS ON FORM 8-K.

#### (A) EXHIBITS

EXHIBIT NUMBER	DESCRIPTION OF EXHIBIT
3.1	Amended and Restated Articles of Incorporation (1)
3.2	Amended and Restated Bylaws (1)
4.1	Form of Common Stock Certificate (1)
4.2	Form of Underwriter's Warrant, as amended (1)
4.3	Form of Management Warrant, as amended (1)
10.1	Placement Agreement by and between the Company and Anderson & Strudwick, Incorporated ("A&S") (1)
10.2	Warrant Agreement between the Company and A&S (1)
10.3	Warrant Agreement between the Company and Richard J. Freer, as amended (1)
10.4	Warrant Agreement between the Company and Thomas R. Reynolds, as amended (1)
10.5	Warrant Agreement between the Company and Robert B. Harris,

	as amended (1)
10.6	Employment Agreement for Richard J. Freer (1)
10.7	Employment Agreement for Thomas R. Reynolds (1)
10.8	Employment Agreement for Robert B. Harris (1)
10.9	Executive Severance Agreement for Richard J. Freer (1)
10.10	Executive Severance Agreement for Thomas R. Reynolds (1)
10.11	Executive Severance Agreement for Robert B. Harris (1)
10.12	1997 Stock Incentive Plan, as amended (1)
10.13	Loan Agreement between the Company and the Virginia Small Business Financing Authority (2)
13.1	Annual Report to Shareholders for the Fiscal Year Ended December 31, 1998 incorporated in Form 10-KSB (3)
16.1	Letter on change in certifying accountant (4)
23.1	Letter of Consent from McGladrey & Pullen LLP (3)
23.2	Letter of Consent from Goodman & Company (3)
27.1	Financial Data Schedule (3)

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- (1) Incorporated by reference to the Company's Registration Statement on Form SB-2, Registration No. 333-31731.
  - (2) Incorporated by reference to the Company's Current Report on Form 8-K, dated April 6, 1998, File No. 001-13467.
  - (3) Filed herewith.
  - (4) Incorporated by reference to Amendment No. 1 to the Company's Current Report on Form 8-K, filed on March 12, 1998.

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EXECUTIVE COMPENSATION PLANS AND ARRANGEMENTS

The following is a list of all executive compensation plans and arrangements filed as exhibits to this annual report on Form 10-KSB or incorporated herein by reference:

- 1. Warrant Agreement between the Company and Richard J. Freer, as amended (1)
- 2. Warrant Agreement between the Company and Thomas R. Reynolds, as amended (1)
- 3. Warrant Agreement between the Company and Robert B. Harris, as amended (1)
- 4. Employment Agreement between the Company and Richard J. Freer (1)
- 5. Employment Agreement between the Company and Thomas R. Reynolds (1)
- 6. Employment Agreement between the Company and Robert B. Harris (1)
- 7. Executive Severance Agreement between the Company and Richard J. Freer (1)
- 8. Executive Severance Agreement between the Company and Thomas R. Reynolds (1)
- 9. Executive Severance Agreement between the Company and Robert B. Harris (1)
- 10. 1997 Stock Incentive Plan (1)

- 
- (1) Incorporated by reference to the Company's Registration Statement on Form SB-2, Registration No. 333-31731.

(B) REPORTS ON FORM 8-K

During the three months ended December 31, 1998, the Company filed the following report on Form 8-K:

- 1. Form 8-K, dated November 17, 1998, relating to the receipt of a report relating to HepArrest, the Company's lead human pharmaceutical.

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SIGNATURES

In accordance with Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

COMMONWEALTH BIOTECHNOLOGIES, INC.

Date: March 31, 1999

By: /s/ Robert B. Harris, Ph.D.

-----  
Robert B. Harris, Ph.D  
President

In accordance with the Exchange Act, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

NAME	TITLE(S)	DATE
----	-----	----
/s/ Richard J. Freer, Ph.D.	Chairman and Director	March 31, 1999
-----	(Principal Executive Officer)	
Richard J. Freer, Ph.D.		

/s/ Robert B. Harris, Ph.D. ----- Robert B. Harris, Ph.D.	President and Director	March 31, 1999
/s/ Thomas R. Reynolds, ----- Thomas R. Reynolds,	Senior Vice President, Secretary and Director	March 31, 1999
s/ James H. Brennan, ----- James H. Brennan	Controller (Principal Financial and Accounting Officer)	March 31, 1999
/s/ Peter C. Einselen ----- Peter C. Einselen	Director	March 31, 1999
/s/ George F. Allen ----- George F. Allen	Director	March 31, 1999

[LOGO] COMMONWEALTH  
BIOTECHNOLOGIES, INC.

-----  
1998  
Annual  
Report

[GRAPHIC]

ABBOTT LABS, INC.

ALCON LABS, INC.

ALL INDIA INSTITUTE OF MEDICAL SCIENCES

ALLEGHENY UNIVERSITY HEALTH SCI. CTR.

ALLERGAN

ALPHA THERAPEUTICS

AMHERST UNIVERSITY

ANAGEN

ANIMUNE

ANTEX BIOLOGICALS

ANTIGEN EXPRESS, INC.

ARRENIUS UNIVERSITY

BAXTER HEALTHCARE, INC.

BAYER CORPORATION

BAYLOR COLLEGE MEDICINE

BIOMOLECULES, INC.

BIOSCREEN TESTING

BIOTECH RESEARCH LABS

BLM GROUP

BOSTON UNIVERSITY

BREASTEK, INC.

BRISTOL MYERS SQUIBB

BROWN UNIVERSITY

CASE WESTERN RESERVE UNIVERSITY

CENTERS FOR DISEASE CONTROL

CENTRAL N.Y. STATE RESEARCH INSTITUTE

CERELA

CHICAGO INSTITUTE NEURO SURG. & NEURO RES.

CHILDREN'S HOSPITAL PITTSBURGH

CHINESE UNIVERSITY HONG KONG

CIENCI ESTEVES  
CKD RESEARCH INSTITUTE  
CLEVELAND CLINIC  
COLUMBIA UNIVERSITY  
CONTHERAPEUTICS  
CORNELL UNIVERSITY  
CORNING DIAGNOSTICS  
CYTOS PHARMACEUTICALS, INC.  
DADE BEHRING, INC.  
DARTMOUTH UNIVERSITY  
DEKALB GENETICS, INC.  
DEMETER BIOTECHNOLOGIES, INC.  
DIONEX CORPORATION  
DNAX, INC.  
DUKE UNIVERSITY  
DUPONT EXPERIMENTAL STATION  
DUQUESNE UNIVERSITY  
DYAD PHARMACEUTICALS, INC.  
EAST CAROLINA SCHOOL MEDICINE  
EASTERN VA MEDICAL SCHOOL  
EDITEK, INC.  
EMISPHERE, INC.  
FLORIDA STATE UNIVERSITY  
FRESENIUS MEDICAL CENTER  
GE CORPORATE RESEARCH CENTER  
GENELABS TECHNOLOGIES, INC.  
GENEWORKS, LLC  
GENOME THERAPEUTICS  
GEORGETOWN UNIVERSITY  
GEORGIA INSTITUTE TECH  
GLAXO WELLCOME CORPORATION  
GLIATECH  
GLYCOMED, INC.  
GREENHARBOR MEDICAL GROUP  
HARVARD SCHOOL OF PUBLIC HEALTH  
HENRY FORD HOSPITAL  
HERSHEY MEDICAL CENTER  
HOFFMAN LA ROCHE  
HONG KONG UNIVERSITY SCIENCE & TECHNOLOGY  
HOPE HEART INSTITUTE  
IDEXX LABS  
IMMCO DIAGNOSTICS

IMMUNO CONCEPTS  
IMMUNODIAGNOSTICS LABS  
IMPERIAL COLLEGE OF LONDON  
INCYTE PHARMACEUTICALS  
INDIA INSTITUTE MED. EDUC. AND RES.  
INDIANA UNIVERSITY  
INNOVAGEN  
INSMED PHARMACEUTICALS, INC.  
INTESCO, INC.  
ISIS PHARMACEUTICALS  
ITP PARTNERS  
JOSLIN DIABETES RESEARCH CENTER  
KOREA UNIVERSITY  
KYOTO UNIVERSITY  
KYUNPOOK NATIONAL UNIVERSITY  
LAB BIOQUIMICO JARDIN PAULISTA  
LABBIOMEX  
LEUKOSITE, INC.  
LIFE TECHNOLOGIES, INC.  
LOFSTRAND LABS  
LOS ALAMOS NATIONAL LABS  
LSU MEDICAL CENTER  
MASSACHUSETTS GENERAL HOSPITAL  
MASSACHUSETTS INTITUTE TECHNOLOGY  
MAYEE WOMEN'S RESEARCH INSTITUTE  
MAYO FOUNDATION  
MCGILL UNIVERSITY  
MCMASTER UNIVERSITY  
MEDAREX, INC.  
MEDICAL COLLEGE OF GEORGIA  
MEDICAL COLLEGE OF SOUTH CAROLINA  
MERCATOR GENETICS  
MERCK AND CO.  
MIAMI UNIVERSITY  
MIAMI UNIVERSITY OF OHIO  
MICROSCIENCES INC.  
MIWON, INC.  
MOLECULAR CARDIOLOGY INSTITUTE  
MONSANTO CORPORATION  
MOUNT HOLYOKE COLLEGE  
MOUNT SINAI HOSPITAL BALTIMORE  
MOUNT SINAI MEDICAL CENTER  
NATIONAL CANCER INSTITUTE

NATIONAL INSTITUTES OF HEALTH  
NEMOURS RESEARCH FOUNDATION  
NEUROTHERAPEUTICS, INC.  
NEW YORK UNIVERSITY  
NIAGRA UNIVERSITY  
NORTH AMERICAN VACCINE  
NORTH CAROLINA STATE UNIVERSITY  
NORTHERN ARIZONA STATE UNIVERSITY  
NOVARTIS, INC.  
NPS PHARMACEUTICALS, INC.  
OHIO STATE UNIVERSITY  
ONCOGENESIS  
ORAVAX, INC.  
OREGON STATE UNIVERSITY  
ORTHO DIAGNOSTICS, INC.  
PATERNITY AND FORENSIC LABS  
PATHOGENESIS CORPORATION  
PENN STATE UNIVERSITY  
PERSEPTIVE BIOSYSTEMS, INC.

TO THE SHAREHOLDERS  
OF COMMONWEALTH  
BIOTECHNOLOGIES, INC.

[GRAPHIC]

What an amazing first full year  
of operations as a publicly  
traded corporation!

We are proud and excited to present  
to you our 1998 scientific  
marketing and financial results.

The year has been one of  
growth, innovation,  
and unprecedented recognition  
for the company.

[GRAPHIC]

1998 Highlights

January

A Richmond Times Dispatch article announced that we would construct a new \$4 million facility in Gateway Centre, Chesterfield County.

March

We received "Notice of Allowance" of all claims from the U.S. Patent Office for our lead human pharmaceutical product, HepArrest(TM). (The full patent was issued in March 1999.) We received exceptional news press for that patent, including Reuters, PRNewswire, and the Times Dispatch, to mention a few. This coverage brought us to the attention of other potential client pharmaceutical companies.

April

Pharmaceutical News Daily and the Washington Post both acknowledged HepArrest(TM). The Post noted that the rise in the market price of CBI stock "outpaced the broader market."

[GRAPHIC]

May

CBI was named winner of the Emerging Technology award sponsored by the Greater Richmond Technology Council. Former Virginia Governor George Allen accepted a directorship on our Board of Directors.

June

HepArrest(TM) was again featured in Emerging Pharmaceuticals, and CBI was named the recipient of two new Small Business Innovative Research awards from the National Institutes of Health and the United States Department of Agriculture.

[GRAPHIC]

September

CBI was featured in the Wall Street Transcript, a retail investors equity research publication. WST features Wall Street's top analysts discussing key sectors and stock picks, as well as money manager and CEO interviews.

October

CBI was accredited under the Clinical Laboratories Improvement Act (CLIA) to perform analysis of human clinical samples for the presence of known genetic markers. We also anticipate accreditation by the American Association of Blood Banks, and have participated in a validation study of the College of American Pathologists.

November

The Mattson Jack Group, an independent consulting firm, issued its report indicating a market potential of over \$250 million in worldwide sales for HepArrest(TM), assuming it meets approval by the Food and Drug Administration following clinical trials.

CBI's new facility was finished on time and on budget. We took occupancy on November 25th.

[GRAPHIC]

December

All operations and personnel were relocated in our new state-of-the-art facility by December 7.

We filed for U.S. patent protection for our new product, AccuTrac(TM).

January 1999

CBI launched AccuTrac(TM) with introduction at The Institute for Genomic Research meeting. Free samples were distributed to the major sequencing facilities in the country and around the world. AccuTrac(TM) sales represent a strong new revenue stream for CBI.



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[GRAPHIC]

#### HepArrest(TM)

CBI's lead human pharmaceutical, HepArrest(TM) is a new heparin binding peptide compound used primarily during open-heart surgery. During cardiovascular procedures, the intense blood thinning effects of the anticoagulant heparin must be reversed to restore normal blood clotting at the end of the surgery. This reversal prevents unwanted bleeding and related post-operative complications. Protamine, the only available approved antidote, causes frequent toxic side effects. If approved by the FDA, HepArrest(TM) is intended for use as a safe, effective antidote for the anticoagulant effects of heparin.

#### AccuTrac(TM)

AccuTrac(TM) is a new tool used as an aid in automated DNA sequencing. During DNA sequencing, a process called electrophoresis is applied to a sequencing reaction mixture. Molecules move quickly through an acrylamide gel because of the electric fields. AccuTrac(TM) uses a fluorescent dye label to mark each DNA "lane." DNA fragments migrate through any of 96 lanes - or tracks - within that gel. Those lanes in the gel hold the samples that are read by the automated sequencer.

With AccuTrac(TM), all 96 lanes are identified whether they contain data or not. By preventing the possible misidentifications caused by "skipped" lanes, AccuTrac(TM) removes the need for manual review and lane assignment. AccuTrac(TM) enables organizations to optimize data quality and reduce both cost and time required to process DNA samples.

[GRAPHIC]

#### Our Core Business

The mainstay of CBI continues to be its core technology business for life sciences investigations. We utilize such tools as custom synthetic organic and bioorganic chemistries, spectroscopy services, and a full complement of protein, DNA/RNA and genetic identity and analysis testing services. The resulting research generally develops into new diagnostics, new pharmaceuticals and/or greater understanding of molecular structure and function.

We have successfully recruited internationally known Senior Scientists, including most recently, a Group Leader for Human Genetic Identity and Analysis. This new scientist is charged with growing the Human Genetics aspect of our business, which we view as an expanding market.

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PHONE 800.735.9224

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FAX 804.648.2641

-----  
ADDRESS  
601 Biotech Drive  
Richmond, Virginia 23235

-----  
Email  
cbi@i2020.net

-----  
WEB PAGE  
www.cbi-biotech.com

#### Expanded Marketing Efforts

In the last quarter of 1998, nine firms signed new long-term contracts or agreements valued between \$1,245,177 and \$1,756,277 (depending on the final scope of the actual work). Also in that quarter, we contracted for 13 new molecular biology projects. By the end of December, we had 19 additional contracts and/or grants under consideration with total valuation of over \$6 million dollars. We are now adding new molecular biology projects at a rate of 3-5 per month, and serve over 700 clients worldwide.

We have done a great deal in 1998 to expand our marketing efforts. We have revised and improved our web page, and developed a new Company brochure. Fully 40% of our work comes to us over the Internet, and our new building is completely networked to our own computer server.

We look forward to 1999 with excitement. We are well on target toward another very successful year. We will continue to expand our marketing and research efforts. In 1999, we will complete the pre-clinical trials of HepArrest(TM), and are seeking strategic partners to help us commercialize it. To that end, we have retained the services of the Mattson Jack Group to assist CBI in negotiations for licensing and royalty rights. We have also filed for Canadian, European, and Japanese patent protection for HepArrest(TM).

Thanks for Your Support

We invite your questions and inquiries. You may reach us by phone, fax or e-mail. We encourage you to visit our web page or drop by our offices in Chesterfield County. We look forward to seeing you at the 1999 Annual Meeting of Shareholders, which we're holding in our new facility.

To all our hard-working employees, to our consultants, our Board of Directors and our stockholders, we say thanks.

With best regards,

/s/ Richard J. Freer, Ph.D.

/s/ Robert B. Harris, Ph.D

-----  
Richard J. Freer, Ph.D.  
Chairman of the Board

-----  
Robert B. Harris, Ph.D  
President

/s/ Thomas R. Reynolds

/s/ James H. Brennan

-----  
Thomas R. Reynolds  
Senior Vice-President, Secretary

-----  
James H. Brennan  
Controller

[GRAPHIC]

#### PART I - THE COMPANY

##### Company Overview

CBI is an example of the "new biotechnology model." Let us explain.

Traditionally, biotechnology companies are established with venture capital or seed funds, and are dependent upon getting a product to market within the first 3-5 years of their existence. By contrast, CBI was founded in 1992 to provide sophisticated research and development services on a contract basis to the biotechnology industry.

In other words, CBI does not depend on commercialization of any product for this revenue. Rather, cash generated from contract services is used to operate the Company, with small amounts used to supplement government and private grants. These grants are used to develop CBI's own intellectual properties through research and development of proprietary products.

At first, CBI was one of only a few taking this approach to biotechnology. Over time several companies have realized the merit to this business strategy. Others are now beginning to support in-house R&D efforts through development and sales of chemicals and reagents. Reagents are specialty chemicals such as AccuTrac(TM) used in the course of research.

Our clients come from private companies, academic institutions and government agencies throughout the world. Virtually all our clients are engaged in some form of Life Sciences Research, and use our technologies to provide data and results to support their individual research programs.

In general, clients fall into one of two categories: those who require a discrete set of analyses ("short-term projects"), and those who contract with the Company on an extended basis for a variety of integrated analytical services ("long-term projects"). A strong measure of customer satisfaction, both short- and long-term project customers frequently send us repeat business.

[PHOTO]

Our core business provides state-of-the-art DNA/RNA and protein/peptide technologies. We often combine these technologies with sophisticated biophysical techniques, such as calorimetry, spectroscopy and mass spectral analysis. These supplementary techniques help us understand the fundamental molecular nature of the compounds we study. This combination allows CBI to provide clients with "one-stop shopping" for biotechnology services.

We market our services using promotional brochures and our web site. Many of our clients come to us through the Web. As a matter of fact, a full 40% of all orders received in the last half of 1998 came from clients who found us on the Internet!

#### Short-Term Research Projects

On average in 1998, CBI added 24 new customers per month. Of its domestic customers, 53.3% were from private companies, while 46.7% came from university or government labs. CBI added 31 new foreign clients in 1998 from all over the world, including North and South America, Europe, Asia and the Near East.

#### Customer Sources

CBI advertises through professional journal ads, trade show exhibits and our web site. Potential customers are able to download order forms directly from the web site, or actually place the order electronically if desired. CBI is also cross-listed on several biotechnology, biochemistry, and molecular biology search services, allowing customers to find us using simple key-word search terms.

[GRAPHIC]

WORLD MAP

Total new foreign clients in 1998: 31  
Biotechnology is truly a global industry!

Argentina, Australia, Canada, China, Columbia, Denmark, Germany, Greece, Hong Kong, India, Israel, Italy, Japan, Korea, Mexico, Malaysia, Norway, Spain, Sweden, Switzerland, United Kingdom, Uruguay

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[PHOTO]

Favorable word-of-mouth advertising has brought us many new customers. We often receive inquiries from several new investigators within a single research-based institution.

All inquiries receive immediate and personal attention. With our "fax on demand" service, clients can easily request information about our services 24 hours a day. Customers continue to comment favorably on their phone, fax, and e-mail interactions with CBI staff.

#### Long-Term Research Projects

CBI is committed to identifying long-term contracts. These provide a reliable revenue source, often allowing us to add to our scientific staff. During 1998, one of our major long-term contractual clients took much of their work back "in-house" due to a change in their corporate philosophy. Loss of this revenue stream did affect CBI's bottom line throughout fiscal year 1998.

We mounted a recovery by signing nine new long-term contracts or agreements in the last quarter, valued up to \$1,756,277 (depending on the scope of the work to be done). As of December, we had over 19 additional long-term contracts pending with a total valuation of over \$6 million dollars. CBI will continue to focus on signing long-term contractual clients throughout 1999.

#### New Technologies at CBI

#### Genetic Analysis

After establishing a Genetic Testing Group, CBI was registered under the Clinical Laboratories Act (CLIA), with pending accreditation by the Virginia Department of Health. Registration under the CLIA guidelines enables CBI to accept human clinical samples, and to perform

[GRAPHIC]

"In 1997 paternity testing performed at AABB-certified laboratories was an \$87 million market!"

analyses of those samples for the presence of genetic markers for known human pathologies. For example, we have already begun analysis for a long-term contract client to detect the presence of the "p53 gene," a marker for cancer.

CBI is also prepared to begin sample analysis for the presence of many other marker genes. In 1999, we will focus our marketing efforts on making Genetic Analysis a larger revenue-producing technology for CBI.

#### Identity Testing and Paternity Testing by Genetic Analysis

We have established a DNA Reference Laboratory in our new facility containing all the necessary work areas required to provide genetic identity and paternity testing.

#### DNA Identity Testing

In 1998, the National Forensic Science Technology Center (NFSTC) accredited CBI to perform DNA identity testing for submission of data into the Combined DNA Index System (CODIS) database. CODIS is used by the FBI to compare DNA fingerprints (traces) from crime scenes with that of known felons. CBI is one of only eight commercial facilities nationwide NFSTC has accredited to perform criminal DNA database testing for submission into CODIS. CBI has already submitted bids for performing DNA fingerprint analysis for the Departments of Criminal Justice in different states.

#### Paternity Testing

We expect accreditation soon by the American Association of Blood Banks (AABB). We have also participated in validation study through the College of American Pathologists (CAP). Through these two organizations, we are now ready to begin offering paternity testing to the general public and to various state and federal agencies. A fact well worth noting, according to a 1998 report from the AABB, paternity testing in 1997 performed at AABB-certified laboratories was an \$87 million market! In 1999, CBI will aggressively market its capabilities in these areas.

[PHOTO]

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#### Agricultural/Veterinary Genetic Testing Services

CBI has also been accredited by the U.S. Department of Agriculture to receive bovine DNA samples from Europe. We can now perform bovine genetic, lineage, and identity analysis. CBI participated in an international study to validate bovine DNA identity testing in conjunction with a study group located in Denmark. We are also establishing the capacity for DNA identity testing in horses.

#### Molecular Biology

Our recent focus on identifying clients who are looking for comprehensive molecular biology services is beginning to pay off. In the last quarter of 1998, we initiated more than 15 individual molecular biology projects, more than five times the number of projects undertaken at CBI since its inception. Often, these contracts call for CBI to clone a gene, overproduce the protein, and characterize the particular protein product. Many proteins are vaccines, antibodies, or components of diagnostic kits. CBI is unique in that it has all of the services in-house to complete this type of project.

We attribute this success in the molecular biology services to concerted marketing efforts, to the addition of highly competent scientists, and to favorable word-of-mouth advertising. Throughout 1999, we intend to expand these

services by offering large scale bacterial fermentation to our clients, which allows us to overproduce large amounts of particular proteins.

#### Proprietary Research & Development

As a rule, CBI does not retain intellectual property rights on work done for its short-term clients, and rarely retains intellectual property rights for work done for its long-term clients. However, CBI is actively pursuing R&D programs to develop its own products. HepArrest(TM) is a prime example, the U.S. patent for which was issued in March 1998. In addition, CBI has filed for Canadian, Japanese, and European patents for HepArrest(TM). CBI has also filed for U.S. patent protection for AccuTrac(TM).

#### Growth Strategy

In 1999, our focus will be to increase our various revenue lines through expanded advertising and marketing efforts. We will be more select in the trade shows we attend, to carefully target our markets. We have also hired a West Coast sales account executive to help move CBI to the forefront of biotechnology contract firms in that region.

We have identified a director for the Human Genetics and Identity division of CBI. Dr. Douglas Oliveri, formerly of Applied Genetics, Inc., Austin, Texas, is a recognized leader in the field of Human Genetics and Identity, who will help grow this segment of CBI's services.

Dr. Oliveri can provide expert testimony in paternity and forensic court cases.

We continue to expand our instrumentation capacity to both maintain and expand our long-term client base, and to attract additional customers as well. The Company continually seeks to identify trends, and to develop related new products and services to meet the changing needs of our customers.

[GRAPHIC]

CBI has been accredited by the United States Department of Agriculture to receive bovine DNA samples from Europe to perform genetic, lineage, and identity analysis.

[PHOTO]

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## PART II - Stockholder Matters

### Market for Common Equity

The Company completed its initial public offering of Common Stock on October 28, 1997 at a price per share of \$6.00. Since that time, the Common Stock has traded on the NASDAQ Small Cap Market ("NASDAQ"). The following table sets forth the range of high and low sales price per share of Common Stock for 1998.

<TABLE>

<CAPTION>

Period	High Stock Price	Low Stock Price
<S>	<C>	<C>
1st Quarter, 1998	\$ 10.50	\$ 7.50
2nd Quarter, 1998	\$ 11.25	\$ 9.00
3rd Quarter, 1998	\$ 10.75	\$ 5.625
4th Quarter, 1998	\$ 9.875	\$ 5.50

</TABLE>

On March 1, 1999, the last reported sales price for a share of the Company's Common Stock on NASDAQ was \$8.625. As of March 1, 1999, there were 70 holders of record of the Company's Common Stock and approximately 771 beneficial holders.

The Company has not paid any cash dividends on its Common Stock. The Company intends to retain its earnings to finance the growth and development of its business and does not expect to declare or pay dividends in the foreseeable future. The declaration of dividends is within the discretion of the Company. However, the Company's ability to pay dividends may be constrained by certain

provisions of its industrial revenue bond financing.

#### Selected Financial Data

Set forth below is selected financial data with respect to the Company for the years ended December 31, 1998 and December 31, 1997, which has been derived from the audited financial statements of the Company. The selected financial data set forth below should be read in conjunction with "Management's Discussion and Analysis of Financial Conditions and Results of Operation."

Management's Discussion  
and Analysis of Financial  
Condition and Results  
of Operation.

The following should be read in conjunction with "Selected Financial Data" and the Company's Audited Financial Statements and Notes thereto included herein.

<TABLE>  
<CAPTION>

	For the Years Ended	
	December 31, 1998	December 31, 1997
<b>Operational Data:</b>		
Revenues 1,761,308	\$ 1,604,267	\$ 1,761,308
Net Loss (1,168,821)	\$ (2,096,937)	\$ (1,168,821)
Loss Per Common Share, Basic and Diluted (3.55)	\$ (1.29)	\$ (3.55)
Weighted Average Common Shares Outstanding 329,480	\$ 1,622,340	\$ 329,480
<b>Balance Sheet Data:</b>		
Total Current Assets 6,489,965	\$ 2,471,022	\$ 6,489,965
Total Assets 7,931,606	\$ 10,401,182	\$ 7,931,606
Total Current Liabilities 624,250	\$ 1,114,563	\$ 624,250
Total Liabilities 624,250	\$ 5,114,563	\$ 624,250
Total Stockholders Equity 7,307,356	\$ 5,286,619	\$ 7,307,356

</TABLE>

#### Overview

The Company's revenues are derived principally from providing macromolecular synthetic and analytical services to researchers in the biotechnology industry

or who are engaged in life sciences research in government or academic labs throughout the world. Development of innovative technologies for biotechnology requires sophisticated laboratory techniques and the Company provides these services to customers on a contract basis.

The Company generally derives revenue from two types of customers: those who require a discrete set of services ("short-term projects"), and those who contract with the Company on an extended basis for performance of a variety of integrated services ("long-term projects"). More often than not, the Company's customers provide repeat business to the Company.

The Company also derives revenues from government grants which fund the bulk of the Company's research efforts for its proprietary technologies. Unlike its short-term or long-term contract services, research and development on the Company's proprietary technologies focuses on commercializing technologies the Company owns or licenses from third parties. All government grants are expense reimbursement grants which provide for reimbursement on a monthly basis of the Company's direct costs incurred in a research project, plus indirect costs stated as a percentage of direct costs.

During 1998, the Company developed AccuTrac(TM), a new reagent, which facilitates the process of automated DNA sequence analysis. In this respect, the Company hopes to broaden its revenue base by direct sales of this reagent to its customers and anticipates selling AccuTrac(TM) to its customers in 1999.

#### Revenues

Gross revenues decreased by \$157,041 or 8.9% from \$1,761,308 during the year ended December 31, 1997 ("1997") to \$1,604,267 during the year ended December 31, 1998 ("1998").

#### Short-Term Projects

Revenues realized from short term projects, which is included in the Statement of Operations as Laboratory Services, increased by \$22,698, or 2.7%, from \$853,810 during 1997 to \$876,508 during 1998. Revenues from peptide synthesis increased by \$47,424 or 34.6% from \$137,210 during 1997 to \$184,632 during 1998. Revenues attributable to protein sequencing increased by \$43,840, or 55.1%, from \$79,545 during 1997 to \$123,385 during 1998. Revenues derived from both peptide synthesis and protein sequencing increased primarily due to new customers placing orders with the Company, and to repeat large orders from existing customers.

Revenues from amino acid analysis decreased by \$18,368, or 28.1%, from \$65,282 during 1997 to \$46,914 during 1998. This decrease is primarily due to one of the Company's major clients ceasing its out-source research program with the Company.

Other "uncategorized" revenues decreased by \$50,214 or 36.8% from \$136,541 during 1997 to \$86,327 during 1998. This decrease is primarily due to administrative changes in invoicing; revenues previously identified as "Other" are now more properly classed under defined work items within the Company. Revenues realized from other core technologies remained essentially constant.

#### Long-Term Projects

Revenues realized from various long-term projects, which is included in the Statement of Operations as Contract Research, decreased by \$94,552, or 16.8%, from \$561,007 during 1997 to \$466,455 during 1998. This decrease is primarily due to the delay in the awarding of new research contracts for 1998, which has the effect of shifting revenue from 1998 to future periods. As mentioned under the category of Short-Term Projects, this decrease is also due to the cutbacks in outsourced services by one of the Company's principal clients. As of December 1998, the Company had approximately 15 additional long-term contract proposals pending with many different potential customers. Although the Company's Management is taking an active role in negotiating these new contracts, management is unable to say with certainty when or whether these other new long-term contracts will be awarded.

#### Research Grants

The Company experienced a decrease in revenue realized from government grants in the amount of \$85,187, or 24.6%, from \$346,491 during 1997 to \$261,304 during 1998. This decrease is primarily due to completion of work on two grants. During 1998, the Company had one ongoing Phase II Small Business Technology Research grant (SBTR) grant from the National Institutes of Health (NIH). In addition, during 1998, the Company was awarded a (\$200,000) Phase II Small Business

Innovative Research Award (SBIR) from the United States Department of Agriculture (USDA) for development of a Diagnostic for Equine Infectious Anemia Infection. Revenues earned through December 31, 1998 amounted to \$32,500. The Company anticipates to complete the project by August, 2000. The Company was also awarded a Phase I SBIR (\$100,000) from the NIH for development of rapid assay methods for the detection of Botulism. Revenues earned through December 31, 1998 amounted to \$62,421. The Company anticipates completion of the project by April 1999. Work began in late September on both grants.

The biotechnology industry is currently progressing through a consolidation stage wherein some potential customers are cutting back on research and development, while others are trying to perform their own research services in-house. In either situation, there is a reduced dependence on the Company to perform its services for customers. If this trend continues, the Company expects that it may derive a larger portion of its revenues from laboratory services. Thus, the Company may experience a pronounced shift from contract research to laboratory services, which may result in a less predictable revenue stream.

The Company experiences quarterly fluctuations in all revenue categories. Engagements for all future projects are highly dependent upon the customer's satisfaction with the services previously provided, and upon factors beyond the Company's control, such as the timing of product development and commercialization programs of the Company's customers. The Company is unable to predict for more than a few months in advance the volume and dollar amount of future projects in any given period. The combined impact of commencement and termination of research contracts from several large customers and unpredictable fluctuations in revenue for laboratory services can result in very large fluctuations in financial performance from period to period.

#### Expenses

Cost of services consists primarily of labor and laboratory supplies. The cost of services increased by \$331,328, or 41.7%, from \$794,236 during 1997 to \$1,125,564 during 1998. The cost of services as a percentage of revenue was 45.1% and 70.2% during 1997 and 1998, respectively.

#### Direct Labor

Labor costs increased by \$172,670, or 50.9%, from \$338,994 during 1997 to \$511,664 during 1998. The increase in labor costs reflects the Company's growth strategy as more qualified personnel are hired full-time to perform the laboratory services. In 1998, the Company was fully staffed for the entire year, but 1997 labor costs reflect only nine months operations with the same number of employees. In addition, in 1998, fringe benefits for all employees associated with laboratory services were allocated to compensation and benefits under labor. Total costs associated with the increase in fringe benefits amounted to \$42,492. Fringe benefits during 1997 were recorded under general and administrative.

#### Direct Materials

The costs for direct materials increased by \$106,357, or 25.2%, from \$421,612 during 1997 to \$527,969 during 1998. These increased costs are directly attributable to the increased purchase of reagents, chemicals and miscellaneous materials used in all the laboratories, and increases in market prices of raw materials as well as relatively higher costs for specialized reagents necessary to perform analyses that the Company was not offering in 1997, such as automated C-terminal sequence analysis.

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#### Other Costs

"Other costs" (travel, equipment rental, maintenance of equipment, etc.) increased by \$58,906 or 218.0% from \$27,025 during 1997 to \$85,931 during 1998. This increase was due to the rental of instrumentation necessary to be validated for a particular set of DNA analysis (\$20,293). The Company sought validation on this particular instrument because it was required for submission of a long-term contract proposal. The instrument was returned and the lease terminated when the Company was not awarded the contract. Other increases included, repairs and maintenance on equipment (\$23,164), and freight delivery to the Company's clients (\$5,861).

#### Selling, General, and Administrative

Sales, general and administrative expenses ("SGA") consist primarily of compensation and related costs for administrative, marketing and sales personnel, facility expenditures, professional fees, consulting, taxes, and



depreciation. Total SGA costs increased by \$947,610, or 73.1%, from \$1,297,005 during 1997 to \$2,244,615 during 1998. As a percentage of revenue, these costs were 73.6% and 139.9% during 1997 and 1998, respectively.

#### Compensation and Benefits

Total Compensation and Benefits increased by \$162,111 or 26.1% from \$620,722 during 1997 to \$782,833 during 1998. The increase is primarily attributable to addition of the Company's executive officers to the payroll on a full-time basis during 1998. These executive officers were full time employees of the Company for only six months during 1997. Salary and benefit costs also increased due to various support personnel hired to assist in implementing the Company's growth strategy.

#### Facility Costs

Costs for facilities increased by \$151,861, or 168.8%, from \$89,984 during 1997 to \$241,845 during 1998. The costs for leasing of additional laboratory space for its operations increased by \$95,104 from 1997 to 1998. Additional space during 1998 was necessary to support the Company's expanded technology offerings. Once the Company relocated to its new facility in late November, 1998, the Company cancelled its contract on all its leased space. Other facility costs include increases in telephone use (\$8,767), waste disposal (\$32,402), and electricity (\$18,909).

#### Professional Services

Professional fees increased by \$10,221 or 7.9%, from \$128,946 during 1997 to \$139,167 during 1998. This increase was primarily due to legal and accounting costs associated with the year-end audit, quarterly accounting reviews, general legal support, legal costs associated with obtaining patents, and corporate liability insurance costs. Consulting fees increased by \$11,496 or 23.2% from \$49,504 during 1997 to \$61,000 during 1998. Consulting fees include payments made to Board members for four regularly scheduled Quarterly Board meetings during 1998, compared to two meetings during 1997. Taxes and License fees increased by 31,901 or 267.3% from 11,934 during 1997 to \$43,835 during 1998. This increase is associated with the paying of property taxes based on equipment purchased during 1997 and 1998.

#### Depreciation Expense

Depreciation increased by \$153,735 or 98.4% from \$156,198 during 1997 to \$309,933 during 1998. Increased depreciation costs are attributable to the purchase of additional laboratory equipment consistent with expanding the Company's technology base, and the first month of depreciation on the Company's new corporate facility.

#### Other Costs

Other costs increased by \$61,618 or 169.1% from \$36,436 during 1997 to \$98,054 during 1998. This increase was primarily attributable to the relocation costs from the move to the new corporate offices.

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#### Marketing

Marketing costs increased by \$254,780 or 257.4%, from \$98,982 during 1997 to \$353,762 during 1998. Salaries and fringe benefits, expenditures for a new brochure, additional advertising in the professional journals, contract costs with a media relations firm, travel, and trade show expenditures contributed to these increased costs.

In September, 1998, the Company entered into a contract with the Mattson Jack Group to perform a global market assessment of the Company's potential human therapeutic, HepArrest(TM). Total costs during 1998 of the Mattson Jack Group contract amounted to \$101,083.

#### Selling

Expenditures during 1998 for selling amounted to \$76,351. Costs associated with selling include personnel, travel, and office expenses. During 1998, the Company hired an Account Executive for the Eastern Region to identify new clients. There were no expenses for Selling during 1997. Selling expenditures have been incurred in 1998 as part of the Company's growth strategy.

## Research and Development

Research and development costs within the Company fall into two general categories: grant-related research and development, and in-house research and development. These categories are distinguished in the Company by those performed in support of government grant-sponsored programs, and those performed in the absence of such grants and funded from working capital. Total expenditures for these two categories decreased by \$99,862, or 17.4%, from \$574,860 during 1997 to \$474,998 during 1998. Total grant-related research and in-house research as a percentage of revenue were 32.6% and 29.6% during 1997 and 1998, respectively.

## Grant Related Research Activities

Expenditures to perform grant-related research activities decreased by \$195,017, or 49.0%, from \$397,974 during 1997 to \$202,957 during 1998. All of the Company's grant-related expenditures are reimbursed from the appropriate governmental agency. This decrease is mainly due to completion of on-going research programs during 1998.

## In-house Research Activities

Expenditures made by the Company for in-house research activities increased by \$95,155 or 53.8%, from \$176,886 during 1997 to \$272,041 during 1998. The Company is actively engaged in establishing fundamental methods for genetic testing for agricultural and human applications, in developing methods of genome sequence analysis, and in pursuing fundamental research related to potential uses of HepArrest in drug formulation.

During 1998, as a direct result of the Company's in-house research and development efforts, the Company perfected AccuTrac(TM) as a reagent to facilitate automated DNA sequence analysis. The Company's in-house research efforts in 1998 resulted in registration under the Clinical Laboratories Improvement Act (CLIA), with pending accreditation by the Virginia Department of Health. Registration under CLIA guidelines allows the Company to perform analysis of human clinical samples for the presence of known genetic markers. Further, in 1998, as a result of the Company's in-house research and development efforts, the Company received accreditation by the United States Department of Agriculture to receive bovine DNA samples from Europe to perform genetic, lineage, and identity analysis and lastly, the Company passed another accreditation level with the National Forensic Science Technology Center (NFSTC) to perform DNA identity testing for submission of data into the Combined DNA Index System (CODIS) data base.

## Other Interest Income and Interest Expenses

Interest income is derived from investing the unused portion of the funds realized by the Company from the private placement of convertible notes in June 1997, and initial public offering of common stock in October 1997. Interest income is also derived from investing the unused portion of the funds realized by the Company from the successful sale (March 1998) of Industrial Revenue Bonds (IRBs) for construction of the Company's new facility.

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## Interest Income

Interest income to the Company increased by \$236,631, or 257.2% from \$91,997 during 1997 to \$328,628 during 1998. Interest income realized from unused funds from the IPO increased by \$148,056, or 160.8% from \$92,039 during 1997 to \$240,095 during 1998. Interest income earned from the unused portion of the funds realized from the sale of IRBs amounted to \$88,532. There was no interest income earned from the unused portion of the funds realized from the sale of IRBs during 1997.

## Interest Expense

Interest costs incurred by the Company during 1998 included (1) interest paid to financial institutions on loans made to the Company; (2) interest paid to the Trustee for the Company's IRBs; and (3) amortization of bond costs incurred as a consequence of the completion of the Company's IRB financing. Interest costs incurred by the Company during 1997 included (1) interest paid to financial institutions on loans made to the Company; (2) interest expense related to a one time charge as a result of issuance of the Notes in June 1997; and (3) amortization of loan costs associated with the Company's private placement of

\$3,000,000 aggregate principal amount of convertible notes.

Interest expenses decreased by \$54,871 or 23.7% from \$231,108 during 1997 to \$176,237 during 1998. During 1997, the Company experienced a one-time charge to interest expense amounting to \$204,039 as a result of issuance of the convertible notes in June 1997. Interest paid to financial institutions remained relatively constant in both 1997, \$27,069, and 1998, \$29,425. The total outstanding principal amount of these loans as of December 31, 1998, was \$249,680. Interest expense paid to the Trustee for the Company's IRBs was \$146,812 during 1998. There was no interest expense associated with the IRB's in 1997. Bond amortization cost decreased by \$116,500 from \$124,918 during 1997 to \$8,418 during 1998. The 1998 amortization represents loan amortization costs for the new facility as compared to 1997 costs for the amortization of loans associated with the Company's private placement of \$3,000,000 aggregate principal amount of convertible notes.

For the Year Ended December 31, 1997  
versus December 31, 1996

#### Revenues

Gross revenues increased by \$771,382 or 77.9%, from \$989,925 during the fiscal year ended December 31, 1996 ("1996") to \$1,761,308 during the fiscal year ended December 31, 1997 ("1997").

Revenues realized from laboratory services increased \$371,224 or 76.9% from \$482,586 in 1996 to \$853,810 in 1997, with the DNA sequence analysis service showing the largest percentage revenue increase, in the amount of \$220,599 or 144.9% from \$152,256 in 1996 to \$372,855 in 1997. Revenues attributable to peptide synthesis increased by \$74,572 or 119.1%, from \$62,638 in 1996 to \$137,210 in 1997.

Revenue realized from various contract research projects increased by \$234,232 or 71.7%, from \$326,776 in 1996 to \$561,007 in 1997. This increase was due primarily to funds received in early 1997 from one major private industry customer.

In addition, the Company experienced an increase in revenue realized from government grants in the amount of \$165,928 or 91.9% from \$180,563 in 1996 to \$346,491 in 1997. These grants were provided by the National Institutes of Health and the United States Department of Agriculture, under the auspices of two different Small Business Technology Transfer Research Grants and a Small Business Innovative Research award. The government grants are expense reimbursement grants which provide for reimbursement of the Company's direct costs incurred, plus indirect costs as a percentage of direct costs. The Company generally receives grant payments semi-monthly, with the amount of each payment being determined by the amount of the costs incurred in the immediately preceding two week period.

Management believes that this increase in revenue is primarily attributable to an expanded customer base and to larger orders from individual customers, both of which result from the Company's enhanced reputation in the industry, and to more effective advertising activities.

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The Company experiences quarterly fluctuations in revenues which arise primarily from variations in research contracts. Revenue fluctuations also result from the dynamic nature of the Company's laboratory services. Engagement for subsequent projects is highly dependent upon the customer's satisfaction with the services previously provided, and upon factors beyond the Company's control, such as the timing of product development and commercialization programs of the Company's customers. The Company is unable to predict for more than a few months in advance the volume and dollar amount of future projects in any given period. The combined impact of commencement and termination of research contracts from several large customers and unpredictable fluctuations in revenue for laboratory services can result in very large fluctuations in financial performance from quarter to quarter.

The biotechnology industry is currently progressing through a consolidation stage wherein some potential customers are cutting back on research and development, while others are trying to perform their own research services in-house. In either situation, there is a reduced dependence on the Company to perform its services for customers. If this trend continues, the Company expects that it may derive a larger portion of its revenues from laboratory services. Thus, the Company may experience a pronounced shift from contract research to laboratory services, which may result in a less predictable revenue stream.

Performance of contract research for five customers was completed in 1997. Two of these customers have initiated new contract research projects with the Company, and in addition, the Company has signed three additional research

contracts which began in January 1998. The Company has bids for several contracts pending, an award of any of which would have a significant impact on revenues.

#### Expenses

Cost of services consists primarily of labor and laboratory supplies. Cost of services increased by \$556,510 or 234.1% from \$237,726 in 1996 to \$794,236 in 1997. The cost of services as a percentage of revenue was 24.0% and 45.1% in 1996 and 1997, respectively. These increased costs are directly attributable to hiring new personnel, to acquisition of reagents, chemicals, materials and so forth necessary to implement the Company's growth strategy. Labor costs increased by \$234,291 or 223.8% from \$104,703 in 1996 to \$338,994 in 1997. The cost of reagents increased by \$131,338 or 307.6% from \$42,700 in 1996 to \$174,038 in 1997. The cost of miscellaneous materials increased by \$142,236 or 500.8% from \$28,404 in 1996 to \$170,641 in 1997. The cost of services is subject to fluctuation and can cause results of operations to fluctuate from quarter to quarter, particularly if the Company purchases supplies but does not record the revenue from the performance of services until a subsequent quarter.

Sales, general and administrative expenses consist primarily of compensation and related costs for administrative personnel, depreciation and amortization, professional fees and advertising. Sales, general and administrative expenses increased by \$973,186 or 300.5% from \$323,820 in 1996 to \$1,297,005 in 1997. Sales, general and administrative expenses as a percentage of revenue were 32.7% in 1996 and 73.6% in 1997. Compensation and benefit expenses increased by \$507,739 or 449.4% from \$112,983 in 1996 to \$620,722 in 1997. This was due in large part to the full-time employment of the four founders of the Company and to payment of bonuses to the executive officers totalling \$150,000. Also included in compensation and benefit expenses is a \$60,000 bonus paid to a former officer of the Company. Rent payments increased by \$60,850 or 733.9% from \$8,291 in 1996 to \$69,641 in 1997. Professional fees increased by \$62,025 or 145.8% from \$42,544 in 1996 to \$104,569 in 1997. This increase was primarily due to the Company's need for additional outside business and scientific consulting expertise. Depreciation increased by \$104,262 or 200.8% from \$51,936 in 1996 to \$156,198 in 1997. Increased depreciation was attributable to the purchase of additional equipment in the latter part of 1997.

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Expenditures for government grant-related research and development activities increased by \$138,911 or 118.2% from \$117,544 in 1996 to \$256,455 in 1997. Expenditures to perform research and development for establishing fundamental technologies in the Company, or expended in performance of grant-related research activities supplemented by the Company increased by \$149,683 or 550.2% from \$27,203 in 1996 to \$176,886 in 1997. Expenditures for research and development performed on behalf of contract research customers decreased by 13.6% or \$22,219 from \$163,737 in 1996 to \$141,518 in 1997. Research and development activities performed by third parties at the behest of the Company amounted to \$56,750 in 1997, and were zero in 1996. Total research and development costs as a percentage of revenue were 31.2% in 1996 and 32.6% in 1997.

#### Other Income and Expenses

The Company realized interest income in 1997 of \$91,997; there was essentially no interest income in 1996. The increase in interest income was primarily due from investing the funds from the Private Placement (as described below) and the Company's initial public offering.

Interest paid by the Company in 1997 included (1) interest paid to financial institutions on loans made to the Company; (2) interest expenses associated incurred as a consequence of completion of the Private Placement in June, 1997; and (3) interest expenses for amortization of loan costs also incurred as a consequence of the completion of the Private Placement.

Interest paid to financial institutions on loans made to the Company increased by \$16,968 or 167.9% from \$10,101 in 1996 to \$27,069 in 1997. The Company experienced an increase in interest expenses associated with the Private Placement of \$204,039 in 1997, and an increase in amortization of loan costs associated with the Private Placement of \$124,918.

#### Liquidity and Capital Resources

Consistent with the Company's implementation of its growth strategy, 1998 showed a decrease in net operating cash flow in the amount of \$1,788,671, as compared to a decrease of \$711,615 in 1997. This decrease in both years is due to substantial investments being made by the Company in personnel, equipment,

sales, and marketing efforts, and these cost outlays were made possible by capital realized from the Company's Private Placement of convertible notes and initial public offering of common stock. The use of cash in 1998 was fully anticipated by management. However based on expected cash out-flow, management anticipates that unless the Company becomes profitable, the remaining cash available invested by the Company will be needed for general operations.

Net working capital as of December 31, 1997 and December 31, 1998 was \$5,865,715 and \$1,356,458 respectively. This decrease is a direct result of capital expenditures on new scientific instrumentation, computers, and furniture and fixtures (\$956,547), costs associated with the new facility (\$1,694,868), implementation of marketing and selling divisions within the Company (\$430,113), and costs associated with additional staffing and direct materials necessary to expand the Company's technology offerings (\$1,427,719).

IRBs sold by the Company (in the amount of \$4,000,000) were issued by the Virginia Small Business Financing Authority. The IRBs were issued pursuant to an Indenture of Trust dated March 15, 1998, between the Virginia Small Business Financing Authority and Crestar Bank, a Virginia banking association, the named Trustee. The IRBs were issued and sold to facilitate construction of the Company's facility in the Gateway Centre Development at 601 Biotech Drive in Chesterfield County, Virginia. Funds generated by the sale of the IRBs are restricted and may only be used for the construction of the Company's new facility. Construction of the new facility began in early June and was completed in late November 1998. Of the \$4,000,000 issued by the Virginia Small Business Financing Authority, \$402,991 remains as restricted cash on the balance sheet of the Company as of December 31, 1998. All of the Company's administrative and research operations have been consolidated into this facility and were fully operational by mid December 1998.

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#### Year 2000 Project

The Company is working to resolve the potential impact of the Year 2000 on the ability of the Company's computerized information systems to accurately process information that may be date-sensitive. Any of the Company's programs that recognize a date using "00" as the year 1900 rather than 2000 could cause errors or system failures. The Company is in the process of making its assessment of the potential impact of the Year 2000 issue. As of March 1, 1999:

- o The Company's financial institutions are in the process of addressing Year 2000 compliance issues. These financial institutions anticipate completion of this review in the first quarter of 1999.
- o During 1998, the Company upgraded its general accounting system to a Year 2000 compliant version.
- o The Company is in the process of updating its payroll system to meet Year 2000 compliance standards, and will complete this effort by the end of the first quarter of 1999.
- o The Company is currently evaluating older equipment to see if such equipment meets Year 2000 compliance standards and anticipates completion of this review during the second quarter of 1999.
- o The Company believes that all equipment purchased during 1998 is Year 2000 compliant.
- o The Company believes that equipment performing analytical data research is not date sensitive, and, therefore, will not have to be replaced or improved.
- o The Company is currently communicating with suppliers and customers to determine the extent to which they have addressed Year 2000 issues. Of the Company's 10 major suppliers, a majority is either Year 2000 compliant or expects to be in compliance by the end of the second quarter of 1999. The Company is in the process of contacting customers to see if their business operations are Year 2000 compliant. As of March 1, 1999, the Company contacted twenty three percent of its customers. The Company expects to complete its Year 2000 compliance assessment of its suppliers and customers during the first and second quarters of 1999.

The Company believes that it will complete its Year 2000 program by the end of the third quarter of 1999. The Company expects that the costs associated with Year 2000 compliance will not exceed \$30,000, and will not have an adverse material impact on the Company's financial position.

Management has included herein certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. When used, statements not historical in nature, including the words "anticipated," "estimate," "should," "expect," "believe," "intend," and similar expressions are intended to identify forward-looking statements. Such statements are, by their nature, subject to certain risks and uncertainties.

Among the factors that could cause the actual results to differ materially from those projected are the following:

- o Business conditions and the general economy
- o The development and implementation of the Company's long-term business goals, including new areas of expertise, such as paternity testing, DNA testing in horses, and large scale bacterial fermentation
- o The federal, state and local regulatory environment
- o Lack of demand for the Company's services
- o The ability of the Company's customers to perform services similar to those offered by the Company "in-house"
- o Potential cost containment by the company's customers resulting in fewer research and development projects
- o The Company's ability to receive accreditation to provide various services, including, but not limited to paternity testing
- o The Company's ability to hire and retain highly skilled employees
- o The Company's ability to obtain foreign patent protection for HepArrest

Other risks, uncertainties, and factors that could cause actual results to differ materially from those projected are detailed from time to time in reports filed by the Company with the Securities and Exchange Commission, including Forms 8-K, 10-QSB, and 10-KSB.

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[LOGO]

McGLADREY & PULLEN, LLP

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Certified Public Accountants and Consultants

Independent Auditor's Report

To the Board of Directors and Stockholders  
Commonwealth Biotechnologies, Inc.  
Richmond, Virginia

We have audited the accompanying balance sheet of Commonwealth Biotechnologies, Inc. as of December 31, 1998 and the related statements of operations, changes in stockholders' equity, and cash flows for the year then ended. 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 audit. The financial statements of Commonwealth Biotechnologies, Inc. for the year ended December 31, 1997 were audited by other auditors whose report, dated February 9, 1998, expressed an unqualified opinion.

We conducted our audit 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 audit provides a reasonable basis for our opinion.

In our opinion, the 1998 financial statements referred to above present fairly, in all material respects, the financial position of Commonwealth Biotechnologies, Inc. as of December 31, 1998, and the results of its operations and its cash flows for the year then ended, in conformity with generally accepted accounting principles.

/s/ McGLADREY & PULLEN, LLP

Richmond, Virginia  
January 22, 1999

## Commonwealth Biotechnologies, Inc.

## BALANCE SHEETS

December 31, 1998 and 1997

&lt;TABLE&gt;

&lt;CAPTION&gt;

	1998	1997
<S>	<C>	<C>
Assets		
Current Assets		
Cash and cash equivalents	\$ 2,091,586	\$ 6,273,765
Accounts receivable (Note 3)	302,936	153,227
Prepaid expenses	76,500	62,973
Total current assets	2,471,022	6,489,965
Property and Equipment, less accumulated depreciation		
1998 \$597,671; 1997 \$290,970 (Notes 2, 3 and 4)	7,263,788	1,435,812
Other Assets		
Bond issuance costs, less accumulated amortization \$8,418	260,181	--
Restricted cash (Note 4)	402,991	--
Deposits and other	3,200	5,829
Total other assets	666,372	5,829
	\$ 10,401,182	\$ 7,931,606
Liabilities and Stockholders' Equity		
Current Liabilities		
Demand note payable (Note 3)	\$ 249,680	\$ 314,680
Accounts payable and other current liabilities	797,597	309,570
Deferred revenue	67,286	--
Total current liabilities	1,114,563	624,250
Bonds Payable (Note 4)	4,000,000	--
Total liabilities	5,114,563	624,250
Commitments (Note 6)		
Stockholders' Equity		
Common stock, no par value, 10,000,000 shares authorized, 1998 1,633,214; 1997 1,620,514, shares issued and outstanding	--	--
Additional paid-in capital	8,838,664	8,762,464
Accumulated deficit	(3,552,045)	(1,455,108)
Total stockholders' equity	5,286,619	7,307,356
	\$ 10,401,182	\$ 7,931,606

&lt;/TABLE&gt;

See Notes to Financial Statements.

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## Commonwealth Biotechnologies, Inc.

## STATEMENTS OF OPERATIONS

Years Ended December 31, 1998 and 1997

&lt;TABLE&gt;

&lt;CAPTION&gt;

	1998	1997
<S>	<C>	<C>

Revenue (Note 7):		
Laboratory services	\$ 876,508	\$ 853,810
Contract research	466,455	561,007
Government grants	261,304	346,491
-----		
Total revenue	1,604,267	1,761,308
-----		
Costs and expenses:		
Cost of services	1,125,564	794,236
Sales, general and administrative	2,244,615	1,297,005
Research and development	474,998	574,859
-----		
Total costs and expenses	3,845,177	2,666,100
-----		
Operating loss	(2,240,910)	(904,792)
-----		
Other income (expense):		
Interest expense (Note 4)	(184,655)	(356,026)
Interest income	328,628	91,997
-----		
Total other income (expense)	143,973	(264,029)
-----		
Net loss	\$ (2,096,937)	\$ (1,168,821)
=====		

Loss per common share, basic and diluted	\$ (1.29)	\$ (3.55)
=====		

</TABLE>

See Notes to Financial Statements

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Commonwealth Biotechnologies, Inc.

STATEMENTS OF CHANGES IN STOCKHOLDERS' EQUITY  
Years Ended December 31, 1998 and 1997

<TABLE>  
<CAPTION>

	Number of Shares Outstanding	Additional Paid-In Capital	Accumulated Deficit	Total
-----				
<S>	<C>	<C>	<C>	<C>
Balance, January 1, 1997	71,273	\$ 135,422	\$ 26,847	\$ 162,269
Contributed services (Note 5)	--	36,346	--	36,346
Distribution to stockholders	--	--	(96,851)	(96,851)
Conversion to C Corporation	--	216,283	(216,283)	--
Purchase of warrants by founding stockholders	--	100	--	100
Conversion of convertible subordinated notes to common stock at a conversion price of \$6 per share, net of unamortized costs	500,000	2,751,187	--	2,751,187
Initial public offering ("IPO") of 1,015,000 shares of common stock at \$6 per share, net of costs	1,015,000	5,417,578	--	5,417,578
Effect of interest expense on convertible notes paid in common stock at \$6 per share	34,241	205,446	--	205,446
Purchase of warrants by underwriters of IPO	--	102	--	102
Net loss	--	--	(1,168,821)	(1,168,821)
-----				
Balance, December 31, 1997	1,620,514	8,762,464	(1,455,108)	7,307,356
Issuance of common stock	12,700	76,200	--	76,200
Net loss	--	--	(2,096,937)	(2,096,937)
-----				
Balance, December 31, 1998	1,633,214	\$ 8,838,664	\$ (3,552,045)	\$ 5,286,619
=====				

</TABLE>

See Notes to Financial Statements.

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Commonwealth Biotechnologies, Inc.



STATEMENTS OF CASH FLOWS  
 Years Ended December 31, 1998 and 1997

<TABLE>  
 <CAPTION>

	1998	1997
<S>	<C>	<C>
Cash Flows From Operating Activities		
Net loss	\$ (2,096,937)	\$ (1,168,821)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	319,180	283,471
Issuance of common stock for interest on convertible notes	--	205,446
Contributed services	--	36,346
Changes in assets and liabilities:		
Accounts receivable	(149,709)	(36,790)
Prepaid expenses	(13,527)	(61,893)
Restricted cash	(402,991)	--
Accounts payable	488,027	230,626
Deferred revenue	67,286	(200,000)
Net cash used in operating activities	(1,788,671)	(711,615)
Cash Flows From Investing Activities		
Purchases of property and equipment	(6,137,909)	(1,348,400)
Deposits	1,800	4,525
Net cash used in investing activities	(6,136,109)	(1,343,875)
Cash Flows From Financing Activities		
Proceeds from issuance of bonds payable, net of issuance cost	3,731,401	488,161
Principal payments on long-term debt and note payable	(65,000)	(366,461)
Stockholder distributions	--	(96,851)
Proceeds from IPO of common stock, net of costs	--	5,417,578
Purchase of warrants	--	202
Proceeds from issuance of common stock	76,200	--
Proceeds from issuance of convertible subordinated notes, net of deferred loan costs	--	2,626,269
Net cash provided by financing activities	3,742,601	8,068,898
Net increase (decrease) in cash and cash equivalents	(4,182,179)	6,013,408
Cash and cash equivalents:		
Beginning	6,273,765	260,357
Ending	\$ 2,091,586	\$ 6,273,765
Supplemental Disclosure of Cash Flow Information		
Cash payments for interest	\$ 165,678	\$ 27,069

</TABLE>

See Notes to Financial Statements.

COMMONWEALTH BIOTECHNOLOGIES, INC.

Notes to Financial Statements

Note 1. Nature of Business and Significant Accounting Policies

Nature of business: Commonwealth Biotechnologies, Inc., (the "Company"), was formed on September 30, 1992, for the purpose of providing specialized analytical laboratory services for the life scientist. The Company provides basic research services in the general areas of protein/peptide and DNA/RNA chemistries. Such services include synthesis, sequence analysis, composition analysis, protein purification and biophysical characterization of biologically relevant materials. The Company also pursues its own research and development intended to lead to intellectual properties.

A summary of the Company's significant accounting policies follows:

Estimates: The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and

disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the period. Actual results could differ from those estimates.

Revenue recognition: The Company recognizes revenue and related profit upon the completion of laboratory service projects, or upon the delivery and acceptance of biologically relevant materials that have been synthesized in accordance with project terms. Laboratory service projects are generally administered under fee-for-service contracts or purchase orders. Any revenues from research and development arrangements, including corporate contracts and research grants, are recognized pursuant to the terms of the related agreements as work is performed, or as scientific milestones, if any, are achieved. Amounts received in advance of services to be performed or acceptance of a milestone, are recorded as deferred revenue.

Cash and cash equivalents: The Company considers all highly liquid debt instruments purchased with an original maturity of three months or less to be cash equivalents. At times, the Company maintains cash balances in excess of FDIC insured amounts.

Property and equipment: Property and equipment are recorded at cost. Depreciation is computed principally by the straight-line method over the following estimated useful lives providing depreciation and amortization for financial reporting purposes. The cost of repairs and maintenance is expensed as incurred. The estimated useful lives of assets are as follows:

<TABLE>  
<CAPTION>  
-----  
<S> <C>  
Buildings 39.5  
-----  
Laboratory and computer equipment 5.0  
-----  
Furniture and fixtures and office equipment 7.0  
-----  
Automobile 5.0  
-----  
</TABLE>

Other assets: Bond issuance costs consist of origination costs associated with the 1998 bond issue and are being amortized over twenty-five years using the straight-line method, which is not materially different than the effective interest method. Amortization expense was \$8,418 for the year ended December 31, 1998.

Income taxes: The Company elected Subchapter S Corporation status from its inception through June 1997. Accordingly, the taxable income of the Company has been "passed-through" to its stockholders, and they have been subject to the tax on any income earned by the Company.

As more fully described in Note 10, the Company organized a private placement offering of convertible subordinated notes in June, 1997, which caused the income tax status of the Company to change from S Corporation status to C Corporation status. Therefore, at June 25, 1997, the undistributed earnings were treated as a constructive distribution to the original stockholders and as a contribution to additional paid-in capital.

As a C Corporation, the Company is responsible for income taxes payable resulting from earnings subsequent to June 25, 1997.

Deferred taxes are provided on a liability method whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax bases. Deferred tax assets are reduced by a

valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment.

Research and development: Costs incurred in connection with research and development activities are expensed as incurred. These consist of direct and indirect costs associated with specific research and development projects.

Internal research and development cost, which are included in research and development cost in the statement of operations, were \$272,041 and \$176,886 for the years ended December 31, 1998 and 1997, respectively.

Loss Per Common Share: Basic loss per share has been computed on the basis of the weighted-average number of common shares outstanding. Common shares issuable upon exercise of the employee stock options (see Note 11) have not been included in the computation because their inclusion would have had an anti-dilutive effect applicable to the net loss. Following is information regarding the computation of loss per share data for the years ended December 31, 1998 and 1997, respectively.

<TABLE>  
<CAPTION>

	1998		1997	
	Numerator	Denominator	Numerator	Denominator
<S>	<C>	<C>	<C>	<C>
Basic Loss Per Share				
Loss available to stockholders	\$(2,096,937)	--	\$(1,168,821)	--
Average shares outstanding	--	1,622,340	--	329,480
Effect of Dilutive Shares	--	--	--	--

Reclassifications: Certain amounts in the 1997 financial statements have been reclassified, with no effect on the results of operations or stockholders' equity, to conform to the classifications adopted in 1998.

Fair Value of Financial Instruments: The Company has determined, based on available market information and appropriate valuation methodologies, that the fair value of its financial instruments approximates carrying value. The carrying amounts of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to the short-term maturity of the instruments. The carrying amounts of debt approximates fair value because the interest rates under the credit agreement are predominantly variable, based on current market conditions.

#### Note 2. Property and Equipment

Property and equipment consisted of the following:

<TABLE>  
<CAPTION>

	1998	1997
<S>	<C>	<C>
Land	\$ 403,919	\$ --
Building	4,783,107	--
Laboratory and computer equipment	2,473,938	1,662,346
Furniture, fixtures and office equipment	175,858	39,800
Automobile	24,637	24,637
	7,861,459	1,726,783
Less accumulated depreciation	597,671	290,971
	\$ 7,263,788	\$ 1,435,812

</TABLE>

Depreciation expense was \$309,933 and \$156,918 for the years ended December 31, 1998 and 1997, respectively.

COMMONWEALTH BIOTECHNOLOGIES, INC.

#### Notes to Financial Statements

#### Note 3. Demand Notes Payable

The Company has a demand note payable with a bank, which bears interest at the bank's prime rate plus 1% (8.75% at December 31, 1998). The note has no stated maturity and is collateralized by a security interest in the Company's accounts receivable, equipment and intangibles. The balance was \$249,680 and \$314,680 at

December 31, 1998 and 1997, respectively.

Note 4. Bonds Payable

<TABLE>

<S> <C>

Bonds payable consist of:

Industrial Revenue Development Bonds Series 1998A, 5.2%-7.0%, payable in monthly installments of interest only through March 15, 2000, annual installments of principal and interest from March 15, 2001 through March 15, 2023, secured by a first deed of trust on land and building with a carrying value of \$5,174,878	\$ 3,670,000
Industrial Revenue Development Bonds Series 1998B, 8.0%, payable in monthly installments of interest only through March 15, 2023 and a final payment of \$330,000 due March 15, 2023, secured by a second deed of trust on land and building with a carrying value of \$5,174,878	330,000
	-----
	\$ 4,000,000

Maturities of long-term debt are as follows:

Year	Amount
1999	\$ --
2000	--
2001	85,000
2002	90,000
2003	95,000
Thereafter	3,730,000
	-----
	\$ 4,000,000

</TABLE>

The total interest expense reported in the Statements of Operations for the years ended December 31, 1998 and 1997 was \$184,655 and \$356,026, respectively. During 1998, \$53,815 of interest was capitalized as part of the cost of the Company's new laboratory facility. No interest was capitalized in 1997.

Note 5. Commitments and Contingencies

Leases: During 1997 through November 1998, the Company leased its laboratory and office space under an operating lease. Upon moving to its new facility in November 1998, the leases were cancelled. Total rent expense for all operating leases for each of the years ended December 31, 1998 and 1997, was \$174,662 and \$69,141, respectively.

Sales commitments: At December 31, 1998, the Company is performing services under contract with several companies. These companies include Insmed Pharmaceuticals (Richmond, Virginia), BLM Group (Cambridge, Massachusetts), Strategic Diagnostics (Newark, Delaware), Creative Bio Molecular (Hopkinton, Massachusetts), Santa Cruz Aids Research Foundation (Santa Cruz, California), Sulzer Carbomedics (Austin, Texas), AXO Diagnostics (Gaithersburg, Maryland), Clayton Foundation (Houston, Texas), Genetic Therapy, Inc. (Gaithersburg, Maryland), Lofstrand Labs (Gaithersburg, Maryland), Bristol Meyers Squibb (Princeton, New Jersey), and Dupont Pharmaceuticals (Wilmington, Delaware).

Employment Agreements: On June 24, 1997, the Company entered into employment agreements with its founders. Each of the agreements has a term of five years with specified base salaries and provide for successive one-year terms. In addition, except for 1997, the employment agreements provide the Company's executive officers with annual bonuses equal to, in the aggregate,

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COMMONWEALTH BIOTECHNOLOGIES, INC.

Notes to Financial Statements

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15% of the Company's pretax net income for the preceding fiscal year. For the fiscal year ended December 31, 1998, there were no bonuses for the Company's executive officers.

In connection with the aforementioned employment agreements, the Company has recognized the fair value for services rendered by its founders in its financial statements. The financial statement recognition is achieved by reflecting a charge against income for contributed services and a contribution to additional paid-in capital for 1997. The fair value of the charges have been established

based on the approximate number of hours worked by the Company's founders annually, and application of a base hourly rate that increases approximately 5% annually to the approximate hourly rate reflected in the agreement applied at June 24, 1997.

Note 6. Retirement Plan

The Company maintains a 401(k) Plan (the "Plan") which covers substantially all employees. Under the Plan, employees may elect to defer a portion of their salary, up to the maximum allowed by law, and the Company will match the contribution up to 1% of the employee's salary. The Company made contributions of \$6,309 to the Plan in 1998 (None in 1997).

Note 7. Major Customers

During 1997, the Company derived revenues from two customers amounting to \$377,932 and \$226,239, respectively, and comprised of 34% of the total revenue for 1997. For the year ended December 31, 1998, there were no revenue concentrations.

Note 8. Compensation and Benefit Costs

Compensation and benefit costs are included in the statements of operations as follows:

<TABLE>  
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	1998	1997
<S>	<C>	<C>
Cost of services	\$ 511,664	\$ 338,994
Selling, general and administrative expenses	782,833	620,721
Research and development costs	378,619	361,925
	\$ 1,673,116	\$ 1,321,640

</TABLE>

Note 9. Income Taxes

The difference between expected income tax benefits and income tax benefits recorded in the financial statements is explained below:

<TABLE>  
<CAPTION>

	1998	1997
<S>	<C>	<C>
Income taxes (credits) computed at 34% statutory rate	\$ (712,959)	\$ (397,399)
Change in valuation allowance	775,461	429,098
Other	(62,502)	(31,699)
	\$ --	\$ --

</TABLE>

COMMONWEALTH BIOTECHNOLOGIES, INC.

Notes to Financial Statements

The significant components of deferred income tax assets and liabilities as of December 31 consist of the following:

<TABLE>  
<CAPTION>

	1998	1997
<S>	<C>	<C>
Deferred tax assets:		
Effect of net operating loss	\$1,190,578	\$ 463,329
Other	182,047	41,629

	1,372,625	504,958
Deferred tax liabilities:		
Tax depreciation in excess of book depreciation	168,066	75,860
Net deferred tax asset before valuation allowance	1,204,559	429,098
Less valuation allowance	1,204,559	429,098
Net deferred tax asset	\$ --	\$ --

</TABLE>

Operating loss carryforwards of approximately \$2,382,000 and \$1,119,000 may be used to offset future taxable income, which were generated in the years ended December 31, 1998 and 1997, respectively. The loss carryforwards expire in 2018 and 2012, respectively.

#### Note 10. Private Placement and Initial Public Offering

On June 24, 1997, the Company declared a 93.78-for-1 stock split which has been retroactively reflected in the accompanying financial statement and related notes.

On June 25, 1997, the Company sold 60 convertible subordinated notes ("notes"), with a principal amount of \$50,000, in a private placement offering at an offering price of \$50,000 per note. The Company received net proceeds of \$2,626,269, after underwriting and other offering costs of \$373,731. Each note carried interest at the rate of 20% and was converted into shares of the Company's common stock. Interest was paid through the date of the conversion in the form of additional shares of common stock, which were issued based on a conversion price of \$6.00 for each share of common stock. Each note was automatically converted into a minimum of 8,333.33 shares of the Company's common stock.

Upon the closing of the private placement offering, the Company issued warrants to members of management for the purchase of 100,000 shares of common stock. The warrants were issued at \$.001 per share, and will be exercisable for a period of ten years expiring June 2007 at an exercise price of \$9.90 per share.

On October 25, 1997, the Company completed its initial public offering (IPO) and received net proceeds of \$5,417,578, after underwriting and other offering costs of \$844,922, which includes \$172,500 representing the approximate fair value of warrants issued to the underwriters, as described in the following paragraph.

On November 13, 1997, Anderson & Strudwick the ("Underwriters") purchased warrants for 101,500 shares of common stock. The warrants were issued to the Underwriter at \$.001 per share, and will be exercisable for a period of five years at an exercise price of \$9.90 per share.

#### Note 11. Stock Compensation

The Company adopted its Stock Incentive Plan (the "Plan") on June 24, 1997. The Plan provides for the granting to employees, officers, directors, consultants and certain other nonemployees of the Company of options to purchase shares of common stock. A maximum of 410,000 shares of common stock may be issued pursuant to the Plan. Of the maximum number of shares to be issued under the Plan, 270,000 will be reserved for incentive awards to be granted to the founders of the Company, and 140,000 shares will be reserved for incentive awards to be granted to others.

Incentive awards may be in the form of stock options, restricted stock, incentive stock or tax offset rights. In the case of incentive stock options (within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended), the exercise price will not be less than 100% of the fair market value of shares covered at the time of the grant, or 110% for incentive stock options granted to persons who own more than 10% of the Company's voting shares. Options granted under the Plan generally vest over a five-year period from the date of grant and are exercisable for ten years, except that the term may not exceed five years for incentive stock options granted to persons who own more than 10% of the Company's outstanding common stock.

The Company applies Accounting Principles Board Opinion No. 25 and related accounting interpretations in accounting for its Plan and accordingly, no compensation cost has been recognized. Had compensation cost for the Company's Plan been determined based on the fair value at the grant dates for awards under the Plan consistent with the method prescribed by FASB No. 123, Accounting for Stock-Based Compensation, the Company's net loss and loss per share would have increased to the proforma amounts indicated below as if the Plan had been in effect for the periods presented:

<TABLE>  
<CAPTION>

	1998	1997
Net loss:		
As reported, historically	\$ (2,096,937)	\$ (1,168,821)
Proforma	(2,263,110)	(1,471,037)
Loss per common share:		
As reported, historically	(1.29)	(3.55)
Proforma	(1.39)	(4.46)

Under FASB No. 123, the fair value of each management stock option and warrant is estimated on the date of grant using the Black-Scholes option pricing model. The following weighted-average assumptions were used for grants in 1998 and 1997, respectively: No dividend yield, expected volatility of 76% and 34%, risk-free interest rate of 5.1% and 5.5%, and expected lives of 5 years.

Stock option and warrant transactions are summarized as follows:

<TABLE>  
<CAPTION>

	1998	Weighted Average Exercise Price	1997	Weighted Average Exercise Price
Options and warrants outstanding, beginning of year	515,900	\$9.23	--	\$ --
Granted	32,400	8.25	515,900	9.23
Exercised	(12,700)	6.00	--	--
Lapsed	(3,850)	6.00	--	--
Options and warrants outstanding, end of year	531,750	\$9.11	515,900	\$9.23
Options and warrants exercisable, end of year	346,808	\$9.05	77,564	\$8.36
Weighted-average fair value per option and warrant for options and warrants granted during the year	\$5.71		\$1.70	

The following table summarizes information about stock options and warrants outstanding at December 31, 1998:

<TABLE>  
<CAPTION>

	Outstanding			Exercisable	
Weighted Average Exercise Price	Number	Contractual Life (Years)	Weighted Average Exercise Price	Number	
\$ 5.50 - 7.00	93,450	9	\$ 6.00	70,750	\$

6.00					
7.50 - 9.00	27,200	10	7.85	8,800	
7.85					
9.25 - 10.00	411,100	7	9.90	267,258	
9.90					
-----					
\$ 5.50 - 10.00	531,750	8	\$ 9.11	346,808	\$
9.05					
=====					
=====					

</TABLE>

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[PHOTO]

The Executive Officers and Board of Directors

Executive Officers

Richard J. Freer, Ph.D. Chairman of the Board	Robert B. Harris, Ph.D. President
Thomas R. Reynolds Senior Vice President and Secretary	James H. Brennan, MBA Controller

Directors

Richard J. Freer, Ph.D. Chairman of the Board	Robert B. Harris, Ph.D. President
Thomas R. Reynolds Senior Vice President and Secretary	Charles A. Mills Director and CEO, Anderson & Strudwick, Inc.
Peter Einselen Director, and Senior Vice President, Anderson & Strudwick, Inc.	The Honorable George F. Allen Director, and Partner, McGuire, Woods, Battle & Boothe, LLP

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[PHOTO]

Corporate Information

Corporate Office:	Transfer Agent and Registrar
Commonwealth Biotechnologies, Inc. 601 Biotech Drive Richmond, Virginia 23235	American Securities Transfer and Trust, Inc. 938 Quail Street, Suite 101 Denver, Colorado 80215-5513
phone: 800-735-9224; 804-648-3820 fax: 804-648-2641 email: cbi@i2020.net web site: www.cbi-biotech.com	Independent Auditors McGladrey and Pullen, LLP 1051 East Cary Street Richmond, Virginia 23218
General Counsel	
LeClair Ryan A Professional Corporation 707 East Main Street Richmond, Virginia 23219	

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PFIZER, INC.  
PHARMACOPEIA  
PICOWER INSTITUTE  
PIONEER HI-BRED INTERNATIONAL  
PRINCETON UNIVERSITY  
PROCYTE, INC.  
PUBLIC HEALTH RESEARCH INSTITUTE  
PURDUE UNIVERSITY  
QUEST INTERNATIONAL  
RAJIV GHANDI BIOTECH CENTER  
RESEARCH TRIANGLE INSTITUTE  
RIBI IMMUNOCHEM  
RICE UNIVERSITY  
ROCHE INSTITUTE MOLECULAR BIOLOGY  
ROCKEFELLER UNIVERSITY  
ROCKY MOUNTAIN LABS  
ROSWELL PARK CANCER INSTITUTE  
RUTGERS UNIVERSITY  
SAN FRANCISCO STATE UNIVERSITY  
SCANTIBODIES, INC.  
SCHEPENS EYE INSTITUTE  
SCHERING PLOUGH  
SCRIPPS RESEARCH INSTITUTE  
SEARLE RESEARCH AND DEVELOPMENT  
SIGMA  
SIGNET LABS  
SKIRBALL INSTITUTE  
SLOAN KETTERING CANCER INSTITUTE  
SMALL MOLECULE THERAPEUTICS  
SMITH KLINE BEECHAM  
SOMATIX THERAPEUTICS  
ST. ELIZABETH'S MEDICAL COLLEGE  
ST. JUDE'S RESEARCH HOSPITAL  
ST. LOUIS UNIVERSITY  
STAR BIOCHEMICALS  
STRATEGIC DIAGNOSTICS  
SUNY BROOKLYN  
SUNY BUFFALO  
SUNY STONY BROOK  
SYMBIOTECH  
SYSTEMIX  
TAMPA BAY RESEARCH INSTITUTE

TEL AVIV UNIVERSITY  
TEMPLE UNIVERSITY SCHOOL OF MEDICINE  
TEMPLE UNIVERSITY TRC  
THERMOGEN, INC.  
TRIARCO INDUSTRIES  
TRITON CHITOS, INC.  
TULANE UNIVERSITY  
U.S. ARMY ABERDEEN  
U.S. DEPT OF AGRICULTURE RESEARCH LABS  
UNICAMP, INC.  
UNILEVER, INC.  
UNITED STATES SURGICAL CORPORATION  
UNIVAX, INC.  
UNIVERSITY OF KENTUCKY  
UNIVERSITY DE LA REPUBLICA  
UNIVERSITY OF AKRON  
UNIVERSITY OF ALABAMA  
UNIVERSITY OF ALABAMA BRIMINGHAM  
UNIVERSITY OF ALASKA AT ANCHORAGE  
UNIVERSITY OF ALASKA AT FAIRBANKS  
UNIVERSITY OF ALBERTA  
UNIVERSITY OF ARKANSAS  
UNIVERSITY OF BERGEN  
UNIVERSITY OF BOLOGNA  
UNIVERSITY OF CALIFORNIA AT SAN DIEGO  
UNIVERSITY OF CALIFORNIA AT SAN FRANCISCO  
UNIVERSITY OF CALIFORNIA AT BERKELEY  
UNIVERSITY OF CALIFORNIA AT LOS ANGELES  
UNIVERSITY OF CAPETOWN  
UNIVERSITY OF CINCINNATI  
UNIVERSITY OF COLOGNE  
UNIVERSITY OF COLORADO  
UNIVERSITY OF CONNECTICUT  
UNIVERSITY OF FLORIDA HEALTH SCI. CTR.  
UNIVERSITY OF GENEVA  
UNIVERSITY OF ICELAND  
UNIVERSITY OF IDAHO  
UNIVERSITY OF ILLINOIS  
UNIVERSITY OF ILLINOIS CHICAGO CIRCLE  
UNIVERSITY OF IOWA  
UNIVERSITY OF KANSAS  
UNIVERSITY OF LOUISVILLE

UNIVERSITY OF MANITOBA  
UNIVERSITY OF MARYLAND BALTIMORE  
UNIVERSITY OF MARYLAND COLLEGE PARK  
UNIVERSITY OF MEDICINE AND DENTISTRY N.J.  
UNIVERSITY OF MICHIGAN  
UNIVERSITY OF MINNESOTA  
UNIVERSITY OF NEW MEXICO  
UNIVERSITY OF OKLAHOMA  
UNIVERSITY OF PENNSYLVANIA  
UNIVERSITY OF PITTSBURGH  
UNIVERSITY OF RICHMOND  
UNIVERSITY OF ROCHESTER  
UNIVERSITY OF SAO PAULO  
UNIVERSITY OF SASSAURI  
UNIVERSITY OF SOUTHERN CALIFORNIA  
UNIVERSITY OF SOUTHERN MISSISSIPPI  
UNIVERSITY OF TEXAS  
UNIVERSITY OF TEXAS HEALTH SCI. CTR.  
UNIVERSITY OF TORONTO  
UNIVERSITY OF VIRGINIA  
UNIVERSITY OF WATERLOO  
UPPSALA UNIVERSITY  
VA MEDICAL CENTER, RICHMOND  
VA MEDICAL CENTER, SYRACUSE  
VANDERBILT UNIVERSITY  
VERTX PHARMACEUTICALS  
VIMS  
VIRGINIA COMMONWEALTH UNIVERSITY  
VIRGINIA STATE UNIVERSITY  
VIRGINIA TECH  
VIRGINIA UNION UNIVERSITY  
VITEX, INC.  
VYSIS, INC.  
WAKE FOREST UNIVERSITY  
WAKO CHEMICALS, INC.  
WALTHER ONCOLOGY CENTER  
WASHINGTON STATE UNIVERSITY  
WAYNE STATE UNIVERSITY  
WHEELER INSTITUTE  
WOLPERT POLYMERS  
WRIGHT PATTERSON AIR FORCE COMMAND  
WYETH LABS  
XENOVIA



Exhibit 23.2

Consent of Independent Auditor

The Board of Directors  
Commonwealth Biotechnologies, Inc.

We consent to the incorporation by reference, in the Registration Statement on Form S-8 of Commonwealth Biotechnologies, Inc. filed on May 6, 1998, of our report, dated February 9, 1998, on the balance sheets of Commonwealth Biotechnologies, Inc. as of December 31, 1997 and 1996, and the related statements of operations, stockholders' equity, and cash flows for the years then ended, which report is incorporated by reference from the 1997 Annual Report on Form 10-KSB of Commonwealth Biotechnologies, Inc. We also consent to the reference of this firm under the caption of "Experts" in such Registration Statement.

/s/ Goodman & Company, L.L.P.

Richmond, Virginia  
March 26, 1999

Exhibit 23.2

Consent of Independent Auditor

The Board of Directors  
Commonwealth Biotechnologies, Inc.

We consent to the incorporation by reference, in the Registration Statement on Form S-8 of Commonwealth Biotechnologies, Inc. filed on May 6, 1998, of our report, dated February 9, 1998, on the balance sheets of Commonwealth Biotechnologies, Inc. as of December 31, 1997 and 1996, and the related statements of operations, stockholders' equity, and cash flows for the years then ended, which report is incorporated by reference from the 1997 Annual Report on Form 10-KSB of Commonwealth Biotechnologies, Inc. We also consent to the reference of this firm under the caption of "Experts" in such Registration Statement.

/s/ Goodman & Company, L.L.P.

Richmond, Virginia  
March 26, 1999

<TABLE> <S> <C>

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5

<LEGEND>

For December 31st, 1998 AND IS QUALIFIED IN ITS ENTITY BY REFERENCE TO SUCH FINANCIAL STATEMENTS.

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