

REGISTRATION NO. 333-31731

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

AMENDMENT NO. 2 TO

FORM SB-2

REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

COMMONWEALTH BIOTECHNOLOGIES, INC.
(Name of small business issuer in its charter)

<TABLE>
<S> <C>
VIRGINIA 8733 56-1641133
(State or Other Jurisdiction of (Primary Standard Industrial (I.R.S. Employer Identification
No.) No.)
Incorporation or Organization) Classification Code Number)
</TABLE>

<TABLE>
<S> <C>
COMMONWEALTH BIOTECHNOLOGIES, INC. COMMONWEALTH BIOTECHNOLOGIES, INC.
911 EAST LEIGH STREET, SUITE G-19 911 EAST LEIGH STREET, SUITE G-19
RICHMOND, VIRGINIA 23219 RICHMOND, VIRGINIA 23219
(804) 648-3820 (804) 648-3820
(Address and Telephone Number (Address of Principal Place of Business
of Principal Executive Offices) or Intended Principal Place of Business)
</TABLE>

COMMONWEALTH BIOTECHNOLOGIES, INC.
911 EAST LEIGH STREET, SUITE G-19
RICHMOND, VIRGINIA 23219
ATTENTION: RICHARD D. FREER, PH.D., CHAIRMAN
(804) 648-3820
(Name, Address and Telephone Number of Agent for Service)

COPIES OF COMMUNICATIONS TO:

<TABLE>
<S> <C>
J. BENJAMIN ENGLISH, ESQ. JAMES J. WHEATON, ESQ.
LECLAIR RYAN, A PROFESSIONAL CORPORATION WILLCOX & SAVAGE, P.C.
707 EAST MAIN STREET, SUITE 1100 800 NATIONS BANK CENTER
RICHMOND, VIRGINIA 23219 NORFOLK, VIRGINIA 23510
(804) 783-2003 (757) 628-5619
</TABLE>

APPROXIMATE DATE OF PROPOSED SALE TO THE PUBLIC:
As soon as practicable on or after the effective date of this Registration
Statement.

If any of the securities being registered on this form are to be offered on
a delayed or continuous basis pursuant to Rule 415 under the Securities Act of
1933, check the following box: [X]

If this form is filed to register additional securities for an offering
pursuant to Rule 462(b) under the Securities Act, please check the following box
and list the Securities Act registration statement number of the earlier
effective registration statement for the same offering. [] _____

If this form is a post-effective amendment filed pursuant to Rule 462(c)

under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. [] _____

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

CALCULATION OF REGISTRATION FEE

<TABLE>
<CAPTION>

OF	TITLE OF EACH CLASS OF	AMOUNT TO BE	PROPOSED MAXIMUM	PROPOSED MAXIMUM	AMOUNT
FEE	SECURITIES TO BE REGISTERED	REGISTERED	OFFERING PRICE PER	AGGREGATE	REGISTRATION
<S> <C>			UNIT(1)	OFFERING PRICE	
	Common Stock.....	1,015,000	\$6.00	\$6,090,000.00	
	Underwriter's Warrants (2).....	101,500	\$0.001	\$101.50	
	Common Stock Issuable Upon Exercise				
	of the Underwriter's Warrants (3)....	101,500	\$9.90	\$1,004,850	
	Common Stock (4).....	541,370	\$6.00	\$3,248,220.00	
	Management Warrants (5).....	100,000	\$0.001	\$100.00	
	Common Stock Issuable Upon Exercise				
	of the Management Warrants (6).....	100,000	\$9.90	\$990,000.00	
	Total.....	--	--	\$11,333,271.50	\$3,435

- </TABLE>
- (1) The proposed maximum price is estimated solely for the purpose of computing the amount of the registration fee.
 - (2) In connection with the Registrant's sale of the shares of Common Stock registered hereby, the Registrant shall sell to Anderson & Strudwick, Incorporated (the "Underwriter") warrants to purchase 101,500 shares of Common Stock (the "Underwriter's Warrants"). The price to be paid by the Underwriter for the Underwriter Warrants is \$.001 per warrant. The exercise price of the Underwriter's Warrants is \$9.90 per share. The resale of the Underwriter's Warrants is registered hereunder.
 - (3) The shares of Common Stock underlying the Underwriter's Warrants are being registered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended.
 - (4) Represents the shares of Common Stock (including those representing interest payments) (the "Conversion Shares") issuable by the Registrant upon conversion of those certain subordinated convertible notes (the "Notes"). The Notes were issued by the Registrant in a private placement on June 25, 1997, and the Conversion Shares will be issued in a private placement simultaneously with the completion of the Offering (the "Private Placement"). The resale of the Conversion Shares is registered hereunder.
 - (5) In connection with the Private Placement, the Registrant sold to the Registrant's executive officers warrants to purchase an aggregate of 100,000 shares of Common Stock (the "Management Warrants"). The price paid by the executive officers for the Management Warrants was \$.001 per warrant. The exercise price of the Management Warrants is \$9.90 per share. The resale of the Management Warrants is registered hereunder.
 - (6) The shares of Common Stock underlying the Management Warrants are being registered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT SHALL FILE A FURTHER AMENDMENT WHICH SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SECTION 8(A), MAY DETERMINE.

 INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES

EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY STATE.

SUBJECT TO COMPLETION, DATED OCTOBER 7, 1997

PROSPECTUS

[LOGO FOR COMMONWEALTH BIOTECHNOLOGIES, INC.]

1,015,000 SHARES OF COMMON STOCK

Commonwealth Biotechnologies, Inc. ("CBI" or the "Company") hereby offers (the "Offering") 1,015,000 shares of the Company's common stock, no par value per share (the "Common Stock"). Prior to the Offering, no public market for the Common Stock existed and no assurance can be given that any such market will develop after the completion of the Offering or, that if developed, such market will be sustained. It is currently anticipated that the initial public offering price will be \$6.00 per share of Common Stock. For the method of determining the initial public offering price of the Common Stock, see "Risk Factors" and "Underwriting." Resales of (a) an aggregate of up to 541,370 shares of Common Stock (the "Conversion Shares"), issuable in a private placement upon the automatic conversion of certain subordinated convertible notes (the "Notes") issued by the Company in a private placement on June 25, 1997 (the "Private Placement"), (b) warrants to purchase an aggregate of 101,500 shares of Common Stock (the "Underwriter's Warrants"), each of which has a term of five years and an exercise price equal to 165% of the initial public offering price of a share of Common Stock offered hereby, to be issued to Anderson & Strudwick, Incorporated (the "Underwriter") upon the closing of the Offering as additional underwriting compensation, and (c) warrants to purchase an aggregate of 100,000 shares of Common Stock (the "Management Warrants"), each of which has a term of ten years and an exercise price equal to 165% of the initial public offering price of a share of Common Stock offered hereby and will first become exercisable on June 25, 1998, issued to certain executive officers of the Company (collectively, the "Resale Securities") are also being registered hereby. The Company is also registering an aggregate of 201,500 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants and the Management Warrants on a delayed or continuous basis (the "Warrant Shares"). Resales of the Resale Securities are not underwritten, and resales of the Conversion Shares and the Underwriter's Warrants are contingent upon, and may only occur subsequent to, the closing of the Offering. The Warrant Shares will only be issued, and the sale thereof may only occur, subsequent to the closing of the Offering. In the event the Underwriter's Warrants and the Management Warrants are exercised, the shares of Common Stock eligible for (x) resale hereunder by the holders thereof (the "Selling Securityholders") or (y) sale on a delayed or continuous basis will constitute 45.6% of the outstanding shares of Common Stock upon completion of the Offering. See "Risk Factors -- Shares Eligible for Future Sale." The Company has applied for inclusion of the shares of Common Stock on the Nasdaq SmallCap Market under the symbol "CBTE."

The Company provides sophisticated research and development support services on a contract basis to the biotechnology industry. See "Business -- Overview."

The Company and the Underwriter have entered into certain arrangements which may involve a conflict of interest, including the issuance of the Underwriter's Warrants and the service of two affiliates of the Underwriter on the Board of Directors of the Company. See "Risk Factors -- Ongoing Relationship with Underwriter."

THESE ARE SPECULATIVE SECURITIES. THE SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. INVESTORS SHOULD BE ABLE TO SUSTAIN A COMPLETE LOSS OF THEIR INVESTMENT. SEE "RISK FACTORS" ON PAGES 8 THROUGH 12.

THESE SECURITIES HAVE NOT BEEN APPROVED OF DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION, NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

<TABLE>

<CAPTION>

	PRICE TO PUBLIC	UNDERWRITING DISCOUNT(1)	PROCEEDS TO
COMPANY(2)			
<S> <C>			
Per Share.....	\$6.00	\$0.48	\$5.52
Total.....	\$6,090,000	\$487,200	\$5,602,800

</TABLE>

- (1) Does not reflect the issuance of the Underwriter's Warrants as additional underwriting compensation. In addition, the Company has agreed to indemnify the Underwriters against certain civil liabilities, including liabilities under the Securities Act of 1933, as amended (the "Securities Act"). See "Underwriting."
- (2) Before deducting additional expenses of the Offering payable by the Company, estimated at \$200,000.

THE COMMON STOCK IS BEING OFFERED BY THE COMPANY THROUGH THE UNDERWRITER ON A "BEST EFFORTS, ALL-OR-NONE" BASIS, WHEN, AS AND IF ISSUED AND SUBJECT TO APPROVAL OF CERTAIN LEGAL MATTERS BY THE UNDERWRITER AND CERTAIN OTHER CONDITIONS. IN ADDITION, OFFICERS, DIRECTORS AND PERSONS HOLDING MORE THAN 5% OF THE OUTSTANDING SHARES OF COMMON STOCK PRIOR TO THE OFFERING MAY PURCHASE UP TO 15,000 OF THE SHARES OF COMMON STOCK OFFERED IN THE OFFERING. UNLESS SOONER WITHDRAWN OR CANCELED BY EITHER THE COMPANY OR THE UNDERWRITER, THE OFFERING WILL CONTINUE UNTIL THE EARLIER OF THE DATE ON WHICH ALL OF THE COMMON STOCK OFFERED HEREBY IS SOLD OR NOVEMBER 21, 1997 (THE "OFFERING TERMINATION DATE"). PENDING THE SALE OF ALL OF THE SHARES OF COMMON STOCK OFFERED HEREBY, ALL PROCEEDS WILL BE DEPOSITED INTO AN ESCROW ACCOUNT WITH CRESTAR BANK (THE "ESCROW AGENT"). IF THE OFFERING IS WITHDRAWN OR CANCELED OR IF ALL OF THE SHARES OFFERED HEREBY ARE NOT SOLD BY THE OFFERING TERMINATION DATE, THE OFFERING WILL TERMINATE AND ALL PROCEEDS WILL BE RETURNED BY THE ESCROW AGENT TO THE PERSONS FROM WHICH THEY ARE RECEIVED, WITHOUT ANY DEDUCTION THEREFROM OR INTEREST THEREON, PROMPTLY AFTER SUCH TERMINATION OR WITHDRAWAL.

ANDERSON & STRUDWICK
INCORPORATED

THE DATE OF THIS PROSPECTUS IS , 1997.

(ALTERNATE COVER)

COMMONWEALTH BIOTECHNOLOGIES, INC.
SHARES OF COMMON STOCK AND COMMON STOCK PURCHASE WARRANTS

This Prospectus relates to the resale by the holders thereof (the "Selling Securityholders") of (a) an aggregate of 541,370 shares (the "Conversion Shares") of common stock, no par value per share ("Common Stock") of Commonwealth Biotechnologies, Inc. (the "Company"), issuable upon the automatic conversion of certain subordinated convertible notes (the "Notes") issued by the Company in a private placement on June 25, 1997 (the "Private Placement"), (b) warrants to purchase an aggregate of 101,500 shares of Common Stock (the "Underwriter's Warrants"), each of which has a term of five years and an exercise price equal to 165% of the initial public offering price of a share of Common Stock offered hereby, issued to Anderson & Strudwick, Incorporated (the "Underwriter") as additional underwriting compensation, and (c) warrants to purchase an aggregate of 100,000 shares of Common Stock (the "Management Warrants"), each of which has a term of ten years and an exercise price equal to 165% of the initial public offering price of a share of Common Stock offered hereby and will first become exercisable on June 25, 1998, issued to certain executive officers of the Company (collectively, the "Resale Securities"). The offering of the Conversion Shares and the Underwriter's Warrants by the Selling Securityholders is contingent upon and may only occur subsequent to the closing of the separate offering of 1,015,000 shares of Common Stock by the Company in an underwritten public offering (the "Offering"). In addition, the Offering contemplates the registration, on a delayed or continuous basis, of an aggregate of 201,500 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants and the Management Warrants. In the event the Underwriter's Warrants and the Management's Warrants are exercised, the shares being registered on behalf of the Selling Securityholders and the shares of Common Stock eligible for sale on a delayed or continuous basis will constitute 45.6% of the outstanding shares of Common Stock upon completion of the Offering. The resale of the Resale Securities is subject to Prospectus delivery and other requirements of the Securities Act of 1933, as amended (the "Securities Act"). Sales of such securities or the potential of such sales at any time may have an adverse effect on the market prices of the securities offered hereby. See "Selling Securityholders" and "Risk Factors -- Shares Eligible for Future Sale."

The Company has applied for inclusion of the Common Stock and the

Underwriter's Warrants on The Nasdaq SmallCap Market although there can be no assurance that an active trading market will develop. See "Risk Factors -- No Prior Market for Common Stock," and " -- Volatility of Stock Price."

The Resale Securities offered by this Prospectus may be sold from time to time by the Selling Securityholders, or by their transferees. Notwithstanding the foregoing, however, resales of the Conversion Shares and the Underwriter's Warrants are contingent upon, and may only occur subsequent to, the closing of the Offering. No underwriting arrangements have been entered into by the Selling Securityholders. The distribution of the securities by the Selling Securityholders may be effected in one or more transactions that may take place in the market, including ordinary brokerage transactions, privately-negotiated transactions or sales to one or more dealers for resale of such shares as principals at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or specifically negotiated brokerage prices or commissions may be paid by the Selling Securityholders in connection with sales of such securities.

The Selling Securityholders and intermediaries through whom such securities may be sold may be deemed "underwriters" within the meaning of the Securities Act, with respect to the securities offered and any profits realized or commissions received may be deemed underwriting compensation. The Company has agreed to indemnify certain of the Selling Securityholders against liabilities, including liabilities under the Securities Act.

The Company will not receive any of the proceeds from the sale of the securities by the Selling Securityholders. All costs incurred in the registration of the securities of the Selling Securityholders are being borne by the Company. See "Selling Securityholders."

The Company provides sophisticated research and development analytical services on a contract basis to the biotechnology industry. See "Business."

THESE ARE SPECULATIVE SECURITIES. THE SECURITIES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. INVESTORS SHOULD BE ABLE TO SUSTAIN A COMPLETE LOSS OF THEIR INVESTMENT. SEE "RISK FACTORS" ON PAGES 8 THROUGH 12.

THESE SECURITIES HAVE NOT BEEN APPROVED OF DISAPPROVED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION, NOR HAS THE SECURITIES AND EXCHANGE COMMISSION OR ANY STATE SECURITIES COMMISSION PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

THE DATE OF THIS PROSPECTUS IS _____, 1997.

(PHOTO TO COME)

PRIOR TO THE OFFERING, THE COMPANY WAS NOT A REPORTING COMPANY UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED (THE "EXCHANGE ACT"). SUBSEQUENT TO THE OFFERING, THE COMPANY INTENDS TO FURNISH TO ITS SHAREHOLDERS ANNUAL REPORTS CONTAINING FINANCIAL STATEMENTS AUDITED BY ITS INDEPENDENT ACCOUNTANTS, AND SUCH OTHER PERIODIC REPORTS AS IT MAY DETERMINE TO FURNISH OR AS MAY BE REQUIRED BY LAW.

PROSPECTUS SUMMARY

THE FOLLOWING SUMMARY IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO THE MORE DETAILED INFORMATION, INCLUDING "RISK FACTORS" AND THE COMPANY'S FINANCIAL STATEMENTS AND RELATED NOTES THERETO APPEARING ELSEWHERE IN THIS PROSPECTUS. THE SHARES OF COMMON STOCK OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK. INVESTORS IN THE OFFERING SHOULD BE ABLE TO SUSTAIN A COMPLETE LOSS OF THEIR INVESTMENT. SEE "RISK FACTORS." THIS PROSPECTUS CONTAINS CERTAIN FORWARD-LOOKING STATEMENTS THAT INVOLVE RISKS AND UNCERTAINTIES. SEE "SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS." THE COMPANY'S ACTUAL RESULTS AND THE TIMING OF CERTAIN EVENTS COULD DIFFER MATERIALLY FROM THOSE DISCUSSED IN OR PROJECTED BY THE FORWARD-LOOKING STATEMENTS. FACTORS THAT COULD CAUSE OR CONTRIBUTE TO SUCH DIFFERENCES INCLUDE THOSE DISCUSSED UNDER "RISK FACTORS." CERTAIN TERMS USED HEREIN ARE DEFINED IN THE GLOSSARY SECTION OF THIS PROSPECTUS.

THE COMPANY

The Company was founded in 1992 by four experienced research scientists to provide sophisticated research and development analytical 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 and biochemical strategies to develop products for health care, agricultural and other purposes.

Much of the revenue in biotechnology is derived from innovative products based on research into the fundamental biological processes that support life. These fundamental processes depend on the interrelationships of basic components of cells in living organisms, including enzymes, proteins, peptides, DNA and RNA, an understanding of which enables scientists to develop new compounds having commercial applications. The Company's services assist customers in understanding these relationships and developing commercial products based on that understanding.

The Company provides services to customers on a contract basis and derives its revenues from these services, and not 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 directly dependent on successfully commercializing a new biotechnology product.

The Company has established a reputation for providing a wider range of services than many of its competitors and in 1996 had revenues of \$989,925 and net income of \$110,088. The Company has identified a growth strategy which involves expansion of facilities and marketing and development of related lines of business having significant potential for growth. The Company intends to focus its efforts on the maintenance and expansion of long term relationships with customers in the biotechnology industry as well as the establishment of new customer relationships. See "Business -- Growth Strategy."

In addition to its analytical services, the Company is also developing several of its own proprietary new technologies in the areas of anti-coagulation and genomic sequence analysis. The Company has a patent application pending for a heparin antagonist compound which may lead to a new drug having fewer adverse effects than existing drugs. The development of these technologies has been funded by grants from government agencies, and the Company anticipates that this portion of its operations will continue to be funded in this manner. These technologies are in the early stage of development and should be considered highly speculative at this time. See "Business -- Proprietary Research and Research Grants," " -- Intellectual Property," " -- Government Regulation" and "Risk Factors -- Risks Associated with Development of Proprietary Technologies."

THE COMPANY'S OFFICES

The Company was incorporated in Virginia in September 1992. The Company's principal executive offices are located at 911 East Leigh Street, Suite G-19, Richmond, Virginia 23219 and its telephone number is (804) 648-3820.

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THE OFFERING

<TABLE>	
<S> <C>	
Securities Offered by the Company.....	1,015,000 shares of Common Stock. See "Description of Capital Stock."
Shares of Common Stock Outstanding before Offering.....	612,643
Common Stock to be Outstanding after the Offering.....	1,627,643 shares of Common Stock
Use of Proceeds.....	The net proceeds of this Offering will be used for working capital, capital expenditures and general and administrative purposes. See "Use of Proceeds."
Risk Factors.....	Investment in the Common Stock involves a high degree of risk. See "Risk Factors."
Proposed Nasdaq SmallCap Symbol(1).....	CBTE
</TABLE>	

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(1) No assurance can be given that an active trading market for the Common Stock will develop or be maintained. See "Risk Factors -- No Prior Market for Common Stock."

Except as otherwise indicated, all share and per share data in this Prospectus (a) assume the conversion of the Notes into 541,370 Conversion Shares of Common Stock upon completion of the Offering (including an assumed payment of

interest in the amount of 41,370 shares -- interest accrues from June 25, 1997 through the date of conversion at a rate of 20% per annum and is payable in shares of Common Stock at a rate of \$6.00 per share through the Offering Termination Date); (b) give no effect to the aggregate of 201,500 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants and the Management Warrants; and (c) assume no issuance of an aggregate of 410,000 shares of Common Stock which may be issued pursuant to incentive awards that may be granted under the Company's 1997 Stock Incentive Plan (the "Incentive Plan"), of which the Company intends to grant options to purchase an aggregate of 270,000 shares of Common Stock to the Company's founders upon the completion of the Offering. See "Capitalization", "Management -- Incentive Plan," "Certain Relationships and Related Transactions," "Description of Capital Stock -- Warrants" and "Underwriting."

SUMMARY FINANCIAL INFORMATION

The following table sets forth certain historical financial information of the Company.

<TABLE> <CAPTION> YEARS ENDED DECEMBER 31, ----- 1995 ----- <S> <C>	FOR THE SIX MONTHS ENDED JUNE 30, -----		FOR THE
	1997	1996	1996
	-----	-----	-----
	(UNAUDITED)		
OPERATIONS DATA:			
Revenue.....	\$1,059,212	\$428,302	\$989,925
\$369,301			
Net income (loss) before proforma income tax expense.....	\$ 286,287	\$122,521	\$110,088
\$(11,890)			
Proforma net income (loss) (1).....	\$ 161,634	\$ 97,976	\$ 60,437
\$(33,982)			
Proforma earnings (loss) per common and common equivalent share(2).....	\$ 0.32	\$ 0.19	\$ 0.12
(0.07)			\$

<TABLE> <CAPTION> DECEMBER 31, ----- (ACTUAL)	JUNE 30, 1997 ----- (UNAUDITED)		
	ACTUAL	AS ADJUSTED (3)	1996
	-----	-----	-----
	(UNAUDITED)		
BALANCE SHEET DATA AS OF:			
Working capital.....	\$ (261,014)	\$8,228,666	\$ 91,637
(34)			
Current ratio.....	0.92	\$ 27.91	\$ 1.32
1.00			
Total assets.....	\$3,964,280	\$9,080,229	\$634,193
\$186,818			
Shareholders' equity.....	\$ 388,051	\$8,504,000	\$162,269
62,656			
Book value per share(2).....	\$ 0.77	\$ 5.59	\$ 0.32
0.12			\$

(1) The above financial data gives retroactive effect to conversion from S Corporation to C Corporation status for federal income tax purposes.

- (2) The above financial data gives retroactive effect to the 93.78-for-one stock split effective June 24, 1997, to the issuance of the Conversion Shares, and to the antidilutive effect of the Management Warrants converted using the Treasury Stock method. See Note 2 to the Company's Financial Statements.
- (3) As adjusted to reflect (i) the sale of 1,015,000 shares of Common Stock offered hereby (at the price to public of \$6.00 per share) and the application of the estimated net proceeds therefrom and (ii) the conversion of the Notes to Common Stock at a conversion price of \$6.00 per share. See "Description of Capital Stock."

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RISK FACTORS

THE SHARES OF COMMON STOCK OFFERED PURSUANT TO THIS PROSPECTUS ARE SPECULATIVE AND INVOLVE A HIGH DEGREE OF RISK, AND AN INVESTMENT IN THE COMMON STOCK SHOULD BE CONSIDERED ONLY BY INVESTORS WHO ARE CAPABLE OF AFFORDING AN ENTIRE LOSS OF THE AMOUNT INVESTED. PROSPECTIVE INVESTORS SHOULD CAREFULLY CONSIDER, ALONG WITH THE OTHER INFORMATION CONTAINED IN THIS PROSPECTUS, THE FOLLOWING CONSIDERATIONS AND RISKS IN EVALUATING AN INVESTMENT IN THE COMPANY.

VARIABILITY OF OPERATING RESULTS

The Company's revenues are derived through provision of analytical services to the pharmaceutical, biotechnology and related industries. The Company has experienced and may continue to experience significant quarterly fluctuations in revenues due to variations in contract status with several large customers. In addition, the majority of other customer projects are individual orders for specific projects. Engagement for successive work is highly dependent upon the customer's satisfaction with the services provided to date, 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 number and size of future projects in any given period. Thus, timing of significant projects could have a significant impact on financial results in any given period. The combined impact of several large contracts and the unpredictable project fluctuations from other customers can result in very large fluctuations in financial performance from quarter to quarter or year to year. In addition, the biotechnology industry is currently progressing through a consolidation phase of development. As a result, many large competitors may internalize their biotechnology research services. If this occurs, the Company's future customers will likely be smaller companies without captive research capabilities. See "Management's Discussion and Analysis of Financial Condition and Result of Operations."

DEPENDENCE ON GOVERNMENT GRANTS

A significant portion of the Company's revenue (approximately 31% in the year ended December 31, 1996 and 42% for the six months ended June 30, 1997), and substantially all of its financing for proprietary research projects, is funded by grants from federal government agencies. As of the date of this Prospectus, the Company has three government grants. The Company must compete for these grants with a large number of other companies and academic institutions, many of which have substantially greater resources than the Company. There can be no assurance that the Company will be able to compete successfully for these grants, or that the agencies making the grants will continue to make grants at levels sufficient to provide funding for the Company's proprietary research. In the absence of these grants, the Company would be forced to seek alternative sources of funding for its proprietary research and development projects, and there can be no assurance that such funding would be available. See "Business -- Proprietary Research and Research Grants."

DEPENDENCE ON AND NEED TO HIRE PERSONNEL

The Company is highly dependent on its senior management and scientific staff, and the loss of their services would adversely affect the Company. In addition, the Company must hire and retain a number of additional highly qualified and experienced management and scientific personnel, consultants and advisors. The Company's ability to attract and retain qualified personnel is critical to the Company's continued success. Competition for qualified individuals is intense, and the Company faces competition from numerous pharmaceutical and biotechnology companies, universities and other research institutions. There can be no assurance that the Company will be able to attract and retain such individuals on acceptable terms or at all, and the failure to do so would have a material adverse effect on the Company. Additionally, the hiring of personnel after the Offering will increase the Company's expenses. See "Business -- Employees."

LACK OF SALES AND MARKETING CAPABILITIES

The Company currently has no full-time marketing or sales personnel. The Company will have to develop a sales force or rely on marketing partners or other arrangements with third parties for the marketing and sale of its services. There can be no assurance that the Company will be able to establish sales and marketing capabilities or make arrangements with third parties to perform those activities on terms satisfactory to the Company, or that any internal capabilities or third party arrangements will be cost-effective. See "Business -- Employees."

In addition, any third parties with which the Company establishes sales and marketing arrangements may have significant control over important aspects of these operations, including market identification, marketing methods, pricing, composition of sales force and promotional activities. There can be no assurance that the Company will be able to control the

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amount and timing of resources that any third party may devote to the Company's services or prevent any third party from pursuing alternative services which compete with those of the Company. See "Business -- Marketing."

COMPETITION

The Company encounters, and expects to continue to encounter, intense competition in the development and sale of its current and future services. Many of the Company's competitors and potential competitors have substantially larger laboratory facilities, marketing capabilities and staff than those of the Company. In order to remain competitive, the Company will need to make available to its customers new analytical technologies as they become available in the Company's rapidly changing, technology driven business. Substantial future capital expenditures may be required to acquire these technologies. See "Business -- Competition."

RELIANCE ON SIGNIFICANT CUSTOMER RETENTION

The Company's future success will depend, in part, upon its ability to maintain relationships with its key customers. In 1996, approximately 20% of the Company's revenues were attributable to one private industry customer. The loss of this customer would adversely affect the Company. See "Business -- Customers" and the Company's Financial Statements and the Notes thereto.

HAZARDOUS MATERIALS

The Company's operations involve the controlled use of hazardous materials, chemicals, recombinant biological molecules, biohazards (infectious agents) and various radioactive compounds. Although the Company believes that its safety procedures for handling and disposing of such materials comply with the standards prescribed by state and federal regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. The Company currently has no insurance against any such liability. See "Business -- Government Regulation."

LACK OF FIRM COMMITMENT TO PURCHASE

The Company has engaged the Underwriter to conduct the Offering on a "best efforts, all-or-none" basis. The Offering is being made without a firm commitment by the Underwriter, which has no obligation to purchase any of the Common Stock. If the Offering is withdrawn or canceled or if the 1,015,000 shares of Common Stock offered hereby are not sold and proceeds therefrom are not received by the Company on or prior to the Offering Termination Date, all proceeds will be promptly returned to investors without interest.

RISKS ASSOCIATED WITH DEVELOPMENT OF PROPRIETARY TECHNOLOGIES

The Company is conducting initial research into several new potential technologies which may result in new pharmaceutical products, the intellectual property rights to which the Company would control. These technologies are in very early stages of development and are highly speculative due to the substantial risks and considerable uncertainties associated with their development, which include but are not limited to the following:

COMMERCIAL VIABILITY. The development of the Company's technologies may fail to yield products which are effective or offer advantages over other

products, resulting in the products having little commercial value. Other companies having substantially greater research, development and marketing resources than the Company may develop competing products which would preclude the Company's products from gaining acceptance in the marketplace.

UNCERTAINTY OF INTELLECTUAL PROPERTY RIGHTS. The Company must secure and defend patent and other intellectual property rights to the technologies, and avoid infringing the intellectual property rights of third parties. The patent positions of biotechnology companies are uncertain and involve complex legal and factual questions. There can be no assurance that the Company will develop intellectual property rights that are protectable or that the protection afforded by patents or otherwise will be sufficient to protect the commercial value of the Company's technologies. In addition, there can be no assurance that any patent rights issued to the Company will not be challenged, invalidated, infringed or circumvented.

EXTENSIVE GOVERNMENT REGULATION. Commercialization of any products resulting from the Company's research generally will require government approvals and be subject to extensive government regulation. In the case of human pharmaceutical products, the approval of the United States Food and Drug Administration requires extensive pre-clinical and clinical trials

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involving considerable costs and uncertainties. Failure to receive government approvals would preclude commercialization of products based on the Company's research and development programs.

DEPENDENCE ON THIRD PARTIES. Because the Company does not have and does not anticipate having the resources necessary to develop products beyond the initial research stage, the Company anticipates licensing any valuable technologies resulting from its research to third parties for development into commercial products. As a result, the Company will surrender control over the development and marketing processes and will be dependent on the efforts and resources of third parties.

There can be no assurance that the Company's proprietary research programs will result in any commercial products, and prospective investors considering an investment in the Common Stock are discouraged from attributing significant value to the Company's proprietary research programs. See "Business -- Intellectual Property" and " -- Government Regulation."

NO DIVIDENDS

The Company does not intend to pay any cash dividends in the foreseeable future and intends to retain its earnings, if any, for the operation of its business. See "Dividend Policy."

ANTI-TAKEOVER PROVISIONS

The Company's Amended and Restated Articles of Incorporation ("Articles") and Amended and Restated Bylaws ("Bylaws") provide for a classified Board of Directors, the removal of Directors only with cause, advance notice requirements for director nominations and actions to be taken at annual meetings of the Company's shareholders and a requirement that affiliated transactions be approved by at least two-thirds of the outstanding shares of each voting group. The Company is subject to certain provisions of the Virginia Stock Corporation Act (the "Virginia Act") which, in general, (i) prevent an Interested Shareholder (defined generally as a person owning more than 10% of any class of the Company's voting securities) from engaging in an "Affiliated Transaction" (as defined herein) with the Company unless certain conditions are met and (ii) deny voting rights to shares acquired by a person in a Control Share Acquisition (defined generally as an acquisition resulting in voting power which exceeds one-fifth, one-third or a majority) unless such rights are granted by the Company's shareholders, and permit the Company, under certain circumstances, to redeem the shares so acquired.

Such provisions could impede any merger, consolidation, takeover or other business combination involving the Company or discourage a potential acquirer from making a tender offer or otherwise attempting to obtain control of the Company. In addition, certain provisions of the Company employee benefit plans, employment agreements and severance agreements may also render any such business combination more costly and therefore less probable. See "Description of Capital Stock -- Certain Provisions of the Company's Articles of Incorporation and Bylaws," " -- Certain Corporate Governance Provisions of the Virginia Act," " -- Effect of Certain Provisions Upon an Attempt to Acquire Control of the Company," "Management -- Incentive Plan," and " -- Change in Control Protections."

LIMITATION ON OFFICERS' AND DIRECTORS' LIABILITIES UNDER VIRGINIA LAW

Pursuant to the Company's Articles, as authorized under applicable Virginia law, directors of the Company are not liable for monetary damages for breach of fiduciary duty, except in connection with a breach of the duty of loyalty, for acts or omissions not in good faith or which involve intentional misconduct or a

knowing violation of law, for dividend payments or stock repurchases illegal under Virginia law or for any transaction in which a director has derived an improper personal benefit. In addition, the Company's Articles provide that the Company must indemnify its officers and directors to the fullest extent permitted by Virginia law for all expenses incurred in the settlement of any actions against such persons in connection with their having served as officers or directors of the Company. See "Management -- Liability and Indemnification of Officers and Directors."

RELATED PARTY TRANSACTIONS / CONFLICTS OF INTEREST

The Company has entered into or proposes to enter into certain transactions with its directors and executive officers. These transactions include the issuance of warrants to acquire shares of Common Stock to executive officers upon the closing of the Private Placement, the proposed issuance of options to acquire shares of Common Stock upon the closing of the Offering, and the payment of cash underwriting compensation and issuance of the Underwriter's Warrants to the Underwriter, with which two of the Company's directors are affiliated. The Company has issued a promissory note pursuant to which it has agreed to pay certain amounts to an executive officer and, as an S Corporation prior to the closing of the Private Placement, paid certain distributions to its shareholders, who are also directors and executive officers of the Company. A summary

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of the terms and conditions of these transactions may be found under the heading "Certain Relationships and Related Transactions." These transactions involve inherent conflicts between the interest of the Company and the interests of the other parties to the transactions.

ONGOING RELATIONSHIP WITH UNDERWRITER

In connection with the Offering, the Company will sell to the Underwriter for a nominal amount the Underwriter's Warrants to purchase up to 101,500 shares of Common Stock. These warrants are exercisable for a period of five years from the respective dates of issuance at a price of \$9.90 per share of Common Stock, equal to 165% of the price of the Common Stock in the Offering. During the term of these warrants, the holders thereof will be given the opportunity to profit from a rise in the market price of the Common Stock, with a resulting dilution in the interest of the Company's other shareholders. The terms on which the Company could obtain additional capital during the life of these warrants may be adversely affected because the holders of these warrants might be expected to exercise them if the Company were able to obtain any needed additional capital in a new offering of securities at a price greater than the exercise price of such warrants. See "Description of Capital Stock -- Warrants."

SUBSTANTIAL SHARES OF COMMON STOCK RESERVED FOR THE EXERCISE OF OPTIONS AND WARRANTS

The Company has reserved 410,000 shares of Common Stock for issuance upon the exercise of incentive awards granted or available for grant to employees, officers, directors, advisors and consultants pursuant to the Incentive Plan, of which the Company anticipates granting options to purchase an aggregate of 270,000 shares of Common Stock to the Company's founders upon the completion of the Offering. In addition, the Company has reserved an aggregate of 201,500 shares of Common Stock for issuance upon exercise of the Underwriter's Warrants and the Management Warrants. These options and warrants may adversely affect the Company's ability to obtain financing in the future. The holders of such options and warrants can be expected to exercise them at a time when the Company would otherwise be able to obtain additional equity capital on terms more favorable to the Company. See "Underwriting," "Certain Relationships and Related Transactions" and "Management -- Management Option Grants."

SHARES ELIGIBLE FOR FUTURE SALE

Future sale of substantial amounts of Common Stock in the public market following the Offering could adversely affect the market value for the Common Stock. The 1,015,000 shares sold by the Company in this Offering will be freely tradable unless acquired by an affiliate of the Company. The holders of the Notes (which automatically convert into an aggregate of 541,370 shares of Common Stock (including assumed interest) upon the completion of the Offering) are not subject to any "lock-up" agreements restricting disposition of their shares, and therefore, the holders of the Notes who are not affiliates of the Company may

sell such shares of Common Stock in accordance with the resale provisions of this Prospectus. In addition, 201,500 shares of the Company's Common Stock (to be issued when and if the Underwriter's Warrants and the Management Warrants are exercised), none of which are subject to any "lock-up" agreements, are being registered, on a delayed or continuous basis, concurrent with the Offering. Notwithstanding the foregoing, however, transfer of the Underwriter's Warrants and the shares underlying these warrants is restricted to bona fide officers of the Underwriter for a one-year period following the grant thereof in accordance with the rules of the National Association of Securities Dealers, Inc. Upon the completion of the Offering, the Company anticipates issuing options to purchase an aggregate of 270,000 shares of Common Stock to certain of the Company's executive officers pursuant to the Incentive Plan. These shares are not being registered in connection with the Offering, but may be resold in accordance with the provisions of Rule 144 promulgated under the Securities Act ("Rule 144"). Similarly, certain of the Company's executive officers and directors own an aggregate of 71,273 shares of Common Stock. While these shares are not registered in the Offering, they may be resold starting 90 days after the completion of the Offering in accordance with the provisions of Rule 144. See "Selling Securityholders" and "Plan of Distribution For Selling Securityholders."

ARBITRARY DETERMINATION OF OFFERING PRICE

The offering price of the shares of Common Stock has been determined through negotiations between the Company and the Underwriter. Among the factors considered in determining the price were prevailing market conditions, the general economic environment, estimates of the prospects of the Company, the background and capital contributions of management and current conditions of the securities markets and the Company's industry. The initial public offering price may bear no relationship to the price at which the Common Stock will trade in the market upon completion of the Offering. See "Underwriting."

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NO PRIOR MARKET FOR COMMON STOCK

Prior to the Offering, there has been no public market for the Common Stock and there can be no assurance that an active trading market will develop or be sustained after the Offering or that investors will be able to sell the Common Stock should they desire to do so. The Company has been advised by the Underwriter that Ferris, Baker Watts Incorporated and Nash, Weiss & Co. intend to make a market in the Company's securities. See "Underwriting."

VOLATILITY OF STOCK PRICE

The market price of the Common Stock is likely to be highly volatile and could be subject to wide fluctuations in response to factors concerning the Company or its competitors. The Company's operating results may also be below the expectations of market analysts and investors, which would likely have a material adverse effect on the prevailing market price of the Common Stock.

Further, the stock market has experienced extreme price and volume fluctuations that have affected the market prices of equity securities of many biotechnology companies. These price fluctuations often have been unrelated or disproportionate to the operating performance of such companies. Market fluctuations, as well as general economic, political and market conditions such as recessions or international currency fluctuations, may adversely affect the market price of the Common Stock. The realization of any of the risks described in these "Risk Factors" could have a dramatic and adverse impact on the market price of the Common Stock.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

Statements herein regarding the development of the Company's proprietary technologies and potential changes in the Company's customer base and the impact of those changes in the variability of the Company's results of operations constitute forward-looking statements under the federal securities laws. Such statements are subject to certain risks and uncertainties that could preclude the Company from developing revenue-generating commercial products based on its proprietary research or result in the Company's failure to realize decreased variability of operating results. Risks and uncertainties relating to proprietary technologies are outlined under the caption "Risk Factors -- Risks Associated with development of Proprietary Technologies." With respect to variability of operating results, the changes in the biotechnology industry anticipated by the Company may fail to occur, or even if they occur, they may fail to have the anticipated effect on the Company's revenues.

USE OF PROCEEDS

After deducting selling commissions and other expenses of the Offering, the net proceeds to the Company from the sale of the shares of Common Stock offered hereby are estimated to be \$5,402,800. The Company currently plans to use the net proceeds from the Offering, and any interest generated therefrom, for working capital, capital expenditures and general and administrative purposes. The information below constitutes the Company's best estimate as to the specific uses of such funds:

<TABLE>
<CAPTION>

PURPOSE	EXPENSE	PERCENTAGE OF TOTAL
Equipment Purchases.....	\$ 2,600,000	48.1%
Lease of Facilities.....	\$ 500,000	9.3
Sales & Marketing.....	\$ 803,680	14.9
Personnel.....	\$ 621,520	11.5
Working Capital.....	\$ 877,600	16.2
Total.....	\$ 5,402,800	100%

The equipment to be purchased consists of laboratory equipment, including DNA sequencers, DNA synthesizers, mass spectroscopy instruments and related computer equipment and software. Sales and marketing expenditures are expected to consist of compensation for sales representatives to be hired, including payment of commissions, advertising and the cost of participating in industry trade shows. Working capital is expected to be used to fund the Company's accounts receivable and to maintain reasonable operating cash reserves. The amounts actually expended for each purpose may vary. Pending the use of the net proceeds, the Company may invest the funds in short-term money market, government and federal agency obligations, bank certificates of deposit and savings deposits.

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DIVIDEND POLICY

The Company currently intends to retain all future earnings, if any, to finance growth and development of its business and, therefore, does not expect to declare or pay any cash dividends in the foreseeable future. The declaration of dividends, however, is within the discretion of the Company's Board. See "Risk Factors -- No Dividends."

DILUTION

At June 30, 1997, after reflecting the conversion of the Notes, the net tangible book value of the Company was \$3,014,320, or \$4.92 per share. "Net tangible book value" per share of Common Stock represents the amount of the Company's total tangible assets, less the amount of its total liabilities, divided by the number of shares of Common Stock outstanding, including 541,370 Conversion Shares and the estimated interest payable on the Notes in the form of 41,370 shares of Common Stock. Dilution represents the difference between the amount per share of Common Stock paid by the new investors in the Offering and the pro forma net tangible book value per share of Common Stock after the Offering. After giving effect to the sale by the Company of the 1,015,000 shares of Common Stock offered hereby at \$6.00 per share and the payment of the estimated expenses related to the Offering of \$600,320, the pro forma net tangible book value of the Company at June 30, 1997 would have been \$8,504,000, or \$5.22 per share of Common Stock. This represents an immediate increase in net tangible book value of \$.30 per share of Common Stock to existing shareholders and an immediate dilution of \$.78 per share of Common Stock to new investors purchasing Common Stock in the Offering, as illustrated in the following table:

Price Per Share in the Offering.....	\$ 6.00
Net tangible book value per share before the Offering.....	\$ 4.92
Increase per share attributable to new investors.....	\$ 0.30
Pro forma net tangible book value per share after the Offering.....	\$ 5.22
Dilution to new investors.....	\$ 0.78

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The following table sets forth, at October 6, 1997, (i) the number of shares of Common Stock purchased from the Company by its founders and by holders of the Conversion Shares to be issued upon completion of the Offering, (ii) the total consideration paid and the average price per share paid for such shares by such shareholders; and (iii) the number of shares of Common Stock to be sold by the Company in the Offering, the total consideration to be paid and the average price per share:

<TABLE>
<CAPTION>

AVERAGE PRICE PER SHARE	SHARES PURCHASED		TOTAL CONSIDERATION	
	NUMBER	PERCENTAGE	AMOUNT	PERCENTAGE
-----	-----	-----	-----	-----
<S> <C>				
New Investors..... \$6.00	1,015,000	62.4%	\$6,090,000 (1)	67.0%
Holders of Conversion Shares..... \$5.54	541,370	33.3	\$3,000,000 (1)	33.0
Company Founders..... --	71,273	4.3	--	--
-----	-----	-----	-----	-----
Total.....	1,627,643	100.0%	\$9,090,000 (1)	100.0%

</TABLE>

(1) Prior to the deduction of expenses related to the issuance thereof.

CAPITALIZATION

The following table sets forth the actual capitalization of the Company at June 30, 1997, and the capitalization of the Company as adjusted to reflect the sale by the Company of the Notes in the Private Placement, the sale by the Company of the Common Stock offered hereby and the initial application of the estimated proceeds of thereof. See "Use of Proceeds." This table should be read in conjunction with the Company's Financial Statements and the Notes thereto included elsewhere herein.

<TABLE>
<CAPTION>

DECEMBER 31,
1996

JUNE 30, 1997

(UNAUDITED)

ACTUAL

AS
ADJUSTED ACTUAL

<S> <C>				
Short-term debt:				
Demand note payable.....	\$	42,000	\$	42,000 \$
--				
Current portion of long-term debt..... 37,293		59,455		59,455

37,293		101,455		101,455

Long-term debt, net of current portion..... 185,687		270,456		270,456

Shareholders' equity:				
Common stock, no par value, 10,000,000 shares authorized, 71,273 shares issued and outstanding; 1,586,273 shares issued and outstanding as adjusted(1) (2).....		760		760
760				
Additional paid-in capital(1) (3).....		8,503,240		387,291
--				

Retained earnings(3).....	--	--
161,509		

	8,504,000	388,051

Total capitalization.....	\$ 8,875,911	\$ 759,962
\$385,249		

- (1) Reflects the (i) conversion of the Notes into 500,000 shares of Common Stock, and (ii) the sale 1,015,000 shares of Common Stock offered hereby (at the price to public of \$6.00 per share) and the application of the estimated net proceeds therefrom.
- (2) Does not include: (i) 100,000 shares of Common Stock reserved for issuance upon exercise of Management Warrants; (ii) up to 410,000 shares of Common Stock reserved for issuance under the Company's Incentive Plan; and (iii) 101,500 shares of Common Stock issuable upon exercise of the Underwriter's Warrants for the Offering.
- (3) Reflects the June 25, 1997 conversion from S Corporation to C Corporation status and the reclassification of \$387,291 in retained earnings, net of \$96,851 in distributions payable to the S Corporation shareholders to cover their respective shares of tax liability resulting from the Company's earnings up to the date of conversion.

SELECTED FINANCIAL DATA

The following selected financial data of the Company as of and for the period ended December 31, 1996 are derived from the financial statements that have been audited by Goodman & Company, L.L.P., independent auditors. The Company's Financial Statements for the six months ended June 30, 1996 and 1997 are unaudited. However, in the opinion of the Company, all adjustments, consisting of normal recurring accruals, necessary for a fair presentation have been made. Interim results are not indicative of the results to be expected for a full fiscal year. These data should be read in conjunction with the Company's Financial Statements and the Notes thereto included elsewhere in this Prospectus and Management's Discussion and Analysis of Financial Condition and Results of Operations which follow.

ENDED 31, ----- 1995 ----- <S> <C>	FOR THE SIX MONTHS		FOR THE YEARS
	ENDED JUNE 30,		DECEMBER
	1997	1996	1996
	-----	-----	-----
	(UNAUDITED)		
OPERATIONS DATA:			
Revenue.....	\$1,059,212	\$428,302	\$989,925
\$369,301			
Net income (loss) before proforma income tax expense.....	\$ 286,287	\$122,521	\$110,088
\$(11,890)			
Proforma net income (loss) (1).....	\$ 161,634	\$ 97,976	\$ 60,437
\$(33,982)			
Proforma earnings (loss) per common and common equivalent share(2)....	\$ 0.32	\$ 0.19	\$ 0.12
(0.07)			
Proforma weighted average common and common equivalent shares			
outstanding and used in computation(2).....	506,273	506,273	506,273
506,273			

BALANCE SHEET DATA AS OF:

<TABLE>
<CAPTION>

	JUNE 30, 1997		DECEMBER	
	AS	AS	1996	
	ADJUSTED	(3)		
	ACTUAL			
31,				

1995				

<S> <C>				
	(UNAUDITED)		(ACTUAL)	
Working capital.....	\$ (261,014)	\$8,228,666	\$ 91,637	\$
(34)				
Current ratio.....	0.92	27.91	1.32	
1.00				
Property and equipment, net.....	\$ 543,386	\$ 543,386	\$243,611	
\$100,749				
Total assets.....	\$3,964,280	\$9,080,229	\$634,193	
\$186,818				
Total long-term debt.....	\$ 270,456	\$ 270,456	\$185,687	\$
--				
Shareholders' equity.....	\$ 388,051	\$8,504,000	\$162,269	\$
62,656				
Book value per share(2).....	\$ 0.77	\$ 5.59	\$ 0.32	\$
0.12				

</TABLE>

- (1) The above financial data gives retroactive effect to conversion from S Corporation to C Corporation status for federal income tax purposes.
- (2) The above financial data gives retroactive effect to the 93.78-for-one stock split effective June 24, 1997, to shares relating to the issuance of the Conversion Shares, and to the antidilutive effect of the Management Warrants converted using the Treasury Stock method. See Note 2 to the Company's Financial Statements.
- (3) As adjusted to reflect (i) the sale of 1,015,000 shares of Common Stock offered hereby (at the price to public of \$6.00 per share) and the application of the estimated net proceeds therefrom and (ii) the conversion of the Notes to Common Stock at a conversion price of \$6.00 per share. See "Description of Capital Stock."

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MANAGEMENT'S DISCUSSION AND ANALYSIS OF
FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The following should be read in conjunction with "Selected Financial Data" and the Company's Financial Statements and Notes thereto appearing elsewhere in this Prospectus.

OVERVIEW

The Company's revenues are derived principally from providing protein/peptide and DNA/RNA chemistries and related analytical services to researchers in the biotechnology industry. The biotechnology industry has experienced rapid growth in recent years based on the development of innovative technologies. The development process requires sophisticated laboratory analysis. Many participants in the industry do not have the facilities or personnel necessary to perform this analysis, and contract it out to the Company and other organizations.

Since commencing operations in 1992, the Company has experienced significant growth in revenues as the biotechnology industry, and the Company's reputation in the industry, has grown. The Company experiences quarterly fluctuations in revenues which arise primarily from variations in contract status with its large customers. In addition, the majority of other customer projects are individual orders for specific projects ranging from \$6,000 to \$200,000. 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. Therefore, the timing of significant projects could have a significant impact on the financial results of any given period. The combined impact of several large contracts from customers and the unpredictable project fluctuations can result in very large fluctuations in financial performance from quarter to quarter. The Company also anticipates that significant capital and related expenditures expected to be made out of proceeds of the Private Placement and the Offering will impact financial performance in the third and fourth quarter of 1997.

The biotechnology industry is currently progressing through a consolidation stage in its development. A number of large customers may desire to develop captive biotechnology research departments, thereby reducing their dependence on outsource research providers such as the Company. If this trend continues, the Company expects that it may derive a large portion of its revenues from smaller customers which do not have the expertise or facilities to perform the analytical services provided by the Company.

The Company believes that its growth initiatives to increase its customer base discussed herein will reduce the significance of sales fluctuations. See "Business -- Growth Strategy." In addition, the Company has initiated several steps to mitigate the effects of these fluctuations where possible. The Company has formalized team-based, project management programs to increase efficiency in laboratory operations, and has developed and implemented a customized database for project tracking. The Company has also instituted cost containment measures where possible without negatively impacting project completion. These measures include more efficient labor scheduling, the use of temporary employees to decrease overhead costs and negotiating with suppliers to decrease supply costs.

The Company also derives revenues from government grants which fund the Company's research on its proprietary technologies. Unlike its analytical research services business, in which the Company provides services to customers on a contract basis and has no ownership or other interest in any intellectual properties resulting from the research, in its proprietary research business the Company attempts to develop products based on intellectual property rights which the Company owns or licenses from third parties. This research has been financed almost entirely through government grants, although the Company has also used a small portion of its retained earnings to finance this business. All government grants are expense reimbursement grants which provide for reimbursement of the Company's direct costs incurred in a research project, plus indirect costs stated 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. In the case of one grant under which the Company serves as a subcontractor, the Company is paid quarterly on the basis of direct and indirect costs incurred during the immediately preceding quarter. See "Business -- Proprietary Research and Research Grants." The Company's proprietary research business uses the same personnel, equipment and facilities as its service business.

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YEARS ENDED DECEMBER 31, 1995 AND DECEMBER 31, 1996

RESULTS OF OPERATIONS

REVENUES

Gross revenue increased \$620,624, or 168.0%, from \$369,301 in 1995 to \$989,925 in 1996. This increase in revenue was attributable to an increase in new customer accounts, which contributed \$453,502, or 73%, of the increase, and to larger orders with existing customers, which contributed \$167,122, or 27%, of the increase, for all types of services provided by the Company in 1996, except for peptide synthesis which experienced a nominal decrease of \$6,380, or 1.7% of total 1995 revenue. See "Business -- Services." This decrease was more than offset by an increase in revenues from DNA sequencing services in the amount of \$109,298, or 254.4%, from \$42,958 in 1995 to \$152,256 in 1996. Revenue earned from governmental grants also increased approximately threefold from \$109,820 in 1995 to \$304,987 (30.8% of total revenue) in 1996. All of the aforementioned grant revenue was used to fund research on the Company's proprietary technologies. The beneficial increase in revenue for 1996 was achieved with minimal advertising and marketing effort.

Management believes that increases in revenues are attributable to the Company's enhanced reputation in the industry and to more effective advertising activities. These activities included the introduction of a tiered pricing structure with services billed at lower rates and initial price concessions made as a component of the Company's aggressive entry into the government and academic sectors. Quarterly fluctuations in gross revenues during 1995 and 1996 were primarily a result of substantial automated sequencing services performed

for the initial contract with a single customer. Revenues from this contract were recognized during the second and third quarters of 1995 and the first quarter of 1996. Operations for an additional contract were substantially completed during the first quarter of 1997, significantly increasing revenues for that quarter as compared to any prior quarters. The customer has extended this contract for a period of one year commencing in the fourth quarter of 1997. The Company believes that revenues to be derived from this contract during the extended term will be commensurate with the revenues historically derived from this contract.

EXPENSES

Cost of services consists primarily of labor and laboratory supplies. Cost of services increased 197.3% from \$79,948 to \$237,726 for the years ended December 31, 1995 and 1996, respectively. This increase was consistent with the increased growth experienced in revenue. Cost of services as a percentage of revenue was 21.6% and 24.0% in 1995 and 1996, respectively. 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, depreciation and amortization, professional fees and advertising. Sales, general and administrative expenses increased from \$220,891 to \$323,820, or 46.6%, in 1995 and 1996, respectively. Sales, general and administrative expenses as a percentage of revenue were 59.8% and 32.7% in 1995 and 1996, respectively. The decrease in the percentage relationship of sales, general and administrative expenses to revenue is primarily attributable to cost containment measures and economies of scale realized with the growth in revenues.

Research and development costs in 1995 were primarily related to developing and improving protocols for the automated sequencing group. Research and development costs in 1996 were related to the development of new and expanded services. Research and development costs were \$69,861 and \$308,484, or 18.9% and 31.2% of revenue, in 1995 and 1996, respectively. The increase of \$238,623 in 1996 research and development costs represented an increase of 341.6% over the amount reported for 1995. Most of these costs, however, were funded by grant awards from government sources. Research and development expenses are likely to continue to increase as the Company's expansion efforts continue. The Company may need increased capital in order to expand its research and development efforts. The Company intends to apply for more grants, and is eligible to compete for additional categories of grants.

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SIX MONTHS ENDED JUNE 30, 1996 AND JUNE 30, 1997

RESULTS OF OPERATIONS

REVENUES

Gross revenues increased 147.3% from \$428,302 to \$1,059,212 for the six month periods ended June 30, 1996 and 1997, respectively. This increase in revenue was attributable to an increase in new customer accounts for both the automated sequencing services and cell culture and protein purification services provided by the Company. Management believes that the increase in automated sequencing revenue is attributable to increased reputation in the industry and advertising activities while the increase in the cell culture and protein purification services is due to increased advertising as well as increased management involvement in promotional activities.

EXPENSES

Cost of services increased 252.7% from \$84,003 to \$296,272 for the six months ended June 30, 1996 and 1997, respectively. Increases in personnel, supply usage and equipment costs as a result of the increase in services rendered comprised the increase in operating costs. Cost of services as a percentage of revenue was 19.6% and 28.0% for the six month periods ending June

30, 1996 and 1997, respectively.

Sales, general and administrative expenses increased from \$129,415 to \$255,798, or 97.7%, for the six months ended June 30, 1996 and 1997, respectively. Sales, general and administrative expenses as a percentage of revenue were 30.2% and 24.1% for the six months ended June 30, 1996 and 1997, respectively. The decrease in the percentage relationship of sales general and administrative expenses to revenue is primarily attributable to cost containment measures and economies of scale realized with the growth in revenues.

Research and development costs for the six months ended June 30, 1997 were primarily related to developing and improving protocols for the automated sequencing efforts. Research and development costs for this period were related to the receipts of new grants and contracts. Research and development costs were \$88,642 and \$213,535, or 20.7% and 20.2% of revenue, for the six months ended June 30, 1996 and 1997, respectively. The increase of \$124,893 in research and development costs for the six months ended June 30, 1997 represented an increase of 140.9% over the amount reported for the same period a year earlier. Research and development expenses are likely to continue to increase as the Company's expansion efforts continue. The Company may need additional capital in order to expand its research and development efforts.

LIQUIDITY AND CAPITAL RESOURCES

The Company has experienced significant fluctuating demands on its working capital due to actual and anticipated growth in all current services. Operating cash flow provided was \$57,850 and \$409,136 for 1995 and 1996, respectively, and \$116,160 and \$218,296 for the six months ended June 30, 1996 and 1997, respectively. Net working capital (deficit) at December 31, 1995 and 1996 was (\$34) and \$91,637, respectively, and (\$261,014) at June 30, 1997. Capital expenditures were \$961 and \$194,798 in 1995 and 1996, respectively. The Company's liquidity was increased substantially during the fourth quarter of 1996 by the receipt of a research contract and the related cash receipt in the amount of \$200,000 from a significant customer. Additionally, the Company's liquidity was increased during the second quarter of 1996 by the expansion of its revolving credit line to purchase a DNA sequencer for \$131,116. In August 1996, the revolving credit line converted to a term note that had an outstanding balance of \$200,800 upon conversion. This term note provides for equal monthly payments of principal and interest through October 2001. The Company received \$30,000 in July 1996 pursuant to an Enterprise Zone incentive loan with the City of Richmond. During 1996, the Company made principal payments on its existing debt of \$33,378. The Company also retired its capital lease obligation in the amount of \$63,860. The Company's liquidity was increased substantially during the first quarter of 1997 from the proceeds of a term loan from a financial

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institution in the amount of \$102,800. The Company also financed the purchase of vehicle under a term loan in the amount of \$23,682.

In June 1997, the Company completed the Private Placement of the Notes. The net proceeds of the Private Placement were \$2,629,269.

Prior to the completion of the Private Placement, the Company, as an S Corporation, made distributions to its shareholders which totaled an aggregate of \$79,533 in 1996 and \$96,851 for the first six months of 1997. In June 1997, the Company altered its taxable status to that of a corporation governed by Subchapter C of the Internal Revenue Code of 1986, as amended (the "Code").

During the twelve-month period following completion of the Offering, the Company expects to incur approximately \$3,100,000 of capital expenditures, consisting of approximately \$2,600,000 of expenditures on laboratory equipment and related computer equipment and software, and approximately \$500,000 of expenditures on fitting up new laboratory and office space. These expenditures will enable the Company to expand its facilities in order to pursue its growth strategy. See "Business -- Growth Strategy." These capital expenditures will be funded out of the proceeds of the Offering.

RECENT ACCOUNTING PRONOUNCEMENTS

In October 1995, the Financial Accounting Standards Board (FASB) issued

FASB Statement No. 123, Accounting for Stock-Based Compensation Arrangements. FASB No. 123 permits a company to choose either a new fair value-based method of accounting for stock-based compensation, or retain the current intrinsic value-based method of accounting for stock-based compensation provided for in Accounting Principles Board Opinion No. 25, Accounting for Stock-Based Compensation. FASB Statement No. 123 requires pro forma disclosures of net income and earnings per share computed as if the fair value-based method had been applied in financial statements of companies that continue to follow the intrinsic value-based method of accounting. APB No. 25 would generally only require the recognition of compensation expense for the difference, if any, between the fair value of the underlying Common Stock and the grant price of the option of the date of the grant. As the Company intends to utilize stock options in the future, these accounting pronouncements could have a material effect on its financial condition and on results of operation in the future. The Company is currently considering the potential effect of these pronouncements, but is unable, at the current time, to determine the effect on its financial condition and results of operation with any degree of certainty.

For a discussion of the Company's plan of operation, see "Use of Proceeds."

BUSINESS

OVERVIEW

The Company was founded in 1992 by four experienced research scientists 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. Much of this revenue is derived from innovative products based on research into the fundamental biological processes that support life. These fundamental processes depend on the interrelationships of basic components of cells in living organisms, including enzymes, proteins, peptides, DNA and RNA, an understanding of which enables scientists to develop new compounds having commercial applications.

The Company provides these services to customers on a contract basis and derives its revenues from these services, and not 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 directly dependent on successfully commercializing a new biotechnology product. The Company has developed a strong reputation as a leading provider of biotechnology research and development analytical services which positions the Company for growth with the availability of additional capital. The Company intends to focus its expansion efforts on the maintenance and expansion of long term relationships with customers in the biotechnology industry as well as establishing new customer relationships. The Company will seek to identify trends that impact its customers and develop new products and services to meet the changing needs of its clients.

In addition to its analytical services, the Company is developing several of its own proprietary new technologies in the areas of anti-coagulation and genomic sequence analysis, and has a patent application pending in the anti-coagulation area. The development of these technologies has been funded by grants from government agencies, and the Company anticipates

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that this portion of its operations will continue to be funded in this manner. These technologies are in the early stage of development and should be considered highly speculative at this time.

GROWTH STRATEGY

The Company's strategy for growth consists of the following elements:

- o Expansion of Capacity in its Existing Service Business. 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. By securing a significantly larger laboratory facility and additional research equipment, the Company will have the capacity to generate substantially greater revenues from its core services and to improve profit margins through more efficient operations.
- o Expansion of Marketing Capabilities. The Company believes that it can increase revenues and profits through greater presence in the biotechnology industry. The Company's marketing to date has consisted largely of customer referrals, limited advertisements in trade publications and participation at trade shows. The Company intends to significantly expand its marketing operations to attract new customers and to receive more business from existing customers.

- o Expansion into New Service Businesses. By enhancing its facilities and expertise, the Company believes it will be positioned to expand its service offerings to existing customers and to attract new customers. For example, the Company does not currently provide services to companies seeking FDA approval for pharmaceutical products because the Company's laboratory does not meet FDA requirements, and it does not offer services in various genetic and forensic testing areas because it does not have personnel who possess the necessary expertise. The Company intends to address these needs, which will open up new markets. The Company believes there is a substantial opportunity to offer analytical services related to the human genome project, and its genetic and forensic applications. See " -- The Biotechnology Industry."

THE BIOTECHNOLOGY INDUSTRY

The biotechnology industry consists of a broad range of companies that use biological processes to develop products for the human health care, agricultural productivity, food safety and nutrition, environmental improvement and animal health markets. The industry began to develop in the early 1970s, with much of its activity focusing on fundamental research and initial development of new products based on that research. The development cycle for products derived from biotechnology research and development has typically been quite long, with many new technologies taking ten or more years to yield products with significant commercial potential.

The promise of the research and development efforts of the previous decades is now being realized, and the result is a stream of new products ready for commercialization and renewed interest in further basic research into new technologies and extensions of existing technologies. Much of the success of the biotechnology industry can be traced to advancements in "foundation" technologies which define the basic structures and relationships of biologically relevant compounds. Elucidation of these structures and relationships has led to the development of commercial scale quantities of pure, custom designed macromolecules.

There are two stages in the development of foundation technologies. In the first stage, the building block components of a macromolecule (amino acids, nucleotides, etc.) are determined and defined. In the second stage, these components are altered in a precise fashion to meet the user's needs. Once analyzed, sequences of peptides and proteins and of RNA and DNA are used to create or enhance a wide range of products and applications, including pharmaceuticals, genetically altered freeze-and pest-resistant crops, DNA "fingerprints" of criminals, paternity testing, infectious disease diagnosis and prognosis, genetic disease detection, identification of cancer-prone individuals and other applications.

Due to the relatively short history of the biotechnology industry and the complexity of most macromolecules, researchers have only recently begun to unravel the sequences of DNA, RNA, peptides, and proteins, and research and development expenditures in this area are expected to grow rapidly in the future. For example, in the early 1990's the federal government budgeted \$15 billion on the human genome project, a multi-government agency sponsored project to sequence the entire human gene sequence (comprised of approximately three billion individual nucleotides), and the completion of this project is estimated to take another 10 years and \$15 billion. The recent success in cloning a sheep from maternal cells has generated significant new interest in cloning. The ability to use DNA sequence analysis to precisely categorize the lineage of domestic

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animals, or to diagnose genetic pathologies, or to create new biopharmaceuticals, has the potential to become a major industry of the 21st century. The Company believes that the expansion of existing biotechnology industries and the development of new ones will lead to an increased demand for sophisticated analytical research services. The Company believes that it will become well positioned to participate in these new service areas.

ANALYTICAL SUPPORT SERVICES

In order to analyze and experiment with cell components and macromolecules, researchers need to analyze, sequence, purify, synthesize, and characterize those components. The cost of creating an in-house laboratory with the equipment and personnel to perform all these functions is well in excess of \$3 million. The Company's business is dependent upon the use of sophisticated, analytical equipment. The Company intends to use a portion of the proceeds of the Offering to purchase additional equipment necessary to provide a wider range of services. The biotechnology industry is rapidly developing and the need for more sophisticated equipment will increase significantly as the technology develops. In light of increasing cost pressures, many companies, universities, and research institutions seek to avoid incurring the costs to equip and staff such a laboratory. Instead, they contract with biotechnology support companies for many of these analytical services. They are increasingly outsourcing routine

procedures to maximize the innovative aspects of their internal efforts. Many players in the biotechnology sector have developed according to the "virtual company" model, which supports outsourcing of routine research and development efforts. In response to this demand, a number of foundation biotechnology support companies have emerged to supply the emerging companies in this growing field.

The Company was founded in September 1992 by four internationally recognized investigators with expertise in the general areas of protein/peptide and nucleic acid chemistries to provide a high degree of expertise and a wide range of analytical services to the biotechnology industry. The Company is a fee-for-service contractor and typically takes no ownership position in the intellectual property rights of the services it performs under contract. 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 RNA synthesis, DNA synthesis, 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 players in the pharmaceutical industry 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 major pharmaceutical and biotechnology companies throughout the world.

SERVICES

The following are the major categories of services the Company provides.

OLIGONUCLEOTIDE SYNTHESIS. Nucleotides are the building blocks of DNA and RNA. Investigators synthesize oligonucleotides in order to build new, or clone existing, DNA strands. Some applications of synthesis include gene therapies, recombinant DNA technologies, pharmaceuticals, infectious disease detection and prognosis, hereditary disease detection and prognosis and cancer detection and predilection, insecticides, test vaccines and anti-viral agents. The Company provides both routine syntheses, for which the average sale is \$150, and custom synthesis chemistries for design of special nucleotide derivatives. Very few commercial companies offer custom RNA synthesis or synthesis of RNA/DNA hybrid molecules, and the Company has been successful in supplying these specialized products to academic and commercial customers. An average order for an RNA oligonucleotide is \$1,000. In addition, the Company has recently negotiated a broad license for the synthesis and distribution of a new type of highly specific, high performance oligonucleotide referred to as "PNA's" or Protein Nucleic Acids.

PROTEIN/PEPTIDE SYNTHESIS. Assembly of amino acids into chains creates synthetic peptides which can act as effective substitutes for their physiological counterparts. For example, synthetic peptide hormones are molecules carried through the blood that can affect cell functions. There are many types of peptides including therapeutics, anti-diuretics, anti-coagulants, and anti-hypertensives. Still other peptides are used as specific substrates or inhibitors of enzyme function. Peptides are used

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primarily for research, clinical therapeutics, and for counteracting the biological activities of other peptides. The Company now has the ability to produce 36 peptides simultaneously, or to produce libraries of peptides containing literally millions of different peptide sequences. New equipment expected to be purchased with the proceeds of the Offering will enable the Company to produce an additional 96 peptides simultaneously. An average order is about \$1,500 per peptide.

DNA SEQUENCING. Sequencing is essentially the reverse process of synthesis. An investigator who wants to know the precise order of constituent nucleotides of a DNA or RNA strand would use sequencing to perform that analysis. Examples of uses of DNA sequencing include gene therapy, cloning, identity testing, mutation analysis, and disease and cancer detection. A customer often will require development of novel sequencing protocols and analysis of the data resulting from sequencing, services which the Company has the expertise to provide. In a typical experiment, a customer will require 10-20 sequencing reactions which are priced at \$60 to \$100 per reaction. However, a number of customers require thousands of sequencing reactions, for which the Company offers aggressive discounts in pricing.

PEPTIDE/PROTEIN SEQUENCING. DNA arranges amino acids into the proteins and enzymes of the body, such as hemoglobin or gamma globulin. Analysis of the order of amino acids in proteins and enzymes is an important analytical tool. For example, to clone a protein, a researcher must know the precise sequence of amino acids that make up a protein, and in creating DNA, a researcher must verify the sequence of amino acids in the new protein resulting from the DNA. The Company provides these analytical services, with a typical sequence experiment costing \$800, although the Company has attracted customers who send the Company hundreds of peptides and proteins for sequence analysis.

PEPTIDE/PROTEIN COMPOSITIONAL ANALYSIS. Analysis of the amino acids that compose a protein or peptide is used to verify purity of synthesized peptides and to determine the make-up of newly discovered proteins or enzymes. Each sample submitted for analysis is \$50 and usually two or three analyses are required for a complete compositional determination.

OTHER TECHNOLOGIES. The Company offers a number of even more complex and sophisticated services that are based on the foundation technologies and interdigitate the current and ongoing biotechnology revolution stimulated by the development of recombinant DNA gene cloning technology. Thus, the marriage in the Company of the gene cloning and recombinant DNA technologies with the protein, DNA, and macromolecular analysis foundation technologies provides a strong strategic capability for services for prospective customers. The breadth and depth of the Company's expertise, therefore, provides a wide range of potential approaches to research and developmental contracts.

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 and 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 prolonged 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 his results. If the project entails 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 physiochemical 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 retains all rights to any developments 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.

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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.

CUSTOMERS

The Company currently provides similar products and support to more than 300 individual customers in university and/or government laboratories, and to customers in private companies. The composition of the Company's customer base in terms of numbers of customers is approximately 60% private industry, 20% government agencies and 20% academic institutions. In 1996, one private industry customer accounted for approximately 20% of the Company's revenues. The Company

has entered into a research agreement with this customer which will expire in December 1997, and has entered into two additional research agreements with this customer which are expected to run from January through December 1998. The Company regularly bills the customer against a standing purchase order. No other customer accounted for more than 5% of the Company's revenues in 1996.

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. The Company believes that it is very competitive in protein sequence analysis and DNA sequence analysis and competitive in all other services, with the exception of DNA synthesis, in which it is currently less competitive. See "Risk Factors -- Competition."

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) and is listed with several biotechnical and biomedical oriented sites on the World Wide Web. See "Risk Factors -- Lack of Sales and Marketing Capabilities."

FACILITIES

The Company currently occupies 10,000 square feet of laboratory and office space in two adjacent locations, each having 5,000 square feet of space. The lease for one location continues through the year 2000 and is subject to cancellation by the Company upon nine months' notice. The lease for the other location continues through May 31, 1998 and is subject to cancellation by the Company upon three months' notice. The Company sponsors a research program at the Medical College of Virginia ("MCV") campus of Virginia Commonwealth University ("VCU") which allows its employees access to certain laboratories and facilities of MCV. As part of its growth strategy, the Company anticipates the need for substantial additional space and is investigating a 18,000 square foot facility which, together with options to lease at least 10,000 square feet of adjoining space, would accommodate the Company's needs for the foreseeable future.

RELATIONSHIP WITH VIRGINIA COMMONWEALTH UNIVERSITY

Three of the Company's founders were faculty members at VCU, and the Company benefited from certain agreements with VCU in the early stage of its development. See "Management -- Relationship with VCU."

PROPRIETARY RESEARCH AND RESEARCH GRANTS

In addition to customer billings, the Company has attracted federal contracts and grants which are used to fund the Company's development of its own proprietary technologies. See " -- Intellectual Property." The Company has completed three \$25,000 contracts from the National Institutes of Health ("NIH"), has completed three different Phase I Small Business Technology Transfer Research ("SBTTR") grants from NIH (\$100,000 each), and has completed the first year of a Phase II SBTTR grant from NIH (\$235,000). The Company currently is in the second year of the Phase II SBTTR grant from NIH (\$265,000), which will expire on August 31, 1998, and has a Small Business Innovative Research Award ("SBIR") from the United States Department of Agriculture (\$55,000), which will expire on May 31, 1998. Revenues from federally funded contracts are recognized on a cost reimbursement basis. See "Risk Factors -- Dependence on Government Grants" and "Management's Discussion and Analysis of Financial Condition -- Overview."

INTELLECTUAL PROPERTY

The Company's principal intellectual property rights consist of a patent application relating to an anti-coagulation technology it is developing. 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. This anti-coagulation technology, and all other proprietary technologies under development at the Company, are at a very early stage of development. To yield commercial products, these technologies will require extensive additional research and development, testing and government approval. The Company does not anticipate undertaking this work itself, but instead will license the technologies to third parties which would pursue commercialization and pay the Company license fees and royalties based on sales of products, if any. As a result, there can be no assurance that commercial products will result from these technologies, all of which should be considered highly speculative.

The Company anticipates that its ability to secure and protect patents and other intellectual property rights will be 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.

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 actions 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 FDA submission projects until the violations are remedied. The Company will also require a new license from the Nuclear Regulatory Commission ("NRC") for the operation of a new laboratory facility. The Company estimates that the time period for obtaining the NRC license should not exceed three months. See "Risk Factors -- Government Regulation."

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 for FDA approval of human pharmaceutical products. 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.

EMPLOYEES

The Company currently employs 30 full-time and 3 part-time employees. The Company believes its relations with its employees to be very good. See "Risk Factors -- Dependence on and Need to Hire Personnel" and " -- Lack of Sales and Marketing Capabilities."

LEGAL PROCEEDINGS

The Company is not involved in any legal proceedings.

MANAGEMENT

EXECUTIVE OFFICERS AND DIRECTORS

The executive officers and directors of the Company and their ages, as of October 6, 1997, are as follows:

<TABLE> <CAPTION>	NAME	AGE	POSITION
<S> <C>	Richard J. Freer, Ph.D.....	55	Chairman of the Board, Director and Founder
	Robert B. Harris, Ph.D.....	45	President, Director and Founder
	Gregory A. Buck, Ph.D.....	46	Senior Vice-President, Chief Scientific Officer, Secretary, Director and Founder
	Thomas R. Reynolds.....	35	Senior Vice President, Director and Founder
	Chester M. Trzaski.....	51	Chief Operating Officer
	Charles A. Mills, III.....	50	Director
	Peter C. Einselen.....	58	Director

The following is a brief summary of the background of each executive officer and director of the Company:

RICHARD J. FREER, PH.D., Chairman of the Board, Director and Founder. Since founding the Company in 1992, Dr. Freer has served as the Chairman of the Board and a Director of the Company. From 1977 until 1997, Dr. Freer was employed by VCU, first as an Associate Professor and then a Professor, in the Department of Pharmacology and Toxicology. In addition, from 1988-1995, Dr. Freer was first Director and then Chair of the Biomedical Engineering Program. Dr. Freer received a bachelor's degree in Biology from Marist College and a doctorate in Pharmacology from Columbia University.

ROBERT B. HARRIS, PH.D., President, Director and Founder. Since founding the Company in 1992, Dr. Harris has served as the President and a Director of the Company. Until 1997, Dr. Harris was employed in the Department of Biochemistry and Molecular Biophysics at VCU, first as an Assistant, then Associate and finally a full Professor. Dr. Harris received a joint bachelor's degree in Chemistry and Biology from the University of Rochester, and a master's degree and a doctorate degree in Biochemistry/Biophysical Chemistry from New York University.

GREGORY A. BUCK, PH.D., Senior Vice President, Chief Scientific Officer, Secretary, Director and Founder. Since founding the Company in 1992, Dr. Buck has served as Senior Vice President, Chief Scientific Officer, Secretary and a Director of the Company. In addition, from 1996 until 1997, Dr. Buck was employed as a Professor in the Department of Microbiology and Immunology at VCU. From 1991 through 1996, Dr. Buck served as an Associate Professor in the Department of Microbiology and Immunology at VCU. Dr. Buck received a bachelor's degree in Genetics from the University of Wisconsin-Madison and a doctorate degree in Microbiology and Immunology from the University of Washington.

THOMAS R. REYNOLDS, Senior Vice President, Director and Founder. Since founding the Company in 1992, Mr. Reynolds has served as a Senior Vice President and a Director of the Company. From 1987 until 1997, Mr. Reynolds served as the Manager of the Nucleic Acids Core Laboratory at The Massey Cancer Center in the Department of Microbiology and Immunology at VCU. From 1984 through 1986, Mr. Reynolds served as a research assistant in Genetics at Carnegie Mellon University. Mr. Reynolds received a bachelor's degree in Biology from the Pennsylvania State University.

CHESTER M. TRZASKI, Chief Operating Officer. Mr. Trzaski has been employed by the Company as its Chief Operating Officer since May 1996. From 1993 to 1995, Mr. Trzaski was the Chief Operating Officer and Executive Vice President of Corning National Packaging, a clinical packaging company. From 1990 to 1993, Mr. Trzaski served as the Director of Materials Management for Whitby Pharmaceuticals, a pharmaceutical marketing company. Mr. Trzaski received a bachelor's degree in Microbiology from Alliance College.

CHARLES A. MILLS, III, Director. Mr. Mills became a director of the Company in June 1997. Mr. Mills has been employed by the Underwriter as a Senior Vice President since 1986. He served as Chairman of the Board of the Underwriter from 1990 to 1992 and from 1994 to the present. He has served as a director of Humphrey Hospitality Trust, Inc. since 1994 and as a Director of Virginia Gas Company since 1996.

PETER C. EINSELEN, Director. Mr. Einselen became a director of the Company in June, 1997. Mr. Einselen has served as Senior Vice President of the Underwriter since 1990. From 1983 to 1990, Mr. Einselen was employed by Scott & Stringfellow, Incorporated, Richmond, Virginia. He has been a member of the Board of Directors of American Industrial Loan Association since 1992 and has also been a director of Virginia Gas Company since 1996.

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The Company anticipates appointing one additional non-employee Director to the Board.

RELATIONSHIP WITH VCU

Drs. Freer, Harris, and Mr. Reynolds have terminated their employment with VCU and are now full-time employees of the Company. Dr. Buck has been granted a one-year leave of absence from VCU and will devote 100% of his efforts to the Company's business.

BOARD OF DIRECTORS

The Articles and the Bylaws provide that the Company's Board of Directors shall have between five and nine members and shall be divided into three classes. The members of each class of directors will serve for staggered three-year terms. Following the completion of the Offering, Messrs. Reynolds and Mills will be classified as Class I directors to serve until the annual meeting of the Company's shareholders (the "Annual Meeting") to be held in 1998; Dr. Harris and Mr. Einselen will be classified as Class II directors to serve until the 1999 Annual Meeting; and Drs. Freer and Buck will be classified as Class III directors to serve until the 2000 Annual Meeting. Each successor to a director whose term expires at an Annual Meeting will be elected to serve until the third Annual Meeting after his or her election and until his or her successor has been duly elected and qualified. Any director chosen to fill a vacancy on the Board shall hold office until the next election of the class for which he or she shall have been chosen, and until his or her successor has been duly elected and qualified. Directors may be removed only for cause.

COMMITTEES OF THE BOARD OF DIRECTORS

The Company's Audit Committee and Compensation Committee are each composed of Mr. Mills and Mr. Einselen, both of whom are independent directors. The Audit Committee recommends the annual appointment of auditors, with whom the Audit Committee reviews the scope of audit and non-audit assignments and related fees, accounting principles used by the Company in financial reporting, internal auditing procedures and the adequacy of the internal control procedures of the Company. The Compensation Committee will administer the Company's Incentive Plan and make recommendations to the Board of Directors regarding compensation and benefits for the executive officers. The Compensation Committee also has oversight responsibilities for all broad-based compensation and benefit programs, including the Incentive Plan.

DIRECTOR COMPENSATION

All directors receive a fee of \$2,500 for each regularly scheduled quarterly Board meeting attended (the "Director's Fee"). The Director's Fee shall be adjusted upwards or downwards on an annual basis in an amount equal to the percentage change in the market price of the Company's Common Stock as compared to the market price of the Common Stock for the previous fiscal year. For the first year of this calculation, the prior fiscal year's market price will be \$6.00 per share. In addition to the Director's Fee, all directors receive reimbursement for travel and other related expenses incurred in attending Board meetings and committee meetings.

EXECUTIVE COMPENSATION AND OTHER INFORMATION

The following table set forth certain information regarding compensation earned by Dr. Freer during the fiscal years ended December 31, 1996, December 31, 1995 and December 31, 1994. No executive officer of the Company, including Dr. Freer, received compensation in excess of \$100,000 during such fiscal years.

SUMMARY COMPENSATION TABLE

<TABLE>
<CAPTION>

ANNUAL COMPENSATION
TABLE

NAME AND PRINCIPAL POSITION	YEAR	SALARY	BONUS	ALL OTHER COMPENSATION
<S> <C>				
Richard J. Freer, Ph.D.....	1996	\$8,729	--	\$ 23,024 (1)
Chairman of the Board	1995	--	--	--
	1994	--	--	--

</TABLE>

(1) Represents distribution to pay income taxes incurred by Dr. Freer as a result of the Company's status, as of December 31, 1996, as a corporation taxed in accordance with Subchapter S of the Code.

INCENTIVE PLAN

The Company adopted the Incentive Plan on June 24, 1997. The Incentive Plan provides for the granting to employees, officers, directors, consultants and certain non-employees of the Company of options to purchase shares of Common Stock.

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The maximum number of shares of Common Stock that may be issued pursuant to options under the Incentive Plan is 410,000, subject to adjustment in the event of a stock split, stock dividend or other change in the Common Stock or the capital structure of the Company. Of these shares, 270,000 have been reserved for incentive awards to be granted to Drs. Freer, Harris and Buck and Mr. Reynolds. 140,000 shares are reserved for incentive awards to be granted to other persons. Incentive awards may be in the form of stock options, restricted stock, incentive stock or tax offset rights. The Incentive Plan is administered by the Compensation Committee of the Board of Directors. Subject to the provisions of the Incentive Plan, the Compensation Committee is authorized to determine who may participate in the Incentive Plan, the number and type of awards to each participant, the schedules on which each award will become exercisable, and the terms, conditions, and limitations applicable to each award. The Compensation Committee has the exclusive power to interpret the Incentive Plan and to adopt such rules and regulations as it may deem necessary or appropriate for the purposes of administering the plan. Subject to certain limitations, the Board of Directors is authorized to amend, modify or terminate the Incentive Plan to meet any changes in legal requirements or for any other purpose permitted by law.

OPTIONS. Options granted under the Incentive Plan may be either "incentive stock options" within the meaning of Section 422(a) of the Code, or non-qualified options. Incentive stock options may be granted only to employees of the Company (including directors who are employees), while non-qualified options may be issued to non-employee directors, employees, consultants, advisors and other independent contractors providing services to the Company. The per share exercise price of the Common Stock subject to all options granted pursuant to the Incentive Plan shall be determined by the Compensation Committee at the time any option is granted. In the case of incentive stock options, the exercise price shall not be less than 100% of the fair market value of the shares covered thereby at the time the incentive stock option is granted. "Fair market value" shall be determined by the Board, or by its designated committee, in good faith and using any reasonable method. No person who owns, directly or indirectly, at the time of the granting of an incentive stock option to him, 10% or more of the total combined voting power of all classes of Common Stock (a "10% Shareholder"), shall be eligible to receive any incentive stock options under the Incentive Plan unless the option price is at least 110% of the fair market value of the Common Stock subject to the option, determined on the date of grant. Non-qualified options are not subject to this limitation.

No incentive stock option may be transferred by an optionee other than by will or the laws of descent and distribution, and during the lifetime of an optionee, the option will be exercisable only by the optionee. In the event of termination of employment, other than by death or permanent, total disability, the optionee will have three months after such termination to exercise the option. Upon termination of employment of an optionee by reason of death or permanent disability, an option remains exercisable for one year thereafter to the extent it was exercisable on the date of such termination. No similar limitation applies to non-qualified options.

Incentive stock options granted under the Incentive Plan cannot be exercised more than 10 years from the date of grant, except that incentive stock options issued to a 10% Shareholder are limited to five year terms. All options granted under the Incentive Plan may provide for the payment of the exercise price in cash, by cash equivalent acceptable to the Company, or by delivery to the Company of shares of Common Stock already owned by the optionee having a fair market value equal to the exercise price of the options being exercised, or by a combination of such methods of payment. Therefore, a participant may be able to tender shares of Common Stock to purchase additional shares of Common

Stock and may, theoretically, exercise all of his or her stock options with no additional investment other than his or her original shares. Any unexercised options that expire or terminate become available once again for issuance.

RESTRICTED STOCK. Restricted stock issued pursuant to the Incentive Plan is subject to the following general restrictions: (i) none of such shares may be sold, transferred, pledged or otherwise encumbered or disposed of until the restrictions on such shares have lapsed or been removed under the provisions of the Incentive Plan, and (ii) if a holder of restricted stock ceases to be employed by the Company, he will forfeit any shares of restricted stock on which the restrictions have not lapsed or been otherwise removed.

The Compensation Committee will establish as to each share of restricted stock issued under the Incentive Plan the terms and conditions upon which the restriction on such shares shall lapse. Such terms and conditions may include, without limitation, the lapsing of such restrictions at the end of a specified period of time, as a result of the disability, death or retirement of the participant. In addition, the Compensation Committee may at any time, in its sole discretion, accelerate the time at which any or all restrictions will lapse or remove any and all such restrictions.

INCENTIVE STOCK. The Compensation Committee may establish performance programs with fixed goals and designate key employees as eligible to receive incentive stock if the goals are achieved. Incentive stock will only be issued in accordance with the program established by the Compensation Committee. More than one performance program may be established by

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the Compensation Committee and they may operate concurrently or for varied periods of time and a participant may participate in more than one program at the same time. A participant who is eligible to receive incentive stock under a performance program has no rights as a shareholder until such incentive stock is received.

TAX OFFSET RIGHTS. The Compensation Committee may, in its discretion, award tax offset rights in conjunction with any incentive award. Tax offset rights entitle the participant to receive an amount of cash from the Company sufficient to satisfy the income and payroll taxes legally required to be withheld upon exercise of an option or tax offset right, upon grant of incentive stock, or upon the lapse of restriction on restricted stock.

FEDERAL INCOME TAX CONSEQUENCES. A participant will not incur federal income tax when he is granted an option, tax offset right, or, in most cases and depending on the restrictions imposed, restricted stock. Upon receipt of incentive stock, a participant will recognize compensation income, which is subject to income tax withholding by the Company, equal to the fair market value of the shares of incentive stock on the date of transfer to the participant.

Upon exercise of a nonstatutory stock option, a participant generally will recognize compensation income, which is subject to income tax withholding by the Company, equal to the difference between the fair market value of the Common Stock on the date of the exercise and the option price. The Compensation Committee has authority under the Incentive Plan to include provisions allowing the participant to deliver Common Stock, or to elect to have withheld a portion of the shares he would otherwise acquire upon exercise, to cover his tax liabilities. The election will be effective only if approved by the Compensation Committee and made in compliance with other requirements set forth in the Incentive Plan. When an employee exercises an incentive stock option, he generally will not recognize income, unless he is subject to the alternative minimum tax.

If the terms of an option permit, a participant may deliver shares of Common Stock instead of cash to acquire shares under an option, without having to recognize taxable gain (except in some cases with respect to "statutory option stock") on any appreciation in value of the shares delivered. However, if an employee delivers shares of "statutory option stock" in satisfaction of all, or any part, of the exercise price under an incentive stock option, and if the applicable holding periods of the "statutory option stock" have not been met (two years from grant and one year from exercise), he will be considered to have made a taxable disposition of the "statutory option stock." "Statutory option stock" is stock required upon the exercise of incentive stock options.

In general, a participant who receives shares of restricted stock will include in his gross income as compensation an amount equal to the fair market value of the shares of restricted stock at the time the restriction lapse or are removed. Such amounts will be included in income in the tax year in which such event occurs. The income recognized will be subject to income tax withholding by the Company.

Upon exercise of a tax offset right, a participant generally will recognize ordinary income, which is subject to income tax withholding by the Company, equal to the cash received.

The Company generally will be entitled to a business expense deduction, except as explained below, at the time and in the amount that the recipient of an incentive award recognizes ordinary compensation income in connection herewith. As stated above, this usually occurs upon exercise of nonstatutory options or tax offset rights, upon the lapse or removal of restrictions on restricted stock, and upon issuance of incentive stock. Generally, the Company's deduction is contingent upon the Company's meeting withholding tax requirements. No deduction is allowed in connection with an incentive stock option, unless the employee disposes of Common Stock received upon exercise in violation of the holding period requirements. The Company's right to a tax deduction for income recognized in connection with incentive awards or the exercise of options by executives whose total compensation is subject to the proxy disclosure rules will depend upon whether the compensation of such executive in the aggregate exceeds \$1,000,000; if so, the excess over \$1,000,000 will not be deductible.

This summary of the federal income tax consequence of nonstatutory stock options, incentive stock options, tax offset rights, restricted stock and incentive stock does not purport to be complete. There may also be state and local income taxes applicable to these transactions. Holders of incentive awards should consult their own advisors with respect to the application of the laws to them and to understand other tax consequences of the awards including possible income deferral, alternative minimum tax rules, taxes on parachute payments and the tax consequences of the sale of shares.

CHANGE IN CONTROL PROVISIONS. In the event of a "change in control" transaction, the Company's Compensation Committee may take any one or more of the following actions either at the time an incentive award is granted or any time thereafter: (i) provide for an assumption of incentive awards granted under the Incentive Plan (which a Common Stock assumption may be effected by means of a payment to each participant in exchange for the cancellation of the incentive awards held by such

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participant, of the difference between the fair market value of the aggregate number of shares of Common Stock subject to the participant's incentive awards and the aggregate exercise price that would have to be paid to acquire such shares); (ii) provide for substitution of appropriate new incentive awards covering stock to a successor corporation or the Company or an affiliate thereof; or (iii) give notice to participants that no such assumption or substitution will be made, in which event each incentive award outstanding shall automatically accelerate to become fully exercisable immediately before the effective date for the change in control, except that such acceleration will not occur if, in the opinion of the Company's outside accountants, it would render unavailable "pooling of interest" accounting for a change in control that would otherwise qualify for such accounting treatment. All incentive awards will terminate immediately following consummation of a change in control, except to the extent assumed by the successor corporation or an affiliate thereof. In relation to the Incentive Plan, a "change in control" transaction is defined to constitute any of the following: (i) approval by the shareholders of a merger or consolidation in which holders of outstanding voting stock of the Company would receive less than 50% of the voting stock of the surviving or resulting corporation; (ii) approval by the shareholders of a plan of liquidation or approval of the dissolution of the Company; (iii) approval by the shareholders of the sale or transfer of substantially all of the assets of the Company; or (iv) the acquisition by a person or group of related persons of beneficial ownership of 50% or more of the outstanding voting securities of the Company.

MANAGEMENT OPTION GRANTS

The Company has agreed that simultaneously with the closing of the Offering, the Company will issue to Drs. Freer, Harris and Buck and Mr. Reynolds incentive stock options to acquire a total of 270,000 shares of Common Stock pursuant to the Incentive Plan. Incentive stock options to acquire 70,000 shares will have an exercise price of \$6.00 per share and incentive stock options to acquire 200,000 shares will have an exercise price of \$9.90 per share. All such incentive stock options will have terms of ten years. See "Certain Relationships and Related Transactions."

EMPLOYMENT AGREEMENTS

On June 24, 1997, the Company entered into employment agreements with each of Drs. Freer, Harris and Buck and Mr. Reynolds. Each of these agreements has a term of five years and will be extended for successive one-year terms beginning on the first anniversary of its commencement, unless either the executive officer or the Company shall have given notice to the other of an election not to extend the term of the employment agreement; provided that the Company may not give such notice prior to December 31, 1997. The employment agreements provide for base salaries of \$165,000 for Drs. Freer, Harris and Buck and \$120,000 for Mr. Reynolds, which are adjustable annually at the discretion of the Compensation Committee. In addition, the employment agreements provide the Company's executive officers with annual bonuses equal to, in the aggregate, 15%

of the Company's pre-tax net income for the preceding fiscal year. Such bonuses will be paid within 30 days following the release of the Company's annual audited financial statements. Notwithstanding the foregoing, however, the bonuses for the executive officers for the fiscal year ending December 31, 1997 shall collectively equal the greater of (i) 15% of the Company's pre-tax net income or (ii) \$150,000. Under each of the employment agreements, the Company may terminate the executive officers employment at any time for "Cause" as such term is defined in the employment agreement, without incurring any continuing obligations to the executive officer. If the Company terminates an executive officer's employment for any reason other than for "Cause" or if an executive officer terminates his or her employment for "Good Reason," as such term is defined in the employment agreement, the Company will remain obligated to continue to provide the compensation and benefits specified in the executive officers employment agreement for the duration of what otherwise would have been the term of the employment agreement. In addition, each employment agreement contains non-competition provisions which prohibit each executive officer from competing with the Company or soliciting its employees under certain circumstances. A court may, however, determine that these non-competition provisions are unenforceable or only partially enforceable.

CHANGE IN CONTROL PROTECTIONS

The Company has entered into severance agreements with each of its executive officers. Each severance agreement (all of which are substantially similar) has an initial term of five years and will be extended for successive one-year periods beginning on the first anniversary of its commencement, unless either the executive officer or the Company shall have given notice to the other of an election not to extend the term of the severance agreement. If the employment of any of these executive officers is terminated (with certain exceptions) within 60 months following a "Change in Control," as such term is defined in the severance agreement, the executive officer will be entitled to receive a cash payment equal to two times the annual salary for the most recent twelve-month period and three times the bonus paid with respect to such period. To the

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extent the aggregate benefits available to an executive officer, whether under his respective severance agreement or otherwise, exceed the limit of three times the executive's average base compensation provided in Section 280G of the Code, resulting in the executive officer incurring an excise tax under Section 4999 of the Code or any other taxes or penalties (other than ordinary income or capital gains taxes), the severance agreements require the Company to pay the executive officer an additional amount to cover any such excise taxes or penalties incurred. The Company will not be entitled to a deduction for the amount in excess of this limit. Neither the Offering nor an initial public offering of the Common Stock will constitute a Change in Control for purposes of these agreements.

LIABILITY AND INDEMNIFICATION OF OFFICERS AND DIRECTORS

The Articles eliminate all liability of the Company's directors and officers for monetary damages to the Company or its shareholders except in the event of willful misconduct or a knowing violation of the criminal law or any federal or state securities law. Pursuant to such provisions, the Company's directors or officers will not be liable for monetary damages to the Company or its shareholders even if they should fail, through negligence or gross negligence, to satisfy their duty of care to the Company or its shareholders.

The Articles require indemnification of any person against liability incurred in connection with any proceeding to which that person is made a party by reason of (i) his service to the Company as a director or officer or (ii) his service as director, officer, trustee, or partner to some other enterprise at the request of the Company, except in the event of willful misconduct or a knowing violation of the criminal law. The Articles also authorize the Company's Board of Directors to contract in advance to indemnify any director or officer by a majority vote of a quorum of disinterested directors. In addition, the Articles authorize the Company's Board of Directors, by a majority vote of a quorum of disinterested directors, to cause the Company to indemnify, or agree to indemnify in advance, to the same extent any person who serves as an employee, agent or consultant of the Company or who serves at the request of the Company in some other capacity. See "Risk Factors -- Limitations on Officers' and Directors' Liabilities Under Virginia Law."

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the Company pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. Currently there is no pending litigation or proceeding involving a director or officer of the Company as to which indemnification is being sought, nor is the Company aware of any threatened litigation that may result in claims for indemnification by any officer or director.

PRINCIPAL SHAREHOLDERS

The following table sets forth certain information regarding the beneficial ownership of the Common Stock as of October 6, 1997 (i) each person who is known by the Company to own of record or beneficially more than five percent (5%) of the Common Stock, (ii) each director and executive officer of the Company and (iii) all directors and executive officers of the Company as a group. Unless otherwise indicated, each of the persons or entities listed below has sole voting and investment power with respect to all shares shown beneficially owned by them, except to the extent such power is shared by a spouse under applicable law.

<TABLE>
<CAPTION>

PERCENT OF
SHARES
OUTSTANDING

NAME AND ADDRESS OF BENEFICIAL OWNER OFFERING	NUMBER OF SHARES (1)	BEFORE
<S> <C>		
Richard J. Freer, Ph.D. (2)..... 7.7%	49,579	
Robert B. Harris, Ph.D. (2)..... 7.7%	49,578	
Gregory A. Buck, Ph.D. (2)..... 9.0%	57,912 (3)	
Thomas R. Reynolds (2)..... 3.6%	22,537	
Chester M. Trzaski (2)..... 1.4%	8,333 (4)	
Charles A. Mills, III (5)..... 0	0	
Peter C. Einselen (5)..... 0	0	
James T. Martin (6) (7)..... 21.8%	133,333	
James H. Wallace (8) (9)..... 5.4%	33,333	
All Directors and Executive Officers as a Group (7 persons)..... 26.4%	187,939	

<CAPTION>

NAME AND ADDRESS OF BENEFICIAL OWNER	AFTER OFFERING
<S> <C>	
Richard J. Freer, Ph.D. (2).....	3.0%
Robert B. Harris, Ph.D. (2).....	3.0%
Gregory A. Buck, Ph.D. (2).....	3.6%
Thomas R. Reynolds (2).....	1.4%
Chester M. Trzaski (2).....	*
Charles A. Mills, III (5).....	0
Peter C. Einselen (5).....	0
James T. Martin (6) (7).....	8.2%
James H. Wallace (8) (9).....	2.0%
All Directors and Executive Officers as a Group (7 persons).....	11.5%

</TABLE>

* Less than one percent (1%)

(1) The table above includes shares of the Company's Common Stock which an individual has the right to acquire upon the exercise of the Management Warrants within 60 days of October 6, 1997. Such shares are deemed to be outstanding for the purpose of calculating the percentage ownership of the individual holding such shares, but are not deemed to be outstanding for calculating the percentage of any other person shown on the table.

(2) 911 East Leigh Street, Suite G-19, Richmond, Virginia 23219.

- (3) Includes 8,333 shares of Common Stock issuable to Dr. Buck and Leon I. Salzberg, as tenants in common, upon the conversion of the Note held by them.
- (4) Represents shares of Common Stock issuable to Mr. Trzaski and his spouse, upon the conversion of the Note held by them.
- (5) 1108 East Main Street, Richmond, Virginia 23218.
- (6) Tupenny House, Tuckerstown, Bermuda
- (7) Represents shares of Common Stock issuable upon the conversion of the Note held by Dr. Martin.
- (8) 1776 K Street, N.W., Washington, D.C. 20006-2304
- (9) Represents shares of Common Stock issuable upon the conversion of the Notes held by Mr. Wallace.

CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS

Simultaneously with the closing of the Offering, the Company anticipates issuing to Drs. Freer, Harris and Buck and Mr. Reynolds options to acquire an aggregate of 270,000 shares of Common Stock pursuant to the Incentive Plan. Options to acquire 70,000 shares will have an exercise price of \$6.00 per share, and options to acquire 200,000 will have an exercise price of \$9.90 per share. Each of such options will have a term of 10 years. See "Management -- Management Option Grants."

On June 25, 1997, the Company issued the Management Warrants to members of the Company's management team. The Management Warrants are exercisable commencing June 25, 1998 and for a period of nine years thereafter at an exercise price of \$9.90 per share. The Management Warrants were issued as noted below:

<TABLE>	
<S> <C>	
Richard J. Freer, Ph.D.....	28,947 Warrants
Robert B. Harris, Ph.D.....	28,947 Warrants
Gregory A. Buck, Ph.D.....	28,948 Warrants
Thomas R. Reynolds.....	13,158 Warrants
</TABLE>	

On June 25, 1997, the Company entered into an agreement with Mr. Trzaski pursuant to which the Company agreed to pay certain amounts due to Mr. Trzaski, and Mr. Trzaski agreed to relinquish certain rights to acquire shares of the capital stock of the Company in exchange for \$110,000, which will be paid in accordance with the terms of a promissory note. The note provides that the Company will pay Mr. Trzaski \$60,000 on demand at any time after the Company has increased its working capital to not less than \$2,000,000, and will pay him an additional \$50,000 at any time after the Company has increased its working capital by not less than an additional \$3,000,000, provided that the second payment shall not be made prior to January 1, 1998. The note will bear interest at an annual rate of 8% on any principal amounts due thereunder. On July 2, 1997, the Company paid the first \$60,000 installment of the note to Mr. Trzaski.

The Company, as an S Corporation, made distributions to its shareholders in 1996 and 1997. These distributions totaled an aggregate of \$79,533 in 1996 and \$96,851 for the first six months of 1997.

Two directors of the Company, Charles A. Mills, III and Peter C. Einselen, also serve as executive officers of the Underwriter. The Company paid commissions to the Underwriter in connection with the closing of the Private Placement. In connection with the Offering, the Company will pay an underwriting discount and issue the Underwriter's Warrants to the Underwriter. See "Risk Factors -- Ongoing Relationship with Underwriter" and "Underwriting."

The Company believes that all of the transactions noted above were made or will be made on terms no less favorable to the Company than could have been obtained from unaffiliated third parties. All future transactions between the Company and its officers, directors and principal shareholders will be approved in accordance with the Virginia law by a majority of the Board, including a majority of the independent and disinterested directors of the Board, and will be on terms no less favorable to the Company than could be obtained from unaffiliated third parties.

DESCRIPTION OF CAPITAL STOCK

The following summary description of the capital stock of the Company is qualified in its entirety by reference to the Company's Articles.

COMMON STOCK

The Company is authorized to issue up to 10,000,000 shares of Common Stock. As of the date of this Prospectus, 71,273 shares of Common Stock are issued and outstanding. Such shares are held by four holders of record. Upon the completion of the Offering, the Notes will automatically convert into an aggregate of 500,000 additional shares of Common Stock. Accrued interest on the Notes payable in the form of additional shares of Common Stock will also be issued at that time. For purposes of this Prospectus, the interest on the Notes has been assumed to be 41,370 shares of Common Stock, the amount that would accrue through November 21, 1997. See "Principal Shareholders."

The holders of Common Stock are entitled to one vote for each share on all matters voted on by shareholders, including elections of directors, and possess exclusively all voting power except as otherwise required by law. The Articles do not provide for cumulative voting for the election of directors. The holders of Common Stock are entitled to such dividends as may be declared from time to time by the Company's Board of Directors from funds available therefor, and upon liquidation will be entitled to receive pro rata all assets of the Company available for distribution to such holders. The holders of Common Stock have no preemptive or other subscription rights, and there are no conversion rights or redemption or sinking fund provisions with respect to the Common Stock.

WARRANTS

As of the date of this Prospectus, the Company has reserved (a) 101,500 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants, and (b) 100,000 shares of Common Stock issuable upon the exercise of the Management Warrants.

The Underwriter's Warrants, the Management Warrants and the Warrant Shares are being registered with the Offering but are not underwritten. The Underwriter's Warrants and the Management Warrants will not necessarily be sold concurrently with the Common Stock being offered through the Underwriter, and the Warrant Shares will not be issued until after the completion of the Offering. The shares of Common Stock underlying the Underwriter's Warrants and the Management Warrants, however, are being registered on a delayed or a continuous basis. It is anticipated that the Underwriter's Warrants will be listed for trading on the Nasdaq SmallCap Market under the symbol " .". The Underwriter's Warrants will be issued and the Management Warrants were issued subject to the terms and conditions of certain warrant agreements between the Company and the holders of such warrants. The following description of the Underwriter's Warrants and the Management Warrants is not complete and is qualified in all respects by the warrant agreements which are filed as exhibits to the Registration Statement of which this Prospectus is a part.

Each Underwriter's Warrant entitles the holder to purchase one share of Common Stock at an exercise price of \$9.90 per share. The number, character, and exercise price of the shares of Common Stock underlying these warrants are subject to adjustment in certain events, such as mergers, reorganizations, stock dividends, subdivisions or reclassifications, to prevent dilution. The Underwriter's Warrants are exercisable at any time after one year from the date of this Prospectus until five years from the date of this Prospectus. Holders of the Underwriter's Warrants will not, as such, have any of the rights of stockholders of the Company.

Each Management Warrant entitles the holder to purchase one share of Common Stock at an exercise price of \$9.90 per share. The number, character, and exercise price of the shares of Common Stock underlying these warrants are subject to adjustment in certain events, such as mergers, reorganizations, stock dividends, subdivisions or reclassifications, to prevent dilution. The Management Warrants are exercisable from June 25, 1998 through June 25, 2007. Holders of the Management Warrants will not, as such, have any of the rights of stockholders of the Company.

In certain cases, the sale of securities by the Company upon exercise of the Underwriter's Warrants or the Management Warrants could violate the securities laws of the United States, certain states thereof or other jurisdictions. The Company will use its best efforts to cause a registration statement with respect to such securities under the Securities Act to continue to be effective during the respective terms of the warrants and to take such other actions under the laws of various states as may be required to cause the sale of securities upon the exercise of the Underwriter's Warrants or the Management Warrants to be lawful. The Company, however, will not be required to cause the sale of securities upon exercise of such warrants if, in the opinion of counsel, the sale of securities upon such exercise would be unlawful.

CERTAIN PROVISIONS OF THE COMPANY'S ARTICLES OF INCORPORATION AND BYLAWS

The Company's Articles and Bylaws contain provisions that make more difficult the acquisition of control of the Company by means of a tender offer, a proxy contest, open market purchases or otherwise. The Articles provide for the Company's Board of Directors to be divided into three classes serving staggered terms so that directors initial terms will expire at the 1998, 1999 or 2000 Annual Meeting. Starting with the 1998 Annual Meeting, one class of directors will be elected each year for a three-year term subject to the rights of the holders of any series or class of Preferred Stock then outstanding. A director may be removed only for cause.

The Articles follow the Virginia Act by requiring the affirmative vote of more than two-thirds of the outstanding shares of Common Stock for the approval of mergers, share exchanges, certain dispositions of assets and other extraordinary transactions. In addition, the affirmative vote of at least two-thirds of the outstanding shares of each voting group of capital stock is required for approval of an Affiliated Transaction (as defined below) with an Interested Shareholder (as defined below), subject to certain exceptions comparable to those contained in the Virginia Act. See " -- Certain Corporate Governance Provisions of the Virginia Act." The Articles further require the affirmative vote of the majority of the outstanding shares of Common Stock for the approval of amendments to the Articles, except that the affirmative vote of at least two-thirds of the outstanding shares of Common Stock is required to approve an amendment to the provisions of the Articles establishing the classified board and the super majority voting requirement for Affiliated Transactions.

The Bylaws establish an advance notice procedure for the nomination of candidates for election as directors, other than by the Board of Directors of the Company, and for certain matters to be brought before an Annual Meeting of the Company. A shareholder must give the Company notice not less than 90 days prior to an Annual Meeting of shareholders to (i) nominate persons to be elected directors of the Company at such meeting or (ii) propose business matters to be considered at such meeting.

The purpose of the relevant provisions of the Articles and Bylaws is to discourage certain types of transactions that may involve an actual or threatened change of control of the Company and to encourage persons seeking to acquire control of the Company to consult first with the Company Board of Directors to negotiate the terms of any proposed business combination or offer. The provisions are designed to reduce the vulnerability of the Company to an unsolicited proposal for a takeover of the Company that does not have the effect of maximizing long-term shareholder value or is otherwise unfair to shareholders of the Company, or an unsolicited proposal for the restructuring or sale of all or part of the Company that could have such effects. See "Risk Factors -- Anti-Takeover Provisions."

CERTAIN CORPORATE GOVERNANCE PROVISIONS OF THE VIRGINIA ACT

The Company is subject to the "affiliated transactions" provisions of the Virginia Act which restrict certain transactions between the Company and any person (an "Interested Shareholder") who beneficially owns more than 10% of any class of the Company's voting securities ("Affiliated Transactions"). These restrictions, which are described below, do not apply to an Affiliated Transaction with an Interested Shareholder who has been such continuously since the date the Company first had 300 shareholders of record or whose acquisition of shares making such person an Interested Shareholder was previously approved by a majority of the Company's Disinterested Directors. "Disinterested Director" means, with respect to a particular Interested Shareholder, a member of the Company's Board of Directors who was (i) a member on the date on which an Interested Shareholder became an Interested Shareholder or (ii) recommended for election by, or was elected to fill a vacancy and received the affirmative vote of, a majority of the Disinterested Directors then on the Board of Directors. Affiliated Transactions include mergers, share exchanges, material dispositions of corporate assets not in the ordinary course of business, any dissolution of the Company proposed by or on behalf of an Interested Shareholder, or any reclassification, including reverse stock splits, recapitalization or merger of the Company with its subsidiaries, which increases the percentage of voting shares owned beneficially by an Interested Shareholder by more than five percent.

The "affiliated transactions" statute prohibits the Company from engaging in an Affiliated Transaction with an Interested Shareholder for a period of three years after the Interested Shareholder became such unless the transaction is approved by the affirmative vote of a majority of the Disinterested Directors and by the affirmative vote of the holders of two-thirds of the voting shares other than those shares beneficially owned by the Interested Shareholder. Following the three-year period, in addition to any other vote required by law or by the Articles, an Affiliated Transaction must be approved either by a majority of the Disinterested Directors or by the shareholder vote described in the preceding sentence unless the transaction satisfies the fair-price provisions of the statute. These fair-price provisions require, in general, that

the consideration to be received by shareholders in the Affiliated Transaction (i) be in cash or in the form of consideration used by the Interested Shareholder to acquire the largest number of its shares and (ii) not be less, on a per share basis, than an amount determined in the manner

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specified in the statute by reference to the highest price paid by the Interested Shareholder for shares it acquired and the fair market value of the shares on specified dates. The Company is also subject to the "control share acquisitions" provisions of the Virginia Act, which provide that shares of the Company's voting securities which are acquired in a "Control Share Acquisition" have no voting rights unless such rights are granted by a shareholders' resolution approved by the holders of a majority of the votes entitled to be cast on the election of directors by persons other than the acquiring person or any officer or employee-director of the Company. A "Control Share Acquisition" is an acquisition of voting shares which, when added to all other voting shares beneficially owned by the acquiring person, would cause such person's voting strength with respect to the election of directors to meet or exceed any of the following thresholds: (i) one-fifth, (ii) one-third or (iii) a majority. "Beneficial ownership" means the sole or shared power to dispose or direct the disposition of shares, or the sole or shared power to vote or direct the voting of shares, or the sole or shared power to acquire shares, including any such power which is not immediately exercisable, whether such power is direct or indirect or through any contract, arrangement, understanding, relationship or otherwise. A person shall be deemed to be a beneficial owner of shares as to which such person may exercise voting power by virtue of an irrevocable proxy conferring the right to vote. An acquiring person is entitled, before or after a Control Share Acquisition, to file a disclosure statement with the Company and demand a special meeting of shareholders to be called for the purpose of considering whether to grant voting rights for the shares acquired or proposed to be acquired. The Company may, during specified periods, redeem the shares so acquired if no disclosure statement is filed or if the shareholders have failed to grant voting rights to such shares. In the event full voting rights are granted to an acquiring person who then has majority voting power, those shareholders who did not vote in favor of such grant are entitled to dissent and demand payment of the fair value of their shares from the Company. The control share acquisitions statute does not apply to an actual or proposed Control Share Acquisition if the Articles or the Company's Bylaws are amended, within the time limits specified in the statute, to so provide.

A corporation may, at its option, elect not to be governed by the foregoing provisions of the Virginia Act by amending its articles of incorporation or bylaws to exempt itself from coverage; provided, however, any such election not to be governed by the "affiliated transactions" statute must be approved by the corporation's shareholders and will not become effective until 18 months after the date it is adopted. The Company has not elected to exempt itself from coverage under these statutes. See "Risk Factors -- Limitation on Officers and Directors Liabilities Under Virginia Law."

EFFECT OF CERTAIN PROVISIONS UPON AN ATTEMPT TO ACQUIRE CONTROL OF THE COMPANY

The foregoing provisions of the Company's Articles and Bylaws, as well as the provisions of Virginia law described above, make more difficult, and may discourage certain types of potential acquirers from proposing, a merger, tender offer or proxy contest, even if such transaction or occurrence may be favorable to the interests of the shareholders. Similarly, such provisions may delay or frustrate the assumption of control by a holder of a large block of Common Stock and the removal of incumbent management, even if such removal might be beneficial to shareholders. By discouraging takeover attempts, these provisions might have the incidental effect of inhibiting (i) certain changes in management and (ii) the temporary fluctuations in the market price of the shares that often result from actual or considered takeover attempts. See "Risk Factors -- Limitations on Officers' and Directors' Liabilities Under Virginia Law."

TRANSFER AGENT AND REGISTRAR

American Securities Transfer & Trust, Inc. will serve as the Company's transfer agent and registrar.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to the Offering, there has been no market for the Common Stock of the Company. Future sales of substantial amounts of Common Stock in the public market could adversely affect market prices prevailing from time to time. The availability for sale or sales of substantial amounts of Common Stock of the Company in the public market could adversely affect the prevailing market price and the ability of the Company to raise equity capital in the future.

Upon completion of the Offering, the Company will have 1,627,643 shares of Common Stock outstanding. Of these shares, the 1,015,000 shares of Common Stock sold in this Offering will be freely transferable without restriction or further registration under the Act, except shares purchased by an affiliate (in general,

a person who is in a control relationship with the Company) which will be subject to the limitations of Rule 144. The Management Warrants and the Underwriter's Warrants will be freely transferable without restriction or further registration under the Act pursuant to the resale provisions of this Prospectus; provided, however, the transfer of the Underwriter's Warrants and the Warrant Shares underlying these warrants is restricted to bona fide officers of the Underwriter for a one-year period in accordance with the rules of the

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National Association of Securities Dealers, Inc. In addition, the 541,370 shares of Common Stock assumed for purposes of this Prospectus to be issuable upon the conversion of the Notes will be freely transferable without restriction or further registration in accordance with the resale provisions contained in this Prospectus.

The remaining 71,273 shares of Common Stock are held by the Company's executive officers and are "restricted securities" as that term is defined in Rule 144 ("Restricted Shares"). Restricted Shares may be sold in the public market only if registered or if they qualify for an exemption from registration under Rules 144 or 144(k), which rules are summarized below. As a result of the provisions of Rules 144 and 144(k), all 71,273 Restricted Shares will be available for sale in the public market commencing 90 days after the effectiveness of the registration statement of which this Prospectus is a part.

In the event the Underwriter's Warrants and the Management Warrants are exercised, the holders of 201,500 shares of Common Stock, or their permitted transferees, who are not affiliates will hold shares that are freely tradable without restriction under the Securities Act.

See "Risk Factors -- No Prior Market for Common Stock," " -- Volatility of Stock Price" and " -- Shares Eligible for Future Sale."

In general, under Rule 144 as currently in effect, beginning 90 days after the date of this Prospectus, a person (or persons whose shares are aggregated) who has beneficially owned Restricted Shares for at least one year (including the holding period of any prior owner except an affiliate of the Company) would be entitled to sell within any three-month period a number of shares that does not exceed the greater of: (i) one percent of the number of shares of Common Stock then outstanding or (ii) the average weekly trading volume of the Common Stock on The Nasdaq SmallCap Market during the four calendar weeks preceding the sale. Sales under Rule 144 are also subject to certain manner of sale provisions and notice requirements and to the availability of current public information about the Company. Under Rule 144(k), a person who is not deemed to have been an affiliate of the Company at any time during the 90 days preceding a sale, and who has beneficially owned the shares proposed to be sold for at least two years (including the holding period of any prior owner except an affiliate), is entitled to sell such shares without complying with the manner of sale, public information, volume limitation or notice provisions of Rule 144; therefore, unless otherwise restricted, "144(k) shares" may therefore be sold immediately upon the completion of the Offering.

SELLING SECURITYHOLDERS

In addition to the registration of the shares of Common Stock included in the Offering and the Warrant Shares, the registration statement of which this Prospectus forms a part covers the resale by the Selling Securityholders (as defined below) of the Resale Securities, consisting of (a) up to 541,370 shares of Common Stock issuable upon conversion of the Notes, (b) the Underwriter's Warrants and (c) the Management Warrants. In the event the Underwriter's Warrants and the Management Warrants are exercised, the shares of Common Stock eligible for (x) sale on a delayed or continuous basis or resale hereunder and (y) resale pursuant to the resale provisions of this Prospectus will constitute 45.6% of the outstanding shares of Common Stock upon completion of the Offering. The Resale Securities are not being underwritten as a part of the Offering and may be sold from time to time as described under the caption "Plan of Distribution For Selling Securityholders." The Company will not receive any of the proceeds from the sale of the securities by the Selling Securityholders (other than the proceeds from the exercise of the warrants). The resale of the securities of the Selling Securityholders are subject to prospectus delivery and other requirements of the Securities Act. Sales of such securities or the potential of such sale at any time may have an adverse effect on the market prices of the securities offered hereby. See "Risk Factors -- Shares Eligible for Future Sale."

The following table sets forth the number of shares of Common Stock and warrants owned by each Selling Securityholder upon completion of the Offering, the number of warrants and shares of Common Stock being offered and the number of shares and the percentage of the class to be owned after the Offering is complete. The information contained in the following table assumes the conversion of the Notes in accordance with their terms.

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<TABLE>
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OF OWNED OFFERING	SHARES OF COMMON STOCK BEFORE RESALE OFFERING	WARRANTS OWNED UPON CLOSING OF RESALE OFFERING	WARRANTS OFFERED FOR RESALE HEREBY	COMMON STOCK OFFERED FOR RESALE HEREBY	SHARES STOCK AFTER RESALE
	-----	-----	-----	-----	-----
----- <S> <C> Dr. John F. Bourgeois..... 0	8,333	--	--	8,333	
Haley Chisholm & Morris..... 0	8,333	--	--	8,333	
Joseph J. Cockriel... 0	8,333	--	--	8,333	
Michael Riggs Crane..... 0	8,333	--	--	8,333	
Dennis R. Deans..... 0	8,333	--	--	8,333	
Robert G. Doumar..... 0	8,333	--	--	8,333	
Gerald Einhorn, DDS LTD Defined S Benefit Trust DTD 4-1-84..... 0	8,333	--	--	8,333	
Stephen F. Evans..... 0	8,333	--	--	8,333	
Gerald T. George..... 0	8,333	--	--	8,333	
Thomas T. Goodale.... 0	8,333	--	--	8,333	
Jonathan M. Gorog.... 0	8,333	--	--	8,333	
Harold P. Heafner, Jr..... 0	8,333	--	--	8,333	
George C. Hutter..... 0	8,333	--	--	8,333	
Ali R. Jamali..... 0	8,333	--	--	8,333	
Paul L. Johnson and Margaret W. Johnson, JT TEN WROS..... 0	8,333	--	--	8,333	
Edwin A. Joseph..... 0	8,333	--	--	8,333	
Edward C. Kvetko..... 0	8,333	--	--	8,333	
Willard H. Lane and Hellen M. Lane..... 0	8,333	--	--	8,333	
James T. Martin..... 0	133,333	--	--	133,333	
Martha D. Massie..... 0	8,333	--	--	8,333	
Dr. Andrew A. Mayer..... 0	8,333	--	--	8,333	
Milton Miller and Louis Miller, JT CON..... 0	8,333	--	--	8,333	
Joan Miller..... 0	8,333	--	--	8,333	
Eugene Moos and Susan					

Bell Moos, JT TEN WROS.....	8,333	--	--	8,333
0				
Padua Ventures Limited BVI.....	8,333	--	--	8,333
0				
Leah T. Robinson TTEE of the Revocable TR DTD 3-21-89 FBO Leah T. Robinson.....	8,333	--	--	8,333
0				
Karen Lee Sobel Sachs.....	8,333	--	--	8,333
0				
Joyce M. Salzberg....	8,333	--	--	8,333
0				

<CAPTION>

PERCENT OF
COMMON
STOCK
AFTER
RESALE OFFERING

<S> <C>

Dr. John F. Bourgeois.....	0
Haley Chisholm & Morris.....	0
Joseph J. Cockriel...	0
Michael Riggs Crane.....	0
Dennis R. Deans.....	0
Robert G. Doumar.....	0
Gerald Einhorn, DDS LTD Defined S Benefit Trust DTD 4-1-84.....	0
Stephen F. Evans.....	0
Gerald T. George.....	0
Thomas T. Goodale....	0
Jonathan M. Gorog....	0
Harold P. Heafner, Jr.....	0
George C. Hutter.....	0
Ali R. Jamali.....	0
Paul L. Johnson and Margaret W. Johnson, JT TEN WROS.....	0
Edwin A. Joseph.....	0
Edward C. Kvetko.....	0
Willard H. Lane and Hellen M. Lane.....	0
James T. Martin.....	0
Martha D. Massie.....	0
Dr. Andrew A. Mayer.....	0
Milton Miller and Louis Miller, JT CON.....	0
Joan Miller.....	0
Eugene Moos and Susan Bell Moos, JT TEN WROS.....	0
Padua Ventures Limited BVI.....	0
Leah T. Robinson TTEE of the Revocable TR DTD 3-21-89 FBO Leah T. Robinson.....	0
Karen Lee Sobel Sachs.....	0
Joyce M. Salzberg....	0

</TABLE>

<TABLE>
<CAPTION>

OF OWNED OFFERING	SHARES OF COMMON STOCK	WARRANTS OWNED	WARRANTS OFFERED FOR RESALE HEREBY	COMMON STOCK OFFERED FOR RESALE HEREBY	SHARES STOCK AFTER RESALE
	BEFORE RESALE OFFERING	UPON CLOSING OF RESALE OFFERING	-----	-----	-----
----- <S> <C> Leon I. Salzberg and Gregory A. Buck, JT TEN COM..... 0	8,333	--	--	8,333 (1)	
Steven E. Shinholser and Keller R. Shinholser, JT WROS..... 0	8,333	--	--	8,333	
Louise Williams Sloan..... 0	8,333	--	--	8,333	
Jacquelyn C. Smith... 0	8,333	--	--	8,333	
Robert M. Smith, III..... 0	8,333	--	--	8,333	
Robert G. Sullivan... 0	8,333	--	--	8,333	
Chester M. Trzaski and Stella M. Trzaski(2)..... 0	8,333	--	--	8,333	
Noell P. Vawter..... 0	8,333	--	--	8,333	
James H. Wallace..... 0	33,333	--	--	33,333	
Maurice Edward Waller..... 0	8,333	--	--	8,333	
Eric M. Warner..... 0	8,333	--	--	8,333	
Kent J. Weber..... 0	8,333	--	--	8,333	
Transerve Marine, Inc..... 0	8,333	--	--	8,333	
Jeffrey M. Zwerdling..... 0	8,333	--	--	8,333	
Richard J. Freer, Ph.D. (2)..... 20,632	20,632	28,947	28,947	--	
Robert B. Harris, Ph.D. (2)..... 20,631	20,631	28,947	28,947	--	
Gregory A. Buck, Ph.D. (2)..... 20,632	20,632	28,948	28,948	--	
Thomas R. Reynolds(2)..... 9,379	9,379	13,158	13,158	--	
Anderson & Strudwick, Inc..... 0	--	101,500	101,500	0	

<CAPTION>

PERCENT OF
COMMON
STOCK
AFTER
RESALE OFFERING

<S> <C> Leon I. Salzberg and Gregory A. Buck, JT TEN COM..... Steven E. Shinholser and	0
---	---

Keller R. Shinholser, JT WROS.....	0
Louise Williams Sloan.....	0
Jacquelyn C. Smith...	0
Robert M. Smith, III.....	0
Robert G. Sullivan...	0
Chester M. Trzaski and Stella M. Trzaski(2).....	0
Noell P. Vawter.....	0
James H. Wallace.....	0
Maurice Edward Waller.....	0
Eric M. Warner.....	0
Kent J. Weber.....	0
Transerve Marine, Inc.....	0
Jeffrey M. Zwerdling.....	0
Richard J. Freer, Ph.D.(2).....	1.3
Robert B. Harris, Ph.D.(2).....	1.3
Gregory A. Buck, Ph.D.(2).....	1.8(3)
Thomas R. Reynolds(2).....	0
Anderson & Strudwick, Inc.....	0

- -----

- (1) Excludes shares of Common Stock held by Dr. Buck in an individual capacity.
- (2) Officers and directors of the Company.
- (3) Includes shares of Common Stock held by Dr. Buck and Leon I. Salzberg, as tenants in common.

PLAN OF DISTRIBUTION
FOR SELLING SECURITYHOLDERS

The Resale Securities offered by the Selling Securityholders consist of (a) the Conversion Shares, (b) the Underwriter's Warrants and (c) the Management's Warrants. Resales of the Conversion Shares and the Underwriter's Warrants are contingent upon, and may only occur subsequent to, the closing of the Offering. The Selling Securityholders may offer and sell the Resale Securities from time to time directly or through underwriters, dealers or agents. The distribution of securities by the Selling Securityholders may be effected in one or more transactions that may take place in the market, including ordinary brokerage transactions, privately-negotiated transactions or sales to one or more broker-dealers for resale of such shares as principals, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices. Usual and customary or

specifically negotiated brokerage fees or commissions may be paid by the Selling Securityholders in connection with such sales of securities. The securities offered by the Selling Securityholders may be sold by one or more of the following methods, without limitations: (a) a block trade in which a broker-dealer so engaged will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction; (b) purchases by a broker-dealer as principal and resale by such broker-dealer for its account pursuant to this Prospectus; (c) ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers, and (d) face-to-face transactions between sellers and purchasers without a broker-dealer. In effecting sales, broker-dealers engaged by the Selling Securityholders may arrange for other broker-dealers to participate. The Selling Securityholders and intermediaries through whom such securities are sold may be deemed "underwriters" within the meaning of the Securities Act with respect to the securities offered, and any profits realized or commissions received may be deemed underwriting compensation.

At the time a particular offer of securities is made by or on behalf of a Selling Securityholder, to the extent required, a Prospectus will be distributed which will set forth the number of shares being offered and the terms of the offering, including the name or names of any underwriters, dealers or agents, if any, the purchase price paid by any underwriter for sales purchased from the Selling Securityholder and any discounts, commissions or concessions allowed or reallocated or paid to dealers and the proposed selling price to the public. Sales of securities by the Selling Securityholders or even the potential of such sales would likely have an adverse effect on the market prices of the securities offered hereby. See "Risk Factors -- Shares Eligible for Future Sale."

UNDERWRITING

The Company has engaged the Underwriter to conduct the Offering on a "best efforts, all-or-none" basis. The Offering is being made without a firm commitment by the Underwriter, which has no obligation or commitment to purchase any of the Common Stock. The Underwriter has advised the Company that it proposes to offer the Common Stock to the public at the price shown on the cover page of this Prospectus and to certain dealers at such price less a concession not in excess of \$.24 per share.

The Conversion Shares, the Underwriter's Warrants, the Management Warrants and the Warrant Shares are being registered contemporaneously with the shares of Common Stock being sold by the Company in the Offering, but are not part of the underwritten offering. See "Selling Securityholders."

Unless sooner withdrawn or canceled by either the Company or the Underwriter, the Offering will continue until the earlier of the date on which all of the Common Stock offered hereby is sold or November 21, 1997 (the "Offering Termination Date"). Until the closing of the Offering, all proceeds from the sale of the Common Stock will be deposited in escrow with Crestar Bank (the "Escrow Agent"). Proceeds deposited in escrow with the Escrow Agent may not be withdrawn by investors prior to the earlier of the closing of the Offering or the Offering Termination Date. If the Offering is withdrawn or canceled or if the 1,015,000 shares of Common Stock offered hereby are not sold and proceeds therefrom are not received by the Company on or prior to the Offering Termination Date, all proceeds will be returned by the Escrow Agent without interest to the persons from which they are received promptly after such withdrawal or cancellation. Officers, directors and persons holding more than 5% of the outstanding shares of Common Stock prior to the Offering may purchase up to 15,000 shares in the aggregate of the shares of Common Stock offered in the Offering. Such persons may purchase such shares only on the prevailing terms and conditions of the Offering and with investment intent.

Pursuant to that certain Underwriting Agreement by and between the Company and the Underwriter, the obligations of the Underwriter to solicit offers to purchase the Common Stock and of investors solicited by the Underwriter to purchase the Common Stock are subject to approval of certain legal matters by counsel to the Underwriter and to various other conditions which are customary in transactions of this type, including, that, as of the closing of the Offering, there shall not have occurred (a) a suspension or material limitation in trading in securities generally on the New York Stock Exchange or the publication of quotations on the Nasdaq Stock Market (National Market System or SmallCap Market); (ii) a general moratorium on commercial banking activities in the Commonwealth of Virginia or the State of New York; (iii) the engagement by the United States in hostilities which have resulted in the declaration of a national emergency or war if any such event would have a material adverse effect, in the Underwriter's reasonable judgment, as to make it impracticable or inadvisable to proceed with the solicitation of offers to consummate the Offering with respect to investors solicited by the Underwriter on the terms and conditions contemplated herein. The Company has agreed to indemnify the Underwriter against certain liabilities, including liabilities under the Securities Act. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to the Underwriter pursuant to the foregoing provisions, or otherwise, the Company has been advised that in the

opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable.

Mr. Einselen, Senior Vice President of the Underwriter, and Mr. Mills, Chairman of the Board of the Underwriter, serve as directors of the Company. Mr.

Einselen and Mr. Mills will each receive a Director's Fee for services rendered to the Company. In addition, the Company will reimburse them for any expenses incurred in attending such Board meetings. See "Management -- Director Compensation."

The Underwriter does not intend to sell the Common Stock to any accounts over which it exercises discretionary authority.

The initial public offering price of the Common Stock along with the exercise price of the Underwriter's Warrants, which are being registered with the Common Stock, but are not underwritten, have been determined by negotiation between the Company and the Underwriter and are not necessarily related to the Company's asset value, net worth or other established criteria of value. Factors considered in determining the public offering price of the Common Stock and the exercise price of the Underwriter's Warrants include the business in which the Company is engaged, the stage of development of the Company's activities, the Company's financial condition, and assessment of management, the general condition of the securities markets and the demand for similar securities of comparable companies.

As additional underwriting compensation, the Company has agreed to sell the Underwriter's Warrants to the Underwriter at a purchase price of \$.001 per warrant upon completion of the Offering. The exercise price of the Underwriter's Warrants shall be \$9.90 per share. The purchase price of the Underwriter's Warrants and the exercise price thereof (165% of the initial public offering price of the Common Stock) was determined by negotiation between the Company and the Underwriter. The factors considered in determining these values are noted above.

LEGAL MATTERS

The validity of shares of Common Stock offered hereby will be passed upon for the Company by LeClair Ryan, A Professional Corporation, Richmond, Virginia. Willcox & Savage, P.C., Norfolk, Virginia, has acted as counsel for the Underwriter with respect to certain legal matters relating to the Common Stock offered hereby.

EXPERTS

The financial statements of the Company as of December 31, 1996 and 1995, and for the years then ended appearing in this Prospectus and Registration Statement have been audited by Goodman & Company, L.L.P., independent public accountants, as set forth in their report thereon appearing elsewhere herein and in the Registration Statement, and have been included herein in reliance upon such report given upon the authority of such firm as experts in accounting and auditing.

AVAILABLE INFORMATION

The Company has filed with the Commission a Registration Statement on Form SB-2 (as amended from time to time and together with all exhibits and schedules thereto, the "Registration Statement") under the Securities Act with respect to the Common Stock to be sold in the Offering. This Prospectus constitutes a part of the Registration Statement and does not contain all the information set forth therein, certain portions of which have been omitted as permitted by the rules and regulations of the Commission. Statements contained in this Prospectus as to the content of any contract or other document are not necessarily complete, and in each instance, reference is made to the copy of such contract or other document filed as an exhibit to the Registration Statement, each such statement being qualified in all respects by such reference.

For further information regarding the Company and the Common Stock to be sold in the Offering, reference is hereby made to the Registration Statement. A copy of the Registration Statement, including the exhibits and schedules thereto, may be inspected by anyone without charge at the Public Reference Section of the Commission at Room 1024, Judiciary Plaza, 450 Fifth Street, N.W., Washington, D.C. 20549 and at the following Regional Offices of the Commission: New York Regional Office, 7 World Trade Center, 13th Floor, New York, New York 10048; and Chicago Regional Office, 500 West Madison Street, Suite 1400, Chicago, Illinois 60661. Copies of the Registration Statement and the exhibits and schedules thereto can be obtained from the Public Reference Section of the Commission upon payment of prescribed fees. In addition the Commission maintains a Web site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the Commission. Such information can be accessed free of charge (other than costs associated with acquiring access to the Internet) at the Commission's Web site (<http://www.sec.gov>).

Prior to filing the Registration Statement of which this Prospectus is a part, the Company was not subject to the reporting requirements of Section 13 or 15(d) of the Securities Exchange Act. Upon effectiveness of the Registration

Statement, the Company will become subject to the informational and periodic reporting requirements of the Exchange Act, and in accordance therewith, will file periodic reports, proxy statements and other information with the Commission. Such periodic reports, proxy statements and other information will be available for inspection and copying at the public reference facilities and other regional officers referred to above. The Company intends to register the securities offered by the Registration Statement under the Exchange Act simultaneously with the effectiveness of the Registration Statement and to furnish its shareholders with annual reports containing audited financial statements and quarterly reports for the first three quarters of each fiscal year containing unaudited interim financial information.

The Common Stock registered in connection with the Offering will be listed on The Nasdaq SmallCap Market. Reports and other information required to be filed with such market may be inspected at the offices of The Nasdaq SmallCap Market at 1735 K Street, N.W., Washington, D.C. 20006.

GLOSSARY

AMINO ACIDS -- The basic building blocks of proteins and peptides. There are twenty naturally occurring amino acids that differ from each other in chemical structures and physicochemical properties.

AMINO ACID ANALYSIS -- The process by which the number or quantity of amino acids in a particular protein, peptide or physiological fluid are measured.

BIOPHYSICAL -- Having to do with the intrinsic properties of the macromolecule.

CALORIMETRY STUDIES -- A biophysical technique for determining the relative structural stability of a macromolecule. In some calorimetry experiments (differential scanning calorimetry), the amount of heat necessary to unfold (denature) a macromolecule is determined, while in other types of calorimetry experiments (isothermal titration calorimetry), the amount of heat that accompanies the binding between two molecules is determined.

COAGULATION -- The process by which blood clots.

DNA (DEOXYRIBONUCLEIC ACID) -- Genes are composed of long strands of DNA, which are, in turn, assembled from individual nucleotides. The particular arrangement (sequence) of nucleotides in a strand of DNA encodes the sequence of individual proteins. Each cell of the human body is estimated to contain approximately 100,000 genes, although not every gene is expressed in each cell.

DNA SEQUENCE ANALYSIS -- The process by which the sequence of nucleotides in a strand of DNA is determined.

ELECTROLYTES -- Charged species in the blood, such as sodium or chloride, that help maintain cell integrity and vascular tone.

ENZYMES -- Often called "nature's catalysts," enzymes carry out virtually every critical biological function necessary for life, such as the conversion of food stuffs into energy, the conversion of inactive proteins into active peptides, and the synthesis of DNA or RNA. Enzymes are, in effect, specialized proteins.

FIBRINOLYSIS -- The process by which blood clots are dissolved.

GENE -- The unit of the genome used to describe the structural and genetic features of DNA which encode for a functional protein.

GENOME SEQUENCING -- Performing DNA sequence analysis of an organism with the goal of determining all of the sequence contained in its genetic material.

GENE THERAPY -- The process by which diseases of hereditary, genetic, cancer or infectious etiology are treated with products of recombinant DNA.

HEMOSTASIS -- The balance between coagulation and fibrinolysis that maintains normal cardiovascular function and tone.

HEPARIN -- A complex carbohydrate composed of long chains of highly negatively charged, individual saccharide (sugar) residues of known chemical structure. Heparin possesses many biological activities, including the ability to cause anti-coagulation and the ability to inhibit the proliferation of smooth muscle cells.

MACROMOLECULES -- Any of the organic molecules essential for life. DNA, RNA, and proteins are all considered macromolecules.

MASS SPECTRAL ANALYSIS- A PROCESS BY WHICH THE ATOMIC MASS OF AN ORGANIC MOLECULE CAN BE DETERMINED WITH GREAT PRECISION.

MUTATION ANALYSIS- THE PROCESS BY WHICH MUTATIONS IN GENES RESPONSIBLE FOR

CANCER AND METABOLIC AND HEREDITARY DISEASES ARE IDENTIFIED AND CHARACTERIZED.

NUCLEOTIDES -- The basic building blocks of DNA and RNA strands. There are four chemically distinct nucleotides that make up DNA; three of these nucleotides are also found in RNA along with a fifth structurally distinct nucleotide.

OLIGONUCLEOTIDE -- An assemblage of more than one nucleotide. Oligonucleotides can be in the deoxy or ribonucleotide families.

PEPTIDE -- Peptides are small proteins, usually encompassing fewer than 80 amino acid residues. Different peptides are intimately involved in regulating most aspects of human physiology, including neurotransmission, regulation of electrolytes in blood, reproduction and vascular tone.

PHYSIOCHEMICAL -- Relating to the physical and chemical properties of a particular compound.

PHYSIOLOGICAL FLUID -- Fluids such as blood, urine or lymph.

PROTEINS -- Proteins are composed of long strands of amino acids assembled in particular order, the sequences of all proteins are coded by genes. There are many specialized classes of proteins, such as enzymes, peptides, antibodies and structural proteins (e.g., keratin, collagen, and elastin).

PROTEIN SEQUENCE ANALYSIS -- The process by which the sequence of amino acids that make up a protein chain is determined.

RNA (RIBONUCLEIC ACID) -- Long strands of RNA are composed of individual nucleotides, in much the same way as DNA is composed of individual nucleotides. The order in which the nucleotides of RNA are assembled is dictated by the sequence of the genomic DNA from which it is transcribed. RNA performs many physiological functions, and specialized RNA molecules carry out the assembly of amino acids into proteins.

SOLID-PHASE PEPTIDE SYNTHESIS -- A strategy for chemical synthesis of amino acids into peptides.

SPECTROSCOPY -- Any study which uses electromagnetic radiation (light waves, X-rays, radio waves, etc.)

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REPORT OF INDEPENDENT AUDITORS

Board of Directors and Stockholders
Commonwealth Biotechnologies, Inc.

We have audited the accompanying balance sheets of Commonwealth Biotechnologies, Inc. (the Company) as of December 31, 1996 and 1995, and the related statements of income, changes in shareholders' equity, and cash flows for the years 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 audits.

We conducted our audits in accordance with generally accepted auditing standards. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material

misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Commonwealth Biotechnologies, Inc. at December 31, 1996 and 1995, and the results of its operations and cash flows for the years then ended in conformity with generally accepted accounting principles.

/s/ GOODMAN & COMPANY, L.L.P.

7301 Forest Avenue
 Richmond, Virginia
 June 10, 1997
 (except for Notes 2, 11, 12 and 13,
 as to which the date is June 25, 1997)

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COMMONWEALTH BIOTECHNOLOGIES, INC.

BALANCE SHEETS

<TABLE>
 <CAPTION>

DECEMBER 31, 1995	PROFORMA JUNE 30, 1997	JUNE 30, 1997	1996
	-----	-----	-----
<S> <C>	(UNAUDITED)	(UNAUDITED)	
ASSETS			
Current assets			
Cash and cash equivalents.....	\$ 8,350,885	\$ 2,861,205	\$ 260,357
\$ 1,115			
Accounts receivable.....	181,625	181,625	116,437
79,015			
Prepaid expenses.....	1,929	1,929	1,080
--			
	-----	-----	-----
Total current assets.....	8,534,439	3,044,759	377,874
80,130			
	-----	-----	-----
Property and equipment, net.....	543,386	543,386	243,611
100,749			
	-----	-----	-----
Other assets			
Organization costs, net.....	2,004	2,004	3,183
5,539			
Deposits.....	400	400	9,525
400			
Deferred loan costs.....	--	373,731	--
--			
	-----	-----	-----
Total other assets.....	2,404	376,135	12,708
5,939			
	-----	-----	-----
	\$ 9,080,229	\$ 3,964,280	\$ 634,193
\$ 186,818			
	-----	-----	-----
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities			
Demand note payable.....	\$ 42,000	\$ 42,000	\$ --
\$ --			
Current portion of long-term debt.....	59,455	59,455	37,293
25,468			
Current portion of capital lease obligation.....	--	--	--
19,862			
Accounts payable.....	144,706	144,706	48,944
33,004			

Distributions payable to shareholders.....	59,612	59,612	--
--			
Deferred revenue.....	--	--	200,000
1,830			
Convertible subordinated notes payable.....	--	3,000,000	--
--			

Total current liabilities.....	305,773	3,305,773	286,237
80,164			
Long-term debt.....	270,456	270,456	185,687
--			
Long-term portion of capital lease obligation.....	--	--	--
43,998			

Total liabilities.....	576,229	3,576,229	471,924
124,162			

Shareholders' equity			
Common stock, no par value, 10,000,000 shares authorized, 71,273 shares issued and outstanding at June 30, 1997 (unaudited) and December 31, 1996 and 1995 and on a proforma basis, 1,586,273 shares issued and outstanding at June 30, 1997 (unaudited).....	760	760	760
760			
Additional paid-in capital.....	8,503,240	387,291	134,662
65,604			
Retained earnings (deficit).....	--	--	26,847
(3,708)			

Total stockholders' equity.....	8,504,000	388,501	162,269
62,656			

	\$ 9,080,229	\$ 3,964,280	\$ 634,193
\$ 186,818			

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

F-3

COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENTS OF OPERATIONS

<TABLE> <CAPTION> YEARS ENDED DECEMBER 31, 1995	FOR THE SIX MONTHS ENDED JUNE 30,		FOR THE
	1997	1996	1996
	-----	-----	-----
			(UNAUDITED)
<S> <C> Revenue			
Laboratory services.....	\$1,059,212	\$428,302	\$989,925
\$369,301	-----	-----	-----

Costs and expenses			
Cost of services.....	296,272	84,003	237,726
79,948			
Sales, general and administrative.....	255,798	129,415	323,820
220,891			
Research and development.....	213,535	88,642	308,484
69,861	-----	-----	-----

Total cost and expenses.....	765,605	302,060	870,030
370,700	-----	-----	-----

Operating income (loss)..... (1,399)	293,607	126,242	119,895	
Other income (expense)				
Interest expense..... (10,545)	(10,675)	(3,771)	(10,102)	
Interest income.....	3,355	50	295	
54				

Total other income (expense)..... (10,491)	(7,320)	(3,721)	(9,807)	

Net income (loss)..... (11,890)	286,287	122,521	110,088	

Proforma presentation applicable to conversion from S Corporation to C Corporation				
Net income (loss) before proforma income tax expense..... \$(11,890)	\$ 286,287	\$122,521	\$110,088	
Proforma Income tax expense..... 22,092	124,653	24,545	49,651	

Proforma net income (loss)..... \$(33,982)	\$ 161,634	\$ 97,976	\$ 60,437	

Proforma earnings (loss) per common and common equivalent share..... (0.07)	\$ 0.32	\$ 0.19	\$ 0.12	\$
Proforma weighted average common and common equivalent shares outstanding..... 506,273	506,273	506,273	506,273	

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

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COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

<TABLE> <CAPTION>	NUMBER OF SHARES OUTSTANDING	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	RETAINED EARNINGS (DEFICIT)	
TOTAL	-----	-----	-----	-----	
<S> <C>					
Balance at January 1, 1995..... 8,942	71,273	\$760	\$ --	\$ 8,182	\$
Net income (loss)..... (11,890)	--	--	--	(11,890)	
Contributed services..... 65,604	--	--	65,604	--	

Balance at December 31, 1995..... 62,656	71,273	760	65,604	(3,708)	
Net income..... 110,088	--	--	--	110,088	
Contributed services..... 69,058	--	--	69,058	--	
Distributions..... (79,533)	--	--	--	(79,533)	

Balance at December 31, 1996..... 162,269	71,273	760	134,662	26,847	
Net income (unaudited)..... 286,287	--	--	--	286,287	

Contributed services (unaudited).....	--	--	36,346	--
36,346				
Distributions (unaudited).....	--	--	--	(37,239)
(37,239)				
Distribution payable to shareholders for payment of income taxes through June 25, 1997 (unaudited).....	--	--	--	(59,612)
(59,612)				
Effects of conversion to C Corporation (unaudited).....	--	--	216,283	(216,283)
--				
-----	-----	-----	-----	-----
Balance at June 30, 1997 (unaudited).....	71,273	760	387,291	--
388,051				
Proforma effects of the conversion of convertible subordinated notes to common stock at a conversion price of \$6.00 per share (unaudited).....	500,000	--	2,626,269	--
2,626,269				
Proforma effects of the intial public offering of 1,015,000 shares of common stock at \$6.00 per share (unaudited).....	1,015,000	--	5,489,680	--
5,489,680				
-----	-----	-----	-----	-----
Proforma Balance at June 30, 1997 (unaudited).....	1,586,273	\$760	\$8,503,240	\$ -- \$
8,504,000				
-----	-----	-----	-----	-----
-----	-----	-----	-----	-----

</TABLE>

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

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COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENT OF CASH FLOWS

YEARS ENDED DECEMBER 31, 1995	FOR THE SIX MONTHS ENDED JUNE 30,		FOR THE
	1997	1996	1996
-----	-----	-----	-----
	(UNAUDITED)		
<S> <C>			
Cash flows from operating activities			
Net income (loss).....	\$ 286,287	\$ 122,521	\$ 110,088
\$(11,890)	-----	-----	-----

Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization.....	56,813	21,409	54,382
38,938			
Contributed services.....	36,346	34,529	69,058
65,605			
Changes in:			
Accounts receivable.....	(65,188)	(55,147)	(37,422)
(40,225)			
Prepaid expenses.....	(849)	(2,338)	(1,080)
5,457			
Deposits.....	9,125	--	--
--			
Accounts payable.....	95,762	(2,984)	15,940
(1,865)			
Deferred revenue.....	(200,000)	(1,830)	198,170
1,830			
-----	-----	-----	-----
Total adjustments.....	(67,991)	(6,361)	299,048
69,740			
-----	-----	-----	-----
Net cash provided by (used in) operating activities.....	218,296	116,160	409,136
57,850	-----	-----	-----

Cash flows from investing activities			

Purchases of property and equipment.....	(355,409)	(159,783)	(194,798)
(961)			
Deposits.....	--	--	(9,125)
5,752			

Net cash provided by (used in) investing activities.....	(355,409)	(159,783)	(203,923)
4,791			

Cash flows from financing activities			
Proceeds from issuance of long-term debt.....	126,540	149,948	231,000
--			
Proceeds from notes payable.....	42,000	--	--
--			
Principal payments on long-term debt.....	(19,609)	(25,468)	(33,578)
(41,007)			
Principal payments on capital lease obligations.....	--	(6,080)	(63,860)
(18,545)			
Principal payments on related party notes payable.....	--	--	--
(7,500)			
Proceeds from issuance of convertible subordinated notes, net of deferred loan costs.....	2,626,269	--	--
--			
Shareholder distributions.....	(37,239)	(38,981)	(79,533)
--			

Net cash provided by (used in) financing activities.....	2,737,961	79,419	54,029
(67,052)			

Net (decrease) increase in cash and cash equivalents.....	2,600,848	35,796	259,242
(4,411)			
Cash and cash equivalents, beginning of period.....	260,357	1,115	1,115
5,526			

Cash and cash equivalents, end of period.....	\$2,861,205	\$ 36,911	\$ 260,357
\$ 1,115			

Supplemental disclosure of cash flow information			
Cash paid during the period for interest.....	\$ 10,675	\$ 3,771	\$ 10,102
\$ 10,545			

</TABLE>

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

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS

JUNE 30, 1997 (UNAUDITED) AND DECEMBER 31, 1996 AND 1995

NOTE 1 -- ORGANIZATION

Commonwealth Biotechnologies, Inc., a Virginia S Corporation (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 leading to intellectual properties.

NOTE 2 -- SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

INTERIM FINANCIAL INFORMATION

The unaudited financial statements as of June 30, 1997, and for the six months ended June 30, 1997 and 1996, include, in the opinion of management, all adjustments necessary to present fairly the Company's financial position, results of operations, changes in shareholders' equity and cash flows. All such adjustments are of a normal and recurring nature. The results of operations for the unaudited six months ended June 30, 1997 are not necessarily indicative of the results that may be expected for the year ending December 31, 1997.

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 milestones, 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.

PROPERTY AND EQUIPMENT

Property and equipment are recorded at cost. Depreciation and amortization expense is recorded over the estimated useful lives of the assets. The straight-line method is used by the Company in 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:

Laboratory equipment.....	5 years
Furniture and fixtures.....	7 years
Computer equipment and improvements.....	30 months to 5 years

OTHER ASSETS

Other assets consist of the organizational costs associated with the formation of the Company and are amortized over five years.

INCOME TAXES AND SUBSEQUENT EVENT

The Company has been an S Corporation since January 1, 1993 for federal income tax purposes. Accordingly, the taxable income or loss of the Company has been "passed-through" to its shareholders, and they have been subject to the tax on any income earned by the Company.

NOTE 2 -- SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES -- (CONTINUED)

As more fully described in Note 11, the Company organized a private placement offering of convertible subordinated notes, which caused the income tax status of the Company to change. Management believes that the Company is no longer eligible for S Corporation status effective June 25, 1997. Therefore, at June 25, 1997, the undistributed earnings were treated as a constructive distribution to the original shareholders and as a contribution to additional paid-in capital. As a C Corporation, the Company will be responsible for income taxes payable resulting from earnings subsequent to June 25, 1997. Additionally, under the provisions of Financial Accounting Standards Board ("FASB") Statement No. 109, ACCOUNTING FOR INCOME TAXES, deferred tax assets and liabilities are computed based on the difference between the financial statement and tax bases of assets and liabilities using currently enacted tax rates.

At June 30, 1997 (unaudited) and December 31, 1996, the Company's deferred taxes would have consisted of differences attributable to the cash basis of accounting and accelerated methods of depreciation used for income tax purposes. If the Company had been a C Corporation for all periods presented, at June 30, 1997, its current tax liability for federal and state taxes would have been \$124,653; its deferred tax liabilities would have been \$66,075 and its retained earnings would be decreased by \$199,652. At December 31, 1996, its current tax liability for federal and state taxes would have been \$39,931; its deferred tax liabilities would have been \$35,068 and its retained earnings would be decreased by \$74,999.

RESEARCH & 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.

ADVERTISING COSTS

The Company expenses all advertising costs as incurred. Total advertising expense for the six months ended June 30, 1997 (unaudited), June 30, 1996 (unaudited), and for the years ended December 31, 1996 and 1995 was \$23,263, \$8,751, \$25,008 and \$26,286, respectively.

PROFORMA EARNINGS PER COMMON AND COMMON EQUIVALENT SHARE

The proforma earnings per common and common equivalent share were computed by dividing the proforma net income, including applying the effects of proforma income taxes, by the weighted average number of shares of common stock and common stock equivalents outstanding during each period. Common stock equivalents include the effect of the Company's convertible subordinated notes and warrants that are assumed to be exercised or converted into common stock for the earliest period presented. The Company's warrants are antidilutive. However, pursuant to Securities and Exchange Commission ("SEC") rules (Staff Accounting Bulletin No. 83), shares of stock sold, stock options and warrants granted and convertible subordinated notes issued within one year of the date of the contemplated initial public offering (but exclusive of the initial public offering itself) have been included in the calculation of common stock equivalents, using the treasury stock method, as if they were outstanding for all periods presented, even if the effect is antidilutive.

The number of shares outstanding for the purpose of presenting proforma earnings per common and common equivalent share gives effect retroactively for the 93.78-for-one stock split that occurred on June 17, 1997. After giving retroactive effect to the stock split, the weighted average number of shares outstanding during the year ended December 31, 1996 and the six months ended June 30, 1997 (unaudited) was 71,273. For December 31, 1996 and 1995, and June 30, 1997 (unaudited) and June 30, 1996 (unaudited), the average common equivalent shares used to calculate proforma earnings per common and common equivalent share were 473,773. This includes the Company's presently outstanding common shares of 71,273, 500,000 shares relating to the Company's convertible subordinated notes on an "as if converted" basis, and the antidilutive effect of

the Company's 100,000 warrants converted using the Treasury Stock method to reduce the shares outstanding by 65,000. The antidilutive component results from the exercise price of \$9.90 for each of the Company's warrants being greater than the \$6.00 anticipated market price of the Company's common stock.

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 2 -- SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES -- (CONTINUED)

CREDIT RISK

The Company provides laboratory services primarily to researchers in North America (United States, Canada). Other major clients are located in South America (Brazil, Colombia), in the far east (Japan, Korea), and in Europe (Norway, Sweden, Germany, Italy, France, Greece). For projects exceeding \$5,000, the Company mitigates its credit risk by requiring a deposit of 50% of total anticipated billings. The Company performs ongoing credit evaluations of its customers and generally does not require additional collateral on its laboratory services. However, the Company provides a charge to bad debts when, in the opinion of management, such balances are not deemed to be collectible.

The Company primarily invests its excess cash in a money market fund administered by an institutional investment firm and also in overnight deposits managed by a financial institution and, at times, these deposits may exceed federally insured limits.

ESTIMATES

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

NOTE 3 -- PROPERTY AND EQUIPMENT

Property and equipment consisted of the following at:

<TABLE>
<CAPTION>

	JUNE 30, 1997	DECEMBER 31, 1996 1995	
	-----	-----	-----

	(UNAUDITED)		
<S> <C>			
Laboratory equipment.....	\$ 685,637	\$ 359,476	\$180,574
Vehicles.....	25,029	--	--
Furniture and fixtures.....	1,925	1,925	--
Office equipment and improvements.....	21,201	16,983	3,012
---	-----	-----	-----
183,586	733,792	378,384	
Less accumulated depreciation and amortization.....	(190,406)	(134,773)	
(82,837)	-----	-----	-----

Property and equipment, net.....	\$ 543,386	\$ 243,611	\$100,749
---	-----	-----	-----

</TABLE>

Long-term debt consists of the following at:

<TABLE>
<CAPTION>

	JUNE 30, 1997	DECEMBER 31, 1996 1995	
	-----	-----	-----

	(UNAUDITED)		
<S> <C>			
Term note payable at an interest rate of 10% to NationsBank collateralized by a first priority security interest in the Company's accounts receivable, chattel paper, equipment and intangibles, and due in equal monthly payments of principal and interest of \$2,235 through December 1996.....	\$ --	\$ --	\$ 25,468
Term note payable at an interest rate of 9.195% to Crestar Bank collateralized by a first priority security interest in the Company's accounts receivable, chattel paper, equipment and intangibles, and due in equal monthly payments of principal and interest of \$2,144 through March 2002.....	98,701	--	--
Term note payable at an interest rate of 9% to Crestar Bank, collateralized by a security interest in a Company vehicle, and due in equal monthly payments of principal and interest of \$455 through August 2002.....	23,177	--	--

</TABLE>

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 3 -- PROPERTY AND EQUIPMENT -- (CONTINUED)

<TABLE>
<CAPTION>

	JUNE 30, 1997	DECEMBER 31, 1996 1995	
	-----	-----	-----

	(UNAUDITED)		
<S> <C>			
Term note payable at an interest rate of 8.75% to Crestar Bank, collateralized by a security interest in the Company's accounts receivable, chattel paper, equipment and intangibles, and due in equal monthly payments of principal and interest of \$4,150 through October 2001.....	178,033	192,980	--
Enterprise Zone incentive loan payable to the City of Richmond, collateralized by equipment and due in ten annual installments of \$3,000 plus interest at 3% beginning in September 1997. Enterprise Zone incentive loans provide for an alternative means of repayment in lieu of cash. Each year, any increase over 1996 in real estate, machinery and tools, and business licenses taxes will directly curtail, on a dollar for dollar basis, the interest and then principal payments on the loan.....	30,000	30,000	--

	329,911	222,980	
25,468			
Less -- current portion of long-term debt.....	(59,455)	(37,293)	
(25,468)			

	\$ 270,456	\$ 185,687	\$

</TABLE>

NOTE 4 -- LONG-TERM DEBT

Five-year maturities of long-term debt are as follows at December 31, 1996:

<TABLE>	
<S> <C>	
1997.....	\$ 37,293
1998.....	40,417
1999.....	43,826
2000.....	47,545
2001.....	38,899
Thereafter.....	15,000

	\$222,980

</TABLE>

NOTE 5 -- DEMAND NOTE PAYABLE

The Company has a demand note payable to Crestar Bank in the amount of \$42,000 at June 30, 1997. The note bears interest at the rate of prime plus 1%. Interest is payable monthly. The note is unsecured.

NOTE 6 -- CAPITAL LEASE OBLIGATIONS

The Company acquired, in January 1994, certain computer equipment for its laboratory from Hewlett Packard Company under a capital lease in the amount of \$104,500. The lease terms called for monthly lease payments of \$2,049 to be made through December 1998 at an implicit lease rate of 8.44%. The lease was paid off during 1996. Accumulated depreciation and depreciation expense on the assets previously subject to capital lease amounted to \$41,800 at December 31, 1996 and \$20,900 for 1996, respectively.

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 7 -- COMMITMENTS AND CONTINGENCIES

LEASES

During 1996 and 1995, the Company was engaged in a noncancelable operating lease for its laboratory and office space from the Virginia Biotechnology Research Park in Richmond, Virginia as a sub-landlord for the City of Richmond. The monthly rental payment through the culmination of the lease at June 30, 1997 is \$691.

Beginning July 1, 1997, the Company will lease its current laboratory and office space, directly from the City of Richmond. The monthly rental payment will increase to \$3,222. The initial term of the lease will extend through June 30, 2000, however, either party may cancel the lease with nine months notice.

The Company also leases certain of its office equipment under a noncancelable lease agreement which expires in October 1999.

Future minimum payments under these noncancelable operating leases at December 31 are as follows:

1997.....	\$27,354
1998.....	13,542
1999.....	11,199

	\$52,095

Total rent expense for all operating leases for each of the years ended December 31, 1996 and 1995 was \$8,291.

SALES COMMITMENTS

In December 31, 1996, the Company entered into a contract with one customer to perform structural studies on a proprietary protein product totaling approximately \$200,000. As of December 31, 1996, no services have been rendered pursuant to this contract.

At December 31, 1996, the Company is performing under contract with several companies. These companies include Insmmed Pharmaceuticals (Richmond, Virginia), Bayer Corporation (Clayton, North Carolina, Raleigh, North Carolina, West Haven, Connecticut and Berkley, California), Breastek, Inc. (Charleston, South Carolina) and Somatix Therapeutics Corporation (Alameda, California). The Company is the major biochemistry subcontractor to a grant issued by the University of New Mexico, Department of Chemical and Nuclear Engineering at Albuquerque, New Mexico.

SPONSORED RESEARCH CONTRACT AND CONSULTING AGREEMENT

The Company entered into a sponsored research agreement (the "Agreement") with Virginia Commonwealth University (the "University") on November 15, 1992. Unless canceled by written notification by either party, the Agreement automatically renews annually. The Agreement allows CBI personnel access to equipment located within the academic laboratories of certain professors, who are also officers of the Company. The laboratories are located on the campus of the Medical College of Virginia (an affiliate of the University). The Agreement carries a fee for service schedule, which allows for payment to the University for use of the equipment. The Company has since purchased its own equipment and reduced its dependence on the University's equipment to a level that total payments made to the University are approximately \$1,200 per calendar quarter.

NOTE 8 -- RETIREMENT PLAN

Effective October 1, 1996, the Company adopted an employee 401(k) retirement plan. Qualified employees may contribute up to 15% of their gross pay to the plan. Employee contributions are limited to amounts established by law. The Company may make matching contributions to the plan as determined by the Board of Directors subject to the limitations under the Internal Revenue Code. The Company made no contributions to the Plan during the six-month period ended June 30, 1997 (unaudited), or in 1996 or 1995.

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 9 -- MAJOR CUSTOMERS

The Company had the following revenue concentrations that exceeded 10% for any of the periods presented:

<TABLE>
<CAPTION>

	JUNE 30, 1997	DECEMBER 31, 1996	DECEMBER 31, 1995
	-----	-----	-----

--

	(UNAUDITED)		
<S> <C>			
Bayer Pharmaceuticals, AG.....	\$ 200,000	\$ --	\$ --
Small Business Technology Transfer Research Grant Phase I.....	--	--	39,000
Small Business Technology Transfer Research Grant Phase II.....	98,450	63,773	--
Small Business Technology Transfer Research 2 Grant Phase I.....	--	90,766	6,460
Small Business Technology Transfer Research 3 Grant Phase I.....	53,096	26,025	--
University of New Mexico Grant.....	96,873	124,423	64,359
	-----	-----	-----
--			
	\$ 448,419	\$304,987	
\$109,819	-----	-----	-----
--			
--			
</TABLE>			

These research revenues represent 42.34%, 30.81% and 29.74% of total revenue for the six months ended June 30, 1997 (unaudited) and for the years ended December 31, 1996 and 1995, respectively.

NOTE 10 -- COMPENSATION AND BENEFIT COSTS

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

	JUNE 30, 1997	DECEMBER 31, 1996 1995	
	-----	-----	-----
<TABLE>			
<CAPTION>			
--			
	(UNAUDITED)		
<S> <C>			
Cost of services.....	\$ 119,982	\$104,703	\$ 21,346
Selling, general and administrative expenses.....	91,834	106,954	95,724
Research and development costs.....	142,848	176,444	50,672
	-----	-----	-----
--			
	\$ 354,664	\$388,101	
\$167,742	-----	-----	-----
--			
--			
</TABLE>			

NOTE 11 -- PRIVATE PLACEMENT AND PROPOSED INITIAL PUBLIC OFFERING ("IPO")

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

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. Each note bears interest at the rate of 20% and is payable upon the conversion of the note into shares of the Company's common stock. Interest will be paid through the date of the conversion in the form of additional shares of common stock that will be issued based on a conversion price of \$6.00 for each share of common stock. Each note will be automatically converted into a minimum of 8,333.33 shares of the Company's common stock, upon the earlier of the closing of the Company's proposed IPO, or on June 25, 1998, the maturity date. Upon conversion, the actual number of shares issued will equal the principal amount of the notes plus accrued interest divided by the stated conversion price of \$6.00. The Company received net proceeds of \$2,626,269, after underwriting and other offering costs of \$373,731.

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 to the management team at \$.001 per share, and will be exercisable for a period of ten years at an exercise price of \$9.90 per share.

The Company intends to file a Form SB-2 Registration Statement with the Securities and Exchange Commission for the sale of 1,015,000 shares of common stock. The proceeds are expected to be used to acquire laboratory equipment, additional personnel, expand existing facilities, expand marketing and advertising and fund working capital.

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 12 -- STOCK COMPENSATION

The Company adopted its Incentive Plan (the "Plan") on June 24, 1997. The Incentive Plan provides for the granting to employees, officers, directors, consultants and certain non-employees of the Company of options to purchase shares of common stock. The maximum number of shares of common stock that may be issued pursuant to options under the Plan is 410,000. This amount is subject to adjustment in the event of a stock split, stock dividend or other change in the common stock or capital structure of the Company. 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 four founders of the Company, and 140,000 shares will be reserved for incentive awards to be granted to other persons.

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 or non-qualified stock options, the exercise price will not be less than 100% of the fair market value of shares covered at the time of the grant. Options granted under the Plan vest immediately at 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 APB 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 income and earnings per share would have been reduced to the proforma amounts indicated below as if the Plan had been in effect for the periods presented:

<TABLE>
<CAPTION>

		JUNE 30,	DECEMBER
		1997	1996
		-----	-----
31,			

<S> <C>			
Net income	As previously reported	(UNAUDITED) \$ 286,287	\$110,088
	As previously reported to include proforma tax effect from conversion to C Corporation.....	\$ 161,634	\$ 60,437
	Proforma application of FASB 123, as if included with C Corporation conversion...	\$ 113,813	\$ 12,616
Earnings per common and common equivalent share	As previously reported to include proforma tax effects from conversion to C Corporation.....	\$ 0.32	\$ 0.12
	Proforma application of FASB 123 to include C Corporation conversion.....	\$ 0.22	\$ 0.02

</TABLE>

Under FASB No. 123, the fair value of each Management Warrant is estimated on the date of grant using the Black-Scholes option pricing model. The following

assumptions were used for the grant made on June 24, 1997. The expected dividend yield is 0%, since the Company does not presently plan to pay dividends in the foreseeable future. The risk-free interest rate used was 6.4%, and the expected life of the warrants is ten years. As provided for by FASB No. 123, volatility does not have to be considered for calculating the fair value of the Management Warrants, since the Company is not yet publicly traded.

NOTE 13 -- EMPLOYMENT AGREEMENTS

On June 24, 1997, the Company entered into employment agreements with its four founders. Each of the agreements has a term of five years with specified base salaries and provide for successive one-year terms. In addition, the employment agreements provide the Company's executive officers with annual bonuses equal to, in the aggregate, 15% of the Company's pre-tax net income for the preceding fiscal year. The bonuses for the Company's executive officers for the fiscal year ending December 31, 1997 will equal the greater of 15% of the Company's pre-tax net income or \$150,000.

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

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COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

NOTE 13 -- EMPLOYMENT AGREEMENTS -- (CONTINUED)

against income for contributed services and a contribution to additional paid-in capital for all of the periods presented. 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 July 24, 1997.

The contributed services charged against income for the six-months ended June 30, 1997 (unaudited), June 30, 1996 (unaudited), and for the years ended December 31, 1996 and 1995 was \$36,346, \$34,529, \$69,058 and \$65,604, respectively. Of these amounts, the charges allocated to sales, general and administrative expenses for the six-months ended June 30, 1997 (unaudited), June 30, 1996 (unaudited), and the years ended December 31, 1996 and 1995 were \$33,173, \$31,514, \$63,029 and \$59,877, respectively. The contributed services allocated to research and development costs for the six-months ended June 30, 1997 (unaudited), June 30, 1996 (unaudited), and the years ended December 31, 1996 and 1995 were \$3,173, \$3,015, \$6,029 and \$5,727, respectively.

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- - - - -

NO PERSON HAS BEEN AUTHORIZED IN CONNECTION WITH THE OFFERING MADE HEREBY TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATION NOT CONTAINED IN THIS PROSPECTUS AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATION MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY OR ANY UNDERWRITER. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO BUY ANY OF THE SECURITIES OFFERED HEREBY TO ANY PERSON OR BY ANYONE IN ANY JURISDICTION IN WHICH IT IS UNLAWFUL TO MAKE SUCH OFFER OR SOLICITATION. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCES, CREATED ANY IMPLICATION THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY DATE SUBSEQUENT TO THE DATE HEREOF.

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Until , 1997, all dealers effecting transactions in the registered securities, whether or not participating in the distribution, may be required to deliver a prospectus. This is in addition to the obligations of dealers to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

1,015,000 SHARES

[INSERT LOGO]

COMMON STOCK

PROSPECTUS

ANDERSON & STRUDWICK
INCORPORATED

, 1997

PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 24. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Article VI of the Company's Articles of Incorporation provides as follows:

The Corporation shall indemnify(a) any person who was, is or may become a party to any proceeding, including a proceeding brought by a shareholder in the right of the Corporation or brought by or on behalf of shareholders of the Corporation, by reason of the fact that he is or was a director or officer of the Corporation, or (b) any director or officer who is or was serving at the request of the Corporation as a director, trustee, partner or officer of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against any liability incurred by him in connection with such proceeding unless he engaged in willful misconduct or a knowing violation of criminal law. A person is considered to be serving an employee benefit plan at the Corporation's request if his duties to the Corporation also impose duties on, or otherwise involve securities by, him to the plan or to participants in or beneficiaries of the plan. The Board of Directors is hereby empowered, by a majority vote of a quorum of disinterested Directors, to enter into a contract to indemnify any Director or officer in respect of any proceedings arising from any act or omission, whether occurring before or after the execution of such contract.

Section 8 of the Underwriting Agreement, filed as Exhibit 1.1 hereto

provides for reciprocal indemnification between the Registrant and the Underwriter against certain liabilities in connection with the Offering, including liabilities under the Securities Act.

ITEM 25. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following is a list of the estimated expenses to be incurred by the Registrant in connection with the issuance and distribution of the shares of Common Stock being registered, other than the Underwriter's selling commissions. All of the following expenses will be paid by the Company.

Commission Filing Fee.....	\$ 3,435.00
Nasdaq SmallCap Fee.....	\$ 7,843.00
NASD Filing Fee.....	\$ 1,633.00
Blue Sky Fees and Expenses.....	\$ 10,000.00
Printing and Engraving Expenses.....	\$ 20,000.00
Accounting Fees and Expenses.....	\$ 45,000.00
Legal Fees and Expenses.....	\$ 100,000.00
Transfer Agent and Registrar Fees.....	\$ 5,000.00
Miscellaneous Fees and Expenses.....	\$ 7,089.00

Total (Estimated).....	\$ 200,000.00

ITEM 26. RECENT SALES OF UNREGISTERED SECURITIES

Since October 6, 1994, the Company has sold and issued the following unregistered securities:

On June 25, 1997, the Company sold subordinated convertible notes in an aggregate principal amount of \$3,000,000 to 42 accredited investors in an offering exempt from registration pursuant to Rule 506 of Regulation D promulgated under the Securities Act. Such notes accrue interest from June 25, 1997 through the date of conversion at a rate of 20% per annum and are payable in shares of Common Stock at a rate of \$6.00 per share. The Underwriter served as placement agent in connection with such private placement and received a \$240,000 placement fee.

On June 25, 1997, the Company issued the Management Warrants to four executive officers of the Company for \$.001 per warrant. Each Management Warrant entitles the holder to purchase one share of Common Stock at an exercise price of \$9.90 per share. The Management Warrants are exercisable for a period of ten years following the issuance thereof.

The Company believes that all of the transactions noted above that were entered into with officers, directors and principal shareholders were made or will be made on terms no less favorable to the Company than could have been obtained from unaffiliated third parties. All future transactions between the Company and its officers, directors and principal shareholders will be approved in accordance with the Virginia law by a majority of the Board, including a majority of the independent and

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disinterested directors of the Board, and will be on terms no less favorable to the Company than could be obtained from unaffiliated third parties.

The sales and issuance of the securities in the above transactions were deemed to be exempt under the Securities Act by virtue of Section 4(2) thereof as transactions not involving any public offering. The purchasers in each case represented their intention to acquire the securities for investment only and not with a view to the distribution thereof. Appropriate legends were affixed to the certificates issued in such transactions.

ITEM 27. EXHIBITS

<TABLE>
 <CAPTION>
 EXHIBIT NUMBER DESCRIPTION OF EXHIBITS

- - - - -

<S>	<C>
1.1	Form of Underwriting Agreement*
1.2	Form of Selected Dealers Agreement*
1.3	Form of Escrow Agreement, as amended**
3.1	Amended and Restated Articles of Incorporation of Registrant*
3.2	Amended and Restated Bylaws of Registrant*
4.1	Form of Common Stock Certificate*
4.2	Form of Subordinated Convertible Note*
4.3	Form of Underwriter's Warrant, as amended**
4.4	Form of Management Warrant, as amended**
5.1	Opinion of LeClair Ryan, A Professional Corporation**
10.1	Placement Agreement between the Company and the Underwriter relating to the Private Placement*
10.2	Warrant Agreement between the Company and the Underwriter relating to the Offering, as amended**
10.3	Warrant Agreement between the Company and Richard J. Freer, as amended**
10.4	Warrant Agreement between the Company and Thomas R. Reynolds, as amended**
10.5	Warrant Agreement between the Company and Gregory A. Buck, as amended**
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10.7	Employment Agreement for Richard J. Freer**
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10.12	Executive Severance Agreement for Thomas R. Reynolds**
10.13	Executive Severance Agreement for Gregory A. Buck**
10.14	Executive Severance Agreement for Robert B. Harris**
10.15	1997 Stock Incentive Plan, as amended**
10.16	Form of Incentive Stock Option Agreement**
11.1	Statement re: computation of per share earnings*
23.1	Consent of Goodman & Company, L.L.P.*
23.2	Consent of LeClair Ryan, A Professional Corporation (included in Exhibit 5.1 hereto)**
24.1	Power of Attorney*
27.1	Financial Data Schedule*
</TABLE>	

* Previously filed

** Filed herewith

ITEM 28. UNDERTAKINGS

The undersigned registrant hereby undertakes:

(1) To file, during any period in which it offers or sells securities, a post-effective amendment to this registration statement to:

(i) Include any prospectus required by Section 10(a) (3) of the Securities Act;

(ii) Reflect in the prospectus any facts or events which, individually or together, represent a fundamental change in the information in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of

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securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) Include any additional or changed material information on the plan of distribution.

Provided, however, that paragraphs 1 (i) and 1 (ii) do not apply if the registration statement is on Form S-3 or Form S-8, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona

fide offering thereof.

(3) To remove from registration by means of a post-effective amendment of any of the securities being registered which remain unsold at the termination of the offering.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the small business issuer pursuant to the foregoing provisions, or otherwise, the small business issuer has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the small business issuer of expenses incurred or paid by a director, officer or controlling person of the small business issuer in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the small business issuer will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

The registrant hereby undertakes that:

(1) For the purpose of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or(4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it is declared effective.

(2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and this offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

The undersigned small business issuer undertakes to provide to the underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

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SIGNATURES

In accordance with the requirements of the Securities Act, the Registrant certifies that has reasonable grounds to believe that it meets all of the requirements of filing on Form SB-2 and authorized this Registration Statement to be signed on its behalf by the undersigned, in the in the City of Richmond, Commonwealth of Virginia, on October 7, 1997.

COMMONWEALTH BIOTECHNOLOGIES, INC.

By: /s/ RICHARD J. FREER, PH.D.

RICHARD J. FREER, PH.D.,
CHAIRMAN OF THE BOARD

Pursuant to the requirement of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

<TABLE> <CAPTION>	NAME	TITLE	DATE
	-----	-----	-----
<S> <C>	*	Chairman of the Board (Principal Executive Officer) and Director	October 7, 1997
	RICHARD J. FREER, PH.D.		
	/S/ ROBERT B. HARRIS, PH.D.	President and Director	October 7, 1997
	ROBERT B. HARRIS, PH.D.		
	*	Secretary, Vice President and Director	October 7, 1997
	-----	-----	-----

GREGORY A. BUCK, PH.D.

* Vice President and Director October 7, 1997

THOMAS R. REYNOLDS

* Director October 7,

1997

CHARLES A. MILLS, III

* Director October 7,

1997

PETER C. EINSELEN

* Chief Operating Officer (Principal
Financial Officer) October 7, 1997

CHESTER M. TRZASKI

/S/ ROBERT B. HARRIS, PH.D.

ROBERT B. HARRIS, PH.D.
ATTORNEY-IN-FACT

</TABLE>

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EXHIBIT INDEX

<TABLE>

<CAPTION>

EXHIBIT NUMBER

DESCRIPTION OF EXHIBITS

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23.2 Consent of LeClair Ryan, A Professional Corporation (included in Exhibit 5.1 hereto)**
24.1 Power of Attorney*
27.1 Financial Data Schedule*

</TABLE>

* Previously filed

** Filed herewith

ESCROW AGREEMENT

This Escrow Agreement is made and entered into as of the ____ day of September, 1997, by and among ANDERSON & STRUDWICK, INCORPORATED, a Virginia corporation (the "Underwriter"), COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and CRESTAR BANK, a Virginia bank (the "Escrow Agent").

R E C I T A L S:

A. The Company proposes to sell up to 1,015,000 shares (the "Shares") of common stock of the Company at a price of \$6.00 per Share (the "Offering").

B. The Company has retained the Underwriter, as agent for the Company on a best efforts all-or-none basis, to sell the Shares in the Offering, and the Underwriter has agreed to sell the Shares in the Offering as the Company's agent on a best efforts all-or-none basis.

C. The Escrow Agent is willing to hold the proceeds of the Offering in escrow pursuant to this Agreement.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements contained in this Agreement, it is hereby agreed as follows:

1. Establishment of the Escrow Account. Contemporaneously herewith, the parties have established a non-interest-bearing account with the Escrow Agent, which escrow account is entitled "Commonwealth Biotechnologies, Inc. Escrow Account" (the "Escrow Account"). The Underwriter will transfer funds (and will instruct selected dealers ("Selected Dealers") to transfer funds) directly to the Escrow Agent as directed by its customers and will instruct other purchasers of the Shares to make checks payable to "Crestar Bank - Commonwealth Biotechnologies, Inc. Escrow Account."

2. Escrow Period. The escrow period (the "Escrow Period") shall begin with the commencement of the Offering and shall terminate upon the earlier to occur of the following dates:

(a) the date on which the Escrow Agent confirms that it has received in the Escrow Account gross proceeds of \$6,090,000 (the "Minimum");

(b) November 21, 1997;

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(c) the date on which the Underwriter and the Company notify the Escrow Agent that the Offering has been terminated.

During the Escrow Period, the Company is aware and understands that it is not entitled to any funds received into escrow and no amounts deposited in the Escrow Account shall become the property of the Company or any other entity, or be subject to the debts of the Company or any other entity.

3. Deposits into the Escrow Account. The Underwriter agrees that it shall deliver to the Escrow Agent (and will instruct Selected Dealers to deliver to the Escrow Agent) for deposit in the Escrow Account all monies received from purchasers of the Shares by noon of the next business day after receipt together with a written account of each sale, which account shall set forth, among other things, (i) the purchaser's name and address, (ii) the number of Shares purchased by the purchaser, (iii) the amount paid therefor by the purchaser, (iv) whether the consideration received from the purchaser was in the form of a check, draft or money order, and (v) the purchaser's social security or tax identification number. The Escrow Agent agrees to hold all monies so deposited in the Escrow Account (the "Escrow Amount") for the benefit of the parties hereto until authorized to disburse such monies under the terms of this Agreement.

4. Disbursements from the Escrow Account. In the event the Escrow Agent does not receive the Minimum deposits totaling \$6,090,000 prior to the termination of the Escrow Period, or if the Underwriter and the Company notify the Escrow Agent that the Offering has been terminated, the Escrow Agent shall

promptly refund to each purchaser the amount received from the purchaser, without deduction, penalty, or expense to the purchaser, and the Escrow Agent shall notify the Company and the Underwriter of its distribution of the funds. The purchase money returned to each purchaser shall be free and clear of any and all claims of the Company or any of its creditors.

In the event the Escrow Agent does receive the Minimum prior to termination of the Escrow Period, on the date of Closing, the Escrow Agent shall disburse the Escrow Amount pursuant to the provisions of Section 6, provided, however, in no event will the Escrow Amount be released to the Company until such amount is received by the Escrow Agent in collected funds. For purposes of this Agreement, the term "collected funds" shall mean all funds, including fed funds, received by the Escrow Agent which have cleared normal banking channels.

5. Collection Procedure.

(a) The Escrow Agent is hereby authorized to deposit each check in the Escrow Account.

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(b) In the event any check paid by a purchaser and deposited in the Escrow Account shall be returned, the Escrow Agent shall notify the Underwriter by telephone of such occurrence and advise it of the name of the purchaser, the amount of the check returned, and any other pertinent information. The Escrow Agent shall then transmit the returned check directly to the purchaser and shall transmit the statement previously delivered by the Underwriter relating to such purchase to the Underwriter.

(c) If the Company rejects any purchase of Shares for which the Escrow Agent has already collected funds, the Escrow Agent shall promptly issue a refund check to the rejected purchaser. If the Underwriter rejects any purchase for which the Escrow Agent has not yet collected funds but has submitted the purchaser's check for collection, the Escrow Agent shall promptly issue a check in the amount of the purchaser's check to the rejected purchaser after the Escrow Agent has cleared such funds. If the Escrow Agent has not yet submitted a rejected purchaser's check for collection, the Escrow Agent shall promptly remit the purchaser's check directly to the purchaser.

6. Delivery of Escrow Account and the Shares.

(a) Prior to the Closing (as defined in Section 8 of this Agreement), the Underwriter and the Company shall provide the Escrow Agent with a statement, executed by each party, containing the following information:

(i) The total number of Shares sold by the Underwriter directly to purchasers and a list of each purchaser, and the number of Shares purchased by such purchaser, and specification of the manner in which the Shares should be issued; and

(ii) A calculation by the Underwriter and the Company as to the manner in which the Escrow Account should be distributed to the Company, the Underwriter and Selected Dealers and in the event of oversubscription or rejection of certain purchases, the aggregate amount to be returned to individual purchasers and a listing of the exact amount to be returned to each such purchaser.

The Escrow Agent shall hold the Escrow Account and distribute it in accordance with the above-described statement on the date of Closing or such later date that it receives the above-described statement.

(b) The Company shall deliver the certificates representing the Shares to the Escrow Agent prior to the Closing. On the day of the Closing and in the event the Minimum is met, the Escrow Agent shall deliver the certificates representing the Shares to the Underwriter and Selected Dealers, or in the manner specified in writing to the Escrow Agent by the Underwriter.

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(c) Upon termination of the Offering by the Company or the Underwriter for any reason, the Escrow Agent shall return to the purchasers who contributed to the Escrow Account the exact amount contributed by them.

7. Investment of Escrow Account. The Escrow Agent shall deposit funds received from purchasers in the Escrow Account, which shall be a non-interest-bearing bank account at Crestar Bank.

8. Closing Date. The "Closing" shall be the date of closing of the Offering, and the "Closing Date" shall be the date on or subsequent to the date on which the Escrow Agent has received the Minimum deposits in collected funds that is designated to the Escrow Agent by the Underwriter and the Company as the Closing Date.

9. Compensation of Escrow Agent. The Company shall pay the Escrow Agent a fee for its services hereunder in an amount equal to Five Hundred Dollars (\$500.00), which amount shall be paid on the Closing Date. In the event the Offering is canceled for any reason, the Company shall pay the Escrow Agent its fee within ten (10) days after the Escrow Amount is refunded to purchasers. No such fee or any other monies whatsoever shall be paid out of or chargeable to the funds on deposit in the Escrow Account.

10. Disbursement Into Court. If, at any time, there shall exist any dispute between the Company, the Underwriter and/or the purchasers with respect to the holding or disposition of any portion of the Escrow Amount or any other obligations of the Escrow Agent hereunder, or if at any time the Escrow Agent is unable to determine, to the Escrow Agent's sole satisfaction, the proper disposition of any portion of the Escrow Amount or the Escrow Agent's proper actions with respect to its obligations hereunder, or if the Company and the Underwriter have not within 30 days of the furnishing by the Escrow Agent of a notice of resignation appointed a successor Escrow Agent to act hereunder, then the Escrow Agent may, in its sole discretion, take either or both of the following actions:

(a) suspend the performance of any of its obligations under this Escrow Agreement until such dispute or uncertainty shall be resolved to the sole satisfaction of the Escrow Agent or until a successor Escrow Agent shall have been appointed (as the case may be); provided however, that the Escrow Agent shall continue to hold the Escrow Amount in accordance with Section 7 hereof; and/or

(b) petition (by means of an interpleader action or any other appropriate method) any court of competent jurisdiction in Richmond, Virginia, for instructions with respect to such dispute or uncertainty, and pay into such court all funds held by it in the Escrow Account for holding and disposition in accordance with the instructions of such court.

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The Escrow Agent shall have no liability to the Company, the Underwriter or any other person with respect to any such suspension of performance or disbursement into court, specifically including any liability or claimed liability that may arise, or be alleged to have arisen, out of or as a result of any delay in the disbursement of funds held in the Escrow Account or any delay in or with respect to any other action required or requested of the Escrow Agent.

11. Duties and Rights of the Escrow Agent. The foregoing agreements and obligations of the Escrow Agent are subject to the following provisions:

(a) The Escrow Agent's duties hereunder are limited solely to the safekeeping of the Escrow Account and the delivery of the certificates representing the Shares in accordance with the terms of this Agreement. It is agreed that the duties of the Escrow Agent are only such as herein specifically provided, being purely of a ministerial nature, and the Escrow Agent shall incur no liability whatsoever except for negligence, willful misconduct or bad faith. The Escrow Agent shall have no duty with respect to the certificates representing the Shares other than to exercise reasonable care in acquiring and delivering the same in accordance with this Agreement.

(b) The Escrow Agent is authorized to rely on any document believed by the Escrow Agent to be authentic in making any delivery of the Escrow Account or the certificates representing the Shares. It shall have no responsibility for the genuineness or the validity of any document or any other item deposited with it and it shall be fully protected in acting in accordance with this Agreement or instructions received.

(c) The Company and the Underwriter hereby waive any suit, claim, demand or cause of action of any kind which they may have or may assert against the Escrow Agent arising out of or relating to the execution or performance by the Escrow Agent of this Agreement, unless such suit, claim, demand or cause of action is based upon the gross negligence, willful misconduct, or bad faith of the Escrow Agent.

12. Notices. It is further agreed as follows:

(a) All notices given hereunder will be in writing, served by registered or certified mail, return receipt requested, postage prepaid, or by hand-delivery, to the parties at the following addresses:

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To the Company:

Commonwealth Biotechnologies, Inc.
911 East Leigh Street
Richmond, Virginia 23219
Attention: Richard J. Freer, Ph.D.
Telecopier No.: (804) 648-2641

with a copy to:

LeClair Ryan
707 East Main Street, 11th Floor
Richmond, Virginia 23219
Attention: J. Benjamin English, Esquire
Telecopier No.: (804) 783-2294

To the Underwriter:

until October 18, 1997:

Anderson & Strudwick, Incorporated
1108 E. Main Street
Richmond, Virginia 23219
Attention: Mr. L. McCarthy Downs, III
Telecopier No.: (804) 648-3404

From and after October 18, 1997:
Anderson & Strudwick, Incorporated
707 E. Main Street, 20th Floor
Richmond, Virginia 23219
Attention: Mr. L. McCarthy Downs, III
Telecopier No.: (804) 648-3404

with a copy to:

Willcox & Savage, P.C.
1800 NationsBank Center
Norfolk, Virginia 23510
Attention: James J. Wheaton, Esquire
Telecopier No.: (757) 628-5566

To the Escrow Agent:
Crestar Bank
Corporate Trust Department
919 East Main Street, 10th Floor
Richmond, Virginia 23219
Attention: Mr. Bill Michie
Telecopier No.: (804) 782-5581

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13. Miscellaneous.

(a) This Agreement shall be binding upon, inure to the benefit of and be enforceable by the parties hereto and their respective successors and assigns.

(b) If any provision of this Agreement shall be held invalid by any court of competent jurisdiction, such holding shall not invalidate any other provision hereof.

(c) This Agreement shall be governed by the applicable laws of the Commonwealth of Virginia.

(d) This Agreement may not be modified except in writing signed by the parties hereto.

(e) All demands, notices, approvals, consents, requests and other communications hereunder shall be given in the manner provided in this Agreement.

(f) This Agreement may be executed in one or more counterparts, and if executed in more than one counterpart, the executed counterparts shall together constitute a single instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed in their respective names, all as of the date first above written.

ANDERSON & STRUDWICK,
INCORPORATED

By: _____
L. McCarthy Downs, III
Senior Vice President

COMMONWEALTH BIOTECHNOLOGIES,
INC.

By: _____
Name: _____
Title: _____

7

CRESTAR BANK, as Escrow Agent

By: _____
Name: _____
Title: _____

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EXHIBIT 4.4

No. _____
_____ Shares

COMMONWEALTH BIOTECHNOLOGIES, INC.
COMMON STOCK PURCHASE WARRANT

NEITHER THIS SECURITY NOR ANY SECURITY FOR WHICH IT MAY BE EXERCISED HAS BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR APPLICABLE STATE SECURITIES LAWS. NEITHER THIS SECURITY NOR ANY SECURITY FOR WHICH IT MAY BE EXERCISED NOR ANY INTEREST OR PARTICIPATION HEREIN OR THEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF AT ANY TIME IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

THIS IS TO CERTIFY that _____ or his assigns as permitted in that certain Warrant Agreement (the "Warrant Agreement") dated June 25, 1997 between the Company (as hereafter defined) and _____ is entitled to purchase at any time or from time to time on or after June 25, 1998 until 5:00 p.m., Richmond, Virginia time on June 25, 2007, _____ shares of Common Stock of Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), for an exercise price per share as set forth in the Warrant Agreement referred to herein. This Warrant is issued pursuant to the Warrant Agreement, and all rights of the holder of this Warrant are further governed by, and subject to the terms and provisions of such Warrant Agreement, copies of which are available upon request to the Company. The holder of this Warrant and the shares issuable upon the exercise hereof shall be entitled to the benefits, rights and privileges and subject to the obligations, duties and liabilities provided in the Warrant Agreement.

Subject to the provisions of the Securities Act of 1933, of the Warrant Agreement and of this Warrant, this Warrant and all rights hereunder are transferable, in whole or in part, only to the extent expressly permitted in such documents and then only at the office of the Company at Commonwealth Biotechnologies, Inc., 911 East Leigh Street, Richmond, Virginia 23219, Attention: Chairman, by the holder hereof or by a duly authorized attorney-in-fact, upon surrender of this Warrant duly endorsed, together with the Assignment hereof duly endorsed. Until transfer hereof on the books of the Company, the Company may treat the registered holder hereof as the owner hereof for all purposes.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed and its corporate seal to be hereunto affixed by its proper corporate officers thereunto duly authorized.

COMMONWEALTH BIOTECHNOLOGIES, INC.

By: _____ (SEAL)
President

ATTEST:

Secretary

EXHIBIT 4.4

No. _____
_____ Shares

COMMONWEALTH BIOTECHNOLOGIES, INC.
COMMON STOCK PURCHASE WARRANT

NEITHER THIS SECURITY NOR ANY SECURITY FOR WHICH IT MAY BE EXERCISED HAS BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT") OR APPLICABLE STATE SECURITIES LAWS. NEITHER THIS SECURITY NOR ANY SECURITY FOR WHICH IT MAY BE EXERCISED NOR ANY INTEREST OR PARTICIPATION HEREIN OR THEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF AT ANY TIME IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM REGISTRATION.

THIS IS TO CERTIFY that _____ or his assigns as permitted in that certain Warrant Agreement (the "Warrant Agreement") dated June 25, 1997 between the Company (as hereafter defined) and _____ is entitled to purchase at any time or from time to time on or after June 25, 1998 until 5:00 p.m., Richmond, Virginia time on June 25, 2007, _____ shares of Common Stock of Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), for an exercise price per share as set forth in the Warrant Agreement referred to herein. This Warrant is issued pursuant to the Warrant Agreement, and all rights of the holder of this Warrant are further governed by, and subject to the terms and provisions of such Warrant Agreement, copies of which are available upon request to the Company. The holder of this Warrant and the shares issuable upon the exercise hereof shall be entitled to the benefits, rights and privileges and subject to the obligations, duties and liabilities provided in the Warrant Agreement.

Subject to the provisions of the Securities Act of 1933, of the Warrant Agreement and of this Warrant, this Warrant and all rights hereunder are transferable, in whole or in part, only to the extent expressly permitted in such documents and then only at the office of the Company at Commonwealth Biotechnologies, Inc., 911 East Leigh Street, Richmond, Virginia 23219, Attention: Chairman, by the holder hereof or by a duly authorized attorney-in-fact, upon surrender of this Warrant duly endorsed, together with the Assignment hereof duly endorsed. Until transfer hereof on the books of the Company, the Company may treat the registered holder hereof as the owner hereof for all purposes.

IN WITNESS WHEREOF, the Company has caused this Warrant to be executed and its corporate seal to be hereunto affixed by its proper corporate officers thereunto duly authorized.

COMMONWEALTH BIOTECHNOLOGIES, INC.

By: _____ (SEAL)
President

ATTEST:

Secretary

October 1, 1997

Commonwealth Biotechnologies, Inc.
911 East Leigh Street, Suite G-19
Richmond, Virginia 23219

Ladies and Gentlemen:

We have acted as counsel to Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), in connection with the preparation and filing of the Company's registration statement on Form SB-2 (Registration No. 333-31731) and all amendments thereto (the "Registration Statement"), as originally filed with the Securities and Exchange Commission on July 21, 1997. The Registration Statement relates to the offering of 1,015,000 shares (the "Offering Shares") of the Company's common stock, no par value per share ("Common Stock"). In addition, the Registration Statement, registers the resale of (a) an aggregate of up to 541,370 shares of Common Stock (the "Conversion Shares"), issuable in a private placement upon the automatic conversion of certain subordinated convertible notes issued by the Company in a private placement on June 25, 1997, (b) warrants to purchase an aggregate of 101,500 shares of Common Stock (the "Underwriter's Warrants"), issued to Anderson & Strudwick, Incorporated as additional underwriting compensation and (c) warrants to purchase an aggregate of 100,000 shares of Common Stock (the "Management Warrants"), issued to certain executive officers of the Company. The Registration Statement also relates to the offering, on a delayed or continuous basis, of an aggregate of 201,500 shares of Common Stock issuable upon the exercise of the Management Warrants and the Underwriter's Warrants.

In connection with this opinion, we have examined the Registration Statement and the prospectus contained therein, the Company's Articles of Incorporation, as amended to date, the Company's Bylaws, as amended to date, and the originals, or copies certified to our satisfaction, of such records, documents, certificates, memoranda and other instruments as in our judgment are necessary or appropriate to enable us to render the opinions expressed below (the "Documents"). We are relying (without any independent investigation thereof) upon the truth and accuracy of the statements, covenants, representations and warranties set forth in the Documents. In addition, for all purposes of this opinion, we have assumed that the underwriting agreement pursuant to which the Offering Shares will be sold (the "Underwriting Agreement") will be duly executed and delivered and will be a valid and binding agreement of the parties thereto in accordance with its terms.

Commonwealth Biotechnologies, Inc.
October 1, 1997
Page 2

On the basis of the foregoing, and in reliance thereon, we are of the opinion that:

1. The Offering Shares have been duly authorized and upon the sale thereof in accordance with the terms of the Underwriting Agreement, such securities will be duly and validly issued, fully paid and non-assessable shares of the Common Stock of the Company.

2. The Conversion Shares have been duly authorized and, when issued upon the automatic conversion of the Notes in accordance with their terms, will be duly and validly issued, fully paid and non-assessable shares of the Common Stock of the Company.

3. The Management Warrants have been duly and validly authorized and, when resold as contemplated by the Registration Statement, will be duly and validly issued.

4. The Underwriter's Warrants have been duly and validly authorized and, when resold as contemplated by the Registration Statement, will be duly and validly issued.

5. The shares of Common Stock issuable upon the exercise of the Underwriter's Warrants and the Management Warrants have been duly and validly authorized and, when issued as contemplated by the Registration Statement and the respective terms and conditions of such warrants, will be fully paid and non-assessable shares of the Common Stock of the Company.

We consent to the use of this opinion as an exhibit to the Registration Statement and further consent to all references to us in the Registration Statement, the prospectus contained therein and any further amendments thereto. Subject to the foregoing sentence, however, this opinion is given as of the date hereof solely for your benefit and may not be relied upon, circulated, quoted or otherwise referred to for any purpose without our prior written consent.

Very truly yours,

LECLAIR RYAN,
A Professional Corporation

By: J. Benjamin English

Title: Vice President

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____
Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____
Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____
Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____

COMMONWEALTH BIOTECHNOLOGIES, INC.
INCENTIVE STOCK OPTION AGREEMENT

THIS AGREEMENT, dated as of the _____, 1997, between COMMONWEALTH BIOTECHNOLOGIES, INC., a Virginia corporation (the "Company"), and _____ ("Optionee"), is made pursuant and subject to the provisions of the Company's 1997 Stock Incentive Plan (the "Plan"), a copy of which is attached and which is incorporated herein by reference. If there shall be any inconsistency between this Agreement and the Plan, the terms of the Plan shall control. All capitalized terms used herein that are defined in the Plan have the same meanings given them in the Plan. All references herein to the Plan shall mean the Plan in effect on the date hereof, as the same may be amended from time to time in accordance with its terms.

1. Grant of Option. Pursuant to the Plan, the Company hereby grants to Optionee, subject to the terms and conditions set forth herein and in the Plan, the right and option (the "Option") to purchase from the Company all or any part of an aggregate of ___ shares of Common Stock (the "Option Shares") at the price (the "Option Price") of \$_____ per share, being not less than the Fair Market Value per share of the Common Stock on the date of grant. Such Option will be exercisable as hereinafter provided. This Option is intended to be an Incentive Stock Option under Section 422 of the Code, but the Company does not represent or warrant that the Option qualifies as such.

2. Terms and Conditions. This Option is subject to the following terms and conditions:

(a) Expiration Date. The Expiration Date of this Option is ten years after the date of this Agreement.

(b) Vesting; Exercise of Option. Subject to paragraphs 3, 4, 5, and 7, this Option shall become exercisable in accordance with following schedule:

[vesting schedule to be inserted]

Once this Option has become exercisable in accordance with the preceding schedule it shall continue to be exercisable with respect to such Option Shares until the termination of Optionee's rights hereunder pursuant to paragraphs 3, 4, 5, or 6, or until the Expiration Date, whichever occurs first. A partial exercise of this Option shall not affect Optionee's right to exercise this Option with respect to the remaining Option Shares, subject to the conditions of the Plan and this Agreement. Any portion of this Option which has not become exercisable on the effective date of termination of Optionee's employment by the Company shall lapse.

(c) Method of Exercising and Payment. This Option shall be exercised by written notice in the form attached hereto as Exhibit A, which is incorporated herein by reference, delivered to the attention of the Company's Secretary at the Company's principal office in Virginia. The exercise date shall be the date such notice is received by the Company. Such notice shall be accompanied by (i) cash payment or certified check equal to the Option Price times the number of shares purchased (the "Exercise Price"), (ii) a certificate representing Common Stock held for at least six months if acquired from the Company and not subject to any restrictions with a Fair Market Value equal to the Exercise Price, or (iii) instructions for the Company to withhold from the purchased shares an amount with a Fair Market Value equal to the Exercise Price. Upon acceptance of such notice and receipt of payment in full, the Company shall cause to be issued a certificate representing the shares of Common Stock so purchased.

(d) Nontransferability. This Option is nontransferable except by will or by the laws of descent and distribution. During the Optionee's lifetime, this Option may be exercised only by Optionee.

3. Exercise During Employment. Except as provided in Sections 4, 5 and this Section 3, this Option may not be exercised (if otherwise exercisable under Section 2) in whole or in part unless Optionee is then an employee of the Company or an Affiliate or unless it is exercised, to the extent exercisable on the date of termination under Section 2(b) above, within the period ending on the earlier of the Expiration Date or the date 90 days after the effective date of termination of Optionee's employment by the Company or an Affiliate; provided, however, that in the event Optionee was terminated by the Company for Cause, this Option may not be exercised at any time after the effective date of such termination.

4. Exercise in the Event of Death. In the event Optionee dies while an employee of the Company or an Affiliate and prior to the Expiration Date of this

Option, this Option may be exercised by Optionee's estate, or other person or persons to whom his rights under this Option shall pass by will or the laws of descent and distribution, to the extent exercisable on the date of his death under Section 2(b) above, within one year after Optionee's death or until the Expiration Date, whichever is earlier.

5. Exercise in the Event of Permanent and Total Disability. If Optionee becomes permanently and totally Disabled (as determined in the sole and absolute discretion of the Company) while an employee of the Company or an Affiliate and prior to the Expiration Date of this Option, Optionee may exercise this Option, to the extent exercisable on the date Optionee becomes permanently and totally Disabled under Section 2(b) above, until the earlier of one year from the date he ceases to be employed by the Company or an Affiliate due to such Disability or the Expiration Date.

6. Extension if Optionee Subject to Section 16(b) of the 1934 Act. Notwithstanding the foregoing paragraphs 3, 4, and 5, if the exercise of the Option within the applicable time periods set forth above would subject the Optionee to suit under Section 16(b) of the 1934 Act, the Option shall remain exercisable to the extent permitted by law until the earliest to occur of (i) the 10th day following the date on which the Optionee would no longer be subject to such suit, (ii) the 190th day after the Optionee's termination of employment, or (iii) the Expiration Date, provided that no additional vesting of the Option shall occur during such periods. Any such extension of the period in which the Option may be exercised may result in the Option ceasing to qualify as an Incentive Stock Option and the Company makes no representation as to the tax consequences of any such delayed exercise. The Optionee should consult with the Optionee's own tax advisors as to the tax consequences to the Optionee of any such delayed exercise.

7. \$100,000 Limitation; Acceleration.

(a) Except as provided in Section 7(b) below, the aggregate Fair Market Value of the stock with respect to which Optionee may exercise the Option for the first time during any calendar year (determined as of the date the Option was granted), together with any other Incentive Stock Options which are exercisable by Optionee for the first time under any Company plan during any such year, as determined in accordance with Code Section 422, shall not exceed \$100,000 (the "\$100,000 Limitation"), other than as a result of an acceleration of vesting due to a Change of Control transaction pursuant to Section 18 of the Plan. In the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed such amount, Section 7(b), below, will apply. To the extent the exercisability of the Option is deferred by reason of the \$100,000 Limitation, the deferred portion of the Option will first become exercisable in the first calendar year or years thereafter in which the \$100,000 Limitation would not be contravened.

(b) Notwithstanding any other provisions of this Agreement, in the event an acceleration of vesting causes the number of shares for which the Option is first exercisable to exceed the \$100,000 Limitation, the Option shall be deemed to be two options. The first Option shall be for the maximum number of shares subject to the Option that can comply with the \$100,000 Limitation without causing the Option to be unexercisable as to vested shares. The second Option, which shall not be treated as an Incentive Stock Option, shall be for the balance of the shares subject to the Option and shall be exercisable on the same terms and at the same time as set forth in this Agreement; provided, however, that such shares shall become vested on the same date or dates as set forth in this Agreement without regard to this paragraph. Unless Optionee specifically elects to the contrary in his written notice of exercise, the first option shall be deemed to be exercised first to the maximum possible extent and then the second option shall be deemed to be exercised.

8. No Right to Continued Employment. This Option does not confer upon Optionee any right with respect to continuance of employment by the Company or an Affiliate, nor shall it interfere in any way with the right of the Company or an Affiliate to terminate his employment at any time with or without cause.

9. Change in Capital Structure. The terms of this Option shall be adjusted as provided in Section 17 of the Plan from time to time as the Board determines is appropriate in the event of any subdivision or consolidation of shares or other capital adjustment. Any and all new, substitute, or additional securities or other property to which Optionee is entitled by reason of ownership of the Option Shares shall be immediately subject to this Agreement and shall be included in the definition of Option Shares for all purposes.

10. General Restrictions. Notwithstanding anything contained herein to the contrary, no purported exercise of the Option shall be effective without the written approval of the Company, which may be withheld to the extent that the exercise of the Option, either individually or in the aggregate together with the exercise of other previously exercised stock options and/or offers and sales pursuant to any prior or contemplated offering of securities, would, in the sole and absolute judgment of the Company, (i) require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state or (ii) violate any federal, state, or foreign securities laws or other law or regulations. The Company shall avail

itself of any exemptions from registration contained in applicable federal and state securities laws which are reasonably available to the Company on terms which, in its sole and absolute discretion, it deems reasonable and not unduly burdensome or costly. The Optionee shall deliver to the Company, prior to the exercise of this Option, such information, representations and warranties as the Company may reasonably request for the Company to be able to satisfy itself that the Common Stock to be acquired pursuant to the exercise of the Option is being acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities laws. The Optionee is cautioned that the Option may not be exercisable unless the foregoing conditions are satisfied. Accordingly, the Optionee may not be able to exercise the Option when desired even though the Option is vested.

11. Tax Withholding. At the time the Option is exercised, in whole or in part, or at any time thereafter as requested by the Company, the Optionee hereby authorizes payroll withholding and otherwise agrees to make adequate provision for Applicable Withholding Taxes, if any, which arise in connection with the Option, including, without limitation, obligations arising upon (i) the exercise, in whole or in part, of the Option, (ii) the transfer, in whole or in part, of any Option Shares, (iii) the operation of any law or regulation providing for the imputation of interest, or (iv) the lapsing of any restriction with respect to any Option Shares. The Company shall have the right to withhold or retain from any payment to Optionee (whether or not such payment is made pursuant to this Option) or take such other action as is permissible under the Plan which the Company deems necessary or appropriate to satisfy any Applicable Withholding Taxes. The Optionee is cautioned that the Option is not exercisable unless the Company's withholding obligations are satisfied.

12. Notice of Disqualifying Disposition. To obtain certain tax benefits afforded to ISOs under Code Section 422, Optionee must hold the shares issued upon the exercise of an ISO for two years after the date of grant of the option and one year from the date of exercise. Optionee may be subject to the alternative minimum tax at the time of exercise. Tax advice should be obtained when exercising any option and before the disposition of the shares issued upon the exercise of any option. By accepting the Option, Optionee hereby agrees to promptly notify the Company's Chief Financial Officer if Optionee disposes of any of the Option Shares within one year from the date he exercises all or part of the Option or within two years of the date of grant of the Option.

13. Governing Law. This Agreement shall be governed by the laws of the Commonwealth of Virginia without reference to the conflicts of laws principles of any jurisdiction.

14. Optionee Bound by Plan. Optionee hereby acknowledges receipt of a copy of the Plan and agrees to be bound by all the terms and provisions thereof. Optionee hereby agrees to accept as binding, conclusive, and final all decisions or interpretations of the Committee upon any questions arising under this Agreement.

15. Legends. The Company may at any time place legends referencing the terms of this Agreement and any applicable federal, state, or foreign securities law restrictions on all certificates representing shares of stock subject to the provisions of this Agreement. The Optionee shall, at the request of the Company, promptly present to the Company any and all certificates representing shares acquired pursuant to the Option in the possession of the Optionee in order to carry out the provisions of this paragraph. Unless otherwise specified by the Company, legends placed in such certificates may reference, but shall not be limited to, (i) the 1933 Act requirements, (ii) the right of first refusal, and (iii) the requirements of Code Section 422.

16. Binding Effect. Subject to the limitations stated above and in the Plan, this Agreement shall be binding upon and inure to the benefit of the legatees, distributees, and personal representatives of Optionee and the successors of the Company.

17. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior or contemporaneous written or oral agreements or understandings with respect to the subject matter hereof. This Agreement may only be amended by a writing signed by the party to be charged.

18. Legal Counsel. This Agreement has been prepared by LeClair Ryan, A Professional Corporation (the "Firm"), as counsel to the Company, after full disclosure of its representation of the Company to Optionee and with the consent and direction of Optionee. Optionee has reviewed the contents of this Agreement and fully understands its terms. Optionee acknowledges that he is fully aware of his right to the advice of counsel independent from that of the Company, that the Firm has advised him of such right and disclosed to him the risks in not seeking such independent advice, and that he understands the potentially adverse interests of the parties with respect to this Agreement. Optionee further acknowledges that no representations have been made with respect to the income or estate tax or other consequences of this Agreement to him and that he has been advised of the importance of seeking independent advice of counsel with respect to such consequences.

IN WITNESS WHEREOF, the Company has caused this Agreement to be signed by a duly authorized officer, and Optionee has affixed his signature hereto.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: _____
Date: _____

_____, Optionee
Date: _____

Exhibit A

NOTICE OF EXERCISE OF STOCK OPTION
TO PURCHASE COMMON STOCK OF COMMONWEALTH BIOTECHNOLOGIES, INC.

Name: _____

Address: _____

Date: _____

COMMONWEALTH BIOTECHNOLOGIES, INC..

Attention: Secretary

Re: Exercise of Stock Option

Gentlemen:

Subject to acceptance hereof in writing by Commonwealth Biotechnologies, Inc. (the "Company") pursuant to the provisions of the Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan, I hereby elect to exercise options granted to me to purchase _____ shares of Common Stock, no par value (the "Stock"), of the Company under the Incentive Stock Option Agreement dated April 23, 1997 (the "Agreement"), at a price of \$_____ per share, for a total of \$_____ (the "Exercise Price"). Any capitalized terms not defined herein shall have the meanings ascribed to them in the Agreement.

I wish to pay for the Stock as follows:

By cash, certified check, or bank cashier's check, enclosed, for \$_____ for the full Exercise Price, payable to Commonwealth Biotechnologies, Inc.

By the enclosed certificate representing ____ shares of Common Stock with a Fair Market Value equal to the Exercise Price (\$ _____) that I have held for at least six months (if I acquired them from the Company) and are not subject to any restrictions.

By requesting that the Company withhold from the Stock I am purchasing an amount with a Fair Market Value equal to the Exercise Price.

As soon as the Stock Certificate is registered as indicated below, please deliver it to me at the above address.

I would like the Stock to be registered in the name(s) of _____ as _____ (specify individual, joint tenants, tenants by the entirety, for the benefit of, or other legal designation).

Very truly yours,

AGREED TO AND ACCEPTED:

COMMONWEALTH BIOTECHNOLOGIES, INC..

By: _____

Its: _____

Number of Shares

Exercised: _____

Number of Shares

Remaining: _____