

As filed with the Securities and Exchange Commission on July 21, 1997

REGISTRATION NO. 333-_____

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

FORM SB-2
REGISTRATION STATEMENT
UNDER
THE SECURITIES ACT OF 1933

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

<TABLE>
<CAPTION>

VIRGINIA 8733 56-1641133

<S> <C>
(STATE OR OTHER JURISDICTION OF (PRIMARY STANDARD INDUSTRIAL (I.R.S. EMPLOYER IDENTIFICATION NO.)
INCORPORATION OR ORGANIZATION) CLASSIFICATION CODE NUMBER)

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 OF PRINCIPAL EXECUTIVE (ADDRESS OF PRINCIPAL PLACE OF BUSINESS OR INTENDED
OFFICES) 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:

J. BENJAMIN ENGLISH, ESQ. JAMES J. WHEATON, ESQ.
LECLAIR RYAN, A PROFESSIONAL CORPORATION WILLCOX & SAVAGE, P.C.
707 EAST MAIN STREET, SUITE 1100 1800 NATIONSBANK CENTER
RICHMOND, VIRGINIA 23233 NORFOLK, VIRGINIA 23510
(804) 783-2003 (757) 628-5619

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. []

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CALCULATION OF REGISTRATION FEE

Amount to be Proposed Maximum Proposed Maximum

Amount Title of Each Class of Securities to be of	Registered	Offering Price Per Unit (1)	Aggregate Offering Price
Registration Fee			
<S> <C>			
Common Stock	834,000	\$ 6.00	\$ 5,004,000.00
Underwriter's Warrants (2)	83,400	\$ 0.001	\$ 83.40
Common Stock Issuable Upon Exercise of the Underwriter's Warrants	83,400	\$ 9.90	\$ 825,660.00
Common Stock (3)	541,370	\$ 6.00	\$ 3,248,220.00
Private Placement Warrants (4)	50,000	\$ 0.001	\$ 50.00
Common Stock Issuable Upon Exercise of the Private Placement Warrants	50,000	\$ 9.90	\$ 495,000.00
Management Warrants (5)	100,000	\$ 0.001	\$ 100.00
Common Stock Issuable Upon Exercise of the Management Warrants	100,000	\$ 9.90	\$ 990,000.00
Total	--	--	\$10,563,113.40
\$ 3,201			

</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 83,400 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.
- (3) 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.
- (4) In connection with the Private Placement, the Registrant sold to the Underwriter warrants to purchase an aggregate of 50,000 shares of Common Stock (the "Private Placement Warrants"). The price paid by the Underwriter for the Private Placement Warrants was \$.001 per warrant. The exercise price of the Private Placement Warrants is \$9.90 per share.
- (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 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.

SUBJECT TO COMPLETION, DATED JULY 21, 1997

PROSPECTUS

[LOGO--COMMONWEALTH BIOTECHNOLOGIES, INC.]

834,000 Shares of Common Stock

Commonwealth Biotechnologies, Inc. ("CBI" or the "Company") hereby offers (the "Offering") 834,000 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." In addition, resales of (a) an aggregate of 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 83,400 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, (c) warrants to purchase an aggregate of 50,000 shares of Common Stock (the "Private Placement 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 the Underwriter as additional compensation for placement services rendered to the Company during the Private Placement, (d) 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, issued to certain executive officers of the Company and (e) an aggregate of 233,400 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants, the Private Placement Warrants and the Management Warrants (collectively, the "Resale Securities") are being registered hereby. The Resale Securities are not being sold concurrently with the Common Stock offered by the Company to the public and are not underwritten. Such securities may, however, be sold at a later time. See "RISK FACTORS--Shares Eligible for Future Sale." The Company intends to apply 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."

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

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.

	Price to Public Underwriting Discount(1)		Proceeds to Company(2)
Per Share....	\$ 6.00	\$ 0.48	\$ 5.52
Total.....	\$5,004,000	\$ 400,320.00	\$4,603,680.00

(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.

(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 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 83,400 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, (c) warrants to purchase an aggregate of 50,000 shares of Common Stock (the "Private Placement 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 the Underwriter as additional compensation for placement services rendered to the Company during the Private Placement, (d) 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, issued to certain executive officers of the Company, and (e) an aggregate of 233,400 shares of Common Stock issuable upon conversion of the Underwriter's Warrants, the Private Placement Warrants and the Management Warrants. The offering of such securities by the Selling Securityholders may occur contemporaneously with the separate offering of 834,000 shares of Common Stock by the Company in an underwritten public offering (the "Offering"). In the event the Underwriter's Warrants, the Private Placement Warrants and the Management's Warrants are exercised, the shares being registered on behalf of the Selling Securityholders will constitute 53.6% of the outstanding shares of Common Stock upon completion of the Offering. The resale of the securities of the Selling Securityholders 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, the Underwriter's Warrants and the Private Placement 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 Common Stock offered by this Prospectus may be sold from time to time by the Selling Securityholders, or by their transferees. 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 ___ THROUGH ___

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 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. 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 _____ (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, within five business days after such termination or withdrawal.

ANDERSON & STRUDWICK
INCORPORATED

The date of this Prospectus is _____, 1997.

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 \$179,146. 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.

The Offering

Securities Offered by the Company	834,000 shares of Common Stock. See "DESCRIPTION OF SECURITIES."
Shares of Common Stock Outstanding before Offering	612,643
Common Stock to be Outstanding after the Offering	1,446,643 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

(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 the Conversion Shares 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 233,400 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants, the Private Placement Warrants and the Management Warrants; and (c) assume no issuance of an aggregate of 376,667 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 236,667 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>
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Years Ended	For the Three Months		For the
31,	Ended March 31,		December
1995	1997	1996	1996

(Unaudited)

<S> <C>
Operations Data:

Revenue	\$ 599,916	\$ 193,054	\$ 989,925
\$ 369,301			
Net income before proforma income tax expense	\$ 248,947	\$ 83,184	\$ 179,146
\$ 53,714			
Proforma net income (1)	\$ 178,828	\$ 77,662	\$ 129,495
\$ 31,622			
Proforma earnings per common and common equivalent share (2)	\$ 0.38	\$ 0.16	\$ 0.27
\$ 0.07			

Balance Sheet Data as of:

<TABLE>
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	March 31, 1997		December

	(Unaudited)		
	Actual	As Adjusted (3)	1996
	-----	-----	-----
31,			

(Actual)			
1995			

<S> <C>			
Working capital	\$ 243,928	\$ 7,177,996	\$ 91,637
\$ (34)			
Current ratio	2.37	\$ 31.25	\$ 1.32
\$ 1.00			
Total assets	\$ 846,858	\$ 7,840,538	\$ 634,193
\$ 186,818			
Shareholders' equity	\$ 388,692	\$ 7,322,760	\$ 162,269
\$ 62,656			
Book value per share (2)	\$ 0.82	\$ 5.60	\$ 0.34
\$ 0.13			

- (1) The above financial data gives retroactive effect to conversion from S Corporation to C Corporation.
- (2) The above financial data gives retroactive effect to the 93.78-for-one stock split effective June 24, 1997.
- (3) As adjusted to reflect (i) the sale of 834,000 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 convertible subordinated notes to common stock at a conversion price of \$6.00 per share. See "Description of Capital Stock."

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 21% for the quarter ended March 31, 1997), and substantially all of its financing for proprietary research projects, is funded by grants from federal government agencies. 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 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.

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. See "BUSINESS--Government Regulation."

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 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

The Company has entered into certain transactions with parties who were stockholders of the Company at the time of the transactions. A summary 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.

Substantial Shares of Common Stock Reserved for the Exercise of Options and Warrants

The Company has reserved 376,667 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 236,667 shares of Common Stock to the Company's founders upon the completion of the Offering. In addition, the Company has reserved an aggregate of 233,400 shares of Common Stock for issuance upon exercise of (a) the Underwriter's Warrants, (b) the Private Placement Warrants, and (c) 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 834,000 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, resales of 233,400 shares of the Company's Common Stock (to be issued when and if the Underwriter's Warrants, the Private Placement Warrants and the Management Warrants are exercised), none of which are subject to any "lock-up" agreements, are being registered concurrent with the Offering. Such shares may be resold in accordance with the resale provisions contained in this Prospectus. Notwithstanding the foregoing, however, transfer of the Underwriter's Warrants, the Private Placement 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 236,667 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 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."

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. 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 \$4,403,680. 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:

Equipment Purchases	-	\$2,000,000
---------------------	---	-------------

Lease of Facilities	-	\$ 500,000
Sales & Marketing	-	\$ 803,680
Personnel	-	\$ 400,000
Working Capital	-	\$ 700,000

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.

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 March 31, 1997, the net tangible book value of the Company was \$2,978,692. "Net tangible book value" per share of Common Stock represents the amount of the Company's total assets, less the amount of its total liabilities, divided by the number of shares of Common Stock outstanding. Dilution represents the difference between the amount per share of Common Stock paid by the new investors purchasing 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 834,000 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 March 31, 1997 would have been \$7,382,732, or \$5.60 per share of Common Stock. This represents an immediate increase in net tangible book value of \$.39 per share of Common Stock to existing shareholders and an immediate dilution of \$.40 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	\$	5.21
Increase per share attributable to new investors	\$.79
Pro forma net tangible book value per share after the Offering	\$	5.60
Dilution to new investors	\$.40

The following table sets forth, at July 18, 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>

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percentage	Amount	Percentage	
<S> <C>					
New Investors	834,000	57.7%	\$5,004,000(1)	62.5%	\$6.00
Holders of					
Conversion Shares	541,370	37.4	\$3,000,000(1)	37.5	\$5.25
Company Founders	71,273	4.9	--	--	--
	-----	-----	-----	-----	
Total	1,446,643	100.0%	\$8,004,000(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 March 31, 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>

	March 31, 1997		December 31
	(Unaudited)		1996
	As Adjusted	Actual	Actual
Short-term debt:			
Demand note payable	\$ 42,000	\$ 42,000	\$ -
Current portion of long-term debt	58,496	58,496	37,293
	100,496	100,496	37,293
Long-term debt, net of current portion	280,507	280,507	185,627
Shareholders' equity:			
Common stock, no par value, 10,000,000 shares authorized, 71,273 shares issued and outstanding; 1,405,273 shares issued and outstanding as adjusted (1) (2)	760	760	760
Additional paid-in capital (1) (3)	7,322,000	-	-
Retained earnings (3)	-	387,932	161,509
	7,322,760	388,692	162,269
Total capitalization	\$ 7,703,763	\$ 769,695	\$ 385,189

</TABLE>

- (1) Reflects the (i) conversion of the convertible subordinated notes into 500,000 shares of common stock, and (ii) the sale 834,000 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 reserved for issuance upon exercise of Management Warrants; (ii) up to 376,667 shares reserved for issuance under the Company's Incentive Plan; (iii) 83,400 shares issuable upon exercise of the Underwriter's Warrants for the Offering and (iv) 50,000 shares issuable upon exercise of the Underwriter's Private Placement Warrants.
- (3) Reflects the June 25, 1997 conversion from S Corporation to C Corporation status and the reclassification of \$328,320 in retained earnings, net of \$59,612 in distributions payable to the S Corporation shareholders to cover their respective share 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 three months ended March 31, 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.

SELECTED FINANCIAL INFORMATION

<TABLE>
<CAPTION>

Ended	For the Three Months		For the Years	
	Ended March 31, 1997	1996	December 31, 1996	1995

(Unaudited)

<S> <C>

Operations Data:

Revenue	\$ 599,916	\$ 193,054	\$ 989,925	\$
369,301				
Net income before proforma income tax expense	\$ 248,947	\$ 83,184	\$ 179,146	\$
53,714				
Proforma net income (1)	\$ 178,828	\$ 77,662	\$ 129,495	\$
31,622				
Proforma earnings per common and common equivalent share (2)	\$ 0.38	\$ 0.16	\$ 0.27	\$
0.07				
Proforma weighted average common and common equivalent shares outstanding and used in computation (2)	473,773	473,773	473,773	
473,773				

</TABLE>

Balance Sheet Data as of:

<TABLE>
<CAPTION>

	March 31, 1997		December 31,	
	(Unaudited)		(Actual)	
	Actual	As Adjusted (3)	1996	1995
Working capital	\$ 243,928	\$7,177,996	\$ 91,637	\$
(34)				
Current ratio	2.37	31.25	1.32	
1.00				
Property and equipment, net	\$ 422,280	\$ 422,280	\$ 243,611	\$
100,749				
Total assets	\$ 846,858	\$7,840,538	\$ 634,193	\$
186,818				
Total long-term debt	\$ 280,507	\$ 280,507	\$ 185,687	\$
-				
Shareholders' equity	\$ 388,692	\$7,322,760	\$ 162,269	\$
62,656				
Book value per share (2)	\$ 0.82	\$ 5.60	\$ 0.34	\$
0.13				

</TABLE>

(1) The above financial data gives retroactive effect to conversion from S Corporation to C Corporation.

(2) The above financial data gives retroactive effect to the 93.78-for-one stock split effective June 24, 1997.

(3) As adjusted to reflect (i) the sale of 834,000 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 convertible subordinated notes to common stock at a conversion price of \$6.00 per share. See "Description of Capital Stock."

<TABLE>
<CAPTION>

	March 31, 1997		December 31,	
	(Unaudited)		1996	
	As Adjusted	Actual	Actual	
Short-term debt:				
Demand note payable	\$ 42,000	\$ 42,000	\$	-

<S> <C>

Current portion of long-term debt	58,496	58,496	37,293
	-----	-----	-----
	100,496	100,496	37,293
	-----	-----	-----
Long-term debt, net of current portion	280,507	280,507	185,627
	-----	-----	-----
Shareholders' equity:			
Common stock, no par value, 10,000,000 shares authorized, 71,273 shares issued and outstanding; 1,405,273 shares issued and outstanding as adjusted (1) (2)	760	760	760
Additional paid-in capital (1) (3)	7,322,000	-	-
Retained earnings (3)	-	387,932	161,509
	-----	-----	-----
	7,322,760	388,692	162,269
	-----	-----	-----
Total capitalization	\$ 7,703,763	\$ 769,695	\$ 385,189
	=====	=====	=====

</TABLE>

- (1) Reflects the (i) conversion of the convertible subordinated notes into 500,000 shares of common stock, and (ii) the sale 834,000 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 reserved for issuance upon exercise of Management Warrants; (ii) up to 376,667 shares reserved for issuance under the Company's Incentive Plan; (iii) 83,400 shares issuable upon exercise of the Underwriter's Warrants for the Offering and (iv) 50,000 shares issuable upon exercise of the Underwriter's Private Placement Warrants.
- (3) Reflects the June 25, 1997 conversion from S Corporation to C Corporation status and the reclassification of \$328,320 in retained earnings, net of \$59,612 in distributions payable to the S Corporation shareholders to cover their respective share of tax liability resulting from the Company's earnings up to the date of conversion.

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 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. The Company's proprietary research business uses the same personnel, equipment and facilities as its service business.

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 primarily attributable to an increase in new customer accounts and to larger orders with existing customers 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. An extension of this contract may be granted during the third quarter of 1997. This extension or lack thereof will have a significant material impact on the Company's revenue in the third and possibly fourth quarters of 1997.

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 \$161,014 to \$260,791, or 62.0%, in 1995 and 1996, respectively. Sales, general and administrative expenses as a percentage of revenue were 43.6% and 26.3% 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 \$64,134 and \$302,455, or 17.4% and 30.6% of revenue, in 1995 and 1996, respectively. The increase of \$238,321 in 1996 research and development costs represented an increase of 371.6% 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 will 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.

Three Months Ended March 31, 1996 and March 31, 1997

Results of Operations

Revenues

Gross revenues increased 210.8% from \$193,054 to \$599,916 for the three month periods ended March 31, 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 sales, reputation in the industry and advertising activities while the increase in the cell culture and protein purification services is due to the increased advertising as well as increased management involvement in promotional activities.

Expenses

Cost of services increased 350.4% from \$31,615 to \$142,383 for the three months ended March 31, 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 16.4% and 23.7% for the three month periods ending March 31, 1996 and 1997, respectively.

Sales, general and administrative expenses increased from \$34,743 to \$98,822, or 184.7%, for the three months ended March 31, 1996 and 1997, respectively. Sales, general and administrative expenses as a percentage of revenue was 18.0% and 16.5% for the three months ended March 31, 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 three months ended March 31, 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 \$41,618 and \$104,602, or 21.6% and 17.4% of revenue, for the three months ended March 31, 1996 and 1997, respectively. The increase of \$62,984 in research and development costs for the three months ended March 31, 1997 represented an increase of 151.3% 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 will need additional capital in order to expand its research and development efforts.

Variability of Future Operating Results

The Company experienced another significant revenue increase in the latter half of 1996, due mostly to the commencement of another contract with a large customer. This contract is expected to be completed during the last quarter of 1997. Presently, the Company is expecting an additional contract with this customer for services to begin in the last quarter of 1997 and to be completed sometime in 1998. Renewal of another contract completed in the first quarter of 1997 would have a material impact on the Company's revenue in the third and fourth quarters of 1997. Completion of these contracts without a replacement source of revenue from this or another large customer could have a material adverse impact on the Company.

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 (used) was \$4,135 and \$229,990 for 1995 and 1996, respectively, and \$77,261 and (\$10,244) for the three months ended March 31, 1996 and 1997, respectively. Net working capital (deficit) at December 31, 1995 and 1996 was (\$34) and \$91,637, respectively, and \$243,928 at March 31, 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 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.

The Company, as an S Corporation, also made distributions to its shareholders. These distributions totaled an aggregate of \$79,533 in 1996 and \$82,136 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").

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 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 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 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.

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.

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 Company believes that the principal competitive factors are pricing, expertise, and range of services offered. 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 5,000 square feet of laboratory and office space and has executed a lease to continue to occupy its present space through the year 2000. This lease is subject to cancellation by the Company upon nine 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. The Company and VCU are parties to one license agreement under which VCU licenses certain intellectual property rights to the Company. See "MANAGEMENT--Relationship with VCU."

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, has completed two different Phase I Small Business Technology Transfer Research ("SBTTR") grants from the National Institutes of Health (\$100,000 each), is in the first year of a Phase II SBTTR grant (\$500,000), and has been awarded a

third Phase I SBTTR grant (\$100,000), and Small Business Innovative Research Award ("SBIR") (\$55,000), from the United States Department of Agriculture. Revenues from federally funded contracts are recognized on a cost reimbursement basis. See "RISK FACTORS--Dependence on Government Grants."

Intellectual Property

The Company's principal intellectual property rights consist of a patent application relating to an anti-coagulation technology it is developing and one exclusive license from VCU relating to technologies for catalytic RNA molecules, which has not been the subject of any patent filings. 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 for the operation of a new laboratory facility.
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 July 15, 1997, are as follows:

Name	Age	Position
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	34	Senior Vice President, Director and Founder
Chester M. Trzaski	51	Chief Operating Officer
Charles A. Mills, III	50	Director
Peter C. Einselen	57	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.

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 at least two 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

Name and Principal Position	Year	Annual Compensation		All Other Compensation
		Salary	Bonus	
Richard J. Freer, Ph.D., Chairman of the Board	1996	\$8,729	--	\$23,024 (1)
	1995	--	--	--
	1994	--	--	--

(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. The maximum number of shares of Common Stock that may be issued pursuant to options under the Incentive Plan is 376,667, 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, 236,667 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 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 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 options to acquire a total of 236,667 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 166,667 shares will have an exercise price of \$9.90 per share. All such 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. These provisions prohibit each executive officer from competing with the Company or soliciting its employees under certain circumstances.

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 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 July 15, 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>

Name and Address of Beneficial Owner	Number of Shares (1)	Percent of Shares Outstanding	
		Before Offering	After Offering
<S> <C>			
Richard J. Freer, Ph.D. (2)	49,579	7.7%	3.4%
Robert B. Harris, Ph.D. (2)	49,578	7.7%	3.4%
Gregory A. Buck, Ph.D. (2)	57,912 (3)	9.0%	3.9%
Thomas R. Reynolds (2)	22,537	3.6%	1.5%
Chester M. Trzaski (2)	8,333 (4)	1.4%	0
Charles A. Mills, III (5)	0	0	0
Peter C. Einselen (5)	0	0	0
James T. Martin (6) (7)	133,333	21.8%	9.2%
James H. Wallace (8) (9)	33,333	5.4%	2.3%
All Directors and Executive Officers as a Group (7 persons)	187,939	26.4%	12.2%

</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 July 15, 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.

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 236,667 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 166,667 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 for a period of ten years at an exercise price of \$9.90 per share. The Management Warrants were issued as noted below:

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

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.

In connection with the Private Placement, the Company issued the Private Placement Warrants to the Underwriter. Shortly thereafter, the Underwriter assigned warrants to purchase 25,000 shares of the Company's Common Stock to Charles A. Mills, III, a director of the Company and a principal of the Underwriter.

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 \$82,136 for the first six months of 1997.

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) 83,400 shares of Common Stock issuable upon the exercise of the Underwriter's Warrants, (b) 50,000 shares of Common Stock issuable upon the exercise of the Private Placement Warrants, and (c) 100,000 shares of Common Stock issuable upon the exercise of the Management Warrants.

The Underwriter's Warrants, the Private Placement Warrants and the Management Warrants (and the shares of Common Stock underlying each) are being registered with the Offering but are not underwritten and will not necessarily be sold concurrently with the Common Stock being offered through the Underwriter. It is anticipated that the Underwriter's Warrants and the Private Placement Warrants will, however, be listed for trading on the Nasdaq SmallCap Market under the symbol "_____." The Underwriter's Warrants, the Private Placement Warrants 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, the Private Placement 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 and Private Placement 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. The Private Placement Warrants are exercisable during the period from June 25, 1998 through June 24, 2002. Holders of the Underwriter's Warrants or the Private Placement 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 at any time for a period of ten years following the issuance thereof. 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, the Private Placement 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, the Private Placement 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 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 1,446,643 shares of Common Stock outstanding. Of these shares, the 834,000 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. Notwithstanding the foregoing, however, transfer of the Underwriter's Warrants, the Private Placement Warrants and the shares of Common Stock underlying these warrants is restricted to bona fide officers of the Underwriter for a one-year period in accordance with the rules of the 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, the Private Placement Warrants or the Management Warrants are exercised, the holders of 233,400 shares of Common Stock, or their permitted transferees, will hold shares that are freely tradable without restriction under the Securities Act in accordance with the resale provisions contained in this Prospectus.

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 shares of Common Stock included in the Offering, 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) 541,370 shares of Common Stock issuable upon conversion of the Notes, (b) the Underwriter's Warrants, (c) the Private Placement Warrants, (d) the Management Warrants, and (e) an aggregate of 233,400 shares of Common Stock underlying the Underwriter's Warrants, the Private Placement Warrants and the Management Warrants. In the event such warrants are exercised, the shares being registered on behalf of the Underwriter, the holders of Notes and certain affiliates of the Company noted below (collectively, the "Selling Securityholders") will constitute 53.6% 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 on 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.

<TABLE>
<CAPTION>

	Shares of Common Stock Owned Before Offering	Warrants Owned Before Offering	Warrants Offered Hereby(1)	Common Stock Offered Hereby	Shares of Stock Owned After Offering	Percent of Common Stock After Offering
<S> <C>						
Dr. John F. Bourgeois	8,333	--	--	8,333	0	0
Haley Chisholm & Morris	8,333	--	--	8,333	0	0
Joseph J. Cockriel	8,333	--	--	8,333	0	0
Michael Riggs Crane	8,333	--	--	8,333	0	0

Dennis R. Deans	8,333	--	--	8,333	0	0
Robert G. Doumar	8,333	--	--	8,333	0	0
Gerald Einhorn, DDS LTD Defined S Benefit Trust DTD 4-1-84	8,333	--	--	8,333	0	0
Stephen F. Evans	8,333	--	--	8,333	0	0
Gerald T. George	8,333	--	--	8,333	0	0
Thomas T. Goodale	8,333	--	--	8,333	0	0
Jonathan M. Gorog	8,333	--	--	8,333	0	0
Harold P. Heafner, Jr.	8,333	--	--	8,333	0	0
George C. Hutter	8,333	--	--	8,333	0	0
Ali R. Jamali	8,333	--	--	8,333	0	0
Paul L. Johnson and Margaret W. Johnson, JT TEN WROS	8,333	--	--	8,333	0	0
Edwin A. Joseph	8,333	--	--	8,333	0	0
Edward C. Kvetko	8,333	--	--	8,333	0	0
Willard H. Lane and Hellen M. Lane	8,333	--	--	8,333	0	0
James T. Martin	133,333	--	--	133,333	0	0
Martha D. Massie	8,333	--	--	8,333	0	0
Dr. Andrew A. Mayer	8,333	--	--	8,333	0	0
Milton Miller and Louis Miller, JT CON	8,333	--	--	8,333	0	0
Joan Miller	8,333	--	--	8,333	0	0
Eugene Moos and Susan Bell Moos, JT TEN WROS	8,333	--	--	8,333	0	0
Padua Ventures Limited BVI	8,333	--	--	8,333	0	0
Leah T. Robinson TTEE of the Revocable TR DTD 3-21-89 FBO Leah T. Robinson	8,333	--	--	8,333	0	0
Karen Lee Sobel Sachs	8,333	--	--	8,333	0	0
Joyce M. Salzberg	8,333	--	--	8,333	0	0
Leon I. Salzberg and Gregory A. Buck, JT TEN COM	8,333	--	--	8,333 (2)	0	0
Steven E. Shinholser and Keller R. Shinholser, JT WROS	8,333	--	--	8,333	0	0
Louise Williams Sloan	8,333	--	--	8,333	0	0
Jacquelyn C. Smith	8,333	--	--	8,333	0	0
Robert M. Smith, III	8,333	--	--	8,333	0	0
Robert G. Sullivan	8,333	--	--	8,333	0	0
Chester M. Trzaski and Stella M. Trzaski (3)	8,333	--	--	8,333	0	0
Noell P. Vawter	8,333	--	--	8,333	0	0
James H. Wallace	33,333	--	--	33,333	0	0
Maurice Edward Waller	8,333	--	--	8,333	0	0

Eric M. Warner	8,333	--	--	8,333	0	0
Kent J. Weber	8,333	--	--	8,333	0	0
Transerve Marine, Inc.	8,333	--	--	8,333	0	0
Jeffrey M. Zwerdling	8,333	--	--	8,333	0	0
Richard J. Freer, Ph.D. (3)	20,652	28,947	28,947	--	20,632	1.4
Robert B. Harris, Ph.D. (3)	20,631	28,947	28,947	--	20,631	1.4
Gregory A. Buck, Ph.D. (3)	20,632	28,948	28,948	--	20,632	2.0 (4)
Thomas R. Reynolds (3)	9,379	13,158	13,158	--	9,379	0
Anderson & Strudwick, Inc.	--	12,500	12,500	--	0	0
L. McCarthy Downs, III	--	12,500	12,500	--	0	0
Charles A. Mills, III	--	25,000	25,000	--	0	0

</TABLE>

- - - - -

* Less than one percent (1%)

- (1) The warrants offered hereby may be exercised and an identical number of shares of Common Stock is issuable by the Company.
- (2) Excludes shares of Common Stock held by Dr. Buck in an individual capacity.
- (3) Officers and directors of the Company
- (4) Includes shares of Common Stock held by Dr. Buck and Leon I. Salzberg, as tenants in common.

PLAN OF DISTRIBUTION
FOR SELLING SECURITYHOLDERS

The securities offered hereby may be sold from time to time directly by the Selling Securityholders. Alternatively, the Selling Securityholders may from time to time offer such securities 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 \$.04 per share.

The shares of Common Stock underlying the Notes, the Underwriter's Warrants, the Private Placement Warrants the Management Warrants, and the shares of Common Stock underlying such warrants, 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 _____ (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 834,000 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 within five (5) business days after such withdrawal or cancellation.

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.

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 prices of the Underwriter's Warrants and the Private Placement Warrants, which are being registered with the Common Stock, but are not very underwritten, have been determined by negotiation between the Company and the Underwriter and is 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 prices of the Underwriter's Warrants and the Private Placement 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.

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)

COMMONWEALTH BIOTECHNOLOGIES, INC.

BALANCE SHEETS

<TABLE>
 <CAPTION>

	Proforma March 31, 1997	March 31, 1997	December 31, 1996	
1995				

<S> <C>	(Unaudited)	(Unaudited)		
ASSETS				
Current assets				
Cash and cash equivalents	\$ 7,175,426	\$ 181,746	\$ 260,357	\$
1,115				
Accounts receivable	237,912	237,912	116,437	
79,015				
Prepaid expenses	1,929	1,929	1,080	
-				

Total current assets	7,415,267	421,587	377,874	
80,130				

Property and equipment, net	422,280	422,280	243,611	
100,749				

Other assets				
Organization costs, net	2,591	2,591	3,183	
5,539				
Deposits	400	400	9,525	
400				

Total other assets	2,991	2,991	12,708	
5,939				

	\$ 7,840,538	\$ 846,858	\$ 634,193	\$
186,818				
=====				

LIABILITIES AND SHAREHOLDERS' EQUITY

Current liabilities				
Demand note payable	\$ 42,000	\$ 42,000	\$ -	\$
-				
Current portion of long-term debt	58,496	58,496	37,293	
25,468				
Current portion of capital lease obligation	-	-	-	
19,862				
Accounts payable	42,163	42,163	48,944	
33,004				
Distributions payable to shareholders	59,612	-	-	
-				
Deferred revenue	35,000	35,000	200,000	
1,830				

80,164	Total current liabilities	237,271	177,659	286,237
-	Long-term debt	280,507	280,507	185,687
43,998	Long-term portion of capital lease obligation	-	-	-

124,162	Total liabilities	517,778	458,166	471,924

	Shareholders' equity			
760	Common stock, no par value, 10,000,000 shares authorized, 71,273 shares issued and outstanding at March 31, 1997 (unaudited) and December 31, 1996 and 1995 and on a proforma basis, 1,405,273 shares issued and outstanding at March 31, 1997 (unaudited)	760	760	760
-	Additional paid-in capital	7,322,000	-	-
61,896	Retained earnings	-	387,932	161,509

62,656	Total stockholders' equity	7,322,760	388,692	162,269

186,818		\$ 7,840,538	\$ 846,858	\$ 634,193

</TABLE>

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

COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENTS OF INCOME

<TABLE>
<CAPTION>

Ended	For the Three Months		For the Years	
	Ended March 31,		December	
31,	1997	1996	1996	
1995				

	(Unaudited)			
369,301	\$ 599,916	\$ 193,054	\$ 989,925	\$

79,948	142,383	31,615	237,726	
161,014	98,822	34,743	260,791	
64,134	104,602	41,618	302,455	

305,096	345,807	107,976	800,972	

64,205	254,109	85,078	188,953	

Other income (expense)				
Interest expense	(5,324)	(1,894)	(10,102)	
(10,545)				
Interest income	162	-	295	
54				

Total other income (expense)	(5,162)	(1,894)	(9,807)	
(10,491)				

Net income	248,947	83,184	179,146	
53,714				
=====				
Proforma presentation applicable to conversion from S Corporation to C Corporation				
Net income before proforma income tax expense	\$ 248,947	\$ 83,184	\$ 179,146	\$
53,714				
Proforma Income tax expense	70,119	5,522	49,651	
22,092				

Proforma net income	\$ 178,828	\$ 77,662	\$ 129,495	\$
31,622				
=====				
Proforma earnings per common and common equivalent share	\$ 0.38	\$ 0.16	\$ 0.27	\$
0.07				
Proforma weighted average common and common equivalent shares outstanding	473,773	473,773	473,773	
473,773				

</TABLE>

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

COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENTS OF CHANGES IN SHAREHOLDERS' EQUITY

<TABLE>
<CAPTION>

Total	Number of Shares Outstanding	Common Stock	Additional Paid-in Capital	Retained Earnings

<S> <C>				
Balance at January 1, 1995	71,273	\$ 760	\$ -	\$ 8,182
8,942				
Net income	-	-	-	53,714
53,714				
Distributions	-	-	-	-
-				

Balance at December 31, 1995	71,273	760	-	61,896
62,656				
Net income	-	-	-	179,146
179,146				
Distributions	-	-	-	(79,533)
(79,533)				

Balance at December 31, 1996	71,273	760	-	161,509

162,269				
Net income (unaudited)	-	-	-	248,947
248,947				
Distributions (unaudited)	-	-	-	(22,524)
(22,524)				

Balance at March 31, 1997 (unaudited)	71,273	760	-	387,932
388,692				
Proforma distribution payable to shareholders for payment of income taxes through June 25, 1997 (unaudited)	-	-	-	(59,612)
(59,612)				
Proforma effects of conversion to C Corporation (unaudited)	-	-	328,320	(328,320)
-				
Proforma effects of the conversion of convertible subordinated notes to common stock at a conversion price of \$6.00 per share (unaudited)	500,000	-	2,590,000	-
2,590,000				
Proforma effects of the intial public offering of 834,000 shares of common stock at \$6.00 per share (unaudited)	834,000	-	4,403,680	-
4,403,680				

Proforma Balance at March 31, 1997 (unaudited)	1,405,273	\$ 760	\$ 7,322,000	\$ -
7,322,760				\$

</TABLE>

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

COMMONWEALTH BIOTECHNOLOGIES, INC.

STATEMENT OF CASH FLOWS

<TABLE>				
<CAPTION>				
Years Ended		For the Three Months		For the
31,		Ended March 31,		December
1995		1997	1996	1996
-				

		(Unaudited)		
<S> <C>				
Cash flows from operating activities				
Net income		\$ 248,947	\$ 83,184	\$ 179,146
\$ 53,714				

Adjustments to reconcile net income to net cash provided by operating activities:				
Depreciation and amortization		25,789	9,767	54,382
38,938				
Changes in:				
Accounts receivable		(121,475)	(4,315)	(37,422)
(40,225)				
Prepaid expenses		(849)	(2,001)	(1,080)
5,457				
Deposits		9,125	-	-
-				
Accounts payable		(6,781)	(5,996)	15,940
(1,865)				
Deferred revenue		(165,000)	(3,378)	198,170
1,830				

4,135	Total adjustments	(259,191)	(5,923)	229,990

57,849	Net cash provided by (used in) operating activities	(10,244)	77,261	409,136

	Cash flows from investing activities			
(961)	Purchases of property and equipment	(203,866)	(1,817)	(194,798)
5,752	Deposits	-	-	(9,125)

4,791	Net cash provided by (used in) investing activities	(203,866)	(1,817)	(203,023)

	Cash flows from financing activities			
-	Proceeds from issuance of long-term debt	168,540	-	231,000
(41,006)	Principal payments on long-term debt	(10,517)	(4,843)	(33,578)
(18,545)	Principal payments on capital lease obligations	-	(6,115)	(63,860)
(7,500)	Principal payments on related party notes payable	-	-	-
-	Shareholder distributions	(22,524)	(10,363)	(79,533)

(67,051)	Net cash provided by (used in) financing activities	135,499	(21,321)	54,029

	Net (decrease) increase in cash and cash equivalents	(78,611)	54,123	259,242
(4,411)				
5,526	Cash and cash equivalents, beginning of period	260,357	1,115	1,115

	Cash and cash equivalents, end of period	\$ 181,746	\$ 55,238	\$ 260,357
\$ 1,115				
=====				
	Supplemental disclosure of cash flow information			
\$ 10,545	Cash paid during the period for interest	\$ 5,324	\$ 1,894	\$ 10,102
=====				

</TABLE>

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

COMMONWEALTH BIOTECHNOLOGIES, INC.

NOTES TO FINANCIAL STATEMENTS

MARCH 31, 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 March 31, 1997, and for the three months ended March 31, 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 three months ended March 31, 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 delivery of biologically relevant materials that have been synthesized. Research revenues are generally recognized as the expenses for research and development performed under the terms of the research contracts and grants are incurred. However, any revenues resulting from the achievement of objectives would be recognized when the objectives are achieved. Amounts received in advance of services to be performed 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

(Notes continued on next page)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

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.

As more fully described in Note 10, 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, any undistributed earnings or losses will be treated as a constructive distribution and reclassified 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 March 31, 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 March 31, 1997, its current tax liability for federal and state taxes would have been \$34,268; its deferred tax liabilities would have been \$70,919 and its retained earnings would be decreased by \$145,118. 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 three months ended March 31, 1997 (unaudited), March 31, 1996 (unaudited), and for the years ended December 31, 1996 and 1995 was \$11,293, \$4,045, \$25,008 and \$26,286, respectively.

Proforma Earnings Per Common and Common Equivalent Share

The proforma earnings per common and common equivalent share was 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 effects 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.

(Notes continued on next page)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Proforma Earnings Per Common and Common Equivalent Share (Continued)

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 three months ended March 31, 1997 (unaudited) was 71,273. For December 31, 1996 and 1995, and March 31, 1997 (unaudited) and March 31, 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 150,000 warrants converted using the Treasury Stock method to reduce the shares outstanding by 97,500. 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.

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:

	March 31, 1997	December 31, 1996 1995	
	-----	-----	
	(Unaudited)		
Laboratory equipment	\$ 563,342	\$ 359,476	\$ 180,574
Furniture and fixtures	1,925	1,925	-
Office equipment and improvements	16,983	16,983	3,012
	-----	-----	-----
	582,250	378,384	183,586
Less accumulated depreciation and amortization	(159,970)	(134,773)	(82,837)
	-----	-----	-----
Property and equipment, net	\$ 422,280	\$ 243,611	\$ 100,749
	=====	=====	=====

(Notes continued on next page)

NOTE 4 - LONG-TERM DEBT

Long-term debt consists of the following at:

<TABLE>
<CAPTION>

31, 1995	March 31, 1997	December 1996
	-----	-----
	(Unaudited)	
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 2,002.	101,444	-
-		
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.	23,741	-
-		
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.	183,818	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
-		
	-----	-----
25,468	339,003	222,980
Less - current portion of long-term debt (25,468)	(58,496)	(37,293)
	-----	-----
	\$ 280,507	\$ 185,687
	=====	=====

</TABLE>

(Notes continued on next page)

NOTE 4 - LONG-TERM DEBT (Continued)

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

1997	\$	37,293
1998		40,417
1999		43,826
2000		47,545
2001		38,899
Thereafter		15,000

	\$	222,980
		=====

NOTE 5 - DEMAND NOTE PAYABLE

The Company has a demand note payable to Crestar Bank in the amount of \$42,000 at March 31, 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.

NOTE 7 - COMMITMENTS AND CONTINGENCIES

Leases

During 1996 and 1995, the Company was engaged in a noncancellable 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 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.

(Notes continued on next page)

NOTE 7 - COMMITMENTS AND CONTINGENCIES (Continued)

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 three-month period ended March 31, 1997, or in 1996 or 1995.

NOTE 9 - MAJOR CUSTOMERS

The Company had the following revenue concentrations that exceeded 10%:

<TABLE>
<CAPTION>

	March 31, 1997	December 31, 1996 1995	

	(Unaudited)		
<S> <C>			
Bayer Pharmaceuticals, AG	\$ 165,000	\$ -	\$ -
Small Business Technology Transfer Research Grant Phase I	-	-	39,000
Small Business Technology Transfer Research Grant Phase II	37,082	63,773	-
Small Business Technology Transfer Research 2 Grant Phase I	-	90,766	6,460
Small Business Technology Transfer Research 3 Grant Phase I	14,333	26,025	-
University of New Mexico Grant	73,547	124,423	64,359
	-----	-----	-----
	\$ 289,962	\$ 304,987	\$ 109,819
	=====	=====	=====

</TABLE>

These research revenues represent 48.3%, 30.81% and 29.74% of total revenue for the three months ended March 31, 1997 (unaudited) and for the years ended December 31, 1996 and 1995, respectively.

(Notes continued on next page)

NOTE 10 - COMPENSATION AND BENEFIT COSTS

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

<TABLE>
<CAPTION>

	March 31, 1997	December 31, 1996 1995	

	(Unaudited)		
<S> <C>			
Cost of services	\$ 57,556	\$ 104,703	\$ 21,346
Selling, general and administrative expenses	25,602	43,925	35,847
Research and development costs	55,078	170,415	44,945
	-----	-----	-----
	\$ 138,236	\$ 319,043	\$ 102,138
	=====	=====	=====

</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 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 approximately \$2,590,000, after underwriting and other offering costs of \$410,000.

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 also agreed to grant the underwriter five-year warrants to purchase 50,000 shares of the Company's common stock 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 834,000 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.

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 376,667. 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, 236,667 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.

(Notes continued on next page)

NOTE 12 - STOCK COMPENSATION (Continued)

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:

		March 31, 1997	December 31, 1996

		(Unaudited)	
Net income	As previously reported	\$ 248,947	\$ 179,146
	Proforma	\$ 201,126	\$ 131,325
Earnings per common and common equivalent share	As previously reported	\$ 0.53	\$ 0.38
	Proforma	\$ 0.42	\$ 0.28

NOTE 13 - EMPLOYMENT AGREEMENTS

Also 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.

* * * * *

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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.

834,000

SHARES OF COMMON STOCK

[INSERT LOGO]

PROSPECTUS

ANDERSON & STRUDWICK,
INCORPORATED

July _____, 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	\$ 3,201.00
Nasdaq SmallCap Fee	\$ 7,843.00
NASD Filing Fee	\$ 1,465.00
Blue Sky Fees and Expenses	\$ 10,000.00
Printing and Engraving Expenses	\$ 20,000.00
Accounting Fees and Expenses	\$ 35,000.00
Legal Fees and Expenses	\$100,000.00
Transfer Agent and Registrar Fees	\$ 5,000.00
Miscellaneous Fees and Expenses	\$ 27,491.00
Total (Estimated)	\$200,000.00

Item 26. Recent Sales of Unregistered Securities

Since July 18, 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. As additional compensation, the Company issued the Private Placement Warrants to the Underwriter. The Private Placement Warrants are exercisable for a period of five years at an exercise price of \$9.90 per share.

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.

The sales and issuance of the securities in the above transactions were deemed to be exempt under the Securities Act by virtue of Sections 3(b) and/or 4(2) thereof and/or Regulation D promulgated thereunder 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

Exhibit Number	Description of Exhibits
1.1	Form of Underwriting Agreement*
1.2	Form of Selected Dealers Agreement*
1.3	Form of Escrow Agreement*
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*
4.4	Form of Private Placement Warrant*
4.5	Form of Management Warrant*
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 Private Placement*
10.2	Warrant Agreement between the Company and the Underwriter relating to the Offering*
10.4	Warrant Agreement between the Company and Richard J. Freer*
10.5	Warrant Agreement between the Company and Thomas R. Reynolds*
10.6	Warrant Agreement between the Company and Gregory A. Buck*
10.7	Warrant Agreement between the Company and Robert B. Harris*
10.8	Employment Agreement for Richard J. Freer*
10.9	Employment Agreement for Thomas R. Reynolds*
10.10	Employment Agreement for Gregory A. Buck*
10.11	Employment Agreement for Robert B. Harris*
10.12	Executive Severance Agreement for Richard J. Freer*
10.13	Executive Severance Agreement for Thomas R. Reynolds*
10.14	Executive Severance Agreement for Gregory A. Buck*
10.15	Executive Severance Agreement for Robert B. Harris*
10.16	Escrow 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 (see Page II-6)*
99.1	1997 Stock Incentive Plan*

* Filed Herewith

** To be filed by amendment

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 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.

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 July 21, 1997.

COMMONWEALTH BIOTECHNOLOGIES, INC.

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

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

Each person whose signature appears below on this Registration Statement hereby constitutes and appoints Richard J. Freer, Ph.D.. and Robert B. Harris, Ph.D. and each of them, with full power to act without the other, his or her true and lawful attorney-in-fact and agent, with full power of substitution

and substitution, for him or her and in his or her name, place and stead, in any and all capacities (until revoked by writing) to sign any and all amendments to this Registration Statement (including post-effective amendments and amendments thereto) and any registration statement relating to the same offering as this Registration Statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them, or their or his substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

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>

<S> <C>	Name	Title	Date
	/s/ Richard J. Freer, Ph.D. ----- Richard J. Freer, Ph.D.	Chairman of the Board (Principal Executive Officer) and Director	July 21, 1997
	/s/ Robert B. Harris, Ph.D. ----- Robert B. Harris, Ph.D..	President and Director	July 21, 1997
	/s/ Gregory A. Buck, Ph.D. ----- Gregory A. Buck, Ph.D.	Secretary, Vice President and Director	July 21, 1997
	/s/ Thomas R. Reynolds ----- Thomas R. Reynolds	Vice President and Director	July 21, 1997
	/s/ Charles A. Mills, III ----- Charles A. Mills, III	Director	July 21, 1997
	/s/ Peter C. Einselen ----- Peter C. Einselen	Director	July 21, 1997
	/s/ Chester M. Trzaski ----- Chester M. Trzaski	Chief Operating Officer (Principal Financial Officer)	July 21, 1997

</TABLE>

EXHIBIT INDEX

Exhibit Number	Description of Exhibits
1.1	Form of Underwriting Agreement*
1.2	Form of Selected Dealer Agreement*
1.3	Form of Escrow Agreement*
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*
4.4	Form of Private Placement Warrant*
4.5	Form of Management Warrant*
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 Private Placement*
10.3	Warrant Agreement between the Company and the Underwriter relating to the Offering*

10.4 Warrant Agreement between the Company and
Richard J. Freer*
10.5 Warrant Agreement between the Company and
Thomas R. Reynolds*
10.6 Warrant Agreement between the Company and
Gregory A. Buck*
10.7 Warrant Agreement between the Company and
Robert B. Harris*
10.8 Employment Agreement for Richard J. Freer*
10.9 Employment Agreement for Thomas R. Reynolds*
10.10 Employment Agreement for Gregory A. Buck*
10.11 Employment Agreement for Robert B. Harris*
10.12 Executive Severance Agreement for Richard J.
Freer*
10.13 Executive Severance Agreement for Thomas R.
Reynolds*
10.14 Executive Severance Agreement for Gregory A.
Buck*
10.15 Executive Severance Agreement for Robert B.
Harris*
10.16 Escrow 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 (see Page II-6)*
99.1 1997 Stock Incentive Plan*

* Filed Herewith

** To be filed by amendment

ESCROW AGREEMENT

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

R E C I T A L S:

A. The Company proposes to sell up to 834,000 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 "_____ - 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 \$5,004,000 (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 \$5,004,000 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 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 -----.

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 _____ Dollars (\$_____), 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 _____, 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 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:

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 You:

Anderson & Strudwick, Incorporated
1108 E. Main Street
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:

Attention: -----

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: _____

_____, as Escrow Agent

By: _____
Name: _____
Title: _____

ESCROW AGREEMENT

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

R E C I T A L S:

A. The Company proposes to sell up to 834,000 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 "_____ - 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 \$5,004,000 (the "Minimum");

(b) November 21, 1997;

1

(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 \$5,004,000 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 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 -----.

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 _____ Dollars (\$_____), 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 _____, 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 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:

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 You:

Anderson & Strudwick, Incorporated
1108 E. Main Street
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:

Attention: -----

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: _____

_____, as Escrow Agent

By: _____
Name: _____
Title: _____

ESCROW AGREEMENT

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

R E C I T A L S:

A. The Company proposes to sell up to 834,000 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 "_____ - 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 \$5,004,000 (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 \$5,004,000 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 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 -----.

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 _____ Dollars (\$_____), 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 _____, 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 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:

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 You:

Anderson & Strudwick, Incorporated
1108 E. Main Street
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:

Attention: -----

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: _____

_____, as Escrow Agent

By: _____
Name: _____
Title: _____

AMENDED AND RESTATED
ARTICLES OF INCORPORATION

OF

COMMONWEALTH BIOTECHNOLOGIES, INC.

I.

The name of the Corporation is Commonwealth Biotechnologies, Inc.

II.

The purpose for which the Corporation is formed is to transact any or all lawful business, not required to be specifically stated in these Articles, for which corporations may be incorporated under the Virginia Stock Corporation Act, as amended from time to time.

III.

The Corporation shall have authority to issue 10,000,000 shares of common stock, no par value per share ("Common Stock"). The rights, preferences, voting powers and the qualifications, limitations and restrictions of the Common Stock shall be as follows:

1. Each share of Common Stock shall be entitled to one vote on all matters submitted to a vote at any meeting of the Corporation's shareholders.

2. Except as otherwise required in these Articles as they may hereafter be amended:

(a) Any corporate action, except the election of directors, an amendment or restatement of these Articles, a merger, a statutory share exchange, the sale or other disposition of all or substantially all the Corporation's assets otherwise than in the usual and regular course of business, or dissolution shall be approved at a meeting at which a quorum of the Corporation's shareholders is present if the votes cast in favor of the action exceed the votes cast against the action;

(b) Directors shall be elected by a plurality of the votes cast by the holders of the Common Stock entitled to vote in the election at a meeting at which a quorum is present;

(c) An amendment or restatement of these Articles other than an amendment or restatement described, or involved in a transaction described, in Subsection (d), (e) or (f) of this Section shall be approved by a majority of the votes entitled to be cast by the holders of the Common Stock;

(d) Any transaction with the Corporation or any subsidiary that constitutes or involves an affiliated transaction, as defined in Section 13.1-725 of the Virginia Stock Corporation Act, as in effect on the effective date of these Articles, shall be approved by at least two-thirds of the votes entitled to be cast by the holders of the Common Stock;

(e) A merger, statutory share exchange, sale or other disposition of all or substantially all the Corporation's assets otherwise than in the usual and regular course of business, or dissolution shall be approved by at least two-thirds of the votes entitled to be cast by the holders of the Common Stock entitled to vote on such transactions; and

(f) An amendment to these Articles that amends or affects the classification of the Board of Directors provided in Section 1 of Article IV hereof shall be approved by at least two-thirds of the votes entitled to be cast by the holders of the Common Stock.

For purposes of Subsection (d) of this Section, a transaction shall not constitute an affiliated transaction if it is with an interested shareholder, as defined in Section 13.1-725 of the Virginia Stock Corporation Act as in effect on the effective date of these Articles: (i) who has been an interested shareholder continuously or who would have been such but for the unilateral action of the Corporation since the later of (A) the date on which the Corporation first had 300 shareholders of record or (B) the date such person became an interested shareholder with the prior or contemporaneous approval of a majority of the disinterested directors as defined in Section 13.1-725 of the Virginia Stock Corporation Act, as in effect on the effective date of these Articles; (ii) who became an interested shareholder as a result of acquiring shares from a person specified in Subdivision (i) or Subdivision (ii) of this Subsection by gift, testamentary bequest or the laws of descent and distribution

or in a transaction in which consideration was not exchanged and who continues thereafter to be an interested shareholder, or who would have so continued but for the unilateral action of the Corporation, (iii) who became an interested shareholder inadvertently or as a result of the unilateral action of the Corporation and who, as soon as practicable thereafter, divested beneficial ownership of sufficient shares so that such person ceased to be an interested shareholder, and who would not have been an interested shareholder but for such inadvertence or the unilateral action of the Corporation; or (iv) whose acquisition of shares making such person an interested shareholder was approved by a majority of the disinterested directors.

3. Subject to any other provisions of these Articles or any amendment hereto, holders of Common Stock shall be entitled to receive such dividends and other distributions in cash, stock or property of the Corporation as may be declared thereon by the Board of Directors from time to time.

4. No holder of shares of Common Stock shall have any preemptive or preferential right to purchase or subscribe to (i) any shares of any class of stock of the Corporation, whether now or hereafter authorized, (ii) any warrants, rights or options to purchase any such stock, or (iii) any obligations convertible into any such stock or into warrants, rights or options to purchase any such stock.

IV.

The initial registered office shall be located at 707 East Main Street, Eleventh Floor, Richmond, Virginia 23219, and the initial registered agent shall be Gary D. LeClair, who is a resident of Virginia and member of the Virginia State Bar, and whose address is the same as the address of the initial registered office.

V.

1. Unless otherwise fixed in the Bylaws, the number of directors of the Corporation shall be at least five and no more than nine. Upon effectiveness of these Amended and Restated Articles of Incorporation, the Board of Directors shall be divided into three classes, Class I, Class II and Class III, as nearly equal in number as possible. Directors of the first class (Class I) shall be elected to hold office for a term expiring at the 1998 annual meeting of shareholders; directors of the second class (Class II) shall be elected to hold office for a term expiring at the 1999 annual meeting of shareholders; and directors of the third class (Class III) shall be elected to hold office for a term expiring at the 2000 annual meeting of shareholders. At each annual meeting of shareholders, the successors to the class of directors whose terms then shall expire shall be identified as being of the same class as the directors they succeed and elected to hold office for a term expiring at the third succeeding annual meeting of shareholders. When the number of directors is changed, any newly-created directorships or any decrease in directorships shall be apportioned among the classes by the Board of Directors as to make all classes as nearly equal in number as possible.

2. A director may be removed only for Cause. For the purposes of these Articles, the term "Cause" shall mean:

(a) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Corporation or any subsidiary or affiliate thereof;

(b) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Corporation or any subsidiary or affiliate thereof;

(c) deliberate dishonesty of the director with respect to the Corporation or any subsidiary or affiliate thereof; or

(d) material dereliction of duties owed to the Corporation by a director.

VI.

1. In this Article:

"applicant" means the person seeking indemnification pursuant to this Article.

"expenses" includes counsel fees.

"liability" means the obligation to pay a judgment, settlement, penalty, fine, including any excise tax assessed with respect to an employee benefit plan, or reasonable expenses incurred with respect to a proceeding.

"party" includes an individual who was, is, or is threatened to be made a named defendant or respondent in a proceeding.

"proceeding" means any threatened, pending, or completed action, suit, or proceeding, whether civil, criminal, administrative or investigative and whether formal or informal.

2. In any proceeding brought by or in the right of the Corporation or brought by or on behalf of shareholders of the Corporation, no director or officer of the Corporation shall be liable to the Corporation or its shareholders for monetary damages with respect to any transaction, occurrence or course of conduct, whether prior or subsequent to the effective date of these Articles, except for liability resulting from such persons having engaged in willful misconduct or a knowing violation of the criminal law or any federal or state securities law.

3. 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 the 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 services 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.

4. The provisions of this Article shall be applicable to all proceedings commenced after the adoption hereof by the shareholders of the Corporation, arising from any act or omission, whether occurring before or after such adoption. No amendment or repeal of this Article shall have any effect on the rights provided under this Article with respect to any act or omission occurring prior to such amendment or repeal. The Corporation shall promptly take all such actions, and make all such determinations, as shall be necessary or appropriate to comply with its obligation to make any indemnity under this Article and shall promptly pay or reimburse all reasonable expenses, including attorneys' fees, incurred by any such director, officer, employee or agent in connection with such actions and determinations or proceedings of any kind arising therefrom.

5. The termination of any proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not of itself create a presumption that the applicant did not meet the standard of conduct described in Section 2 or 3 of this Article.

6. Any indemnification under Section 3 of this Article (unless ordered by a court) shall be made by the Corporation only as authorized in the specific case upon a determination that indemnification of the applicant is proper in the circumstance because he has met the applicable standard of conduct set forth in Section 3.

The determination shall be made:

(a) By the Board of Directors by a majority vote of a quorum consisting of directors not at the time parties to the proceeding;

(b) If a quorum cannot be obtained under Subsection (a) of this Section, by majority vote of a committee duly designated by the Board of Directors (in which designation directors who are parties may participate), consisting solely of two or more directors not at the time parties to the proceeding;

(c) By special legal counsel:

(i) Selected by the Board of Directors or its committee in the manner prescribed in Subsection (a) or (b) of this Section; or

(ii) If quorum of the Board of Directors cannot be obtained under Subsection (a) of this Section and a committee cannot be designated under Subsection (b) of this Section, selected by majority vote of the full Board of Directors, in which selection directors who are parties may participate; or

(d) By the shareholders of the Corporation, but shares owned by or voted under the control of directors who are at the time parties to the proceeding may not be voted on the determination.

Any evaluation as to reasonableness of expenses shall be made in the same manner as the determination that indemnification is appropriate, except that if the determination is made by special legal counsel, such evaluation as to reasonableness of expenses shall be made by those entitled under Subsection (c) of this Section 6 to select counsel.

Notwithstanding the foregoing, in the event there has been a change in the composition of a majority of the Board of Directors after the date of the alleged act or omission with respect to which indemnification is claimed, any determination as to indemnification and advancement of expenses with respect to any claim for indemnification made pursuant to this Article shall be made by special legal counsel agreed upon by the Board of Directors and the applicant. If the Board of Directors and the applicant are unable to agree upon such special legal counsel, the Board of Directors and the applicant each shall select a nominee, and the nominees shall select such special legal counsel.

7. (a) The Corporation shall pay for or reimburse the reasonable expenses incurred by any applicant who is a party to a proceeding in advance of final disposition of the proceeding or the making of any determination under Section 3 if the applicant furnishes the Corporation:

(i) a written statement of his good faith belief that he has met the standard of conduct described in Section 3; and

(ii) a written undertaking, executed personally or on his behalf, to repay the advance if it is ultimately determined that he did not meet such standard of conduct.

(b) The undertaking required by Subdivision (ii) of Subsection (a) of this Section shall be an unlimited general obligation of the applicant but need not be secured and may be accepted without reference to financial ability to make repayment.

(c) Authorizations of payments under this Section shall be made by the persons specified in Section 6.

8. The Board of Directors is hereby empowered, by majority vote of a quorum consisting of disinterested directors, to cause the Corporation to indemnify or contract to indemnify any person not specified in Section 2 or 3 of this Article who was, is or may become a party to any proceeding, by reason of the fact that he is or was an employee or agent of the Corporation, or is or was serving at the request of the Corporation as director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, to the same extent as if such person were specified as one to whom indemnification is granted in Section 3. The provisions of Sections 4 through 7 of this Article shall be applicable to any indemnification provided hereafter pursuant to this Section 8.

9. The Corporation may purchase and maintain insurance to indemnify it against the whole or any portion of the liability assumed by it in accordance with this Article and may also procure insurance, in such amounts as the Board of Directors may determine, on behalf of any person who is or was a director, officer, employee or agent of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, against any liability asserted against or incurred by him in any such capacity or arising from his status as such, whether or not the Corporation would have power to indemnify him against such liability under the provisions of this Article.

10. Every reference herein to directors, officers, employees or agents shall include former directors, officers, employees and agents and their respective heirs, executors and administrators. The indemnification hereby provided and provided hereafter pursuant to the power hereby conferred by this Article on the Board of Directors shall not be exclusive of any other rights to which any person may be entitled, including any right under policies of insurance that may be purchased and maintained by the Corporation or others, with respect to claims, issues or matters in relation to which the Corporation would not have the power to indemnify such person under the provisions of this Article. Such rights shall not prevent or restrict the power of the Corporation to make or provide for any further indemnity, or provisions for determining entitlement to indemnity, pursuant to one or more indemnification agreements, bylaws, or other arrangements (including, without limitation, creation of trust funds or security interests funded by letters of credit or other means) approved by the Board of Directors (whether or not any of the directors of the Corporation shall be a party to or beneficiary of any such agreements, bylaws or arrangements); provided, however, that any provision of such agreements, bylaws or other arrangements shall not be effective if and to the extent that it is determined to be contrary to this Article or applicable laws of the Commonwealth of Virginia.

11. Each provision of this Article shall be severable, and an adverse determination as to any such provision shall in no way affect the validity of any other provision.

COMMONWEALTH BIOTECHNOLOGIES, INC.

AMENDED AND RESTATED BYLAWS

ARTICLE I

Meeting of Shareholders

Section 1. Places of Meetings. All meetings of the shareholders shall be held at such place, either within or without the State of Virginia, as may, from time to time, be fixed by the Board of Directors.

Section 2. Annual Meetings. The annual meeting of the shareholders, for the election of directors and transaction of such other business as may come before the meeting, shall be held in each year on the second Thursday in March, or on such other date and at such other time as the Board of Directors of the Corporation may designate from time to time.

Section 3. Special Meetings. Special meetings of shareholders for any purpose or purposes may be called at any time by the Chairman of the Board, by at least three (3) members of the Board of Directors or by the President. At a special meeting no business shall be transacted and no corporate action shall be taken other than that stated in the notice of the meeting.

Section 4. Notice of Meetings. Except as otherwise required by law, written or printed notice stating the place, day and hour of every meeting of the shareholders and, in case of a special meeting, the purpose or purposes for which the meeting is called, shall be mailed not less than ten (10) nor more than sixty (60) days before the date of the meeting to each shareholder of record entitled to vote at such meeting, at his address which appears in the share transfer books of the Corporation. Meetings may be held without notice if all the shareholders entitled to vote at the meeting are present in person or by proxy or if notice is waived in writing by those not present, either before or after the meeting.

Section 5. Quorum. Except as otherwise required by the Articles of Incorporation, any number of shareholders together holding at least a majority of the outstanding shares of capital stock entitled to vote with respect to the business to be transacted, who shall be present in person or represented by proxy at any meeting duly called, shall constitute a quorum for the transaction of business. If less than a quorum shall be in attendance at the time for which a meeting shall have been called, the meeting may be adjourned from time to time by a majority of the shareholders present or represented by proxy without notice other than by announcement at the meeting.

Section 6. Voting. At any meeting of the shareholders, each shareholder of a class entitled to vote on the matters coming before the meeting shall have one vote, in person or by proxy, for each share of capital stock standing in his or her name on the books of the Corporation at the time of such meeting or on any date fixed by the Board of Directors not more than seventy (70) days prior to the meeting. Every proxy shall be in writing, dated and signed by the shareholder entitled to vote or his duly authorized attorney-in-fact.

Section 7. Voting List. The officer or agent having charge of the stock transfer books for shares of the Corporation shall make, at least ten (10) days before each meeting of shareholders, a complete list of the shareholders entitled to vote at such meeting or any adjournment thereof, with the address of and the number of shares held by each. Such list, for a period of ten (10) days prior to such meeting, shall be kept on file at the registered office of the Corporation or at its principal place of business or at the office of its transfer agent or registrar and shall be subject to inspection by any shareholder at any time during usual business hours. Such list shall also be produced and kept open at the time and place of the meeting and shall be subject to the inspection of any shareholder during the whole time of the meeting. The original stock transfer books shall be prima facie evidence as to who are the shareholders entitled to examine such list or transfer books or to vote at any meeting of shareholders. If the requirements of this Section 7 have not been substantially complied with, the meeting shall, on the demand of any shareholder in person or by proxy, be adjourned until the requirements are complied with.

Section 8. Shareholder Proposals. To be properly brought before an annual meeting of shareholders, business must be (i) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (ii) otherwise properly brought before the meeting by or at the direction of the Board of Directors, or (iii) otherwise properly brought before the meeting by a shareholder. In addition to any other applicable requirements,

for business to be properly brought before an annual meeting by a shareholder, the shareholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely, a shareholder's notice must be given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Corporation not later than ninety (90) days in advance of the annual meeting. A shareholder's notice to the Secretary shall set forth as to each matter the shareholder proposes to bring before the annual meeting (i) a brief description of the business desired to be brought before the annual meeting (including the specific proposal to be presented) and the reasons for conducting such business at the annual meeting, (ii) the name and record address of the shareholder proposing such business, (iii) the class and number of shares of the Corporation that are beneficially owned by the shareholder, and (iv) any material interest of the shareholder in such business.

In the event that a shareholder attempts to bring business before an annual meeting without complying with the provisions of this Section 8, the Chairman of the meeting shall declare to the meeting that the business was not properly brought before the meeting in accordance with the foregoing procedures, and such business shall not be transacted.

No business shall be conducted at the annual meeting except in accordance with the procedures set forth in this Section 8, provided, however, that nothing in this Section 8 shall be deemed to preclude discussion by any shareholder of any business properly brought before the annual meeting.

Section 9. Inspectors. An appropriate number of inspectors for any meeting of shareholders may be appointed by the Chairman of such meeting. Inspectors so appointed will (i) ascertain the number of shares outstanding and the voting powers of each, (ii) determine the shares represented at a meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, and (v) certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.

ARTICLE II

Directors

Section 1. General Powers. The property, affairs and business of the Corporation shall be managed under the direction of the Board of Directors, and except as otherwise expressly provided by law, the Articles of Incorporation or these Bylaws, all of the powers of the Corporation shall be vested in such Board.

Section 2. Number of Directors. The Board of Directors shall be at least five and no more than nine in number. The number of directors of the Corporation may be changed by (i) the affirmative vote of the Corporation's shareholders or (ii) the affirmative vote of the Corporation's Board of Directors taken at a meeting of which the directors received at least ten (10) days advance notice (including a majority of the non-employee-directors and a majority of the employee-directors). Notwithstanding the foregoing, however, any vote to reduce the number of the Corporation's directors shall not result in the removal of a director previously elected or appointed. Rather, such a vote will simply reduce the number of directors to be elected at the next succeeding election of directors by the Corporation's shareholders.

Section 3. Election of Directors.

(a) Directors shall be elected at the annual meeting of shareholders to succeed those directors whose terms have expired and to fill any vacancies thus existing.

(b) Directors shall hold their offices for terms as set forth in the Articles of Incorporation and until their successors are elected. Any director may be removed from office only for Cause (as such term is defined in the Corporation's Amended and Restated Articles of Incorporation).

(c) Any vacancy of a Board seat previously held by a non-employee-director of the Corporation may be filled by the affirmative vote of a majority of the remaining non-employee-directors of the Corporation. If such vacancy is not filled by the remaining non-employee-directors within thirty (30) days of the creation of the vacancy, the vacancy may be filled by the affirmative vote of a majority of all remaining members of the Board of Directors. Directors so appointed shall serve as directors of the Corporation until the Corporation's next annual meeting of shareholders. At such meeting, the Corporation's shareholders will elect a director to serve the remaining portion of the vacating director's term.

(d) Any vacancy of a Board seat previously held by an

employee-director of the Corporation may be filled by the affirmative vote of a majority of the remaining employee-directors of the Corporation. If such vacancy is not filled by the remaining employee-directors within thirty (30) days of the creation of the vacancy, the vacancy may be filled by the affirmative vote of a majority of the remaining members of the Board of Directors. Directors so appointed shall serve as directors of the Corporation until the Corporation's next annual meeting of shareholders. At such meeting, the Corporation's shareholders will elect a director to serve the remaining portion of the vacating director's term.

(e) Provided that each director is afforded at least three business days' notice of a meeting of the Board of Directors, a majority of the number of directors in office immediately prior to the beginning of a meeting of directors shall constitute a quorum for the transaction of business at such meeting. If each director is only provided with notice of a meeting of the Board of Directors in accordance with Section 4 hereof, the act of a majority of the directors present at a meeting at which a quorum is present (including a majority of the non-employee-directors) shall be the act of the Board of Directors.

Section 4. Meetings of Directors. Meetings of the Board of Directors shall be held at places within or without the Commonwealth of Virginia and at times fixed by resolution of the Board, or upon call of (i) the Chairman of the Board, (ii) the President or (iii) two directors, and the Secretary or officer performing the Secretary's duties shall give not less than twenty-four (24) hours' notice by letter, telegraph or telephone (or in person) of all meetings of the directors, provided that notice need not be given of regular meetings held at times and places fixed by resolution of the Board. An annual meeting of the Board of Directors shall be held as soon as practicable after the adjournment of the annual meeting of shareholders. Meetings may be held at any time without notice if all of the directors are present, or if those not present waive notice in writing either before or after the meeting. Commencing July 1997, all directors will receive a fee of \$2,500 for each regularly scheduled quarterly Board meeting attended (the "Directors' Fee"). In the event of an initial public offering of the Corporation's common stock, the Directors' 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 Corporation'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 the initial public offering price of the Corporation's common stock. In addition to the Directors' Fee, all directors receive reimbursement for travel and other related expenses incurred in attending Board meetings and committee meetings.

Section 5. Nominations. Nominations for the election of directors shall be made by the Board of Directors or a committee appointed by the Board of Directors or by any shareholder entitled to vote in the election of directors; provided, however, that all nominations must be made at least ninety-five (95) days prior to the next meeting at which directors of the Corporation shall be elected. However, any shareholder entitled to vote in the election of directors generally may nominate one or more persons for election as directors at a meeting only if written notice of such shareholder's intent to make such nomination or nominations has been given, either by personal delivery or by United States mail, postage prepaid, to the Secretary of the Corporation not later than (i) with respect to an election to be held at an annual meeting of shareholders, ninety (90) days in advance of such meeting, and (ii) with respect to an election to be held at a special meeting of shareholders for the election of directors, the close of business on the seventh day following the date on which notice of such meeting is first given to shareholders. Each notice shall set forth: (a) the name and address of the shareholder who intends to make the nomination and of the person or persons to be nominated; (b) a representation that the shareholder is a holder of record of stock of the Corporation entitled to vote at such meeting and intends to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice; (c) a description of all arrangements or understandings between the shareholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nomination or nominations are to be made by the shareholder; (d) such other information regarding each nominee proposed by such shareholder as would be required to be included in a proxy statement filed pursuant to the proxy rules of the Securities and Exchange Commission, had the nominee been nominated, or intended to be nominated, by the Board of Directors; and (e) the consent of each nominee to serve as a director of the Corporation, if so elected. The Chairman of the meeting may refuse to acknowledge the nomination of any person not made in compliance with the foregoing procedure.

Section 1. Compensation Committee. The Board of Directors, at its regular annual meeting, shall designate a Compensation Committee which shall consist of two or more directors who shall not be employees of the Corporation. In addition, the Board at any time may designate one or more alternate members of the Compensation Committee who shall be directors who are not employees of the Corporation and who may act in place of any absent regular member upon invitation by the Chairman or Secretary of the Compensation Committee.

With respect to bonuses, the Compensation Committee shall have and may exercise the powers to determine the amounts annually available for bonuses pursuant to any bonus plan or formula approved by the Board, to determine bonus awards to executive officers and to exercise such further powers with respect to bonuses as may from time to time be conferred by the Board of Directors.

With respect to salaries, the Compensation Committee shall have and may exercise the power to fix and determine from time to time all salaries of the executive officers of the Corporation, and such further powers with respect to salaries as may from time to time be conferred by the Board of Directors.

While the Compensation Committee possesses the authority to determine the salaries and bonuses of the Corporation's executive officers, the Compensation Committee shall recognize that the Corporation was founded on a "team-oriented" philosophy. Consequently, during the first five (5) years following the adoption of these Bylaws, the salaries of Drs. Freer, Harris and Buck, as three of the Corporation's founders, should not materially differ (assuming equal contribution to the Corporation).

The Compensation Committee shall administer the Corporation's Stock Incentive Plan (the "Plan") and from time to time may grant, consistent with the Plan, stock options, shares of restricted stock and/or tax offset rights.

Vacancies in the Compensation Committee shall be filled by the Board of Directors, and members shall be subject to removal by the Board at any time.

The Compensation Committee shall fix its own rules of procedure. A majority of the number of regular members then serving shall constitute a quorum; and regular and alternate members present shall be counted to determine whether there is a quorum. The Compensation Committee shall keep minutes of its meetings, and all action taken by it shall be reported to the Board of Directors.

Section 2. Audit Committee. The Board of Directors at its regular annual meeting shall designate an Audit Committee which shall consist of two or more directors who shall not be employees of the Corporation. Vacancies in the Audit Committee shall be filled by the Board of Directors with directors meeting the requirements set forth above, giving consideration to continuity of the Audit Committee, and members shall be subject to removal by the Board at any time. The Audit Committee shall fix its own rules of procedures and a majority of the members serving shall constitute a quorum. The Audit Committee shall meet at least twice a year with both the internal and the Corporation's outside auditors present at each meeting and shall keep minutes of its meetings and all action taken shall be reported to the Board of Directors. The Audit Committee shall review the reports and minutes of any audit committees of the Corporation's subsidiaries, if any. The Audit Committee shall review the Corporation's financial reporting process, including accounting policies and procedures. The Audit Committee shall examine the report of the Corporation's outside auditors, consult with them with respect to their report and the standards and procedures employed by them in their audit, report to the Board the results of its study and recommend the selection of auditors for each fiscal year.

Section 3. Nominating Committee. The Board of Directors shall designate a Nominating Committee which shall consist of two or more directors, including at least one non-employee-director. The Committee shall make recommendations to the Board regarding nominees for election as directors by the shareholders at each annual meeting of shareholders and make such other recommendations regarding tenure, classification and compensation of directors as the Nominating Committee may deem advisable from time to time. The Nominating Committee shall fix its own rules of procedure and a majority of the members serving shall constitute a quorum.

Section 4. Other Committees of Board. The Board of Directors, by resolution duly adopted, may establish such other committees of the Board having limited authority in the management of the affairs of the Corporation as it may deem advisable and the members, terms and authority of such committees shall be as set forth in the resolutions establishing the same.

Section 5. Advisory Committees to President. After consultation with the Board of Directors, the President may establish such advisory committees as he may deem advisable to assist him in the administration and management of the business of the Corporation; such committees shall consist of

officers, employees or consultants to be appointed by the President who shall serve for such terms and have such authority as may be designated by the President.

ARTICLE IV

Officers

Section 1. Election. The officers of the Corporation shall consist of a Chairman of the Board, a President, one or more Vice Presidents (any one or more of whom may be designated as Executive Vice Presidents or Senior Vice Presidents) and a Secretary. In addition, such other officers as are provided in Section 3 of this Article may from time to time be elected by the Board of Directors. All officers shall hold office until the next annual meeting of the Board of Directors or until their successors are elected. The Chairman of the Board shall be chosen from among the directors. Any two officers may be combined in the same person as the Board of Directors may determine.

Section 2. Removal of Officers; Vacancies. Any officer of the Corporation may be removed summarily with or without cause, at any time by a resolution passed at any meeting by affirmative vote of a majority of the members of the Board of Directors. Vacancies may be filled at any meeting of the Board of Directors.

Section 3. Other Officers. Other officers may from time to time be elected by the Board, including, without limitation, one or more Assistant Secretaries.

Section 4. Duties. The officers of the Corporation shall have such duties as generally pertain to their offices, respectively, as well as such powers and duties as are hereinafter provided and as from time to time shall be conferred by the Board of Directors. The Board of Directors may require any officer to give such bond for the faithful performance of his duties as the Board may see fit.

Section 5. Duties of the Chairman of the Board. The Chairman of the Board, while he is a full-time employee of the Corporation, shall serve as the Chairman of the Executive Committee, if any. Except as otherwise provided in these Bylaws or the resolutions establishing such committees, he shall be ex officio a member of all committees of the Board (with the exception that if the Chairman is also an employee of the Corporation, then he shall not be ex officio a member of the Audit Committee and the Compensation Committee) with the power to vote. He shall preside at all meetings of shareholders and the Board of Directors. In the incapacity or absence of the President, the Chairman of the Board shall perform the duties and have the authority of the President. The Chairman of the Board may sign and execute in the name of the Corporation deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing and the execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed. In addition, he shall perform all duties incident to the office of the Chairman of the Board and such other duties as from time to time may be assigned to him by the Board of Directors.

Section 6. Duties of the President. The President shall have direct supervision over the business of the Corporation, subject to the Board of Directors and the Chairman of the Board, and shall consult with and report to the aforementioned officer. Except as otherwise provided in these Bylaws or the resolutions establishing such committees, he shall be ex officio a member of all committees of the Board (with the exception that the President shall not be ex officio a member of the Audit Committee and the Compensation Committee), with power to vote, and in the incapacity of the Chairman of the Board, the President shall perform the duties of the Chairman of the Board and in the incapacity of the Chairman of the Board or, in the absence of the Chairman of the Board and upon his designation, the President shall preside at all meetings of shareholders, the Board of Directors and all committees of the Board of Directors of which he is a member. The President may sign and execute in the name of the Corporation deeds, mortgages, bonds, contracts or other instruments, except in cases where the signing and the execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed. He may appoint advisory committees as provided in Section 6 of Article III. In addition, he shall perform all duties incident to the office of the President and such other duties as from time to time may be assigned to him by the Board of Directors or the Chairman of the Board.

Section 7. Duties of the Vice Presidents. Each Vice President of the Corporation (including any Executive Vice President and Senior Vice President) shall have powers and duties as may from time to time be assigned to him by the Board of Directors. When there shall be more than one Vice President

of the Corporation, the Board of Directors may from time to time designate one of them to perform the duties of the President in the absence of the President. Any Vice President of the Corporation may sign and execute in the name of the Corporation deeds, mortgages, bonds, contracts and other instruments, except in cases where the signing and execution thereof shall be expressly delegated by the Board of Directors or by these Bylaws to some other officer or agent of the Corporation or shall be required by law otherwise to be signed or executed.

Section 8. Duties of the Secretary. The Secretary shall act as secretary of all meetings of the Board of Directors and all other Committees of the Board, and the shareholders of the Corporation, and shall keep the minutes thereof in the proper book or books to be provided for that purpose. He shall see that all notices required to be given by the Corporation are duly given and served; shall have custody of the seal of the Corporation and shall affix the seal or cause it to be affixed to all certificates for stock of the Corporation and to all documents the execution of which on behalf of the Corporation under its corporate seal is duly authorized in accordance with the provisions of these Bylaws; shall have custody of all deeds, leases, contracts and other important corporate documents; shall have charge of the books, records and papers of the Corporation relating to its organization and management as a Corporation; shall see that the reports, statements and other documents required by law (except tax returns) are properly filed; and shall, in general, perform all the duties incident to the office of Secretary and such other duties as from time to time may be assigned to him by the Board of Directors, the Chairman of the Board or the President.

Section 9. Other Duties of Officers. Any officer of the Corporation shall have, in addition to the duties prescribed herein or by law, such other duties as from time to time shall be prescribed by the Board of Directors, the Chairman of the Board or the President.

ARTICLE V

Capital Stock

Section 1. Certificates. The shares of capital stock of the Corporation shall be evidenced by certificates in forms prescribed by the Board of Directors and executed in any manner permitted by law and stating thereon the information required by law. Transfer agents and/or registrars for one or more classes of the stock of the Corporation may be appointed by the Board of Directors and may be required to countersign certificates representing stock of such class or classes. In the event that any officer whose signature or facsimile thereof shall have been used on a stock certificate shall for any reason cease to be an officer of the Corporation and such certificate shall not then have been delivered by the Corporation, the Board of Directors may nevertheless adopt such certificate and it may then be issued and delivered as though such person had not ceased to be an officer of the Corporation.

Section 2. Lost, Destroyed and Mutilated Certificates. Holders of the stock of the Corporation shall immediately notify the Corporation of any loss, destruction or mutilation of the certificate therefor, and the Board of Directors may, in its discretion, cause one or more new certificates for the same number of shares in the aggregate to be issued to such stockholder upon the surrender of the mutilated certificate or upon satisfactory proof of such loss or destruction, and the deposit of a bond in such form and amount and with such surety as the Board of Directors may require.

Section 3. Transfer of Stock. The stock of the Corporation shall be transferable or assignable only on the books of the Corporation by the holders in person or by attorney on surrender of the certificate for such shares duly endorsed and, if sought to be transferred by attorney, accompanied by a written power of attorney to have the same transferred on the books of the Corporation. The Corporation will recognize the exclusive right of the person registered on its books as the owner of shares to receive dividends and to vote as such owner.

Section 4. Fixing Record Date. For the purpose of determining shareholders entitled to notice of or to vote at any meeting of the shareholders or any adjournment thereof, or entitled to receive payment for any dividend, or in order to make a determination of shareholders for any other proper purpose, the Board of Directors may fix in advance a date as the record date for any such determination of shareholders, such date in any case to be not more than seventy (70) days prior to the date on which the particular action, requiring such determination of shareholders, is to be taken. If no record date is fixed for the determination of shareholders entitled to notice of or to vote at a meeting of shareholders, or shareholders entitled to receive payment of a dividend, the date on which notice of the meeting is mailed or the date on which the resolution of the Board of Directors declaring such dividend is adopted, as the case may be, shall be the record date for such determination of shareholders. When a determination of shareholders entitled to vote at any meeting of shareholders has been made as provided in this section such determination shall apply to any adjournment thereof.

ARTICLE VI

Miscellaneous Provisions

Section 1. Seal. The seal of the Corporation shall consist of a flat-face circular die, of which there may be any number of counterparts, on which there shall be engraved in the center the words "Commonwealth Biotechnologies, Inc."

Section 2. Fiscal Year. The fiscal year of the Corporation shall end on December 31st of each year, and shall consist of such accounting periods as may be recommended by the Treasurer and approved by the Board of Directors.

Section 3. Books and Records. The Corporation shall keep correct and complete books and records of accounts and shall keep minutes of the proceedings of its shareholders and Board of Directors; and shall keep at its registered office or principal place of business, or at the office of its transfer agent or registrar a record of its shareholders, giving the names and addresses of all shareholders, and the number, class and series of the shares being held.

The Board of Directors shall, subject to the provisions of the foregoing paragraph of this section, to the provisions of Section 7 of Article I and to the laws of the Commonwealth of Virginia, have the power to determine from time to time whether and to what extent and under what conditions and limitations the accounts, records and books of the Corporation, or any of them, shall be open to the inspection of the shareholders.

Section 4. Checks, Notes and Drafts. Checks, notes, drafts and other orders for the payment of money shall be signed by such persons as the Board of Directors from time to time may authorize. When the Board of Directors so authorizes, however, the signature of any such person may be a facsimile.

Section 5. Amendment of Bylaws. These Bylaws may be amended, in whole or in part, by at least a two thirds (2/3) vote of the Board of Directors including a majority of the non-employee-directors, or by the holders of at least two-thirds (2/3) of all shares entitled to vote. Bylaws made or amended by the Board of Directors may be altered or repealed by the shareholders, but shall remain in effect unless and until such action be taken by the shareholders.

Section 6. Voting of Stock Held. Unless otherwise provided by resolution of the Board of Directors, the Chairman of the Board, the President or any Vice President shall from time to time appoint an attorney or attorneys or agent or agents of this Corporation, in the name and on behalf of this Corporation, to cast the vote which this Corporation may be entitled to cast as a shareholder or otherwise in any other corporation, any of whose stock or securities may be held in this Corporation, at meetings of the holders of the stock or other securities of such other corporation, or to consent in writing to any action by any of such other corporation, and shall instruct the person or persons so appointed as to the manner of casting such votes or giving such consent and may execute or cause to be executed on behalf of this Corporation and under its corporate seal or otherwise, such written proxies, consents, waivers or other instruments as may be necessary or proper in the premises; or, in lieu of such appointments, the Chairman of the Board, the President or any Vice President may attend in person any meetings off the holders of stock or other securities of any such other corporation and there vote or exercise any or all power of this Corporation as the holder of such stock or other securities of such other corporation.

Section 7. Control Share Acquisition Statute. To the full extent permitted by Article 14.1 of the Virginia Stock Corporation Act, as amended, ("Control Share Acquisition Act"), the Corporation is authorized to redeem shares acquired in a control share acquisition, as that term is defined under the Control Share Acquisition Act.

Section 8. Implied Amendments. Any action taken or authorized by the shareholders or by the Board of Directors which would be inconsistent with the Bylaws then in effect, but which is taken or authorized by the affirmative vote of not less than that number of shares or the number of directors that would be required to amend these Bylaws so that the Bylaws would be consistent with such action, shall be given the same effect as if these Bylaws had been temporarily amended or suspended to the extent necessary to permit the specific action so taken or authorized.

Section 9. Future Issuances of Capital Stock. Notwithstanding the Corporation's general ability to issue additional capital stock or other securities convertible into capital stock of the Corporation ("Convertible Securities") at any time upon the affirmative vote of the Board of Directors, if the Corporation shall desire to issue (i) shares of its capital stock for less than Fair Market Value (as defined below) or (ii) Convertible Securities with exercise or conversion prices less than Fair Market Value, such issuance must be

approved by the majority of the Corporation's non-employee-directors. For the purpose of these Bylaws, the term "Fair Market Value" shall mean (i) the average closing price of the capital stock over the twenty (20)-day period prior to the vote of the Board of Directors if the capital stock is traded on an exchange or an inter-dealer quotation system or (ii) that price per share mutually agreeable to the Corporation's non-employee-directors (as a group) and the Corporation's employee- directors. If the two groups of directors are unable to agree, then each group of directors shall choose an appraiser and the Fair Market Value of the Corporation's capital stock shall be the arithmetic mean of the values determined by each appraiser. The cost of the appraisers, if any, shall be borne solely by the Corporation. Notwithstanding the foregoing, however, until the date upon which the Corporation's convertible, subordinated notes, issued to investors on or about June 25, 1997, convert into shares of the Corporation's common stock, Fair Market Value shall mean \$6.00 per share.

EXHIBIT 4.5

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 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 4.5

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 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 4.5

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 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 4.5

No. _____
_____ Shares

COMMONWEALTH BIOTECHNOLOGIES, INC.
COMMON STOCK PURCHASE WARRANT

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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

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

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(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

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11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

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advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXECUTIVE SEVERANCE AGREEMENT

This Agreement ("Agreement") is entered into as of June 25, 1997 between Commonwealth Biotechnologies, Inc., a Virginia corporation (the "Company"), and Robert B. Harris, Ph.D. (the "Executive").

1. Purpose.

The Company considers the establishment and maintenance of a sound and vital management to be essential to protecting and enhancing the best interests of the Company and its shareholders. In this connection, the Company recognizes that the possibility of a Change in Control (as defined herein) may arise and that such possibility, and the uncertainty and questions which it may raise among management, may result in the departure or distraction of management personnel to the detriment of the Company and its shareholders. Accordingly, the Board of Directors of the Company (the "Board") has determined that appropriate steps should be taken to reinforce and encourage the continued attention and dedication of members of the Company's management to their assigned duties without distraction in circumstances arising from the possibility of a Change in Control of the Company. In particular, the Board believes it important, should the Company or its shareholders receive a proposal for transfer of control of the Company, that the Executive be able to assess and advise the Board whether such proposal would be in the best interests of the Company and its shareholders and to take such other action regarding such proposal as the Board might determine to be appropriate, without being influenced by the uncertainties of the Executive's own situation. The execution of this Agreement is an integral element of the employment relationship between the Company and the Executive and the Executive's agreement to remain in the employment of the Company. However, nothing in this Agreement shall be construed as creating an express or implied contract of employment and, except as provided in the Employment Agreement (as defined below) or as otherwise agreed in writing between the Executive and the Company, the Executive shall not have any right to be retained in the employ of the Company.

2. Coordination with Employment Agreement.

(a) The Company and the Executive have entered into an Employment Agreement dated June 25, 1997 (the "Employment Agreement"). Pursuant to such Employment Agreement, the Company agreed to employ the Executive, and the Executive agreed to be employed by the Company, as President until the Expiration Date (as such term is defined in the Employment Agreement.)

(b) Notwithstanding the terms of this Agreement, the Employment Agreement shall continue in full force and effect. To the extent that any provision of any other agreement between the Company or any of its subsidiaries or affiliates and the Executive, (including, without limitation, the Employment Agreement), shall limit, qualify or be inconsistent with any provision of this Agreement, then for purposes of this Agreement, while the same shall remain in force, the provision of such other agreement shall be deemed to have been superseded, and to be of no force or effect, as if such other agreement had been formally amended to the extent necessary to accomplish such purpose. Without limiting the generality of the foregoing, in the event the Company shall pay to the Executive all

amounts the Executive shall be eligible to receive under Section 6 hereof, the Company shall have no obligations to make payments to the Executive under Section 6(e) of the Employment Agreement; provided, however, that the Executive may, in his sole discretion, elect to forgo all benefits due to him hereunder and receive, in lieu thereof, the full benefits available to him under the Employment Agreement.

3. Term of Agreement.

This Agreement shall commence on the date hereof (the "Commencement Date") and shall continue in effect until the first anniversary of the Commencement Date; provided, however, that commencing on the fifth anniversary of the Commencement Date and on each anniversary of the Commencement Date thereafter, the term of this Agreement shall automatically be extended for one additional year unless at least 30 days prior to such anniversary date, the Company or the Executive shall have given notice that this Agreement shall not be extended; and provided further that, notwithstanding the delivery of any such notice, this Agreement shall continue in effect for a period of 60 months after a Change in Control of the Company if such Change in Control shall have occurred while this Agreement is in effect. The Company may not give notice of an election not to extend before December 31, 1998. Notwithstanding anything in this Section 3 to the contrary, this Agreement shall terminate if the Executive or the Company terminates the Executive's employment prior to a Change in Control of the Company.

4. Change in Control.

For all purposes of this Agreement, a "Change in Control" shall mean the occurrence of any of the following events or circumstances subsequent to the date of this Agreement, it being agreed that no circumstance or event occurring on or before the date of this Agreement shall constitute a change in control:

(a) The acquisition, after the effective date of the Company's registration statement for its initial public offering of share of Common Stock under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by an individual, entity or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the Securities Exchange Act of 1934, as amended (the "Exchange Act")) other than a trustee or other fiduciary holding securities under an employee benefits plan of the Company (a "Person"), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock of the Company or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, the "Voting Securities") but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(b) Individuals who, immediately following the closing on the date of this Agreement of the Company's sale of \$3 million principal amount of Convertible Subordinated Notes, constitute the Board (the "Incumbent Board") cease for any reason, other than their resignation from the Board or failure to stand for re-election to the Board, to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to the date hereof whose election, or nomination for election by the Company's shareholders, was approved by a vote of at least two-thirds of the directors then comprising the Incumbent Board shall be considered as though such individual were a member of the Incumbent Board, but excluding, for this purpose, any such individual whose initial assumption of office occurs as a result of either an actual or threatened election contest (as such terms are used in Rule 14a-11 of Regulation 14A promulgated under the Exchange Act) or other actual or threatened solicitation of proxies or consents by or on behalf of a Person other than the Board; or

(c) There occurs any acquisition, merger or consolidation of the Company, by, with or into any other corporation (other than a wholly owned subsidiary of the Company) and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the survivor or successor company at any time after consummation of the transaction; or

(d) There occurs a sale or disposition by the Company of all or substantially all of the Company's assets and individuals who are directors of the Company immediately prior to the time the agreement of acquisition, merger or consolidation is executed shall fail to constitute a majority of the board of directors of the acquiring company at any time after consummation of the transaction; or

(e) There occurs a change of control of the Company of a nature that would be required to be reported in response to Item 6(e) of Schedule 14A of Regulation 14A promulgated under the Act, in a Form 8-K filed under the Act or in any other filing by the Company with the Securities and Exchange Commission.

(f) Notwithstanding anything in subsections (a) - (f) of this Section 4 to the contrary, no Change in Control shall be deemed to have occurred for purposes of this Agreement by virtue of any transaction which results in the Executive, or a group of Persons which includes the Executive, acquiring, directly or indirectly, 25% or more of the combined voting power of the Voting Securities. Without limiting the generality of this Section 4(g), the persons who were shareholders of the Company as of June 15, 1997 shall constitute a group of Persons which includes the Executive.

5. Termination Following Change in Control.

If any of the events described in Section 4 hereof constituting a Change in Control of the Company shall have occurred, the Executive shall be entitled to the benefits provided in Section 6 hereof upon the termination of the Executive's employment with the Company within sixty (60) months after such Change in Control, unless such termination is (a) because of death of the Executive,

(b) by the Company for Cause or Disability or (c) by the Executive other than during the Window Period or for Good Reason (as all such capitalized terms are hereinafter defined).

(a) Disability. Termination by the Company of the Executive's employment based on "Disability" shall mean termination because of the Executive's inability to perform his duties with the Company on a full time basis for 90 consecutive days or a total of at least 180 days in any calendar year as a result of the Executive's incapacity due to physical or mental illness (as determined by an independent physician selected by the Board of Directors of the Company).

(b) Cause. Termination by the Company of the Executive's employment for "Cause" shall mean termination for:

(i) gross incompetence, gross negligence, willful misconduct in office or breach of a material fiduciary duty owed to the Company or any subsidiary or affiliate thereof;

(ii) conviction of a felony, a crime of moral turpitude or commission of an act of embezzlement or fraud against the Company or any subsidiary or affiliate thereof;

(iii) any material breach by the Executive of a material term of this Agreement, including without limitation material failure to perform a substantial portion of his duties and responsibilities hereunder; or

(iv) deliberate dishonesty of the Executive with respect to the Company or any subsidiary or affiliate thereof.

(c) Good Reason. Termination by the Executive of his employment for "Good Reason" shall mean termination based on:

(i) a determination by the Executive, in his reasonable judgment, that there has been a material adverse change in the Executive's status or position(s) as an executive officer of the Company as in effect immediately prior to the Change in Control, including, without limitation, any material adverse change in his status or position as a result of a diminution in his duties or responsibilities (other than, if applicable, any such change directly attributable to the fact that the Company shall cease to be publicly owned) or the assignment to the Executive of any duties or responsibilities which are inconsistent with such status or position(s), or any removal of the Executive from, or any failure to reappoint or reelect the Executive to, such positions(s) (except in connection with the termination of the Executive's employment for Cause or Disability or as a result of the Executive's death or by the Executive other than for Good Reason), but excluding any failure to nominate the Executive to the Board;

(ii) a reduction by the Company in the Executive's base salary as in effect immediately prior to the Change in Control;

(iii) the failure by the Company to continue in effect any Plan (as hereinafter defined) in which the Executive is participating at the time of the Change in Control of the Company

(or Plans providing the Executive with at least substantially similar benefits) other than as a result of the normal expiration of any such Plan in accordance with its terms as in effect at the time of the Change in Control, or the taking of any action, or the failure to act, by the Company which would adversely affect the Executive's continued participation in any of such Plans on a substantiality similar basis to the Executive as is the case on the date of the Change in Control, or which would materially reduce the Executive's benefits in the future under any of such Plans or deprive the Executive of any material benefit enjoyed by the Executive at the time of the Change in Control;

(iv) the failure by the Company to provide and credit the Executive with the number of paid vacation days to which the Executive is then entitled in accordance with Company's normal vacation policy as in effect immediately prior to the Change in Control;

(v) the Company's requiring the Executive to be based at any office that is greater than fifty (50) miles from where the Executive's office is located immediately prior to the Change in Control, except for required travel on the Company's business to an extent substantially consistent with the business travel obligations which the Executive undertook on behalf of the Company prior to the Change in Control;

(vi) the failure by the Company to obtain an agreement reasonably satisfactory to the Executive from any Successor (as defined in Section 7(a) hereof) to assume and agree to perform this Agreement;

(vii) the failure by the Company to pay to the Executive

any portion of his compensation or to pay to the Executive any portion of an installment of deferred compensation under any deferred compensation program of the Company within 15 days of the date the Executive gives notice of such failure, without prior written consent of the Executive; or

(viii) any unreasonable refusal by the Company to continue to allow the Executive to attend to matters or engage in activities not directly related to the business of the Company which, prior to the Change in Control, the Executive was permitted by the Board to attend to or engage in.

(ix) For purposes of this Agreement, "Plan" shall mean any compensation plan or any employee benefit plan such as a thrift, pension, profit sharing, medical, disability, accident, life insurance plan or a relocation plan or policy or any other plan, program or policy of the Company intended to benefit employees.

(d) Window Period. The term "Window Period" shall mean the 45 day period immediately following the first anniversary of the date on which a Change in Control occurred.

(e) Notice of Termination. Any purported termination by the Company or by the Executive following a Change in Control shall be communicated by a written Notice of Termination to the other party hereto. For purposes of this Agreement, a "Notice of Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon.

6. Compensation Upon Termination.

(a) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability or (y) by the Executive during the Window Period or for Good Reason, then the Company shall pay to the Executive, no later than the fifteenth day following the date of termination, without regard to any contrary provisions of any Plan, the following:

(i) The Executive's base salary through the date of termination at the rate in effect immediately prior to the time a Notice of Termination is given, plus any benefits or awards (including both the cash and stock components) which pursuant to the terms of any Plans have been earned or become payable, but which have not yet been paid to the Executive (including amounts which previously had been deferred at the Executive's request).

(ii) A lump sum payment in cash in an amount equal to two times the Executive's base salary at the rate in effect immediately prior to the time a Notice of Termination is given.

(iii) A lump sum payment in cash in an amount equal to three times the Executive's Bonus (as such term is defined in the Employment Agreement) paid with respect to the most recent completed twelve-month fiscal year of the Company.

(iv) In the event any payment or distribution by the Company to or for the benefit of the Executive (whether paid or payable or distributed or distributable pursuant to the terms of this Agreement or otherwise, but determined without regard to any additional payments required under this Section 6(a)(iv)) (a "Payment") would be subject to the excise tax imposed by Section 4999 of the Internal Revenue Code of 1986, as amended, or any interest or penalties are incurred by the Executive with respect to such excise tax (collectively, the "Excise Tax"), then the Executive shall be entitled to receive an additional payment (a "Gross-Up Payment") in an amount such that after payment by the Executive of all taxes (including any income taxes and interest or penalties imposed with respect to such taxes) and the Excise Tax imposed on the Gross-Up Payment, the Executive retains an amount of the Gross-Up Payment equal to the Excise Tax imposed on the Payments. All determinations required to be made under this Section 6(a)(iv) shall be made by the Company's regular independent auditors as of the date of the Notice of Termination (the "Accounting Firm"). All fees and expenses of the Accounting Firm shall be borne solely by the Company, and any determination by the Accounting Firm shall be binding upon the Company and the Executive. Any Gross Up Payment shall be paid to the Executive by the Company within 10 days of the Company's receipt of the Accounting Firm's determination.

(b) If, within 60 months after a Change in Control of the Company has occurred, the Executive's employment by the Company is terminated other than on account of the Executive's death and is terminated (x) by the Company other than for Cause or Disability, or (y) by the Executive during the Window Period or for Good Reason, then the Company shall maintain in full force and effect, at the sole cost of the Company (except for the regular contributions of the Executive as described below, if any), for the continued benefit of the Executive and his dependents for a period terminating on the earliest of (a) 12 months after the date of termination, or (b) the commencement date of equivalent

benefits from a new employer, all insured and self-insured employee welfare benefit Plans in which the Executive was entitled to participate immediately prior to the date of termination; provided that (i) the Executive's continued participation is possible under the general terms and provisions of such Plans (and any applicable funding media), (ii) the Executive continues to pay an amount equal to his regular contribution under such Plans prior to the Change in Control for such participation, and (iii) it is acknowledged that the post-termination Plans may be different from the Plans in effect on the date of termination. In the event that the Executive's participation in any such Plan is barred, the Company, at its sole cost and expense, shall arrange to have issued for the benefit of the Executive and his dependents individual policies of insurance providing benefits substantially similar (on an after-tax basis) to those which the Executive otherwise would have been entitled to receive under such Plans pursuant to this Section 6(b) or, if such insurance is not available at a reasonable cost to the Company, the Company shall otherwise provide the Executive and his dependents with equivalent benefits (on an after-tax basis). The Executive shall not be required to pay any premiums or other charges in an amount greater than that which the Executive would have paid in order to participate in such Plans. The Company's obligation to provide the Executive with medical or dental insurance shall terminate with respect to each particular type of insurance in the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer that particular type of insurance, so long as such insurance is substantially similar to the insurance provided by the Employer. In the event the Executive becomes employed and has made available to him in connection with such employment at the expense of the employer life insurance which is substantially similar to the life insurance provided by the Company, the Company shall be required to provide the Executive with life insurance only in an amount equal to the excess, if any, of the amount of life insurance which would be provided by the Company if the Executive had not been provided with life insurance in connection with his new employment over the amount of life insurance provided by the Executive's new employer

(c) Except as specifically provided in paragraph (b) above, the amount of any payment provided for in this Section 6 shall not be reduced, offset or subject to recovery by the Company by reason of any compensation earned by the Executive as the result of employment by another employer after the date of termination, or otherwise.

7. Successors; Binding Agreement.

(a) The Company will seek, by written request at least five business days prior to the time a Person becomes a Successor (as hereinafter defined), to have such Person, by agreement in form and substance satisfactory to the Executive, assent to the fulfillment of the Company's obligations under this Agreement. Failure of such Person to furnish such assent by the later of (x) three business days prior to the time such Person becomes a Successor or (y) ten business days after such Person receives a written request to so assent may, at the election of the Executive, constitute Good Reason for termination by the Executive of his employment if a Change in Control of the Company occurs or has occurred, and the failure of the Executive to elect to terminate for Good Reason upon the expiration of the applicable period shall not constitute a waiver of his right to do so, which right he shall retain until the commencement of the Window Period. For purposes of this Agreement, "Successor" shall mean any Person that succeeds to, or has the practical ability to control (either immediately or with the passage of time), the Company's business directly, by merger or consolidation, or indirectly, by purchase of the Company's Voting Securities or otherwise.

(b) This Agreement shall inure to the benefit of and be enforceable by the Executive's personal legal representatives, executors, administrators, successors, heirs, distributees, devisees and legatees. If the Executive should die while any amount would still be payable to him hereunder if he had continued to live, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Agreement to the Executive's devisee, legatee or other designee or, if no such designee exists, to his estate.

(c) For purposes of this Agreement, the term "Company" shall include any subsidiaries of the Company and any corporation or other entity which is the surviving or continuing entity in respect of any merger, consolidation or form of business combination in which the Company ceases to exist.

8. Fees and Expenses; Mitigation.

(a) The Company shall reimburse the Executive, on a current basis, for all reasonable legal fees and related expenses which he shall incur in connection with the Agreement following a Change in Control of the Company, including without limitation, all such fees and expenses, if any, incurred (i) in contesting or disputing any termination of the Executive's employment or (ii)

the Executive's seeking to obtain or enforce any right or benefit provided by this Agreement, in each case, regardless of whether or not the Executive's claim is upheld by a court of competent jurisdiction; provided, however, the Executive shall be required to repay any such amounts to the Company to the extent that a court issues a final and non-appealable order setting forth the determination that the position taken by the Executive was frivolous or advanced by him in bad faith.

(b) The Executive shall not be required to mitigate the amount of any payment the Company becomes obligated to make to the Executive in connection with this Agreement, by seeking other employment or otherwise.

9. Taxes.

All payments to be made to the Executive under this Agreement will be subject to required withholding of federal, state and local income and employment taxes.

10. Notice.

Any notices, requests, demands and other communications provided for by this Agreement shall be sufficient if in writing and delivered in person or sent by registered or certified mail, postage prepaid (in which case notice shall be deemed to have been given on the third day after mailing), or by overnight delivery by a reliable overnight courier service (in which case notice shall be deemed to have been given on the day after delivery to such courier service) to the Executive at the last address the Executive has filed in writing with the Employer or, in the case of the Employer, at its main offices, attention of the Board of Directors.

11. Miscellaneous.

No provision of this Agreement may be modified, waived or discharged unless such modification, waiver or discharge is approved by each of the Board and the Compensation Committee of the Board and is agreed to in a writing signed by the Executive and a duly authorized person who is the Chairman of the Board or President or an Executive Vice President of the Company and who is not the Executive. No waiver by either party hereto at any time of any breach by the other party hereto of, or of compliance with, any condition or provision of this Agreement to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not expressly set forth in this Agreement.

12. Governing Law.

The validity, interpretation, construction and performance of this Agreement shall be governed by the laws of the Commonwealth of Virginia, without regard to the choice of law provisions of any jurisdiction.

13. Validity.

The invalidity or unenforceability of any provision of this Agreement shall not affect the validity or enforceability of any other provision of this Agreement, which shall remain in full force and effect.

14. Legal Counsel.

This Agreement has been prepared by LeClair Ryan, A Professional Corporation, as counsel to the Company, after full disclosure of its representation of the Company and with the consent of the Executive. The Executive has reviewed the contents of this Agreement and fully understands its terms. The Executive acknowledges that he is fully aware of his right to the

advice of counsel independent from that of the Company, that LeClair Ryan, A Professional Corporation, 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. The Executive 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, this Agreement has been executed as a sealed instrument by the Company, by its duly authorized officer, and by the Executive, as of the date first above written.

By: -----

Title: -----

Date: June 25, 1997

Robert B. Harris, Ph.D.

Date: June 25, 1997

Address: -----

EXHIBIT 11

STATEMENT REGARDING COMPUTATION PER SHARE EARNINGS	12/31/97
EARNINGS PER COMMON AND EQUIVALENT SHARE	
WEIGHTED AVERAGE COMMON AND COMMON EQUIVALENT SHARES (1)	571,123
NET EFFECT OF DILUTIVE STOCK OPTIONS IN ACCORDANCE WITH TREASURY STOCK METHOD (1)	(97,500)

TOTAL SHARES OUTSTANDING	473,773

PROFORMA NET INCOME AFTER PROFORMA INCOME TAXES	\$ 129,495

PER SHARE AMOUNTS: NET INCOME	\$ 0.27

(1) FOR ASSUMPTIONS USED IN THIS EXHIBIT PLEASE SEE NOTE 2 TO THE FINANCIAL STATEMENTS.

CONSENT OF INDEPENDENT CERTIFIED PUBLIC ACCOUNTANTS

We consent to the use of this Form SB-2 Registration Statement of our auditors' report dated June 10, 1997 (except for Notes 2, 11, 12 and 13, as to which the date is June 25, 1997), with respect to the financial statements of Commonwealth Biotechnologies, Inc., for the years ended December 31, 1996 and 1995.

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

7301 Forest Avenue
Richmond, Virginia
July 18, 1997

COMMONWEALTH BIOTECHNOLOGIES, INC.
1997 STOCK INCENTIVE PLAN

1. Purpose. The purpose of this Commonwealth Biotechnologies, Inc. 1997 Stock Incentive Plan (the "Plan") is to further the long term stability and financial success of Commonwealth Biotechnologies, Inc. (the "Company") by attracting and retaining personnel, including employees, directors, officers, consultants, agents, advisors and independent contractors, through the use of stock incentives. It is believed that ownership of Company stock will stimulate the efforts of those persons upon whose judgment and interest the Company is and will be largely dependent for the successful conduct of its business. It is also believed that Incentive Awards granted to such persons under this Plan will strengthen their desire to remain with the Company or to continue to contribute to the growth of the business of the Company and will further the identification of their interests with those of the Company's shareholders. The Plan is intended to conform to the provisions of Securities and Exchange Commission Rule 16b-3 promulgated under the 1934 Act, if the Company shall register its Common Stock under Section 12 of the 1934 Act.

2. Definitions. As used in the Plan, the following terms have the meanings indicated:

(a) "Agreement" means a written agreement (including any amendment or supplement thereto) between the Company and a Participant specifying the terms and conditions of an Incentive Award granted to such Participant.

(b) "Applicable Withholding Taxes" means the aggregate amount of federal, state, and local income and payroll taxes that the Company is required to withhold in connection with any exercise of a Nonstatutory Stock Option, or Tax Offset Right, any lapse of restrictions on Restricted Stock, or any grant of Performance Stock.

(c) "Affiliate" means any "parent" or "subsidiary" corporation (within the meaning of Code Section 424) of the Company.

(d) "Board" means the Board of Directors of the Company.

(e) "Cause" means dishonesty, fraud, misconduct, gross negligence, breach of a material fiduciary duty, material breach of an agreement with the Company or any of its Subsidiaries, unauthorized use or disclosure of confidential information or trade secrets, or conviction or confession of a crime punishable by law (except minor violations), in each case as determined by the Committee, which determination shall be binding.

(f) "Change of Control" means:

(i) The acquisition, after the effective date of the Company's registration statement for its initial public offering of shares of Common Stock

under the Securities Act of 1933, as amended (the "IPO Date"), other than from the Company, by any individual, entity, or group (within the meaning of Section 13(d)(3) or 14(d)(2) of the 1934 Act), who was not a beneficial owner (within the meaning of Rule 13d-3 promulgated under the 1934 Act) of 50% or more of such securities prior to the IPO Date, of beneficial ownership of 50% or more of either the then outstanding shares of Common Stock or the combined voting power of the then outstanding voting securities of the Company entitled to vote generally in the election of directors (collectively, "Voting Securities"), but excluding for this purpose, any such acquisition by the Company or any of its subsidiaries, or any employee benefit plan (or related trust) of the Company or its subsidiaries, or any corporation with respect to which, following such acquisition, more than 50% of the then outstanding shares of Voting Securities of such is then beneficially owned, directly or indirectly, by the individuals and entities who were the beneficial owners of Voting Securities of the Company immediately prior to such acquisition in substantially the same proportion as their ownership, immediately prior to such acquisition, of the then outstanding shares of Voting Securities of the Company; or

(ii) Approval by the shareholders of the Company of (A) a reorganization, merger or consolidation with respect to which the individuals and entities who were the respective beneficial owners of the Voting Securities of the Company immediately prior to such reorganization, merger or consolidation

do not, following such reorganization, merger or consolidation, beneficially own, directly or indirectly, more than 50% of the then outstanding shares of Voting Securities of the corporation resulting from such reorganization, merger or consolidation, or (B) a complete liquidation or dissolution of the Company, or (C) any sale, lease, exchange, or other disposition in one transaction or a series of related transactions of all or substantially all of the Company's assets other than a disposition of the Company's assets to a majority-owned Subsidiary.

(g) "Code" means the Internal Revenue Code of 1986, as amended.

(h) "Committee" means the Compensation Committee appointed by the Board from time to time as described under Section 15 hereof, or in the absence of such Committee, the Board.

(i) "Common Stock" means Common Stock, no par value, of the Company. If the par value of the Common Stock is changed, or in the event of a change in the capital structure of the Company (as provided in Section 14), the shares resulting from such a change shall be deemed to be Common Stock within the meaning of the Plan.

(j) "Company" means Commonwealth Biotechnologies, Inc., a Virginia corporation.

(k) "Date of Grant" means the date on which an Incentive Award is granted by the Committee. If, however, the Committee designates in a resolution a later date as the date an Incentive Award is to be granted, then such later date shall be the Date of Grant.

(l) "Disability" or "Disabled" means, as to an ISO, a Disability within the meaning of Code Section 22(e)(3). As to all other Incentive Awards, the Committee shall determine whether a Disability exists, which determination shall be conclusive.

(m) "Fair Market Value" means, on any given date, the value of a share of Common Stock. If the Common Stock is not publicly traded on the date of valuation, the value shall be determined by the Committee in good faith using any reasonable method. If the Common Stock is publicly traded, then Fair Market Value shall equal (i) if the Common Stock is listed on The Nasdaq National Market or The Nasdaq SmallCap Market, the average of the high and low per share sales prices for the Common Stock as reported by The Nasdaq National Market or The Nasdaq SmallCap Market for a single trading day or (ii) if the Common Stock is listed on the New York Stock Exchange or the American Stock Exchange, the average of the high and low per share sales prices for the Common Stock as such price is officially quoted in the composite tape of transactions on such exchange for a single trading day. If there is no such reported price for the Common Stock for the date in question, then such price on the last preceding date for which such price exists shall be determinative of the Fair Market Value.

(n) "Incentive Award" means any form of an Option, Performance Stock, Restricted Stock, or Tax Offset Right granted under the Plan.

(o) "Incentive Stock Option" or "ISO" means an Option intended to meet the requirements of, and qualify for favorable federal income tax treatment, under Code Section 422.

(p) "Insider" means a person subject to Section 16(b) of the 1934 Act.

(q) "1934 Act" means the Securities Exchange Act of 1934, as amended.

(r) "1933 Act" means the Securities Act of 1933, as amended.

(s) "Nonstatutory Stock Option" means an Option that does not meet the requirements of Code Section 422, or, even if meeting the requirements of Code Section 422, is not intended to be an ISO and is so designated.

(t) "Option" means a right to purchase Common Stock granted under the Plan, at a price determined in accordance with the Plan and set forth in an Agreement.

(u) "Participant" means an individual to whom an Incentive Award is granted under the Plan.

(v) "Performance Stock" means Common Stock awarded when performance goals are achieved pursuant to an incentive program as provided in Section 7.

(w) "Plan" means the Commonwealth Biotechnologies, Inc. Option Plan.

(x) "Reload Feature" means a feature of an Option described in an Agreement that authorizes the automatic grant of a Reload Option in accordance with the provisions of Section 10(d).

(y) "Reload Option" means an Option automatically granted to a Participant equal to the number of shares of already owned Common Stock delivered by the Participant to exercise an Option having a Reload Feature.

(z) "Restricted Stock" means Common Stock awarded upon the terms and subject to the restrictions set forth in Section 6.

(aa) "Rule 16b-3" means Rule 16b-3 of the Securities and Exchange Commission promulgated under the 1934 Act. A reference in the Plan to Rule 16b-3 shall include a reference to any corresponding rule (or number redesignation) of any amendments to Rule 16b-3 enacted after the effective date of the Plan's adoption.

(bb) "Ten Percent Shareholder" means any individual who owns, directly or indirectly, more than 10% of the total combined voting power of all classes of stock of the Company or of an Affiliate. Indirect ownership of stock shall be determined in accordance with Code Section 424(d).

(cc) "Tax Offset Right" means a right to receive cash amounts related to Applicable Withholding Taxes from the Company as described in Section 12 of the Plan.

3. General. All types of Incentive Awards may be granted under the Plan. Options granted under the Plan may be ISOs or Nonstatutory Stock Options.

4. Stock. Subject to Section 16 of the Plan, there shall be reserved for issuance under the Plan an aggregate of 376,667 shares of Common Stock, which shall be authorized, but unissued shares. Of these shares, 236,667 will be reserved for Incentive Awards to be granted to Drs. Richard J. Freer, Robert B. Harris and Gregory A. Buck and Mr. Thomas R. Reynolds. 140,000 shares will be reserved for Incentive Awards to be granted to other persons, and the foregoing named individuals shall not be eligible for Incentive Awards with respect to these 140,000 shares. Incentive Awards may be made and exercised as to whole shares or fractional shares, at the discretion of the Committee. If an Incentive Award is terminated or expires, in whole or in part, for any reason other than its exercise, the number of shares of Common Stock allocated to the Incentive Award or portion thereof may be reallocated to other Incentive Awards to be granted under this Plan. Shares of Common Stock subject to repurchase which are subsequently repurchased by the Company shall also be available for issuance in connection with future grants of Incentive Awards. For purposes of determining the number of shares that are available for Incentive Awards under the Plan, such number shall, to the extent permissible under Rule 16b-3, include the number of shares surrendered by a Participant or retained by the Company

in payment of Applicable Withholding Taxes; provided, however, that for purposes of Code Section 162(m), any such shares shall be counted in accordance with the requirements of such Code Section.

5. Eligibility.

(a) Subject to the sole discretion of the Committee, any employee, director, officer, consultant, agent, advisor, or independent contractor of the Company (or any Affiliate including a corporation that becomes an Affiliate after the adoption of this Plan) is eligible to receive Incentive Awards; provided that only employees of the Company or its Affiliates may be granted ISO's. The Committee has the sole discretion to determine for each Participant the terms and conditions, the nature of the award, and the number of shares to be allocated to each Participant as part of each Incentive Award. Any Incentive Award granted under this Plan shall be evidenced by an Agreement which shall be subject to the applicable provisions of this Plan and to other such provisions as the Committee may impose.

(b) The grant of an Incentive Award shall not obligate the Company or any Affiliate to pay a Participant any particular amount of remuneration, to continue the employment of a Participant after the grant, or to make further grants to the Participant at any time thereafter.

6. Restricted Stock Awards.

(a) Whenever the Committee deems it appropriate to grant Restricted Stock, notice shall be given to the Participant stating the number of shares of Restricted Stock granted and the terms and conditions to which the Restricted Stock is subject. This notice, when accepted in writing by the Participant, shall become an Agreement and certificates representing the shares

shall be issued and delivered to the Participant. Restricted Stock may be awarded by the Committee in its discretion without cash consideration.

(b) Restricted Stock issued pursuant to the Plan shall be subject to the following restrictions:

(i) No shares of Restricted Stock may be sold, assigned, transferred, or disposed of by an Insider within a six-month period beginning on the Date of Grant, and Restricted Stock may not be pledged, hypothecated, or otherwise encumbered within a six-month period beginning on the Date of Grant if such action would be treated as a sale or disposition under Rule 16b-3.

(ii) No shares of Restricted Stock may be sold, assigned, transferred, pledged, hypothecated, or otherwise encumbered or disposed of until the restrictions on such shares as set forth in the Participant's Agreement have lapsed or been removed pursuant to paragraph (d) or (e) below.

(iii) If a Participant ceases to be employed by the Company or an Affiliate, the Participant shall forfeit to the Company any shares of Restricted Stock on

which the restrictions have not lapsed or been removed pursuant to paragraph (d) or (e) below on the date such Participant shall cease to be so employed and the Company shall have no obligation to pay any amounts with respect to such forfeiture, unless the Committee determines to the contrary.

(c) Upon the acceptance by a Participant of an award of Restricted Stock, such Participant shall, subject to the restrictions set forth in paragraph (b) above, have all the rights of a shareholder with respect to such shares of Restricted Stock, including, but not limited to, the right to vote such shares of Restricted Stock and the right to receive all dividends and other distributions paid thereon. Certificates representing Restricted Stock shall bear a legend referring to the restrictions set forth in the Plan and the Participant's Agreement.

(d) The Committee shall establish as to each award of Restricted Stock the terms and conditions upon which the restrictions set forth in paragraph (b) above shall lapse. Such terms and conditions may include, without limitation, the lapsing of such restrictions as a result of the Disability, death or Retirement of the Participant or the occurrence of a Change of Control.

(e) Notwithstanding the provisions of paragraphs (b) (ii) and (iii) above, the 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.

(f) Until the requirements of Section 11 have been met, no stock certificate free of a legend reflecting the restrictions set forth in paragraph (b) above shall be issued to such Participant.

7. Performance Stock Awards.

(a) Performance Stock may be issued pursuant to the Plan in connection with incentive programs established from time to time by the Committee when performance criteria established by the Committee as part of the incentive program have been achieved.

(b) Whenever the Committee deems it appropriate, the Committee may establish an incentive program and notify Participants of their participation in and the terms of the incentive program. More than one incentive program may be established by the Committee and they may operate concurrently or for varied periods of time and a Participant may be permitted to participate in more than one incentive program at the same time. Performance Stock will be issued only subject to the incentive program and the Plan and consistent with meeting the performance goals set by the Committee. A Participant in an incentive program shall have no rights as a shareholder until Performance Stock is issued. Performance Stock may be issued without cash consideration.

(c) A Participant's interest in an incentive program may not be sold, assigned, transferred, pledged, hypothecated, or otherwise encumbered.

8. Stock Options.

(a) Whenever the Committee deems it appropriate to grant Options, a written agreement shall be given to the Participant stating the number of shares for which Options are granted, the Option price per share,

whether the Options are ISOs or Nonstatutory Stock Options, and the conditions to which the grant and exercise of the Options are subject. This written agreement, when duly accepted in writing by the Participant, shall become an Agreement.

(b) The exercise price of shares of Common Stock covered by an ISO shall be not less than 100% of the Fair Market Value of such shares on the Date of Grant; provided that if an ISO is granted to a Participant who, at the time of the grant, is a Ten Percent Shareholder, then the exercise price of the shares covered by the ISO shall be not less than 110% of the Fair Market Value of such shares on the Date of Grant.

(c) Options may be exercised in whole or in part at such times as may be specified by the Committee in the Participant's Agreement, subject to Section 12; provided that no ISO may be exercised after ten years (or, in the case of an ISO granted to a Ten Percent Shareholder, five years) from the Date of Grant. Except as otherwise provided in this paragraph, no ISO may be exercised unless the Participant is employed by the Company or an Affiliate at the time of the exercise and has been employed by the Company or an Affiliate of the Company at all times since the Date of Grant. An ISO by its terms, shall be exercisable in any calendar year only to the extent that the aggregate Fair Market Value (determined at the Date of Grant) of the Common Stock with respect to which ISOs are exercisable for the first time during the calendar year does not exceed \$100,000 (the "Limitation Amount"). ISOs granted under the Plan and all other plans of the Company and any Affiliate shall be aggregated for purposes of determining whether the Limitation Amount has been exceeded. The Board may impose such conditions as it deems appropriate on an ISO to ensure that the foregoing requirement is met. If ISOs that first become exercisable in a calendar year exceed the Limitation Amount, the excess will be treated as Nonstatutory Stock Options to the extent permitted by law.

(d) To obtain certain tax benefits afforded to ISOs under Section 422 of the Code, the Participant must hold the shares issued upon the exercise of an ISO for two years after the Date of Grant of the ISO and one year from the date of exercise. A Participant may be subject to the alternative minimum tax at the time of exercise of an ISO. The Committee may require a Participant to give the Company prompt notice of any disposition of shares acquired by the exercise of an ISO before the expiration of such holding periods.

(e) Notwithstanding the foregoing, no Option shall be exercisable within the first six months after it is granted; provided that, this restriction shall not apply if the Participant becomes Disabled or dies during the six-month period.

(f) The Committee may, in its sole discretion, grant Options that by their terms become fully exercisable upon a Change of Control, notwithstanding other conditions on exercisability in the Agreement.

9. Method of Exercise of Options.

(a) Options may be exercised by the Participant giving written notice of the exercise to the Company, stating the number of shares the Participant has elected to purchase under the Option. Such notice shall be effective only if accompanied by the exercise price in full in cash; provided that, if the terms of an Option so permit, the Participant may (i) deliver, or cause to be withheld from the Option shares, shares of Common Stock (valued at their Fair Market Value on the date of exercise) that have been held for at least six months if acquired from the Company and are not subject to any restrictions in satisfaction of all or any part of the exercise price, (ii) deliver a properly executed exercise notice together with irrevocable instructions to a broker to deliver promptly to the Company, from the sale or loan proceeds with respect to the sale of Common Stock or a loan secured by Common Stock, the amount necessary to pay the exercise price and, if required by the Committee, Applicable Withholding Taxes, or (iii) deliver an interest bearing recourse promissory note, payable to the Company, in payment of all or part of the exercise price together with such collateral as may be required by the Committee at the time of exercise. The interest rate under any such promissory note shall be established by the Committee and shall be at least equal to the minimum interest rate required at the time to avoid imputed interest under the Code.

(b) The Company may place on any certificate representing Common Stock issued upon the exercise of an Option any legend deemed desirable by the Company's counsel to comply with federal or state securities laws, and the Company may require a customary written indication of the Participant's investment intent. Until the Participant has made any required payment, including any Applicable Withholding Taxes, and has had issued a certificate for the shares of Common Stock acquired, he shall possess no shareholder rights with respect to the shares.

(c) If a Participant exercises an Option that has a Reload Feature by delivering already owned shares of Common Stock in payment of the exercise price, the Committee shall grant to the Participant a Reload Option.

The Committee shall grant the Reload Option in the same manner as set forth in Section 8(a). The Reload Option shall be subject to the following restrictions:

(i) The exercise price of shares of Common Stock covered by a Reload Option shall be not less than 100% of the Fair Market Value of such shares on the Date of Grant of the Reload Option;

(ii) If and to the extent required by Rule 16b-3, a Reload Option shall not be exercisable within the first six months after it is granted; provided that this restriction shall not apply if the Participant becomes Disabled or dies during the six-month period;

(iii) The Reload Option shall be subject to the same restrictions on exercisability imposed on the underlying option (possessing the Reload Feature) exercised unless the Committee specifies different limitations;

(iv) The Reload Option shall not be exercisable until the expiration of any retention holding period imposed on the disposition of any shares of Common Stock covered by the underlying Option (possessing the Reload Feature) delivered; and

(v) The Reload Option shall not have a Reload Feature.

The Committee may, in its sole discretion, cause the Company to place on any certificate representing Common Stock issued to a Participant upon the exercise of an underlying Option (possessing a Reload Feature as evidenced by the Agreement for such Option) delivered pursuant to this subsection (d), a legend restricting the sale or other disposition of such Common Stock.

(d) Notwithstanding anything herein to the contrary, at all times at which the Company has any class of securities registered under Section 12 of the 1934 Act, Options shall be granted and exercised in such a manner as to conform to the provisions of Rule 16b-3.

(e) Each Participant shall, before the exercise of any Option, deliver to the Company any reasonable information the Company deems necessary to be able to satisfy itself that the shares of Common Stock issuable upon exercise of an Option will be acquired in accordance with the terms of an applicable exemption from the securities registration requirements of applicable federal and state securities law. With respect to Options that are not ISOs and without limiting the scope of the Company's or the Committee's discretion to withhold approval or otherwise administer this Plan, approval may be withheld to the extent that the exercise, either individually or in the aggregate together with the exercise of other previously exercised 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, require the filing of a registration statement with the United States Securities and Exchange Commission or with the securities commission of any state. 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. If an Option which is not an ISO cannot be exercised at the time it would otherwise expire due to the restrictions contained in this Section, the exercise period for that Option shall be extended for successive one-year periods until that Option can be exercised in accordance with this Section

10. Nontransferability of Options. Options by their terms, shall not be transferable except by will or by the laws of descent and distribution or, if permitted by Rule 16b-3, pursuant to a qualified domestic relations order (as defined in Code Section 414(p)) ("QDRO") and shall be exercisable, during the Participant's lifetime, only by the Participant or, if permitted by Rule 16b-3, an alternative payee under a QDRO, or by his guardian, duly authorized attorney-in-fact or other legal representative.

11. Payment of Applicable Withholding Taxes. The Company may require the Participant to pay to the Company the amount of Applicable Withholding Taxes with respect to

the grant or exercise of any Incentive Award. Subject to the Plan and applicable law, the Committee may, in its sole discretion, permit the Participant to satisfy withholding obligations, in whole or in part, by paying cash, by electing to have the Company withhold shares of Common Stock issuable upon the exercise of an Incentive Award, or by transferring to the Company shares of Common Stock that have been held for at least six months if acquired from the Company and are not subject to any restrictions, in such amounts equal to the Applicable Withholding Taxes. The Company shall have the right to withhold from any shares of Common Stock issuable pursuant to an Incentive Award or from any

cash amounts otherwise due or to become due from the Company to the Participant an amount equal to such taxes. The Company shall have no obligation to deliver shares of Common Stock until the Applicable Withholding Taxes have been satisfied.

12. Effect of Death, Disability, or Termination of Employment.

(a) In the event of termination of a Participant's employment or services for the Company or its Affiliates for any reason other than for Cause, death, or Disability, such Participant shall have the right to exercise the Incentive Award at any time within three months after such termination of employment to the extent of the full number of shares that such Participant was entitled to purchase under the Incentive Award on the date of termination, subject to the condition that no Incentive Award shall be exercisable after the expiration of the term of the Incentive Award.

(b) If a Participant's employment or services is terminated by the Company or its Affiliates for Cause, his Incentive Awards shall be terminated as of the date of the misconduct.

(c) If a Participant's employment or services for the Company or its Affiliates terminate for death or Disability, all Incentive Awards then held by such Participant under the Plan expire on the earlier of (i) 12 months from the date of such termination, (ii) the expiration date of such option, or (iii) if for Retirement, the date on which Participant breaches a noncompetition or other obligation owed to the Company. The Incentive Award may be exercised by the personal representatives, administrators, or guardian of the Participant or by any person or persons to whom the Incentive Award is transferred by will or the applicable laws of descent and distribution, but only to the extent of the full number of shares such Participant was entitled to purchase under the Incentive Award on the date of such death or termination of employment.

(d) Notwithstanding the foregoing, the Committee shall establish and set forth in each Incentive Award agreement whether the Incentive Award will continue to be exercisable, and the terms and conditions of such exercise, if a Participant ceases to be employed by, or to provide services to, the Company or its Affiliates, which provisions may be waived or modified by the Committee at any time. If not so established in the agreement evidencing the Incentive Award, the Option will be exercisable according to the provisions of paragraphs (a), (b), and (c), above, which may be waived or modified by the Committee at any time. If the Committee extends the exercisability of an ISO beyond the time provided for in Code Section 422, the ISO will become a Nonstatutory Stock Option.

13. Tax Offset Rights.

(a) Whenever the Committee deems it appropriate, Tax Offset Rights may be granted in connection with Nonstatutory Stock Options, Performance Stock, or Restricted Stock. Tax Offset Rights shall be evidenced in writing as part of the Agreement to which they pertain.

(b) Tax Offset Rights, (i) upon exercise of all or any part of Nonstatutory Stock Option (ii) upon grant of Performance Stock, or (iii) upon the lapse of restrictions on Restricted Stock, entitle the Participant to receive in cash from the Company an amount equal to or approximating the Applicable Withholding Taxes.

(c) A Participant may exercise a Tax Offset Right by giving the Committee written notice of exercise simultaneously with the exercise of a Nonstatutory Stock Option the receipt of an award of Performance Stock, or the lapse of restrictions on Restricted Stock. To the extent exercised, the Tax Offset Right shall lapse.

(d) The Committee may limit the amount the Participant will be entitled to receive in connection with a Tax Offset Right and may include any provisions in a Tax Offset Right that the Committee deems appropriate to ensure that the Tax Offset Right will not be characterized as an "equity security" or "derivative security" for purposes of Section 16 of the 1934 Act and the rules and regulations thereunder.

14. Repurchase Rights, Escrow.

(a) The Committee shall have the discretion to authorize the issuance of unvested shares of Common Stock pursuant to the exercise of an Incentive Award. In the event of termination of the Participant's employment or services or breach of a material obligation owed by Participant to the Company or its Subsidiaries, all shares of Common Stock issued upon exercise of an Incentive Award which are unvested at the time of cessation of employment or services shall be subject to repurchase at the exercise price paid for such shares. The terms and conditions upon which such repurchase right shall be exercisable (including the period and procedure for exercise) shall be established by the Committee and set forth in the agreement evidencing such right. All of the Company's outstanding repurchase rights under this Section 14(a) are assignable by the Company at any time and shall remain in full force and effect in the event of a Change of Control; provided that if the vesting of

Incentive Awards is accelerated pursuant to Section 17, the repurchase rights under this Section 14(a) shall terminate and all shares subject to such terminated rights shall immediately vest in full. The Committee shall have the discretionary authority, exercisable either before or after the Participant's cessation of employment or services or breach of a material obligation owed by Participant to the Company or its Subsidiaries, to cancel the Company's outstanding repurchase rights with respect to one or more shares purchased or purchasable by the Participant under an Incentive Award and thereby accelerate the vesting of such shares in whole or in part at any time.

(b) To ensure that shares of Common Stock acquired upon exercise of an Incentive Award that are subject to any repurchase right, stockholders agreement, security for any promissory note, or other restrictions, including without limitation those set forth in Section 6(b), will be available for repurchase, the Committee may require the Participant to deposit the certificate or certificates evidencing such shares with an agent designated by the Committee under the terms and conditions of escrow and security agreements approved by the Committee. If the Committee does not require such deposit as a condition of exercise of an Incentive Award, the Committee reserves the right at any time to require the Participant to so deposit the certificate or certificates in escrow. The Company shall bear the expense of the escrow. As soon as practicable after the expiration of any repurchase rights, stockholders agreement, or other restrictions, and after full repayment of any promissory note secured by the shares in escrow, the agent shall deliver to the Participant the shares no longer subject to such restrictions and no longer security for any promissory note. In the event shares held in escrow are subject to the Company's exercise of a repurchase option or stockholders agreement, the notices required to be given to the Participant shall be given to the agent and any payment required to be given to the Participant shall be given to the agent. Within 30 days after payment by the Company, the agent shall deliver the shares which the Company has purchased to the Company and shall deliver the payment received from the Company to the Participant. In the event of a stock dividend, stock split, or consolidation of shares or any like capital adjustment of any of the outstanding securities of the Company, any and all new, substituted or additional securities or other property to which the Participant is entitled by reason of ownership of shares acquired upon exercise of an Incentive Award shall be subject to any repurchase rights, stockholders agreement, and/or security for any promissory note with the same force and effect as the shares subject to such repurchase rights, stockholders agreement and/or security interest immediately before such event

15. Termination, Modification, Change. If not sooner terminated by the Board, this Plan shall terminate at the close of business ten years after the effective date as set forth in Section 24 hereof. No Incentive Awards shall be made under the Plan after its termination. The Board may terminate the Plan or may amend the Plan in such respects as it shall deem advisable; provided that, if and to the extent required by the Code or Rule 16b-3, no change shall be made that increases the total number of shares of Common Stock reserved for issuance pursuant to Incentive Awards granted under the Plan (except pursuant to Section 16), materially modifies the requirements as to eligibility for participation in the Plan, or materially increases the benefits accruing to Participants under the Plan, or unless such change is authorized by the shareholders of the Company. Notwithstanding the foregoing, the Board may unilaterally amend the Plan and Incentive Awards as it deems appropriate to ensure compliance with Rule 16b-3 and to cause ISOs to meet the requirements of the Code and regulations thereunder. Except as provided in the preceding sentence, a termination or amendment of the Plan shall not, without the consent of the Participant, adversely affect a Participant's rights under an Incentive Award previously granted to him.

16. Change in Capital Structure.

(a) In the event of a stock dividend, stock split, combination of shares, recapitalization or merger in which the Company is the surviving corporation, or other change in

the Company's capital stock (including, but not limited to, the creation or issuance to shareholders generally of rights, options, or warrants for the purchase of common stock or preferred stock of the Company), the number and kind of shares of stock or securities of the Company to be subject to the Plan and to Incentive Awards then outstanding or to be granted thereunder, the maximum number of shares or securities which may be delivered under the Plan, the exercise price and other relevant provisions shall be appropriately adjusted by the Committee, whose determination shall be binding on all persons. If the adjustment would produce fractional shares with respect to any unexercised Option, the Committee may, but need not, adjust appropriately the number of shares covered by the Option so as to eliminate the fractional shares.

(b) Notwithstanding anything in the Plan to the contrary, the Committee may take the foregoing actions without the consent of any Participant, and the Committee's determination shall be conclusive and binding on all persons

for all purposes.

17. Change of Control. Except as otherwise provided in the agreement that evidences the Incentive Award, in the event of a Change of Control, the Committee shall determine whether provision will be made in connection with the Change of Control for an appropriate assumption of the Incentive Awards theretofore granted under the Plan (which assumption may be effected by means of a payment to each Participant (by the Company or any other person or entity involved in the Change of Control), in exchange for the cancellation of the Incentive Awards held by such Participant, of the difference between the then Fair Market Value of the aggregate number of shares of Common Stock then subject to such Incentive Awards and the aggregate exercise price that would have to be paid to acquire such shares) or for substitution of appropriate new Incentive Awards covering stock of a successor corporation to the Company or stock of an Affiliate of such successor corporation. If the Committee determines that such an assumption or substitution will be made, the Committee shall give notice of such determination to the Participants, and the provisions of such assumption or substitution, and any adjustments made (i) to the number and kind of shares subject to the outstanding Incentive Awards (or to the options in substitution therefor), (ii) to the exercise prices, and/or (iii) to the terms and conditions of the stock options, shall be binding on the Participants. Any such determination shall be made in the sole discretion of the Committee and shall be final, conclusive, and binding on all Participants. If the Committee, in its sole discretion, determines that no such assumption or substitution will be made, the Committee shall give notice of such determination to the Participants, and each Incentive Award that is at the time outstanding shall automatically accelerate so that each such Incentive Award shall, immediately before the specified effective date for the Change of Control, become 100% vested and exercisable, 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 of Control that would otherwise qualify for such accounting treatment. All such Incentive Awards shall terminate and cease to remain outstanding immediately following the consummation of the Change of Control, except to the extent assumed by the successor corporation or an Affiliate thereof.

18. Administration of the Plan. The Plan shall be administered by the Committee, which shall consist of not less than two non-employee members of the Board, who shall be appointed by the Board. In making grants of Incentive Awards; the Committee shall consult with,

and seek the recommendations of, the executive officers of the Company, although it shall have no obligation to act in accordance with such recommendations and such consultations and recommendations shall not diminish the discretion any authority otherwise granted to the Committee. The Committee shall have general authority to impose any limitation or condition upon an Incentive Award the Committee deems appropriate to achieve the objectives of the Incentive Award and the Plan and, without limitation and in addition to powers set forth elsewhere in the Plan, shall have the following specific authority:

(a) The Committee shall have the power and sole and complete discretion to determine (i) which eligible persons shall receive Incentive Awards and the nature of each Incentive Award, (ii) the number of shares of Common Stock to be covered by each Incentive Award, (iii) whether Options shall be ISOs or Nonstatutory Stock Options, (iv) when, whether and to what extent Tax Offset Rights shall be granted and the terms thereof, (v) the time or times when an Incentive Award shall be granted, (vi) whether an Incentive Award shall become vested over a period of time and when it shall be fully vested, (vii) when Options may be exercised, (viii) whether a Disability exists, (ix) the manner in which payment will be made upon the exercise of Options (x) conditions relating to the length of time before disposition of Common Stock received upon the exercise of Options is permitted, (xi) whether to approve a Participant's election (A) to deliver shares of already owned Common Stock to satisfy Applicable Withholding Taxes or (B) to have the Company withhold from the shares to be issued upon the exercise of a Nonstatutory Stock Option the number of shares necessary to satisfy Applicable Withholding Taxes, (xii) the terms and conditions applicable to Restricted Stock Awards, (xiii) the terms and conditions on which restrictions upon Restricted Stock shall lapse, (xiv) whether to accelerate the time at which any or all restrictions with respect to Restricted Stock will lapse or be removed, (xv) notice provisions relating to the sale of Common Stock acquired under the Plan, (xvi) the terms of incentive programs, performance criteria, and other factors relevant to the issuance of Performance Stock, and (xvii) any additional requirements relating to Incentive Awards that the Committee deems appropriate. Notwithstanding the foregoing, no "tandem stock options" (where two stock options are issued together and the exercise of one option affects the right to exercise the other option) may be issued in connection with ISOs. The Committee shall have the power to amend the terms of previously granted Incentive Awards so long as the terms as amended are consistent with the terms of the Plan and provided that the consent of the Participant is obtained with respect to any amendment that would be detrimental to him, except that such consent will not be required if such amendment is for the purpose of complying with Rule 16b-3 or any requirement of the Code

applicable to the Incentive Award.

(b) The Committee may adopt rules and regulations for carrying out the Plan. The interpretation and construction of any provision of the Plan by the Committee shall be final and conclusive. The Committee may consult with counsel, who may be counsel to the Company, and shall not incur any liability for any action taken in good faith in reliance upon the advice of counsel.

(c) A majority of the members of the Committee shall constitute a quorum, and all actions of the Committee shall be taken by a majority of the members present. Any action

may be taken by a written instrument signed by all of the members, and any action so taken shall be fully effective as if it had been taken at a meeting.

(d) If and so long as the Common Stock is registered under Section 12 of the 1934 Act, the Board shall consider in selecting the membership of the Committee, with respect to any person subject or likely to become subject to Section 16 of the 1934 Act, the provisions regarding (a) "outside directors" as contemplated by Code Section 162(m) and (b) "nonemployee directors" as contemplated by Rule 16b-3 under the 1934 Act. The Committee may consist of one or more members of the Board, subject to such limitations as the Board deems appropriate. Committee members shall serve for such term as the Board may determine, subject to removal by the Board at any time.

19. Market Standoff.

(a) In connection with any underwritten public offering by the Company of its equity securities pursuant to an effective registration statement filed under the 1933 Act, including the Company's initial public offering, a person shall not sell, or make any short sale of, loan, hypothecate, pledge, grant any option for the purchase of, otherwise dispose or transfer for value, or otherwise agree to engage in any of the foregoing transactions with respect to, any shares issued pursuant to an Incentive Award granted under the Plan without the prior written consent of the Company or its underwriters. Such limitations shall be in effect only if and to the extent and for such period of time as may be requested by the Company or such underwriters and agreed to by the Company's officers and directors; provided, however, that in no event shall the weighted average number of days in such period exceed 180 days. The limitations of this paragraph shall in all events terminate two years after the effective date of the Company's initial public offering.

(b) In the event of any stock split, stock dividend, recapitalization, combination of shares, exchange of shares, or other change affecting the Company's outstanding Common Stock affected as a class without the Company's receipt of consideration, then any new, substituted or additional securities distributed with respect to the purchased shares shall be immediately subject to the provisions of this Section 20, to the same extent the purchased shares are at such time covered by such provisions.

(c) To enforce the limitations of this Section 19, the Company may impose stop-transfer instructions with respect to the purchase shares and any new, substituted or additional securities distributed with respect to the purchased shares until the end of the applicable standoff period.

20. Registration.

(a) The Company shall be under no obligation to any Participant to register for offering or resale or to qualify for exemption under the 1933 Act, or to register or qualify under state securities laws, any shares of Common Stock, security or interest in a security paid or issued under, or created by, the Plan, or to continue in effect any such registrations or qualifications if made. The Company may issue certificates for shares with such legends and subject to

such restrictions on transfer and stop-transfer instructions as counsel for the Company deems necessary or desirable for compliance by the Company with federal and state securities laws.

(b) Inability of the Company to obtain, from any regulatory body having jurisdiction, the authority deemed by the Company's counsel to be necessary for the lawful issuance and sale of any shares hereunder or the unavailability of an exemption from registration for the issuance and sale of any shares hereunder shall relieve the Company of any liability in respect of the nonissuance or sale of such shares as to which such requisite authority shall not have been obtained.

(c) As a condition to the exercise of an Incentive Award, the Company may require the Participant to represent and warrant at the time of any such exercise or receipt that such shares are being purchased or received only for the Participant's own account and without any present intention to sell or distribute such shares if, in the opinion of counsel for the Company, such a representation is required by any relevant provision of the aforementioned laws.

At the option of the Company, a stop-transfer order against any such shares may be placed on the official stock books and records of the Company, and a legend indicating that such shares may not be pledged, sold or otherwise transferred, unless an opinion of counsel is provided (concurred in by counsel for the Company) stating that such transfer is not in violation of any applicable law or regulation, may be stamped on stock certificates to ensure exemption from registration. The Committee may also require such other action or agreement by the Participant as may from time to time be necessary to comply with the federal and state securities laws.

21. Compliance With Laws and Approval of Regulatory Bodies. No Option shall be exercisable, no Common Stock shall be issued, no certificates for shares of Common Stock shall be delivered, and no payment shall be made under this Plan except in compliance with all applicable federal and state laws and regulations (including, without limitation, withholding tax requirements) and the rules of all domestic stock exchanges on which the Company's shares may be listed. The Company shall have the right to rely on an opinion of its counsel as to such compliance. Any share certificate issued to evidence Common Stock for which an Option is exercised may bear such legends and statements as the Committee may deem advisable to assure compliance with federal and state laws and regulations. No Option shall be exercisable, no Common Stock shall be issued, no certificate for shares shall be delivered, and no payment shall be made under this Plan until the Company has obtained such consent or approval as the Committee may deem advisable from regulatory bodies having jurisdiction over such matters. The exercise of any Option granted under this Plan shall constitute a Participant's full and complete consent to whatever action the Committee deems necessary to satisfy any federal and state tax withholding requirements which the Committee, acting in its discretion, deems applicable to such exercise.

22. Notice. All notices and other communications required or permitted to be given under this Plan shall be in writing and shall be deemed to have been duly given if delivered personally or mailed first class, postage prepaid, as follows: (a) if to the Company - at its principal business address to the attention of the Treasurer and (b) if to any Participant - at the last address of the Participant known to the sender at the time the notice or other communication is sent.

23. Interpretation. The terms of this Plan are subject to all present and future regulations and rulings of the Secretary of the Treasury or his delegate relating to the qualification of ISOs under the Code. If any provision of the Plan conflicts with any such regulation or ruling, then that provision of the Plan shall be void and of no effect. The terms of this Plan shall be governed by the laws of the Commonwealth of Virginia.

24. Effective Date of the Plan. This Plan shall be effective on June 24, 1997, and shall be submitted to the shareholders of the Company for approval. Until (i) the Plan has been approved by the Company's shareholders, and (ii) the requirements of any applicable State securities laws have been met, no Restricted Stock shall be awarded, no Performance Stock shall be issued and no Option shall be exercisable.

IN WITNESS WHEREOF, the Company has caused this Plan to be adopted as set forth herein this ___ day of June, 1997.

COMMONWEALTH
BIOTECHNOLOGIES, INC.

By: _____
Its: President

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THE FINANCIAL DATA SCHEDULE CONTAINS SUMMARY FINANCIAL INFORMATION EXTRACTED FROM THE COMPANY'S BALANCE SHEET AND STATEMENT OF OPERATIONS FOR 1995 AND 1996 AND IS QUALIFIED IN ITS ENTIRETY BY REFERENCE TO SUCH FINANCIAL STATEMENTS

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