

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No.)*

RiboGene, Inc.

(Name of Issuer)

Common Stock, par value \$.001 per share

(Title of Class of Securities)

762565109

(CUSIP Number)

Jose M. de Lasa, 100 Abbott Park Road
Abbott Park, Illinois 60064-3500; Phone 847 937 8905

(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

June 2, 1998

(Date of Event which Requires Filing of this Statement)

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of Sections 240.13d-1(e), 240.13d-1(f) or 240.13(d)-1(g), check the following box [].

NOTE: Schedules filed in paper format shall include a signed original and five copies of the schedule, including all exhibits. See Section 240.13d-7(b) for other parties to whom copies should be sent.

* The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

1) NAME OF REPORTING PERSON
I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Abbott Laboratories
IRS Identification No. 36-0698440

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP (a) []
(b) []

3) SEC USE ONLY

4) SOURCE OF FUNDS

00 (see Item 3 below)

5) CHECK IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT
TO ITEMS 2(d) OR 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

Illinois

NUMBER OF (7) SOLE VOTING POWER
SHARES 682,495

BENEFICIALLY (8) SHARED VOTING POWER
OWNED BY 0

EACH (9) SOLE DISPOSITIVE POWER
REPORTING 682,495

PERSON WITH (10) SHARED DISPOSITIVE POWER
0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

682,495

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES (SEE INSTRUCTIONS) []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

11.8% (see Item 5 below)

14) TYPE OF REPORTING PERSON (SEE INSTRUCTIONS)

CO

ITEM 1. SECURITY AND ISSUER

This statement relates to shares of the common stock, par value \$0.001 per share (the "Common Stock"), of RiboGene, Inc., a Delaware corporation (the "Issuer"), whose principal executive offices are located at 26118 Research Road, Hayward, California 94545.

ITEM 2. IDENTITY AND BACKGROUND

(a) - (c), and (f) The person filing this statement is Abbott Laboratories ("Abbott"), an Illinois corporation. Abbott's principal business is the discovery, development, manufacture, and sale of a broad and diversified line of health care products and services. Abbott's principal office is located at 100 Abbott Park Road, Abbott Park, Illinois 60064-3500.

The names, citizenship, business addresses, present principal occupation or employment and the name, and the principal business and address of any corporation or other organization in which such employment is conducted of the directors and executive officers of Abbott are as set forth in Exhibit 1 hereto and incorporated herein by this reference.

(d) and (e) Neither Abbott, nor to the best of its knowledge, any person listed on Exhibit 1 has during the last five years (i) has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors) or (ii) been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgment, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION

On May 1, 1996, Abbott purchased 1,555,556 shares of Series E Preferred Stock of the Issuer at an aggregate price of \$3,500,000 pursuant to an agreement dated April 26, 1996. The preferred stock was converted to 111,066 shares of the Issuer's Common Stock upon the closing of the Issuer's initial public offering on June 2, 1998. On June 2, 1998, Abbott purchased an additional 571,429 shares of Common Stock of the Issuer and paid \$4,000,000 for the additional shares. These funds came from Abbott's general assets.

ITEM 4. PURPOSE OF THE ACQUISITION

Abbott acquired the shares of Common Stock as an investment.

(a) - (j) At present, Abbott does not have any plans or proposals which would relate to or result in transactions of the kind described in paragraphs (a) through (j) of Item 4 of Schedule 13D of the Securities and Exchange Commission. Abbott does, however, reserve the right to adopt such plans or proposals subject to compliance with applicable regulatory requirements.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER

(a) Abbott is the beneficial owner of 682,495 shares of Common Stock (the "Shares"). This represents approximately eleven and 80/100 percent (11.8%) of the outstanding shares of the Common Stock. The calculation of the foregoing percentage is based on the number of shares of Common Stock outstanding after the Issuer's initial public offering as shown in the Issuer's prospectus dated May 27, 1998.

(b) Abbott has sole power to vote or to direct the vote and the sole power to dispose or to direct the disposition of the Shares.

(c) Except as described herein, there have been no transactions by Abbott or the persons whose names are listed on Exhibit 1 in securities of the Issuer during the past sixty days.

(d) No one other than Abbott is known to have the right to receive or the power to direct the receipt of dividends from, or the proceeds from a sale of the Shares.

(e) Not applicable.

ITEM 6. CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIPS WITH RESPECT TO SECURITIES OF THE ISSUER

The summaries of certain terms of the following agreements do not purport to be complete and are subject to, and are qualified in their entirety by reference to, all provisions of the agreements and reference is made to the full text of such agreements which are filed as exhibits to this Statement and are incorporated herein by reference.

Abbott and the Issuer are parties to a Series E Preferred Stock Purchase Agreement, as amended, dated as of April 26, 1996 (the "Series E Agreement") and a Stock Purchase Agreement dated as of May 29, 1998 (the "Stock Purchase Agreement"). Abbott purchased 1,555,556 preferred stock of the Issuer pursuant to the Series E Agreement. Abbott acquired certain registration (including demand registration) rights under the Series E Agreement and also agreed to purchase additional shares of the Issuer in a private placement upon the occurrence of an initial public offering by the Issuer if the aggregate price to the public of such offering was not less than \$20,000,000 (inclusive of the shares to be purchased by Abbott). The closing of the Issuer's initial public offering occurred on June 2, 1998. As required by the Series E Agreement, Abbott and the Issuer entered into the Stock Purchase Agreement to address the purchase of additional shares worth \$4,000,000. See Item 3 above. The Stock Purchase Agreement precludes Abbott from seeking a registration of the Shares prior to the first anniversary of the closing of the initial public offering. After such first anniversary, Abbott may seek a registration of the Shares.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS

- Exhibit 1 - Information Concerning Executive Officers and Directors of Abbott Laboratories.
- Exhibit 2 - Series E Preferred Stock Purchase Agreement, dated as of April 26, 1996
- Exhibit 3 - Stock Purchase Agreement, dated as of May 29, 1998

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

Abbott Laboratories

DATED: August 31, 1998

By: /s/ Gary P. Coughlan

Gary P. Coughlan, Senior Vice President,
Finance and Chief Financial Officer

EXHIBIT INDEX

Exhibit Number	Description
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1	Information Concerning Executive Officers and Directors of Abbott Laboratories.
2	Series E Stock Purchase Agreement, dated as of April 26, 1996.
3	Stock Purchase Agreement, dated as of May 29, 1998.

Exhibit 1

Information Concerning Executive Officers and
Directors of Abbott Laboratories

The current corporate officers and directors of Abbott Laboratories are listed below. The address of Abbott Laboratories is: Abbott Laboratories, 100 Abbott Park Road, Abbott Park, Illinois 60064-3500. Abbott Laboratories does not consider all of its corporate officers to be executive officers as defined by the Securities Exchange Act of 1934 or Releases thereunder. Unless otherwise indicated, all positions set forth below opposite an individual's name refer to positions within Abbott Laboratories, and the business address listed for each individual not principally employed by Abbott Laboratories is also the address of the corporation or other organization which principally employs that individual.

POSITION/PRESENT PRINCIPAL
OCCUPATION OR EMPLOYMENT
AND BUSINESS ADDRESS

NAME		CITIZENSHIP
CORPORATE OFFICERS		

Duane L. Burnham(1)	Chairman of the Board and Chief Executive Officer	U.S.A.
Thomas R. Hodgson(1)	President and Chief Operating Officer	U.S.A.
Paul N. Clark(1)	Executive Vice President	U.S.A.
Robert L. Parkinson(1)	Executive Vice President	U.S.A.
Miles D. White(1)	Executive Vice President	U.S.A.
Joy A. Amundson(1)	Senior Vice President, Ross Products	U.S.A.
Thomas D. Brown(1)	Senior Vice President, Diagnostic Operations	U.S.A.
Gary P. Coughlan(1)	Senior Vice President, Finance and Chief Financial Officer	U.S.A.
Jose M. de Lasa(1)	Senior Vice President, Secretary and General Counsel	U.S.A.
William G. Dempsey(1)	Senior Vice President, Chemical and Agricultural Products	U.S.A.
Richard A. Gonzalez(1)	Senior Vice President, Hospital Products	U.S.A.
Arthur J. Higgins(1)	Senior Vice President, Pharmaceutical Operations	United Kingdom

CORPORATE OFFICERS

Continued

Ellen M. Walvoord(1)	Senior Vice President, Human Resources	U.S.A.
Josef Wendler(1)	Senior Vice President, International Operations	Germany
Catherine V. Babington(1)	Vice President, Investor Relations and Public Affairs	U.S.A.
Patrick J. Balthrop	Vice President, Diagnostic Commercial Operations	U.S.A.
Mark E. Barmak	Vice President, Litigation and Government Affairs	U.S.A.
Christopher B. Begley	Vice President, MediSense Operations	U.S.A.
Douglas C. Bryant	Vice President, Diagnostic Operations, Asia and Pacific	U.S.A.
Gary R. Byers(1)	Vice President, Internal Audit	U.S.A.
Thomas C. Chen	Vice President, Pacific, Asia, and Africa Operations	U.S.A.
Kenneth W. Farmer(1)	Vice President, Management Information Services and Administration	U.S.A.
Edward J. Fiorentino	Vice President, Pharmaceutical Products, Marketing, and Sales	U.S.A.
Thomas C. Freyman(1)	Vice President and Treasurer	U.S.A.
David B. Goffredo	Vice President, European Operations	U.S.A.
Guillermo A. Herrera	Vice President, Latin America and Canada Operations	Columbia
Jay B. Johnston	Vice President, Diagnostic Assays and Systems	U.S.A.
James J. Koziarz, Ph.D.	Vice President, Diagnostic Products Research and Development	U.S.A.
John F. Lussen(1)	Vice President, Taxes	U.S.A.
Edward L. Michael(1)	Vice President, Diagnostic Operations, Europe, Africa, and Middle East	U.S.A.
Theodore A. Olson(1)	Vice President and Controller	U.S.A.

CORPORATE OFFICERS

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Continued

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Andre G. Pernet, Ph.D.	Vice President, Pharmaceutical Products Research and Development	U.S.A.
William H. Stadlander	Vice President, Ross Medical Nutritional Products	U.S.A.
Marcia A. Thomas(1)	Vice President, Corporate Quality Assurance and Regulatory Affairs	U.S.A.
H. Thomas Watkins(1)	Vice President, Abbott HealthSystems	U.S.A.
Steven J. Weger(1)	Vice President, Corporate Planning and Development	U.S.A.
Susan M. Widner	Vice President, Diagnostic Operations, U.S. and Canada	U.S.A.
Lance B. Wyatt(1)	Vice President, Corporate Engineering	U.S.A.

(1) Pursuant to Item 401 (b) of Regulation S-K Abbott has identified these persons as "executive officers" within the meaning of Item 401 (b).

POSITION/PRESENT PRINCIPAL
OCCUPATION OR EMPLOYMENT
AND BUSINESS ADDRESS

NAME		CITIZENSHIP
DIRECTORS		

K. Frank Austen, M.D.	Professor of Medicine, Harvard Medical School Smith Building, Room 638 One Jimmy Fund Way Boston, Massachusetts 02115	U.S.A.
Duane L. Burnham	Officer of Abbott	U.S.A.
Paul N. Clark	Officer of Abbott	U.S.A.
H. Laurance Fuller	Chairman and Chief Executive Officer Amoco Corporation 200 East Randolph Drive Mail Code 3000 Chicago, Illinois 60601 (integrated petroleum and chemicals company)	U.S.A.
Thomas R. Hodgson	Officer of Abbott	U.S.A.
David A. Jones	Chairman and Retired Chief Executive Officer Humana Inc. 500 W. Main Street Humana Building Louisville, Kentucky 40202 (Health Plan Business)	U.S.A.
The Rt. Hon. the Lord Owen CH	British Member of Parliament 25 Queen Anne's Gate Westminster, London SW1H 9BU, England	United Kingdom
Robert L. Parkinson	Officer of Abbott	U.S.A.
Boone Powell, Jr.	President and Chief Executive Officer Baylor Health Care System and Baylor University Medical Center, Vice President, Baylor University 3500 Gaston Avenue Dallas, Texas 75246	U.S.A.

DIRECTORS - Continued

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Addison Barry Rand	Executive Vice President Xerox Corporation 800 Long Ridge Road Stamford, Connecticut 06904-1600 (document processing, insurance and financial services company)	U.S.A.
Dr. W. Ann Reynolds	President The University of Alabama at Birmingham Suite 1070 Administration Building 701 S. 20th Street Birmingham, Alabama 35294-0110	U.S.A.
Roy S. Roberts	Vice President General Motors Corporation, and General Manager, Pontiac-GMC Division 100 Renaissance Center Mail Code 482-A30-D10 Detroit, Michigan 48243 (manufacturer of motor vehicles)	U.S.A.
William D. Smithburg	Retired Chairman, President and Chief Executive Officer The Quaker Oats Company 321 N. Clark Street Chicago, Illinois 60610 (worldwide food manufacturer and marketer of beverages and grain-based products)	U.S.A.
John R. Walter	Former President and Chief Operating Officer AT & T Corporation 295 North Maple Avenue Room 4353L1 Basking Ridge, New Jersey (telecommunications company)	U.S.A.
William L. Weiss	Chairman Emeritus, Ameritech Corporation One First National Plaza Suite 2530C Chicago, Illinois 60603-2006 (telecommunications company)	U.S.A.
Miles D. White	Officer of Abbott	U.S.A.

SERIES E PREFERRED STOCK PURCHASE AGREEMENT

THIS SERIES E PREFERRED STOCK PURCHASE AGREEMENT (the "AGREEMENT") is made as of April 26, 1996 by and between RiboGene, Inc., a California corporation (the "COMPANY"), and Abbott Laboratories, an Illinois Corporation (the "PURCHASER").

THE PARTIES HEREBY AGREE AS FOLLOWS:

1. PURCHASE AND SALE OF PREFERRED STOCK.

1.1 AUTHORIZATION. The Company shall adopt and file with the Secretary of State of the State of California on or before the Closing (as defined below) the Amendment to Articles of Incorporation in the form attached hereto as EXHIBIT A (such amendment and the Company's existing Articles of Incorporation, as amended, are herein referred to jointly as the "RESTATED ARTICLES").

1.2 SALE AND ISSUANCE OF SERIES E PREFERRED STOCK. Subject to the terms and conditions of this Agreement, the Purchaser agrees to purchase at the Closing (as defined below) and the Company agrees to sell and issue to the Purchaser at the Closing 1,555,556 shares of the Company's Series E Preferred Stock at a purchase price of \$2.25 per share. The shares of Series E Preferred Stock issued to the Purchaser pursuant to this Agreement shall be hereinafter referred to as the "STOCK."

2. CLOSING AND DELIVERY.

2.1 CLOSING DATE. The closing of the purchase and sale of the Stock (the "CLOSING") shall take place at the offices of Venture Law Group, 2800 Sand Hill Road, Menlo Park, California, at 1:00 p.m., on May 1, 1996, or at such other time and place as the Company and the Purchaser mutually agree upon, orally or in writing (the date of the Closing is hereinafter referred to as the "CLOSING DATE").

2.2 DELIVERY. At the Closing, the Company will deliver to the Purchaser a certificate, registered in the Purchaser's name, representing the Stock to be purchased in the Closing by the Purchaser. Such delivery shall be against payment of the purchase price therefor, by check payable to the Company, by wire transfer to the Company's bank account, or against cancellation of indebtedness.

3. REPRESENTATIONS AND WARRANTIES OF THE COMPANY. The Company hereby represents and warrants to the Purchaser that, except as set forth on a Schedule of Exceptions attached hereto as EXHIBIT B, specifically identifying the relevant subsection hereof, which exceptions shall be deemed to be representations and warranties as if made hereunder.

3.1 ORGANIZATION, GOOD STANDING AND QUALIFICATION. The Company is a corporation duly organized, validly existing and in good standing under the laws of the State of California and has all requisite corporate power and authority to carry on its business as now conducted and as proposed to be conducted. The Company is duly qualified to transact business

and is in good standing in each jurisdiction in which the failure so to qualify would have a material adverse effect on its business or properties.

3.2 CAPITALIZATION. The authorized capital of the Company consists, or will consist, immediately prior to the Closing, of:

(i) PREFERRED STOCK. 12,558,491 shares of Preferred Stock, of which (A) 138,269 shares have been designated Series A Preferred Stock, 138,268 of which are issued and outstanding, (B) 800,000 shares have been designated Series B Preferred Stock, 580,061 of which are issued and outstanding, (C) 2,950,000 shares have been designated Series C Preferred Stock, 2,805,519 of which are issued and outstanding, (D) 270,222 shares have been designated Series D Preferred Stock, all of which are issued and outstanding, and (E) 8,400,000 shares have been designated Series E Preferred Stock, 5,647,814 of which are issued and outstanding. The rights, privileges and preferences of the Series A, Series B, Series C, Series D and Series E Preferred Stock (collectively, the "PREFERRED") are as stated in the Company's Articles of Incorporation, as amended.

(ii) COMMON STOCK. 25,000,000 shares of Common Stock, of which 743,232 shares are issued and outstanding.

(iii) Except for (a) the conversion privileges of the Preferred, (b) the warrants to purchase up to 21,546 shares of Series B Preferred Stock, 15,000 shares of Series C Preferred Stock, and 17,777 shares of Series E Preferred Stock each issued to Dominion Ventures, Inc. (and the conversion privileges of the Preferred Stock issuable upon exercise thereof), (c) the warrants to purchase up to an aggregate of 1,313,000 shares of Common Stock issued to Hyline Laboratories, Inc. and another entity formerly related thereto, (d) warrants for the purchase of up to 33,333 shares of Series E Preferred Stock issued to Silicon Valley Bank, (e) warrants for the purchase of up to 52,850 shares of Common Stock issued to SBC Capital Markets and an individual affiliated therewith, and (f) the outstanding options issued under the Company's equity incentive plan(s) described below, there are no outstanding options, warrants, rights (including conversion or preemptive rights) or agreements, orally or in writing, for the purchase or acquisition from the Company of any shares of its capital stock. The Company has from time to time reserved up to an aggregate of 2,735,000 shares of Common Stock for issuance, at the discretion of the Board of Directors, to officers, directors, employees and consultants pursuant to the Company's 1993 Stock Plan, of which (a) 448,292 shares are currently outstanding pursuant to stock purchases or stock option exercises, (b) 1,910,691 shares are currently subject to outstanding stock options or committed for issuance pursuant to pending stock option grants, and (c) 375,817 shares are reserved for future stock option or purchase grants. The Company has also reserved 4,000 shares of Common Stock for issuance upon the exercise of a single outstanding stock option pursuant to the Company's 1990 Stock Option Plan.

3.3 SUBSIDIARIES. The Company does not presently own or control, directly or indirectly, any interest in any other corporation, association, or other business entity.

3.4 AUTHORIZATION. All corporate action on the part of the Company, its officers, directors and shareholders necessary for the authorization, execution and delivery of the

Agreement, the Ninth Amended and Restated Rights Agreement in substantially the form attached hereto at EXHIBIT C (the "RIGHTS AGREEMENT"), and the issuance of the Stock and the Common Stock issuable upon conversion thereof (collectively, the "SECURITIES"), the performance of all obligations of the Company hereunder and thereunder, has been taken or will be taken prior to the Closing, and the Agreement, the Rights Agreement constitute valid and legally binding obligations of the Company, enforceable in accordance with their respective terms.

3.5 VALID ISSUANCE OF SECURITIES.

(a) The Stock, when issued, sold and delivered in accordance with the terms hereof for the consideration expressed herein, will be duly and validly issued, fully-paid and nonassessable. Based in part upon the representations of the Purchaser in this Agreement and subject to the provisions of Section 3.6 below, the Securities will be issued in compliance with all applicable federal and state securities laws. The Common Stock issuable upon conversion of the Preferred has been duly and validly reserved for issuance, and upon issuance in accordance with the terms of the Restated Articles, shall be duly and validly issued, fully paid and non-assessable and will be issued in compliance with all applicable federal and state securities laws.

(b) The outstanding shares of Common Stock and Preferred Stock are all duly and validly authorized and issued, fully-paid and nonassessable, and were issued in compliance with all applicable federal and state securities laws.

3.6 GOVERNMENTAL CONSENTS. No consent, approval, order or authorization of, or registration, qualification, designation, declaration or filing with, any federal, state or local governmental authority on the part of the Company is required in connection with the consummation of the transactions contemplated by the Agreement, except for the federal and state securities law filings to be made by the Company as set forth on the Schedule of Exceptions attached hereto as Exhibit B.

3.7 LITIGATION. There is no action, suit, proceeding or investigation pending or currently threatened against the Company that questions the validity of the Agreement, or the right of the Company to enter into the Agreement, or to consummate the transactions contemplated thereby, or that might result, either individually or in the aggregate, in any material adverse changes in the assets, condition, affairs or prospects of the Company, financially or otherwise, or any change in the current equity ownership of the Company, nor is the Company aware that there is any basis for the foregoing. The foregoing includes, without limitation, actions pending or threatened (or any basis therefor known to the Company) involving the prior employment of any of the Company's employees, their use in connection with the Company's business of any information or techniques allegedly proprietary to any of their former employers, or their obligations under any agreements with prior employers. The Company is not a party or subject to the provisions of any order, writ, injunction, judgment or decree of any court or government agency or instrumentality. There is no action, suit, proceeding or investigation by the Company currently pending or which the Company intends to initiate.

3.8 EMPLOYEE AGREEMENT. Each employee and officer of the Company has executed an agreement with the Company regarding confidentiality and proprietary information. The Company, after reasonable investigation, is not aware that any of its employees are in violation thereof, and the Company will use its best efforts to prevent any such violation and to maintain and enforce such agreement with its employees.

3.9 PATENTS AND TRADEMARKS. As of the Closing, the Company has or will have sufficient title and ownership of all patents, trademarks, service marks, trade names, copyrights, trade secrets, information, proprietary rights and processes necessary for its business as now conducted and as proposed to be conducted without any conflict with or infringement of the rights of others. There are no outstanding options, licenses, or agreements of any kind relating to the foregoing, nor is the Company bound by or a party to any options, licenses or agreements of any kind with respect to the patents, trademarks, service marks, trade names, copyrights, trade secrets, licenses, information, proprietary rights and processes of any other person or entity. The Company has not received any communications alleging that the Company has violated or, by conducting its business as proposed, would violate any of the patents, trademarks, service marks, trade names, copyrights or trade secrets or other proprietary rights of any contract (including licenses, covenants or commitments of any nature) or other agreement, or subject to any judgment, decree or order of any court or administrative agency, that would interfere with the use of his best efforts to promote the interests of the Company or that would conflict with the Company's business as proposed to be conducted. Neither the execution nor delivery of the Agreement, nor the carrying on of the Company's business as proposed, will, to the Company's knowledge, conflict with or result in a breach of the terms, conditions or provisions of, or constitute a default under, any contract, covenant or instrument under which any of such employees is now obligated. The Company does not believe it is or will be necessary to utilize any inventions of any of its employees (or people it currently intends to hire) made prior to their employment by the Company.

3.10 COMPLIANCE WITH OTHER INSTRUMENTS.

(a) The Company is not in violation or default of any provisions of its Articles of Incorporation, as amended, or Bylaws or of any instrument, judgment, order, writ, decree or contract to which it is a party or by which it is bound or, to its knowledge, of any provision of federal or state statute, rule or regulation applicable to the Company. The execution, delivery and performance of the Agreement, and the consummation of the transactions contemplated hereby and thereby, will not result in any such violation or be in conflict with or constitute, with or without the passage of time and giving of notice, either a default under any such provision, instrument, judgment, order, writ, decree or contract or an event which results in the creation of any lien, charge or encumbrance upon any assets of the Company.

(b) The Company has avoided every condition, and has not performed any act, the occurrence of which would result in the Company's loss of any right granted under any license, distribution or other agreement.

3.11 Agreements: Action.

(a) Except for agreements explicitly contemplated hereby, there are no agreements, understandings or proposed transactions between the Company and any of its officers, directors, affiliates, or any affiliate thereof.

(b) There are no agreements, understandings, instruments, contracts or proposed transactions to which the Company is a party or by which it is bound that involve (i) obligations of, or payments to the Company in excess of, \$50,000, or (ii) the license of any patent, copyright, trade secret or other proprietary right to or from the Company.

(c) The Company has not (i) declared or paid any dividends, or authorized or made any distribution upon or with respect to any class or series of its capital stock, (ii) incurred indebtedness for money borrowed or incurred any other liabilities individually in excess of \$10,000 or in excess of \$50,000 in the aggregate, including guarantees for such amounts, (iii) made any loans or advances to any person, other than ordinary advances for travel expenses, or (iv) sold, exchanged or otherwise disposed of any of its assets or rights, other than the sale of its inventory in the ordinary course of business.

(d) The Company is not a party to and is not bound by any contract, agreement or instrument, or subject to any restriction under its Articles of Incorporation, as amended, or Bylaws, which adversely affects its business as now conducted or as proposed to be conducted, its properties or its financial condition.

(e) The Company has not engaged in the past three (3) months in any discussion (i) with any representative of any corporation or corporations regarding the merger of the Company with or into any such corporation or corporations, (ii) with any corporation, partnership, association or other business entity or any individual regarding the sale, conveyance or disposition of all or substantially all of the assets of the Company or a transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company is disposed of, or (iii) regarding any other form of liquidation, dissolution or winding up of the Company.

3.12 DISCLOSURE. The Company has fully provided the Purchaser with all the information which the Purchaser has requested for deciding whether to acquire the Stock and Warrants and all information which the Company believes is reasonably necessary to enable the Purchaser to make such decision, including the latest draft of the Company's Business Plan (the "BUSINESS PLAN"). No representation or warranty of the Company contained in the Agreement and the Exhibits attached hereto, any certificate furnished or to be furnished to the Purchaser at the Closing, or the Business Plan (when read together) contains any untrue statement of a material fact or omits to state a material fact necessary in order to make the statements contained herein or therein not misleading in light of the circumstances under which they were made. To the extent the Business Plan was prepared by management of the Company, the Business Plan and the financial projections contained in the Business Plan were prepared in good faith; however, the Company does not warrant that it will achieve such financial projections.

3.13 RIGHTS OF REGISTRATION AND FIRST OFFER. Except as contemplated on the Schedule of Exceptions, the Company has not granted or agreed to grant any registration rights, including piggyback rights, to any person or entity.

3.14 CORPORATE DOCUMENTS. The Articles of Incorporation, as amended, and Bylaws of the Company are in the form provided to special counsel for the Purchaser.

3.15 TITLE TO PROPERTY AND ASSETS. The Company owns its property and assets free and clear of all mortgages, liens, loans and encumbrances, except such encumbrances and liens which arise in the ordinary course of business and do not materially impair the Company's ownership or use of such property or assets. With respect to the property and assets it leases, the Company is in compliance with such leases and, to the best of its knowledge, holds a valid leasehold interest free of any liens, claims or encumbrances.

3.16 FINANCIAL STATEMENTS. The Company has delivered to the Purchaser or counsel to the Purchaser its unaudited financial statements (balance sheet and profit and loss statement) as at December 31, 1995 (the "FINANCIAL STATEMENTS"). The Financial Statements have been prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods indicated and with each other, except that unaudited Financial Statements may not contain all footnotes required by generally accepted accounting principles. The Financial Statements fairly present the financial condition and operating results of the Company as of the dates, and for the periods, indicated therein, subject to normal year-end audit adjustments, which are neither individually nor in the aggregate material. Except as set forth in the Financial Statements, the Company has no material liabilities, contingent or otherwise, other than (i) liabilities incurred in the ordinary course of business subsequent to December 31, 1995, and (ii) obligations under contracts and commitments incurred in the ordinary course of business and not required under generally accepted accounting principles to be reflected in the Financial Statements, which, in both cases, individually or in the aggregate, are not material to the financial condition or operating results of the Company. The Company maintains and will continue to maintain a standard system of accounting established and administered in accordance with generally accepted accounting principles.

3.17 EMPLOYEE BENEFIT PLANS. The Company does not have any Employee Benefit Plan as defined in the Employee Retirement Income Security Act of 1974.

3.18 TAX RETURNS AND PAYMENTS. The Company has filed all tax returns and reports as required by law. These returns and reports are true and correct in all material respects. The Company has paid all taxes and other assessments due, except those contested by it in good faith which are listed in the Schedule of Exceptions.

3.19 Insurance. The Company has in full force and effect fire and casualty insurance policies, with extended coverage, sufficient in amount (subject to reasonable deductibles) to allow it to replace any of its properties that might be damaged or destroyed.

3.20 LABOR AGREEMENTS AND ACTIONS. The Company is not bound by or subject to (and none of its assets or properties is bound by or subject to) any written or oral, express or implied, contracts, commitments or arrangement with any labor union, and no labor union has

requested or, to the knowledge of the Company, has sought to represent any of the employees, representatives or agents of the Company. There is no strike or other labor dispute involving the Company pending, or to the knowledge of the Company threatened, which could have a material adverse effect on the assets, properties, financial condition, operating results, or business of the Company (as such business is presently conducted and as it is proposed to be conducted), nor is the Company aware of any labor organization activity involving its employees. The Company is not aware that any officer or key employee, or that any group of key employees, intends to terminate their employment with the Company, nor does the Company have a present intention to terminate the employment of any of the foregoing. The employment of each officer and employee of the Company is terminable at the will of the Company.

4. REPRESENTATIONS AND WARRANTIES OF THE PURCHASER. The Purchaser hereby severally and not jointly represents and warrants to the Company that:

4.1 AUTHORIZATION. This Agreement constitutes its valid and legally binding obligation, enforceable in accordance with its terms.

4.2 PURCHASE ENTIRELY FOR OWN ACCOUNT. This Agreement is made with the Purchaser in reliance upon the Purchaser's representation to the Company, which by the Purchaser's execution of this Agreement the Purchaser hereby confirms, that the Securities will be acquired for investment for the Purchaser's own account, not as a nominee or agent, and not with a view to the resale or distribution of any part thereof, and that the Purchaser has no present intention of selling, granting any participation in, or otherwise distributing the same. By executing this Agreement, the Purchaser further represents that the Purchaser does not presently have any contract, undertaking, agreement or arrangement with any person to sell, transfer or grant participations to such person or to any third person, with respect to any of the Securities. The Purchaser represents that it has full power and authority to enter into this Agreement.

4.3 DISCLOSURE OF INFORMATION. The Purchaser believes it has received all the information it considers necessary or appropriate for deciding whether to acquire the Securities. The Purchaser further represents that it has had an opportunity to ask questions and receive answers from the Company regarding the terms and conditions of the offering of the Securities. The foregoing, however, does not limit or modify the representations and warranties of the Company in Section 3 of this Agreement or the right of the Purchaser to rely thereon.

4.4 INVESTMENT EXPERIENCE. The Purchaser is acquiring the Securities for investment for the Purchaser's own account, not as a nominee or agent, and not with the view to, or for resale in connection with, any distribution thereof. The Purchaser understands that the Securities have not been, and will not be, registered under the Securities Act of 1933, as amended (the "SECURITIES ACT") by reason of a specific exemption from the registration provisions of the Securities Act which depends upon, among other things, the bona fide nature of the investment intent and the accuracy of the Purchaser's representations as expressed herein. The Purchaser has not been formed for the specific purpose of acquiring the Securities.

4.5 RESTRICTED SECURITIES. The Purchaser understands that the Securities are characterized as "restricted securities" under the federal securities laws inasmuch as they are

being acquired from the Company in a transaction not involving a public offering and that under such laws and applicable regulations such Securities may be resold without registration under the Securities Act, only in certain limited circumstances. In this connection, the Purchaser represents that it is familiar with SEC Rule 144, as presently in effect, and understands the resale limitations imposed thereby and by the Securities Act.

4.6 FURTHER LIMITATIONS ON DISPOSITION. Without in any way limiting the representations set forth above, the Purchaser severally and not jointly further agrees not to make any disposition of all or any portion of the Securities unless and until:

(a) There is then in effect a Registration Statement under the Securities Act covering such proposed disposition and such disposition is made in accordance with such Registration Statement; or

(b) (i) The Purchaser shall have notified the Company of the proposed disposition and shall have furnished the Company with a detailed statement of the circumstances surrounding the proposed disposition, and (ii) if reasonably requested by the Company, in the event that such transfer is not made pursuant to a registration statement under the Securities Act, the Purchaser shall have furnished the Company with an opinion of counsel, reasonably satisfactory to the Company, that such disposition will not require registration under the Securities Act. It is agreed that the Company will not require opinions of counsel for transactions made pursuant to Rule 144 except in unusual circumstances.

(c) Notwithstanding the provisions of paragraphs (a) and (b) above, no such registration statement or opinion of counsel shall be necessary for a transfer by the Purchaser to a shareholder or partner of the Purchaser, if the transferee or transferees agree in writing to be subject to the terms hereof to the same extent as if they were the Purchaser hereunder.

4.7 LEGENDS. It is understood that the Securities, and any securities issued in respect thereof or exchange therefor, may bear one or all of the following legends:

(a) "THESE SECURITIES HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933. THEY MAY NOT BE SOLD, OFFERED FOR SALE, PLEDGED OR HYPOTHECATED IN THE ABSENCE OF A REGISTRATION STATEMENT IN EFFECT WITH RESPECT TO THE SECURITIES UNDER SUCH ACT OR AN OPINION OF COUNSEL SATISFACTORY TO THE COMPANY THAT SUCH REGISTRATION IS NOT REQUIRED OR UNLESS SOLD PURSUANT TO RULE 144 OF SUCH ACT."

(b) Any legend required by the laws of the State of California, including any legend required by the California Department of Corporations.

(c) Any legend required by the Blue Sky laws of any other state to the extent such laws are applicable to the shares represented by the certificate so legended.

4.8 U.S. PERSONS. The Purchaser is a United States person.

5. CALIFORNIA COMMISSIONER OF CORPORATIONS.

5.1 CORPORATE SECURITIES LAW. THE SALE OF THE SECURITIES THAT IS THE SUBJECT OF THIS AGREEMENT HAS NOT BEEN QUALIFIED WITH THE COMMISSIONER OF CORPORATIONS OF THE STATE OF CALIFORNIA. THE ISSUANCE OF SUCH SECURITIES OR THE PAYMENT OR RECEIPT OF ANY PART OF THE CONSIDERATION FOR SUCH SECURITIES PRIOR TO SUCH QUALIFICATION IS UNLAWFUL, UNLESS THE SALE OF SECURITIES IS EXEMPT FROM THE QUALIFICATION BY SECTION 25100, 25102 OR 25105 OF THE CALIFORNIA CORPORATIONS CODE. THE RIGHTS OF ALL PARTIES TO THIS AGREEMENT ARE EXPRESSLY CONDITIONED UPON SUCH QUALIFICATION BEING OBTAINED UNLESS THE SALE IS SO EXEMPT.

6. CONDITIONS OF PURCHASER OBLIGATIONS AT CLOSING. The obligations of the Purchaser to the Company under this Agreement are subject to the fulfillment, on or before the Closing, of each of the following conditions:

6.1 REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Company contained in Section 3 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the date of such Closing.

6.2. PERFORMANCE. The Company shall have performed and complied with all agreements, obligations and conditions contained in this Agreement that are required to be performed or complied with by it on or before the Closing.

6.3 COMPLIANCE CERTIFICATE. The Chief Executive Officer of the Company shall deliver to the Purchaser at the Closing a certificate certifying that the conditions specified in Sections 6.1 and 6.2 have been fulfilled.

6.4 QUALIFICATIONS. The Commissioner of Corporations of the State of California shall have issued a permit qualifying the offer and sale of the Stock to the Purchaser pursuant to this Agreement, or such offer and sale shall be exempt from such qualification under the California Corporate Securities Law of 1968, as amended.

6.5 PROCEEDINGS AND DOCUMENTS. All corporate and other proceedings in connection with the transactions contemplated at the Closing and all documents incident thereto shall be reasonably satisfactory in form and substance to the Purchaser and its special counsel, and they shall have received all such counterpart original and certified or other copies of such documents as they may reasonably request.

6.6 OPINION OF COMPANY COUNSEL. The Purchaser shall have received from Venture Law Group, A Professional Corporation, counsel for the Company, an opinion, dated as of the Closing, in substantially the form of EXHIBIT D.

6.7 BOARD OF DIRECTORS. The Board of Directors of the Company as of the Closing Date shall be comprised of Alexander Barkas, Charles Casamento, Charles Hartman, Jon Saxe, Jesse Treu and Petri Vainio.

6.8 RIGHTS AGREEMENT. The Company, the Purchaser and sufficient other shareholders of the Company shall have executed and delivered the Rights Agreement.

7. CONDITIONS OF THE COMPANY'S OBLIGATIONS AT CLOSING. The obligations of the Company to the Purchaser under this Agreement are subject to the fulfillment, on or before the Closing, of each of the following conditions:

7.1 REPRESENTATIONS AND WARRANTIES. The representations and warranties of the Purchaser contained in Section 4 shall be true on and as of the Closing with the same effect as though such representations and warranties had been made on and as of the Closing.

7.2 CALIFORNIA QUALIFICATION. The Commissioner of Corporations of the State of California shall have issued a permit qualifying the offer and sale to the Purchaser of the Stock or such offer and sale shall be exempt from such qualification under the California Corporate Securities Law of 1968, as amended.

7.3 RIGHTS AGREEMENT. The Company, the Purchaser and sufficient other shareholders of the Company shall have executed and delivered the Rights Agreement.

8. COVENANTS OF THE COMPANY.

8.1 DELIVERY OF FINANCIAL STATEMENTS. The Company shall deliver to the Purchaser so long as it holds (i) shares of Stock with respect to the information provided for in subsection (a) and (ii) not less than 100,000 shares of Stock with respect to the information provided for in subsections (b)-(e) (adjusted for subsequent stock splits, stock dividends or recapitalization):

(a) as soon as practicable, but in any event within ninety (90) days after the end of each fiscal year of the Company, an income statement for such fiscal year, a balance sheet of the Company as of the end of such year, and a schedule as to the sources and applications of funds for such year, such year-end financial reports to be in reasonable detail, prepared in accordance with generally accepted accounting principles ("GAAP"), and audited and certified by independent public accountants of nationally recognized standing selected by the Company;

(b) as soon as practicable, but in any event within forty-five (45) days after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited profit or loss statement and schedule as to the sources and application of funds for such fiscal quarter and an unaudited balance sheet as of the end of such fiscal quarter in reasonable detail;

(c) within thirty (30) days of the end of each month, an unaudited income statement and schedule as to the sources and application of funds and balance sheet for and as of the end of such month, in reasonable detail;

(d) as soon as practicable, but in any event thirty (30) days prior to the end of each fiscal year, a budget and business plan for the next fiscal year, prepared on a monthly basis, including balance sheets and sources and applications of funds statements for such months and, as soon as prepared, any other budgets or revised budgets prepared by the Company; and

(e) such other information relating to the financial condition, business, prospects or corporate affairs of the Company as the Purchaser or any assignee of the Purchaser may from time to time request, provided, however, that the Company shall not be obligated to provide information which it deems in good faith to be proprietary.

8.2 INSPECTION. The Company shall permit the Purchaser, at the Purchaser's expense, to visit and inspect the Company's properties, to examine its books of account and records and to discuss the Company's affairs, finances and accounts with its officers, all at such reasonable times as may be requested by the Purchaser; provided, however, that the Company shall not be obligated pursuant to this Section 8.2 to provide access to any information which it reasonably considers to be a trade secret or similar confidential information.

8.3 BOARD MEETINGS; EXPENSES. The Company shall reimburse the reasonable coach-class airfare and other travel and lodging expenses incurred by its nonemployee directors in attending any duly held regular or special meeting of the Board of Directors.

8.4 TERMINATION OF COVENANTS. The covenants set forth in Sections 8.1, 8.2 and 8.3 shall terminate as to the Purchaser and be of no further force or effect immediately upon the consummation of the Company's sale of its Common Stock in a bona fide, firm commitment underwriting pursuant to a registration statement under the Securities Act (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction).

9. ADDITIONAL INVESTMENT.

9.1 PURCHASE EVENTS AND TERMS. The Purchaser covenants that it will contribute an additional \$4,000,000 in funding to the Company or its successor in the form of an additional equity investment in connection with the earliest to occur of following events and on the terms stated herein:

(a) INITIAL PUBLIC OFFERING. In the event that, within three years from the date of this Agreement, the Company consummates a sale of capital stock in a bona fide, firm commitment underwriting pursuant to a registration statement under the Securities Act (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction) with an aggregate Price to Public of not less than \$20,000,000 (inclusive of the Purchaser's participation therein) (the "INITIAL PUBLIC OFFERING"), the Purchaser will purchase for cash from the underwriters shares of the Company's capital stock at the Price to Public stated on the front cover of the final prospectus distributed in connection with such offering. The number of securities to be purchased shall be equal to \$4,000,000 divided by the Price to Public, rounded to the nearest whole share. The Purchaser's obligations under this subsection (a) shall

be conditioned upon the Company delivering to the Purchaser written notice of the Initial Public Offering at least twenty days prior to the consummation thereof.

(b) BUSINESS COMBINATION TRANSACTION.

(i) In the event that, within three years from the date of this Agreement, the Company consummates a Business Combination Transaction (as defined below) in which the surviving entity is subject to periodic reporting requirements under the Securities Exchange Act of 1934, as amended (the "EXCHANGE ACT"), the surviving entity shall have the right, upon twenty (20) days prior written notice (the "NOTICE"), to require the Purchaser to purchase for cash securities of the surviving entity of the class that is publicly traded. The number of securities to be purchased shall be equal to \$4,000,000 divided by the average closing price (or price of the last trade if no closing price is available) for the ten trading days ending at the close of business on the date two days prior to the date of the closing of the Purchaser's purchase of the securities under this subsection, as reported on the exchange or system on which the surviving entity's securities are traded, rounded to the nearest whole share. The Purchaser's obligations under this paragraph shall terminate in the event that the surviving entity shall not have given the Notice to the Purchaser within sixty days after the consummation of the Business Combination of Transaction.

(ii) For purposes of this Section 9(b), a "Business Combination Transaction" shall mean a merger, sale of all or substantially all of the Company's assets (including the assets associated with the activities being conducted pursuant to the Research Agreement between the Purchaser at the Company of even date herewith), or similar business combination transaction.

(iii) The Purchaser's obligations under Section 9.1(b)(i) above shall be further conditioned upon the securities to be purchased under such section by the Purchaser (the "Purchased Securities") being either (A) registered under Section 6 of the Securities Act, or (B) entitled to the registration rights described in the ensuing paragraphs of this subsection (b)(iii).

(1) In the event that the Purchased Securities are not registered when purchased or shortly thereafter, the Purchaser shall be granted the right to demand, in writing, on two occasions, that the surviving entity register certain of such shares for resale pursuant to the provisions of the Securities Act. The first of such demands may be made at any time after the date six months after the acquisition of the Purchased Securities and may cover not more than 50% of the Purchased Securities; PROVIDED HOWEVER, that if the Purchased Securities represent 1% or less of the outstanding capital stock of the issuer, such first demand registration may cover all of the Purchased Securities. The second of such demands may be made at any time after the date twelve months after the acquisition of the Purchased Securities and may cover up to all of the Purchased Securities then held by the Purchaser; provided that the second demand may not be made less than six months after the first demand is made.

(2) Unless otherwise consented to by the surviving entity, each registration must cover securities generating net proceeds to the Purchaser of at least \$500,000 (net of underwriting discounts and commissions). Pursuant to each such

demand, the surviving entity will agree to file a registration statement on Form S-3 (or a successor form), if available, on or Form S-1 covering the Purchased Securities to be sold and will hold such registration statement open for a thirty (30) day period in which the Purchaser may sell the registered securities.

(3) The terms set forth in the Rights Agreement in Sections 3.2(d) (regarding postponement for business reasons), Section 3.6 (regarding expenses of demand registrations), 3.10 (regarding indemnification), and 3.11 (regarding reports under the Exchange Act) shall be applicable to the registration rights discussed in this paragraph and such registration rights would terminate at the earlier of the date three years from the acquisition of the Purchased Securities or such time and for so long as the Purchaser could sell all of its Purchased Securities in any one three-month period.

9.2 STOCK PURCHASE AGREEMENT. The Purchaser understands and agrees that this additional equity investment, and the sale and purchase of securities in connection therewith, other than a purchase of securities in the Initial Public Offering, will require the Purchaser's execution of a Stock Purchase Agreement, which shall in form be substantially similar to this document.

10. MISCELLANEOUS.

10.1 SURVIVAL OF WARRANTIES. The warranties, representations and covenants of the Company and the Purchaser contained in or made pursuant to this Agreement shall survive the execution and delivery of this Agreement and the Closing and shall in no way be affected by any investigation of the subject matter thereof made by or on behalf of the Purchaser or the Company.

10.2 TRANSFER, SUCCESSORS AND ASSIGNS. The terms and conditions of this Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and assigns any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided in this Agreement.

10.3 GOVERNING LAW. This Agreement shall be governed by and construed under the laws of the State of California in the United States of America as applied to agreements among California resident entered into and to be performed entirely within California.

10.4 COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

10.5 TITLES AND SUBTITLES. The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

10.6 NOTICES.

(a) All notices, requests, demands and other communications under this Agreement or in connection herewith shall be given to or made upon the respective parties as follows: if to the Purchaser, to Abbott Laboratories, 100 Abbott Park Road, Abbott Park, IL, 60064-3500, Attn: President, Pharmaceutical Products Division (with a copy to the General Counsel at the same address), or, if to the Company, to RiboGene, Inc., 21375 Cabot Boulevard, Building B, Hayward, California 94545, Attn: President.

(b) All notices, requests, demands and other communications given or made in accordance with the provisions of this Agreement shall be in writing, and shall be sent by airmail, return receipt requested, or by telex or telecopy (facsimile) with confirmation of receipt, and shall be deemed to be given or made when receipt is so confirmed.

(c) Any party may, by written notice to the other, alter its address or respondent, and such notice shall be considered to have been given ten (10) days after the airmailing, telexing or telecopying thereof.

10.7 FINDER'S FEE. Each party represents that it neither is nor will be obligated for any finder's fee or commission in connection with this transaction. The Purchaser agrees to indemnify and to hold harmless the Company from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Purchaser or any of its officers, employees, or representatives is responsible.

The Company agrees to indemnify and hold harmless the Purchaser from any liability for any commission or compensation in the nature of a finder's fee (and the costs and expenses of defending against such liability or asserted liability) for which the Company or any of its officers, employees or representatives is responsible.

10.8 EXPENSES. The Company and the Purchaser shall bear their own expenses incurred with respect to this Agreement and the transactions contemplated hereby. If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reasonable attorney's fees, costs and necessary disbursements in addition to any other relief to which such party may be entitled.

10.9 AMENDMENTS AND WAIVERS. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company and the Purchaser. Any amendment or waiver effected in accordance with this Section shall be binding upon each transferee of any Securities, each future holder of all such Securities, and the Company; provided, however, that none of the conditions set forth in Section 6 hereof may be waived with respect to a particular Purchaser unless it consents thereto.

10.10 SEVERABILITY. If one or more provisions of this Agreement are held to be unenforceable under applicable law, such provision shall be excluded from this Agreement and the balance of the Agreement shall be interpreted as if such provision were so excluded and shall be enforceable in accordance with its terms.

10.11 ENTIRE AGREEMENT. This Agreement constitutes the entire agreement between the parties hereto pertaining to the subject matter hereof, and any and all other written or oral agreements existing between the parties hereto are expressly cancelled.

IN WITNESS WHEREOF, the parties have executed this Series E Preferred Stock Purchase Agreement as of the date first above written.

COMPANY:

RIBOGENE, INC.

By: -----

Title: -----

PURCHASER:

ABBOTT LABORATORIES

By: -----

Title: -----

RIBOGENE, INC.

TENTH AMENDED AND RESTATED RIGHTS AGREEMENT

_____, 1998

RIBOGENE, INC.

TENTH AMENDED AND RESTATED RIGHTS AGREEMENT

THIS TENTH AMENDED AND RESTATED RIGHTS AGREEMENT (THE "RESTATED RIGHTS AGREEMENT") is entered into as of _____, 1998, by and among RIBOGENE, INC., a California corporation (the "COMPANY"), and

Bios Equity Fund L.P.
The Institute of Protein Research of the Academy of Sciences of the USSR,
Sierra Ventures III,
Sierra Ventures III International,
Kleiner Perkins Caufield & Byers V
KPCB Zaibatsu Fund I,
Domain Partners II, L.P.,
Michael Ross,
Aperture Associates,
CW Ventures II, L.P.,
Biotechnology Investments Limited,
Oxford Bioscience Partners L.P.,
Oxford Bioscience Partners (Bermuda) Limited Partnership,
Oxford Bioscience Partners (Adjunct) L.P.,
Dominion Fund II,
Dominion Ventures, Inc.,
Hyline Laboratories, Inc.,
Silicon Valley Bank,
SBC Capital Markets, Inc. and an individual affiliated therewith,
Abbott Laboratories,
all purchasers of Series C Shares under the Fourth Purchase Agreement,
and Dainippon Pharmaceutical Co., Ltd.

(hereinafter jointly referred to as the "SHAREHOLDERS").

WHEREAS, the Company, the Institute of Protein Research of the Academy of Sciences of the USSR ("IPR"), Sierra Ventures III ("SIERRA III") and Sierra Ventures III International ("SIERRA INTERNATIONAL", and collectively with Sierra III, "SIERRA") are parties to a Preferred Stock and Warrants Purchase Agreement dated May 23, 1990 (the "FIRST PURCHASE AGREEMENT"), pursuant to which the Company sold, and IPR and Sierra acquired, shares of the Company's Series A Preferred Stock (the "SERIES A SHARES") and, in the case of Sierra, warrants to purchase shares of the Company's capital stock (the "SIERRA WARRANTS");

WHEREAS, the Company, Sierra, Kleiner Perkins Caufield & Byers V ("KPCB V"), KPCB Zaibatsu Fund I ("KPCB ZAIBATSU," and collectively with KPCB V, "KPCB") and Michael Ross are parties to a Series B Preferred Stock Purchase Agreement dated June 5, 1991 (the "SECOND PURCHASE AGREEMENT"), pursuant to which the Company sold and KPCB, Sierra

and Michael Ross acquired, shares of the Company's Series B Preferred Stock (the "OLD SERIES B SHARES");

WHEREAS, the Company, Sierra, KPCB V, Domain Partners II, L.P, ("DOMAIN") and Aperture Associates ("APERTURE") are parties to a Series B Preferred Stock and Warrant Purchase Agreement dated February 28, 1992 as amended on June 29, 1992 (the "THIRD PURCHASE AGREEMENT"), pursuant to which the Company shares sold or shall sell, and Sierra, KPCB V, Domain and Aperture have acquired or shall acquire, shares of the Company's Series B Preferred Stock (the "NEW SERIES B SHARES," and collectively with the Old Series B Shares, the "SERIES B SHARES") and warrants to purchase up to an aggregate of 3,295,226 shares of the Company's Common Stock, which have since terminated;

WHEREAS, the Company, Sierra, KPCB V, Domain, Aperture, CW Ventures II, L.P. ("CW"), Vladimir I. Baronov, Jack Chirikjian, JMC Family Partnership, Thomas E. Davis, Michael W. Hall, Joel Kirschbaum, Holly Marcum, and Pam Grace Versaw and Timothy T. Revak, as Joint Tenants with Rights of Survivorship are or may be parties to a Series C Preferred Stock Purchase Agreement dated March 31, 1993, or Amendment No. 1 thereto dated June 4, 1993 (collectively the "FOURTH PURCHASE AGREEMENT"), pursuant to which the Company has sold, and Sierra, KPCB, Domain, Aperture, CW, Vladimir I. Baronov, Jack Chirikjian, JMC Family Partnership, Thomas E. Davis, Michael W. Hall, Joel Kirschbaum and Holly Marcum have acquired, shares of the Company's Series C Preferred Stock (the "SERIES C SHARES") and CW purchased a warrant to purchase shares of the Company's Series D Preferred Stock, which warrant was subsequently exercised for shares of the Company's Series D Preferred Stock (the "CW WARRANT SHARES");

WHEREAS, the Company elected a 1-for-10 share reverse stock split on August 2, 1993 pursuant to which all shares of the Company's capital stock were automatically converted into one-tenth (1/10) of one share such class and series of stock (all share numbers stated hereafter are stated in post-split numbers).

WHEREAS, the Company, Sierra, KPCB V, Domain, Aperture, CW, Biotechnology Investments Limited(1) ("BIL"), Oxford Bioscience Partners L.P., Oxford Bioscience Partners (Bermuda) Limited Partnership, and Oxford Bioscience Partners (Adjunct) L.P. (collectively with the previous two Oxford Bioscience funds, "OXFORD"), and Dominion Fund II ("DOMINION FUND") are parties to a Series E Preferred Stock Purchase Agreement dated April 26, 1994, as amended June 13, 1994 (the "FIFTH PURCHASE AGREEMENT"), pursuant to which the Company has sold, and Sierra, KPCB, Domain, Aperture, CW, BIL, Oxford and Dominion Fund have acquired, shares of the Company's Series E Preferred Stock (the "FIRST SERIES E SHARES");

WHEREAS, the Company effected a 4-for-3 share stock split of the outstanding Series E Preferred Stock on November 9, 1995, pursuant to which all shares of the Company's Series E Preferred Stock were automatically converted into one and one third shares (1-1/3) of such series of stock (all share numbers stated hereafter are stated in post-split numbers);

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1 Shares purchased by Biotechnology Investments Limited will be held under the record name of "Old Court Limited."

WHEREAS, the Company, Sierra, KPCB V, Domain, Aperture, CW, BIL and Oxford are parties to a Conversion Agreement of dated November 10, 1995, (the "CONVERSION AGREEMENT"), pursuant to which the Company has sold, and Sierra, KPCB V, Domain, Aperture, CW, BIL and Oxford have acquired, shares of the Company's Series E Preferred Stock (the "SECOND SERIES E SHARES");

WHEREAS, Sierra has acquired an aggregate of 73,500 shares of the Company's Series B Preferred Stock by exercising in full the Sierra Warrants (the "SIERRA WARRANT SHARES"), CW has acquired an aggregate of 270,222 shares of the Company's Series D Preferred Stock by exercising in full the CW Warrant (the "CW WARRANT SHARES"), and IPR and Sierra have acquired an aggregate of 4,757 shares of the Company's Series A Preferred Stock as a dividend pursuant to Section 1.1(d) of the First Purchase Agreement (the "DIVIDEND SHARES");

WHEREAS, the Company intends to issue up to an additional 21,546 shares of its Series B Preferred Stock to Dominion Ventures, Inc. ("DOMINION") upon exercise of a warrant dated August 9, 1991 (as such amount may be adjusted by the terms of such warrant, the "DOMINION B WARRANT SHARES"), up to an additional 15,000 shares of its Series C Preferred Stock to Dominion upon exercise of a warrant dated June 4, 1993 (as such amount may be adjusted by the terms of such warrant, the "DOMINION C WARRANT SHARES"), up to an additional anticipated 17,777 shares of its Series E Preferred Stock to Dominion upon exercise of a warrant issued in May 1994 (such final amount, as such amount may be adjusted by the terms of such warrant, to be the "DOMINION E WARRANT SHARES" and collectively with the Dominion B Warrant Shares and the Dominion E Warrant Shares, the "DOMINION WARRANT SHARES"), up to an additional 1,300,000 shares of its Common Stock to Hyline Laboratories, Inc. ("HYLINE") upon exercise of warrant dated January 5, 1994 (the "HYLINE WARRANT" and the shares of Common Stock issuable thereunder as the "HYLINE WARRANT SHARES"), up to an additional 13,000 shares of its Common Stock to Rip Grossman & Associates, Inc. ("BROKER") upon exercise of a warrant dated January 5, 1994 (the "BROKER WARRANT SHARES"), up to an additional 33,333 shares of its Series E Preferred Stock to Silicon Valley Bank ("SVB") upon exercise of a warrants dated May 19, 1995 and September 25, 1995 (the "SVB WARRANT SHARES"), and 52,850 shares of Common Stock to SBC Capital Markets, Inc. and an individual affiliated therewith (together, "SBC") upon exercise of warrants dated September 20, 1995 (the "SBC WARRANT SHARES");

WHEREAS, the Company and the Shareholders, other than the Shareholder purchasing the Series G Shares as of the date hereof, are also parties to a Rights Agreement originally dated June 26, 1990, as amended and restated on June 5, 1991 and as amended on August 9, 1991, as amended and restated on February 28, 1992, June 29, 1992, March 31, 1993, June 4, 1993, January 5, 1994, April 26, 1994 and June 13, 1994, and as amended September 20, 1995, and as amended and restated on May 1, 1996 (the "RIGHTS AGREEMENT"), pursuant to which the Company granted to such Shareholders certain registration rights and a right of first offer; and

WHEREAS, the Company and Abbott Laboratories ("ABBOTT") are parties to a Series E Preferred Stock Purchase Agreement dated May 1, 1996 (the "SIXTH PURCHASE AGREEMENT"), pursuant to which the Company has sold, and Abbott has acquired, shares of the Company's Series E Preferred Stock (together with all other shares of Company capital stock purchased by Abbott as a result of the provisions of the Sixth Purchase Agreement that are "RESTRICTED SECURITIES" under the Securities Act of 1933, the "ABBOTT SHARES");

WHEREAS, the Company, Sierra, KPCB V, Domain, Aperture, CW, BIL, Oxford, Dominion Fund and Bios Equity Fund L.P. ("BIOS") are parties to a Series E Preferred Stock Purchase Agreement dated May 1, 1996 (the "SEVENTH PURCHASE AGREEMENT"), pursuant to which the Company has sold, and Sierra, KPCB V, Domain, Aperture, CW, BIL, Oxford, Dominion Fund and Bios have acquired, shares of the Company's Series E Preferred Stock (the "THIRD SERIES E SHARES" and collectively with the First Series E Shares and the Second Series E Share, the "SERIES E SHARES,")

WHEREAS, The Company and Dainippon Pharmaceutical Co. Ltd. ("DAINIPPON") are parties to a Series G Preferred Stock Purchase Agreement of even date herewith (the "EIGHTH PURCHASE AGREEMENT"), pursuant to which the Company will sell, and Dainippon will acquire shares of the Company's Series G Preferred Stock (the "SERIES G SHARES", which, taken collectively with the Series A Shares, the Series B Shares, the Series C Shares, the CW Warrant Shares, the Sierra Warrant Shares, the Dividend Shares, the Dominion Warrant Shares, the Hyline Warrant Shares, the Broker Warrant Shares, the SVB Warrant Shares, the SBC Warrant Shares and the Abbott Shares are referred to herein as the "SHARES");

WHEREAS, the Company and the Shareholders wish to execute this Restated Rights Agreement and grant the Shareholder purchasing the Series G Shares the rights contained herein in order to provide it with a further inducement to purchase such Shares;

NOW, THEREFORE, in consideration of the mutual promises and covenants hereinafter set forth, the parties agree as follows:

1. TERMINATION OF PRIOR RIGHTS. The Shareholders, who include a majority in interest of the "Shareholders" who are parties to the Rights Agreement, and the Company hereby terminate the Rights Agreement and in place thereof enter into this Restated Rights Agreement which shall be the sole agreement among the Shareholders and the Company relating to the subject matter hereof.

2. AMENDMENT. Except as expressly provided herein, neither this Restated Rights Agreement nor any term hereof may be amended, waived, discharged or terminated other than by a written instrument signed by the party against whom enforcement of any such amendment, waiver, discharge or termination is sought; PROVIDED, HOWEVER, that any provisions hereof may be amended, waived, discharged or terminated upon the written consent of the Company and the holders of a majority of the outstanding Registrable Securities (as defined below), determined on the basis of assumed conversion of all Shares into Registrable Securities.

3. REGISTRATION RIGHTS.

3.1 DEFINITIONS. As used in this Restated Rights Agreement:

(a) The terms "REGISTER," "REGISTERED," and "REGISTRATION" refer to a registration effected by preparing and filing a registration statement in compliance with the Securities Act of 1933, as amended (the "ACT") and the subsequent declaration or ordering of the effectiveness of such registration statement.

(b) The term "REGISTRABLE SECURITIES" means:

(i) the shares of Common Stock constituting or issuable or issued upon conversion or exercise of (1) the Series A Shares, (2) the Series B Shares, (3) the Series C Shares, (4) the Series E Shares, (5) the Common Warrant Shares, (6) the CW Warrant Shares, (7) the Dividend Shares, (8) the Sierra Warrant Shares, (9) the Dominion Warrant Shares, (10) the Hyline Warrant, (11) the Broker Warrant, (12) the SVB Warrant Shares, (13) the SBC Warrant Shares, (14) the Abbott Shares, and (15) the Series G Shares (the shares of Common Stock referred to in the foregoing clauses (1) through (15) being collectively referred to hereafter as the "STOCK"); and

(ii) any other shares of Common Stock of the Company issued as (or issuable upon the conversion or exercise of any warrant, right or other security which is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the Stock, excluding all cases, however, any Registrable Securities, or Registrable Securities issuable upon the exercise of other securities, sold by a person in a transaction in which his or her rights under this Restated Rights Agreement are not assigned;

PROVIDED, HOWEVER, that Common Stock or other securities shall only be treated as Registrable Securities if and so long as they have not been (A) sold to or through a broker or dealer or underwriter in a public distribution or a public securities transaction, or (B) sold in a transaction exempt from the registration and prospectus delivery requirements of the Act under Section 4(1) thereof, in either case, so that all transfer restrictions, and restrictive legends with respect thereto, if any, are removed upon the consummation of such sale.

Notwithstanding the foregoing, or any other provision herein to the contrary, the parties hereto understand and agree that the Dominion Warrant Shares shall be entitled only to "piggy-back" and Form S-3 registration rights hereunder. Consequently, neither the Dominion Warrant Shares nor the Common Stock issuable upon conversion thereof shall be deemed Registrable Securities or Stock, and the holders of such Dominion Warrant Shares shall not be deemed Shareholders, Holders or Rightholders as such terms are used herein for purposes of Sections 3.2, 3.6, 3.14 and 4.

(c) The number of shares of "REGISTRABLE SECURITIES THEN OUTSTANDING" shall be determined by the number of shares of Common Stock outstanding which are, and the number of shares of Common Stock issuable pursuant to then exercisable or convertible securities (including, without limitation, then exercisable warrants) which are, Registrable Securities.

(d) The term "HOLDER" means any holder of outstanding Registrable Securities who acquired such Registrable Securities in a transaction or series of transactions not involving any registered public offering.

(e) The term "FORM S-3" means such form under the Act as in effect on the date hereof or any registration form under the Act subsequently adopted by the Securities and Exchange Commission ("SEC") which permits inclusion or incorporation of substantial information by reference to other documents filed by the Company with the SEC.

3.2 REQUESTED REGISTRATION.

(a) If the Company shall receive at any time after the earlier of (i) March 31, 1998, or (ii) three (3) months after the effective date of the first registration statement for a public offering of securities of the Company (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction), a written request from the Holders of at least twenty-five percent (25%) of the Registrable Securities then outstanding that the Company file a registration statement under the Act covering the registration of the lesser of (A) at least twenty-five percent (25%) of the Registrable Securities then outstanding (or a lesser percent if the anticipated aggregate offering price would exceed \$2,000,000) or (B) 250,000 Registrable Securities, then the Company shall, within ten (10) days of the receipt thereof, give written notice of such request to all Holders and shall, subject to the limitations of subsection 3.2(b), effect as soon as practicable, and in any event within ninety (90) days of the receipt of such request, the registration under the Act of all Registrable Securities which the Holders request to be registered within twenty (20) days of the mailing of such notice by the Company in accordance with Section 5.5.

(b) If the Holders initiating the registration request hereunder ("INITIATING HOLDERS") intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to this Section 3.2 and the Company shall include such information in the written notice referred to in subsection 3.2(a). In such event, the right of any Holder to include his Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting and the inclusion of such Holder's Registrable Securities in the underwriting (unless otherwise mutually agreed by a majority in interest of the Holders participating in such public offering (the "PARTICIPATING HOLDERS") and the underwriter of such offering) to the extent provided herein. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in subsection 3.4(e)) enter into an underwriting agreement in customary form with the underwriter or underwriters selected for such underwriting by a majority interest of the Participating Holders. Notwithstanding any other provision of this Section 3.2, if the underwriter advises the Participating Holders in writing that marketing factors require a limitation of the number of shares to be underwritten, then the number of shares of Registrable Securities that may be included in the underwriting shall be allocated among all Participating Holders in proportion (as nearly as practicable) to the amount of Registrable Securities of the Company owned by each Participating Holder.

(c) The Company is obligated to effect only two (2) such registrations pursuant to this Section 3.2.

(d) Notwithstanding the foregoing, if the Company shall furnish to Holders requesting a registration statement pursuant to this Section 3.2, a certificate signed by the President of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its shareholders for such registration statement to be filed and it is therefore essential to defer the filing of such registration statement, the Company shall have the right to defer such filing for a period of not more than ninety (90) days after receipt of the request of the Initiating Holders; PROVIDED, HOWEVER, that the Company may not utilize this right more than once in any twelve (12) month period.

3.3 COMPANY REGISTRATION. If (but without any obligation to do so) the Company proposes to register (including for this purpose a registration effected by the Company for shareholders other than the Holders) any of its Common Stock or other securities under the Act in connection with the public offering of such securities solely for cash (other than a registration relating either to the sale of securities to participants in a Company stock option, stock purchase or similar plan or to an SEC Rule 145 transaction, or a registration on any other form not reasonably and customarily appropriate for this purpose), the Company shall, at such time, promptly give each Holder written notice of such registration. Upon the written request of each Holder given within twenty (20) days after mailing of such notice by the Company in accordance with Section 5.5, the Company shall subject to the provisions of Section 3.8, cause to be registered under the Act all of the Registrable Securities that each such Holder has requested to be registered.

3.4 OBLIGATIONS OF THE COMPANY. Whenever required under this Section 3 to effect the registration of any Registrable Securities, the Company shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its best efforts to cause such registration statement to become effective, and, upon the request of the Holders of a majority of the Registrable Securities registered thereunder, keep such registration statement effective for up to one hundred twenty (120) days.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the Act with respect to the disposition of all securities covered by such registration statement.

(c) Furnish to the Holders such numbers of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the Act, and such other documents as they may reasonably request in order to facilitate the disposition of Registrable Securities owned by them.

(d) Use its best efforts to register and qualify the securities covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by the Holders, provided that the Company shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the managing underwriter of such offering. Each Holder participating in such underwriting shall also enter into and perform its obligations under such an agreement.

(f) Notify each Holder of Registrable Securities covered by such registration statement at any time when a prospectus relating thereto is required to be delivered under the Act of the happening of any event as a result of which the prospectus included in such

registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

(g) Furnish, at the request of any Holder requesting registration of Registrable Securities pursuant to this Section 3, on the date that such Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Section 3, if such securities are being sold through underwriters, or, if such securities are not being sold through underwriters, on the date that the registration statement with respect to such securities becomes effective, (i) an opinion, dated such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and to the Holders requesting registration of Registrable Securities and (ii) a letter dated such date, from the independent certified public accountants of the Company, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the underwriters, if any, to the Holders requesting registration of Registrable Securities.

3.5 FURNISH INFORMATION. It shall be a condition precedent to the obligations of the Company to take any action pursuant to this Section 3 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as shall be required to effect the registration of such Holder's Registrable Securities.

3.6 EXPENSES OF DEMAND REGISTRATION. All expenses other than underwriting discounts and commissions incurred in connection with registrations, filings or qualifications pursuant to Section 3.2, including (without limitation), all registration, filing and qualification fees, printers and accounting fees, fees and disbursements of counsel for the Company, and the reasonable fees and disbursements of one counsel for the selling Holders shall be borne by the Company; PROVIDED, HOWEVER, that the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 3.2 if the registration request is subsequently withdrawn at the request of the Holders of a majority of the Registrable Securities to be registered (in which case all Participating Holders shall bear such expenses), unless the Holders of a majority of the Registrable Securities agree to forfeit their right to one (1) demand registration pursuant to Section 3.2; PROVIDED FURTHER, HOWEVER, that if at the time of such withdrawal, the Holders have learned of a material adverse change in the condition, business, or prospects of the Company from that known to the Holders at the time of their request, then the Holders shall not be required to pay any of such expenses and shall retain their rights pursuant to Section 3.2.

3.7 EXPENSES OF COMPANY REGISTRATION. The Company shall bear and pay all expenses incurred in connection with any registration, filing or qualification of Registrable Securities with respect to the registrations pursuant to Section 3.3 for each Holder (which right may be assigned as provided in Section 3.13), including (without limitation) all registration, filing, and qualification fees, printers and accounting fees relating to or apportionable thereto and

the fees and disbursements of one counsel for the selling Holders selected by them, but excluding underwriting discounts and commissions relating to Registrable Securities.

3.8 UNDERWRITING REQUIREMENTS. In connection with any offering involving an underwriting of shares being issued by the Company, the Company shall not be required under Section 3.3 to include any of the Holders' securities in such underwriting unless they accept the terms of the underwriting as agreed upon between the Company and the underwriters selected by it, and then only in such quantity as will not, in the written opinion of the underwriters, jeopardize the success of the offering by the Company. If the total amount of securities, including Registrable Securities, requested by shareholders to be included in such offering exceeds the amount of securities sold other than by the Company that the underwriters reasonably believe compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters believe will not jeopardize the success of the offering (the securities so included to be apportioned pro rata among the selling shareholders according to the total amount of securities entitled to be included therein owned by each selling shareholder or in such other proportions as shall mutually be agreed to by such selling shareholders); but in no event shall (i) the amount of securities of the selling Holders included in the offering be reduced below twenty-five percent (25%) of the total amount of securities included in such offering, unless such offering is the initial public offering of the Company's securities, in which case the selling shareholders may be excluded if the underwriters make the determination described above and no other shareholder's securities are included or (ii) notwithstanding (i) above, any shares being sold by a shareholder exercising a demand registration right similar to that granted in Section 3.2 be excluded from such offering. For purposes of the preceding parenthetical concerning apportionment, for any selling shareholder which is a holder of Registrable Securities and which is a partnership or corporation, the partners, retired partners and shareholders of such holder, or the estates and family members of any such partners and retired partners and any trusts for the benefit of any of the foregoing persons shall be deemed to be a single "SELLING SHAREHOLDER," and any pro rata reduction with respect to such selling shareholder shall be based upon the aggregate amount of shares carrying registration rights owned by all entities and individuals included in such "SELLING SHAREHOLDER," as defined in this sentence.

3.9 DELAY OF REGISTRATION. No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any such registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 3.

3.10 INDEMNIFICATION. In the event any Registrable Securities are included in a registration statement under this Section 3:

(a) To the extent permitted by law, the Company will indemnify and hold harmless each Holder, any underwriter (as defined in the Act) for such Holder and each person, if any, who controls such Holder or underwriter within the meaning of the Act or the Securities Exchange Act of 1934, as amended (the "1934 ACT"), against any losses, claims, damages, or liabilities (joint or several) to which they may become subject under the Act, the 1934 Act or other federal or, state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereof) arise out of or are based upon any of the following statements, omissions or violations (collectively a "VIOLATION"): (i) any untrue statement or alleged untrue

statement of a material fact contained in such registration statement, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, (ii) the omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading, or (iii) any violation or alleged violation by the Company of the Act, the 1934 Act, any state securities law or any rule or regulation promulgated under the Act, the 1934 Act or any state securities law; and the Company will pay as incurred to each such Holder, underwriter or controlling person, any legal or other expenses reasonably incurred by them in connection with investigating or defending any such loss, claim, damage, liability, or action; PROVIDED, HOWEVER, that the indemnity agreement contained in this subsection 3.10(a) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability, or action if such settlement is effected without the consent of the Company (which consent shall not be unreasonably withheld or delayed), nor shall the Company be liable in any such case for any such loss, claim, damage, liability, or action to the extent that it arises out of or is based upon a Violation which occurs in reliance upon and in conformity with written information furnished expressly for use in connection with such registration by the Holder, underwriter or controlling person seeking indemnification hereunder.

(b) To the extent permitted by law, each selling Holder will indemnify and hold harmless the Company, each of its directors, each of its officers who has signed the registration statement, each person, if any, who controls the Company within the meaning of the Act, any underwriter, any other Holder selling securities in such registration statement and any controlling person of any such underwriter or other Holder, against any losses, claims, damages, or liabilities (joint or several) to which any of the foregoing persons may become subject, under the Act, the 1934 Act or other federal or state law, insofar as such losses, claims, damages, or liabilities (or actions in respect thereto) arise out of or are based upon any Violation, in each case to the extent (and only to the extent) that such Violation occurs in reliance upon and in conformity with written information furnished by such Holder expressly for use in connection with such registration; and each such Holder will pay, as incurred, any legal or other expenses reasonably incurred by any person intended to be indemnified pursuant to this subsection 3.10(b), in connection with investigating or defending any such loss, claim, damage, liability, or action; PROVIDED, HOWEVER, that the indemnity agreement contained in this subsection 3.10(b) shall not apply to amounts paid in settlement of any such loss, claim, damage, liability or action if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld or delayed; provided that in no event shall any indemnity under this subsection 3.10(b) exceed the gross proceeds from the offering received by such Holder.

(c) Promptly after receipt by an indemnified party under this Section 3.10 of notice of a claim or of the commencement of any action (including any governmental claim or action), such indemnified party will, if claim in respect thereof is to be made against any indemnifying party under this Section 3.10, deliver to the indemnifying party a written notice of the claim or the commencement of the action and the indemnifying party shall have the right to participate in, and, to the extent the indemnifying party so desires, jointly with any other indemnifying party similarly noticed, to assume the defense thereof with counsel mutually satisfactory to the parties; PROVIDED, HOWEVER, that an indemnified party shall have the right to retain its own counsel with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified

party and any other party represented by such counsel in such proceeding. The failure to deliver written notice to the indemnifying party within a reasonable time of the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve such indemnifying party of any liability to the indemnified party under this Section 3.10 only to the extent that it was so prejudiced, but the omission so to deliver written notice to the indemnifying party will not relieve it of any liability that it may have to any indemnified party otherwise than under this Section 3.10.

(d) The obligations of the Company and Holders under this Section 3.10 shall survive the completion of, any offering of Registrable Securities in a registration statement under this Section 3, and otherwise.

3.11 REPORTS UNDER SECURITIES EXCHANGE ACT OF 1934. With a view to making available to the Holders the benefits of Rule 144 promulgated under the Act and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company agrees to:

(a) make and keep public information available, as those terms are understood and defined in SEC Rule 144, at all times after ninety (90) days after the effective date of the first registration statement filed by the Company for the offering of its securities to the general public;

(b) take such action, including the voluntary registration of its Common Stock under Section 12 of the 1934 Act, as is necessary to enable the Holders to utilize Form S-3 for the sale of their Registrable Securities, such action to be taken as soon practicable after the end of the fiscal year in which the first registration statement filed by the Company for the offering of its securities to the general public is declared effective;

(c) file with the SEC in a timely manner all reports and other documents required of the Company under the Act and the 1934 Act;

(d) furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (i) a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the first registration statement filed by the Company), the Act and the 1934 Act (at any time after it has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after it so qualifies), (ii) a copy of the most recent annual or quarterly report of the Company and such other reports and documents so filed by the Company, and (iii) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC which permits the selling of any such securities without registration or pursuant to such form;

(e) upon the request of any Holder, remove all legends and stop transfer orders on such Holder's Registrable Securities (i) at such time as such Registrable Securities qualify for sale under Rule 144(k), or (ii) in connection with a sale of such Registrable Securities pursuant to the other provisions of Rule 144;

(f) use at its best efforts to otherwise comply with the "REGISTRANT REQUIREMENTS" for the use of Form S-3.

3.12 FORM S-3 REGISTRATION. In case the Company shall receive from any Holder or Holders owning in the aggregate at least the lesser of (i) twenty percent (20%) of the Registrable Securities then outstanding (or a lesser percent if the fair market value of the Registrable Securities held by such Holder(s) would exceed \$2,000,000) or (ii) 250,000 Registrable Securities (adjusted to reflect subsequent stock splits, stock dividends or recapitalization), a written request or requests that the Company effect a registration on Form S-3 and any related qualification or compliance with respect to all or a part of the Registrable Securities owned by such Holder or Holders, the Company will:

(a) promptly give written notice of the proposed registration, and any related qualification or compliance, to all other Holders; and

(b) as soon as practicable, effect such registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all or such portion of such Holder's or Holders' Registrable Securities as are specified in such request, together with all or such portion of the Registrable Securities of any other Holder or Holders joining in such request as are specified in a written request given within 15 days after receipt of such written notice from the Company; PROVIDED, HOWEVER, that the Company shall not be obligated to effect any such registration, qualification or compliance, pursuant to this Section 3.12, (1) if Form S-3 is not available for such offering by the Holders; (2) if the Holders, together with the holders of any other securities of the Company entitled to inclusion in such registration, propose to sell Registrable Securities and such other securities (if any) at an aggregate price to the public (net of any underwriters' discounts or commissions) of less than \$500,000; (3) if the Company shall furnish to the Holders a certificate signed by the president of the Company stating that in the good faith judgment of the Board of Directors of the Company, it would be seriously detrimental to the Company and its shareholders for such Form S-3 Registration to be effected at such time, in which event the Company shall have the right to defer the filing of the Form S-3 registration statement for a period of not more than ninety (90) days after receipt of the request of the Holder or Holders under this Section 3.12, PROVIDED, HOWEVER, that the Company shall not utilize this right more than once in any twelve month period; (4) if the Company has, within the six (6) month period preceding the date of such request, already effected one registration on Form S-3 for the Holders pursuant to this Section 3.12; or (5) in any particular jurisdiction in which the Company would be required to qualify to do business or to execute a general consent to service of process in effecting such registration, qualification or compliance.

(c) Subject to the foregoing, the Company shall file a registration statement covering the Registrable Securities and other securities so requested to be registered as soon as practicable after receipt of the request or requests of the Holders. All expenses incurred in connection with a registration requested pursuant to Section 3.12, including (without limitation) all registration, filing, qualification, printer's and accounting fees and the reasonable fees and disbursements of counsel for the selling Holder or Holders and counsel for the Company, shall be borne pro rata by the Holder or Holders participating in the Form S-3 Registration; PROVIDED, HOWEVER, that the Company shall bear any auditing expenses that shall be

incurred in the normal course of business and shall bear all regular salary expenses of its employees. Registrations effected pursuant to this Section 3.12 shall not be counted as demands for registration or registrations effected pursuant to Section 3.2 or 3.3.

3.13 ASSIGNMENT OF REGISTRATION RIGHTS. The rights to cause the Company to register Registrable Securities pursuant to this Section 3 may be assigned by a Holder to a transferee or assignee of at least the lesser of (i) 150,000 shares (adjusted to reflect subsequent stock splits, stock dividends or recapitalization) or (ii) all of such Holder's Registrable Securities provided the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee or assignee and the securities with respect to which such registration rights are being assigned; and provided, further, that such assignment shall be effective only if immediately following such transfer the further disposition of such securities by the transferee or assignee is restricted under the Act. The foregoing share limitation shall not apply, however, to transfers by a Holder to shareholders, partners (including limited partners) or retired partners of the Holder (including spouses and ancestors, lineal descendants and siblings of such partners or spouses, or trusts for their benefit, who acquire Registrable Securities by gift, will or interstate succession) if all such transferees or assignees agree in writing to appoint a single representative as their attorney in fact for the purpose of receiving any notices and exercising their rights under Section 3.

3.14 LIMITATIONS ON SUBSEQUENT REGISTRATION RIGHTS. From and after the date of this Restated Rights Agreement, the Company shall not, without the prior written consent of the Holders of a majority of the outstanding Registrable Securities, enter into any agreement with any holder or prospective holder of any securities of the Company which would allow such holder or prospective holder (a) to include such securities in any registration filed under Section 3.2 hereof, unless under the terms of such agreement, such holder or prospective holder may include such securities in any such registration only to the extent that the inclusion of his securities will not reduce the amount of the Registrable Securities of the Holders which is included or (b) to make a demand registration which could remit in such registration statement being declared effective prior to the earlier of either of the dates set forth in subsequent 3.2(a) or within one hundred twenty (120) days of the effective date of any registration effected pursuant to Section 3.2.

3.15 "MARKET STAND-OFF" AGREEMENT. The Holder hereby agrees that during the 180-day period following the effective date of a registration statement of the Company filed under the Act, it shall not, to the extent requested by the Company and such underwriter, sell or otherwise transfer or dispose of (other than to donees who agree to be similarly bound) any Common Stock of the Company held by it at any time during such period except Common Stock included in such registration; PROVIDED, HOWEVER, that:

(a) such agreement shall be applicable only to the first such registration statement of the Company which covers Common Stock (or other securities) to be sold on its behalf to the public in an underwritten offering; and

(b) all officers and directors of the Company and all other persons with registration rights (whether or not pursuant to this Restated Rights Agreement) enter into similar agreements.

To enforce the foregoing covenant, the Company may impose stop-transfer instructions with respect to the Registrable Securities of the Holder (and the shares or securities of every other person subject to the foregoing restriction) until the end of such period.

3.16 TERMINATION OF REGISTRATION RIGHTS. No Holder shall be entitled to exercise any right provided for in this Section 3: (a) after seven (7) years following the consummation of the Company's sale of its Common Stock in a bona fide, firm commitment underwriting pursuant to a registration statement on Form S-1 under the Act which results in aggregate gross cash proceeds to the Company in excess of \$7,500,000 and the public offering price of which is not less than \$5.00 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalization) (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or a SEC Rule 145 transaction); or (b) at such time following the Company's initial public offering and for so long as such Holder may sell all of such Holder's Registrable Securities in any one three-month period pursuant to Rule 144 (or such successor rule as may be adopted).

3.17 LIMIT ON SALES. Notwithstanding anything herein to the contrary, none of (a) Hyline, (b) Abbott, (c) Dainippon, or (d) the remaining Holders of Registrable Securities as a group, respectively, shall dispose of more than 250,000 shares of Registrable Securities within any three-month period after the date of this Agreement pursuant to a registration made under Sections 3.2 or 3.12 above; PROVIDED, HOWEVER, that if Hyline, Abbott, or Dainippon wishes to so dispose of more than 250,000 shares of Registrable Securities in any such period, it may do so provided that (i) it delivers to the Company a written notice not less than ninety (90) days prior to the date on which shares in excess of 250,000 will be disposed of stating its desire to so dispose of Registrable Securities and setting forth the aggregate number of shares that Hyline, Abbott, or Dainippon wishes to so dispose of in the such three-month period and (ii) the Company does not receive a writing from its principal investment banker or equivalent financial advisor advising the Company that marketing factors require a limitation of the number of shares to be underwritten at such time, which limitation would otherwise be exceeded by the registration of in excess of 250,000 shares of Registrable Securities by Hyline, Abbott, or Dainippon.

3.18 SUBSEQUENT RIGHTS. If, after the date of this Agreement, the Company shall grant registration rights to a third party different from the rights set forth in this Section 3, the following shall apply on each such occasion until the right set forth in this Section 3.18 is exercised:

(i) The Company shall first deliver to each of Hyline, Abbott, and Dainippon a written notice (the "NOTICE") setting forth the material terms of such subsequent registration rights (the "SUBSEQUENT RIGHTS").

(ii) For a period of thirty (30) days after the receipt of the Notice (the "NOTICE PERIOD"), Hyline, Abbott and Dainippon shall each have the right, but not the obligation, to surrender its registration rights under this Section 3 and agree to accept and be bound by the terms of the Subsequent Rights (the "EXCHANGE RIGHT"). If Hyline, Abbott and/or Dainippon chooses to so exercise the Exchange Right, it shall deliver a written notice of such intent to the Company and enter into an agreement with the Company pursuant to which it will surrender its

registration rights under this Section 3 and the Company will grant to Hyline, Abbott and/or Dainippon, as appropriate, the Subsequent Rights.

(iii) To the extent that Hyline, Abbott, or Dainippon declines to exercise the Exchange Right within the Notice Period, it shall retain its registration rights and the Exchange Right under this Section 3 with respect to future Subsequent Rights, if any, and shall not be entitled to, nor bound by, the Subsequent Rights so declined.

4. ADDITIONAL RIGHTS.

4.1 RIGHT OF FIRST REFUSAL. Subsequent to the terms and conditions specified in this Section 4.1, and subject to any limitations imposed by applicable laws governing the nature and extent of foreign investment in companies domiciled in the U.S., the Company hereby grants to each Shareholder, so long as such Shareholder holds at least 50,000 Shares (or, in the case of a holder of the Hyline Warrant, the portion of such warrant so held represents the right to purchase at least 50,000 Shares) (as subsequently adjusted for subsequent stock splits, stock dividends or recapitalization) (the "RIGHTHOLDER"), a right of first offer with respect to future sales by the Company of its New Securities (as hereinafter defined). For purposes of this Section 4.1, the term Rightholder includes any partners, shareholders or affiliates of the Rightholder. The Rightholder shall be entitled to apportion the right of first offer hereby granted among itself and its partners, shareholders and affiliates in such proportions as it deems appropriate.

(a) In the event the Company proposes to issue New Securities, it shall give the Rightholder written notice (the "NOTICE") of its intention stating (i) a description of the New Securities it proposes to issue, (ii) the number or shares of New Securities it proposes to offer, (iii) the price per share at which, and other terms on which, it proposes to offer such New Securities and (iv) the number of shares that the Rightholder has the right to purchase under this Section 4.1, based on the Rightholder's Percentage (as defined in Section 4.1(d)(ii)).

(b) Within thirty (30) days after the Notice is given (in accordance with Section 5.5), the Rightholder may elect to purchase, at the price specified in the Notice, up to the number of shares of the New Securities proposed to be issued that the Rightholder has the right to purchase as specified in the Notice. An election to purchase shall be made in writing and must be given to the Company within such thirty (30) day period (in accordance with Section 5.5). The closing of the sale of New Securities by the Company to the participating Rightholder upon exercise of its rights under this Section 4.1 shall take place simultaneously with the closing of the sale of New Securities to third parties. Notwithstanding the foregoing, the thirty-day period set forth above shall be fifteen (15) days with respect to the holder(s) of the Hyline Warrant, other than a Shareholder who holds other Shares in addition to such Hyline Warrant.

(c) The Company shall have ninety (90) days after the last date on which the Rightholder's right of first offer lapsed to enter into an agreement (pursuant to which the sale of New Securities covered thereby shall be closed, if at all, within forty-five (45) days from the execution thereof) to sell the New Securities which the Rightholder did not elect to purchase under this Section 4.1, at or above the price and upon terms not materially more favorable to the purchasers of such securities than the terms specified in the initial Notice given in connection with such sale. In the event the Company has not entered into an agreement to sell

the New Securities within such ninety (90) day period (or sold and issued New Securities in accordance with the foregoing within forty-five days from the date of said agreement), the Company shall not thereafter issue or sell any New Securities without first offering such New Securities to the Rightholder in the manner provided in this Section 4.1.

(d) (i) "NEW SECURITIES" shall mean any shares of, or securities convertible into or exercisable for any shares of, any class of the Company's capital stock; provided that "NEW SECURITIES" does not include : (i) the Shares or the Common Stock issuable upon conversion thereof; (ii) securities issued pursuant to the acquisition of another business entity by the Company by merger, purchase of substantially all of the assets of such entity, or other reorganization whereby the Company owns not less than a majority of the voting power of such entity; (iii) shares or options to purchase shares, of the Company's Common Stock and the shares of Common Stock issuable upon exercise of such options, issued pursuant to any arrangement approved by the Board of Directors to employees, officers and directors of, or consultants, advisors or other persons performing services for, the Company; (iv) shares of the Company's Common Stock or Preferred Stock of any series issued in connection with any stock split, stock dividend or recapitalization of the Company; (v) Common Stock issued upon exercise of warrants, options or convertible securities if the issuance of such warrants, options or convertible securities was a result of the exercise of the right of first offer granted under this Section 4.1 or was subject to the right of first offer granted under this Section 4.1; (vi) capital stock or warrants or options for the purchase of shares of capital stock issued by the Company to a lender in connection with any loan or lease financing transaction; and (vii) securities sold to the public in an offering pursuant to a registration statement filed with the Securities and Exchange Commission under the Act.

(ii) The applicable "PERCENTAGE" for the Rightholder shall be the number of shares of New Securities calculated by dividing (i) the total number of shares of Common Stock owned by the Rightholder (assuming conversion of all shares of Preferred Stock and exercise of the Hyline Warrant) by (ii) the total number of shares of Common Stock outstanding at the time the Notice is given (assuming conversion of all shares of Preferred Stock and exercise of the Hyline Warrant); PROVIDED, HOWEVER, that IPR shall not be entitled to purchase more than that number of shares of New Securities the aggregate purchase price of which is equal to the cumulative sum of \$25,000 for each calendar quarter that has elapsed from June 26, 1990 until the time of exercise of the right of first offer provided by this Section 4.1, less the aggregate purchase price of any New Securities already purchased by the Rightholder pursuant to this Section 4.1; provided that in no case may the number of shares of capital stock of the Company owned by the Rightholder equal or exceed 25.1% of the total number of outstanding shares of capital stock of the Company.

(e) The right of first offer granted under this Section 4.1 shall expire upon the earlier of (a) March 31, 1998, or (b) following the consummation of the Company's sale of its Common Stock in a bona fide, firm commitment underwriting pursuant to a registration statement on Form S-1 under the Act which results in aggregate gross cash proceeds to the Company in excess of \$7,500,000 and the public offering price of which is not less than \$600 per share (as subsequently adjusted to reflect subsequent stock dividends, stock splits or recapitalization)(other than a registration statement relating either to the sale of securities to

employees of the Company pursuant to a stock option, stock purchase or similar plan or a SEC Rule 145 transaction).

(f) The right of first offer granted under this section may be assigned by the Rightholder to a transferee or assignee of the Rightholder's shares of the Company's stock acquiring the lesser of (a) at least 50,000 of the Rightholder's shares of the Company's Common Stock (treating all shares of Preferred Stock for this purpose as though converted into Common Stock and the Hyline warrant as having been exercised) (equitably adjusted for any stock splits, subdivision stock dividends, changes, combinations or the like) or (b) all of the Rightholder's remaining shares of the Company's stock. In the event that the Rightholder shall assign its right of first offer pursuant to this Section 4.1 in connection with the transfer of less than all of its shares of the Company's stock, the Rightholder shall also retain its right of first offer.

5. MISCELLANEOUS.

5.1 ASSIGNMENT. Subject to the provisions of Section 3.13 hereof, the terms and conditions of this Restated Rights Agreement shall inure to the benefit of and be binding upon the respective successors and assigns of the parties hereto.

5.2 THIRD PARTIES. Nothing in this Restated Rights Agreement, express or implied, is intended to confer upon any party, other than the parties hereto, and their respective successors and assigns, any rights, remedies, obligations or liabilities under or by reason of this Restated Rights Agreement, except as expressly provided herein.

5.3 GOVERNING LAW. This Restated Rights Agreement shall be governed by and construed under the laws of the State of California in the United States of America.

5.4 COUNTERPARTS. This Restated Rights Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

5.5 NOTICES. Any notice required or permitted by this Agreement shall be in writing and shall be sent by prepaid registered or certified mail, return receipt requested (or if the addressee and addresser are in different countries, by prepaid registered or certified airmail, return receipt requested, or by facsimile with confirmation of receipt), and addressed, if to the Company, to its principal offices, or if to a Shareholder, to the address for such Shareholder set forth on Exhibit A hereto. Such notice shall be deemed to have been given when receipt is so confirmed.

5.6 SEVERABILITY. If one or more provisions of this Restated Rights Agreement are held to be unenforceable under applicable law, portions of such provisions, or such provisions in their entirety, to the extent necessary, shall be severed from this Restated Rights Agreement, and the balance of this Restated Rights Agreement shall be enforceable in accordance with its terms.

5.7 AMENDMENT AND WAIVER. Any provision of this Restated Rights Agreement may be amended with the written consent of the Company and the Holders of at least a majority of the outstanding shares of the Registrable Securities. Any amendment or waiver

effected in accordance with this paragraph shall be binding upon each Holder of Registrable Securities, and the Company. In addition, the Company may waive performance of any obligation owing to it, as to some or all of the Holders of Registrable Securities, or agree to accept alternatives to such performance, without obtaining the consent of any Holder of Registrable Securities. In the event that an underwriting agreement is entered into between the Company and any Holder, and such underwriting agreement contains terms differing from this Restated Rights Agreement, as to any such Holder the terms of such underwriting agreement shall govern.

5.8 EFFECT OF AMENDMENT OR WAIVER. Each Shareholder and its successors and assigns acknowledge that by the operation of Section 5.7 hereof the holders, of a majority of the outstanding Registrable Securities, acting in conjunction with the Company, will have the right and power to diminish or eliminate all rights pursuant to this Restated Rights Agreement.

5.9 RIGHTS OF HOLDERS. Each holder of Registrable Securities shall have the absolute right to exercise or refrain from exercising any right or rights that such holder may have by reason of this Restated Rights Agreement, including, without limitation, the right to consent to the waiver or modification of any obligation under this Restated Rights Agreement, and such holder shall not incur any liability to any other holder of any securities of the Company as a result of exercising or refraining from exercising any such right or rights.

5.10 DELAYS OR OMISSIONS. No delay or omission to exercise any right, power or remedy accruing to any party to this Restated Rights Agreement, upon any breach or default of the other party, shall impair any such right, power or remedy of such nonbreaching party nor shall it be construed to be a waiver of any such breach or default, or an acquiescence therein, or of or in any similar breach or default thereafter occurring; nor shall any waiver of any such breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. Any waiver, permit, consent or approval of any kind or character on the part of any party of any breach or default under this Restated Rights Agreement, or any waiver on the part of any party of any provisions or conditions of this Restated Rights Agreement, must be made in writing and shall be effective only to the extent specifically set forth in such writing. All remedies, either under this Restated Rights Agreement, or by law or otherwise afforded to any holder, shall be cumulative and not alternative.

IN WITNESS WHEREOF, the parties hereto have executed this Tenth Amended and Restated Rights Agreement as of the day and year first above written.

COMPANY:

SHAREHOLDERS:

RIBOGENE, INC.

By: _____

Abbott Laboratories

(Print or Type Name of Shareholder)

Title: _____

By: _____

Title: _____

(Print or Type Name of Shareholder)

By: _____

Title: _____

(Print or Type Name of Shareholder)

By: _____

Title: _____

EXHIBIT A

SCHEDULE OF SHAREHOLDERS

Abbott Laboratories
100 Abbott Park Road
Abbott Park, IL 60064-3500
Attn: Dr. Al Harris

Institute of Protein Research of the Russian
Academy of Sciences
142292 Puschino
Moscow Region, Russia

Biotechnology Investments Limited (2)
c/o Domain Associates
One Palmer Square
Princeton, NJ 08542
Attn: Kathleen Shoemaker

Dominion Fund II
Dominion Ventures, Inc.
44 Montgomery Street
San Francisco, CA 94104

Oxford Bioscience Partners L.P.
Oxford Bioscience Partners (Bermuda) Limited
Partnership
Oxford Bioscience Partners (Adjunct), L.P.
650 Town Center Drive, Ste. 810
Cost Mesa, CA 92626
Attn: Edmund Olivier

Michael J. Ross
1065 Hayne Road
Hillsborough, CA 94010

CW Ventures II, L.P.
1041 Third Avenue
New York, NY 10021
Attn: Charles Hartman

Domain Partners II, L.P.
One Palmer Square
Princeton, NJ 08542

Vladimir I. Baranov
646 Foothill Drive
Pacifica, CA 94044

Sierra Ventures III
Sierra Ventures III International
3000 Sand Hill Road
Menlo Park, CA 94025
Attn: Petri Vainio

Jack Chirikjian
8726 Hickory Bend Trail
Potomac, MD 20854

Kleiner Perkins Caulfield & Byers V
KPCB Zaibatsu Fund I
Menlo Park, CA 94025
Attn: Alexander Barkas

JMC Family Partnership
c/o Jack Chirikjian
8726 Hickory Bend Trail
Potomac, MD 20854

Grace A. Cruz
1693 Chianti Way
Oakley, CA 94561

Aperture Associates, L.P.
c/o Horsley Keogh Associates
505 Montgomery Street
San Francisco, CA 94112
Attn: Dan Reeve

Thomas E. Davis
2642 Ulloa Street
San Francisco, CA 94116

- - - - -
(2) These shares will be held under the record name of "Old Court Limited."

SCHEDULE OF SHAREHOLDERS (CON'T.)

Holly Marcum
2642 Ulloa Street
San Francisco, CA 94116

Michael W. Hall
1716 Fulton Street
Palo Alto, CA 94303

Pam Grace Versaw and Timothy T. Revak, as
Joint Tenants with Rights of Survivorship
23121 Mora Glen Drive
Los Altos, CA 94022

Joel Kirschbaum
6132 Johnston Drive
Oakland, CA 94611

Hyline Laboratories, Inc.
100 Banks Avenue
Rockville Center, NY 11570

Silicon Valley Bank
3000 Lakeside Drive
Santa Clara, CA 95054

Rip Grossman & Associates, Inc.
4200 Somerset Drive, Suite 101
Prairie Village, KS 66208

SBC Capital Markets, Inc.
141 West Jackson Boulevard
Chicago, IL 60604
Attn: _____

Dr. Judith Donaldson
Donaldson Capital Management Corporation
401 South LaSalle Street, Suite 1306
Chicago, IL 60605

Bios Equity Fund, L.P.
401 South LaSalle Street, Suite 1306
Chicago, IL 60605
Attn: _____

Dainippon Pharmaceutical Co., Ltd.
8 Doschomachi 2 chome, Chuo-ku
Osaka 541-0045
Japan
Attention: President

AMENDMENT NO. 1 TO THE SERIES E PREFERRED STOCK PURCHASE
AGREEMENT (THE "AGREEMENT")

RiboGene, Inc. (the "Company"), and Abbott Laboratories hereby agree to amend and restate Section 9.1(a) of the Agreement in its entirety as follows:

(a) INITIAL PUBLIC OFFERING. In the event that, within three years from the date of this Agreement, the Company consummates a sale of capital stock in a bona fide, firm commitment underwriting pursuant to a registration statement under the Securities Act (other than a registration statement relating either to the sale of securities to employees of the Company pursuant to a stock option, stock purchase or similar plan or an SEC Rule 145 transaction) with an aggregate Price to Public of not less than \$20,000,000 (inclusive of the Purchaser's purchase of stock hereunder) (the "INITIAL PUBLIC OFFERING"), the Purchaser will purchase for cash from the Company shares of the Company's capital stock at the Price to Public stated on the front cover of the final prospectus distributed in connection with such offering. Such purchase shall be consummated as a private transaction which shall close simultaneous with the closing of the Initial Public Offering, which shares shall be subject to registration rights to be negotiated and agreed to by the parties. The number of securities to be purchased shall be equal to \$4,000,000 divided by the Price to Public, rounded to the nearest whole share. The Purchaser's obligations under this subsection (a) shall be conditioned upon the Company delivering to the Purchaser written notice of the Initial Public Offering at least twenty days prior to the consummation thereof.

Dated as of the 9th day of October, 1997.

COMPANY:

RiboGene, Inc.

By: -----

Title: -----

PURCHASER:

Abbott Laboratories

By: -----

Title: -----

STOCK PURCHASE AGREEMENT

RIBOGENE, INC.

MAY 29, 1998

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STOCK PURCHASE AGREEMENT

THIS STOCK PURCHASE AGREEMENT (the "Agreement") is made and entered into as of May 29, 1998 (the "Effective Date"), by and between RIBOGENE, INC., a Delaware corporation ("RIBOGENE"), and ABBOTT LABORATORIES, an Illinois corporation ("ABBOTT").

RECITALS

A. RIBOGENE and ABBOTT are parties to that certain Series E Preferred Stock Purchase Agreement, as amended, dated as of April 26, 1996 (the "Series E Purchase Agreement"), whereby ABBOTT covenants to purchase shares of RIBOGENE capital stock upon the occurrence of an Initial Public Offering (as such term is defined in the Series E Purchase Agreement) if the aggregate Price to Public of the Initial Public Offering is not less than \$16,000,000 (exclusive of the Shares, which Shares are defined below).

B. ABBOTT purchased and currently owns 1,555,556 shares of RIBOGENE's Series E Preferred Stock pursuant to the Series E Purchase Agreement, which shares will be converted to shares of common stock of RIBOGENE upon the closing of the Initial Public Offering and which shares are hereinafter referred to as the "Initial Shares."

C. Pursuant to Section 9 of the Series E Purchase Agreement, RIBOGENE desires to sell and issue to ABBOTT, and ABBOTT desires to buy, shares of RIBOGENE's common stock, as provided herein.

NOW, THEREFORE, the Parties hereto agree as follows:

1. PURCHASE AND SALE.

Subject to the terms and conditions hereof, and in reliance upon the representations, warranties and agreements contained herein, RIBOGENE hereby agrees to issue and sell to ABBOTT, and ABBOTT hereby agrees to purchase from RIBOGENE, the aggregate number of shares of RIBOGENE's Common Stock (the "Shares") determined in accordance with Subsection 1.1 hereof.

1.1 SALE OF SHARES. On the Closing Date (as defined in Subsection 1.2), RIBOGENE shall issue and sell to ABBOTT, and ABBOTT shall purchase from RIBOGENE for \$4,000,000, the number of shares of RIBOGENE's Common Stock (the "Shares") equal to the quotient of \$4,000,000 (the "Purchase Price") divided by the Per Share Price (as hereinafter defined). In the event the number of Shares includes a fraction of a share, the number of Shares shall be rounded to the nearest whole number of shares and the Purchase Price shall be adjusted to equal the Per Share Price times such whole number of Shares. The Per Share Price shall be the Price to Public stated on the front cover of the final prospectus distributed in connection with the Initial Public Offering.

1.2 CLOSING DATE. The closing of the sale and purchase of the Shares (the "Closing") shall take place on the date of the closing of the Initial Public Offering (the "Closing Date").

1.3 DELIVERY. At the Closing, RIBOGENE will deliver to ABBOTT a certificate registered in the name of ABBOTT, representing the Shares to be purchased by ABBOTT from RIBOGENE, dated the Closing Date, against payment of the Purchase Price by wire transfer, a check made payable to the order of RIBOGENE, or any combination thereof.

1.4 "MARKET STAND-OFF" AGREEMENTS. ABBOTT hereby agrees that prior to the first anniversary of the Closing Date, it shall not sell or otherwise transfer or dispose of any of the Shares held by it. RIBOGENE may impose stop-transfer instructions with respect to securities subject to the foregoing restrictions until the end of the applicable periods.

2. REPRESENTATIONS AND WARRANTIES OF RIBOGENE.

RIBOGENE hereby represents and warrants to ABBOTT as follows:

2.1 ORGANIZATION AND STANDING; CERTIFICATE AND BYLAWS.

RIBOGENE is a corporation duly organized, validly existing and in good standing under the laws of the State of Delaware, and has full power and authority to own and operate its properties and assets and to carry on its business as presently conducted and as proposed to be conducted. RIBOGENE is qualified as a foreign corporation to do business in each jurisdiction in the United States in which the ownership of its property or the conduct of its business requires such qualification, except where any statutory fines or penalties or any corporate disability imposed for the failure to qualify would not materially adversely affect RIBOGENE, its assets, financial condition or operations. True and correct copies of RIBOGENE's Amended and Restated Certificate of Incorporation and Bylaws currently in effect have been delivered to ABBOTT.

2.2 AUTHORIZATION.

All corporate action on the part of RIBOGENE, its officers, directors and stockholders necessary for the authorization, execution and delivery of this Agreement, the performance of all of RIBOGENE's obligations hereunder, and for the authorization, issuance, sale and delivery of the Shares has been taken or will be taken prior to Closing. This Agreement, when executed and delivered, shall constitute a valid and legally binding obligation of RIBOGENE in accordance with its terms, subject to laws of general application relating to bankruptcy, insolvency and the relief of debtors, and subject to general equity principles.

2.3 VALIDITY OF SHARES.

The sale of the Shares is not subject to any preemptive rights or rights of first refusal that have not been waived and, when issued, sold and delivered in compliance with the provisions of this Agreement, the Shares will be validly issued, fully paid and non-assessable, and will be free of any liens or encumbrances created by RIBOGENE; PROVIDED, HOWEVER, that the Shares may be subject to restrictions on transfer under state and/or federal securities laws as set forth herein or as otherwise required by such laws at the time a transfer is proposed.

2.4 OFFERING.

Assuming the accuracy of the representations and warranties of ABBOTT contained in Section 3 hereof, the offer, issue, and sale of Shares are exempt from the registration and prospectus delivery requirements of the 1933 Act, and the Shares have been registered or qualified (or are exempt from registration and qualification) under the registration, permit, or qualification requirements of all applicable state securities laws.

2.5 NO CONFLICT; NO VIOLATION. The execution, delivery and performance of this Agreement and consummation of the transactions contemplated hereby will not (a) conflict with any provisions of the Amended and Restated Certificate of Incorporation or Bylaws of RIBOGENE; (b) result in any material violation or default of, or permit the acceleration of any obligation under (in each case, upon the giving of notice, the passage of time, or both), any material mortgage, indenture, lease, agreement or other instrument, permit, franchise, license, judgment, order, decree, law, ordinance, rule or regulation applicable to RIBOGENE or its properties.

2.6 CONSENTS AND APPROVALS. All consents, approvals, orders, or authorizations of, or registrations, qualifications, designations, declarations, or filings with, any governmental authority, required on the part of RIBOGENE in connection with the valid execution and delivery of this Agreement, the offer, sale or issuance of the Shares, or the consummation of any other transaction contemplated hereby have been obtained, or will be effective at the Closing, except for notices required or permitted to be filed with certain state and federal securities commissions after the Closing, which notices will be filed on a timely basis.

3. REPRESENTATIONS AND WARRANTIES OF ABBOTT.

ABBOTT hereby represents and warrants to RIBOGENE as follows:

3.1 LEGAL POWER. It has the requisite legal power to enter into this Agreement, to purchase the Shares hereunder, and to carry out and perform its obligations under the terms of this Agreement.

3.2 DUE EXECUTION. This Agreement has been duly authorized, executed and delivered by it, and, upon due execution and delivery by RIBOGENE, this Agreement will be a valid and binding agreement of it.

3.3 INVESTMENT REPRESENTATIONS.

(a) It is acquiring the Shares for its own account, not as nominee or agent, for investment and not with a view to, or for resale in connection with, any distribution or public offering thereof within the meaning of the 1933 Act.

(b) It understands that (i) the Shares have not been registered under the 1933 Act by reason of a specific exemption therefrom, that they must be held by it indefinitely, and that it must, therefore, bear the economic risk of such investment indefinitely, unless a subsequent disposition thereof is registered under the 1933 Act or is exempt from such registration; (ii) each certificate representing the Shares will be endorsed with the following legend:

"THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED OR HYPOTHECATED UNLESS (A) PURSUANT TO SEC RULE 144 OR (B) THERE IS AN EFFECTIVE REGISTRATION STATEMENT UNDER THE 1933 ACT COVERING SUCH SECURITIES OR (C) RIBOGENE, INC.

RECEIVES AN OPINION OF COUNSEL FOR THE HOLDER OF THESE SECURITIES REASONABLY SATISFACTORY TO RIBOGENE, INC., STATING THAT SUCH SALE, TRANSFER, ASSIGNMENT OR HYPOTHECATION IS EXEMPT FROM THE REGISTRATION AND PROSPECTUS DELIVERY REQUIREMENTS OF THE 1933 ACT."

and (iii) RIBOGENE will instruct any transfer agent not to register the transfer of any of the Shares unless the conditions specified in the foregoing legend are satisfied.

ABBOTT shall have the right to demand removal of the foregoing legend with respect to any or all of the Shares if, in the opinion of counsel to RIBOGENE, removal of such legend is permitted by the rules and regulations of the SEC.

(c) It has been furnished with such materials and has been given access to such information relating to RIBOGENE as it or its qualified representative has requested and it has been afforded the opportunity to ask questions regarding RIBOGENE and the Shares, all as it has found necessary to make an informed investment decision.

(d) It is an "accredited investor" within the meaning of Regulation D under the 1933 Act.

(e) It was not formed for the specific purpose of acquiring the Shares offered hereunder.

4. REGISTRATION OF SHARES AND INITIAL SHARES.

4.1 REGISTRATION. The registration rights provided herein are without prejudice to the registration rights contained in the Series E Purchase Agreement and pertinent exhibits thereto, as amended. The term "Registrable Shares" means the Shares and the Initial Shares. If RIBOGENE shall receive at any time after the one year anniversary of the Closing Date a written request from ABBOTT covering the Registrable Shares then outstanding that RIBOGENE file a registration statement under the 1933 Act, then RIBOGENE shall file as soon as practicable, and in any event within thirty (30) days of the receipt of such request, a registration statement with the SEC (the "Registration") under the 1933 Act covering all Registrable Shares which Abbott requests to be registered. In connection with such Registration RIBOGENE will:

(a) promptly give written notice of the proposed Registration, and any related qualification or compliance, to ABBOTT; and

(b) as soon as practicable, effect such Registration and all such qualifications and compliances as may be so requested and as would permit or facilitate the sale and distribution of all of ABBOTT's Shares; PROVIDED, HOWEVER, that RIBOGENE shall not be obligated to effect any such Registration, qualification or compliance pursuant to this Section 4:

(i) if RIBOGENE shall furnish to ABBOTT a certificate signed by the Chairman of the Board of Directors of RIBOGENE stating that in the good faith judgment of the Board of Directors of RIBOGENE, it would be seriously detrimental to RIBOGENE and its stockholders for such Registration to be effected at such time, in which event RIBOGENE shall

have the right to defer the filing of the registration statement for a period of not more than ninety (90) days; PROVIDED, that such right to delay shall be exercised by RIBOGENE not more than once in any twelve (12) month period, or

(ii) in any particular jurisdiction in which RIBOGENE would be required to qualify to do business or to execute a general consent to service of process in effecting such Registration, qualification or compliance.

(c) ABBOTT hereby covenants that prior to the first anniversary of the Closing, it shall not exercise its registration rights under Section 3 of that certain Tenth Amended and Restated Rights Agreement, dated March 23, 1998.

4.2 EXPENSES OF REGISTRATION. Except as specifically provided herein, all expenses incurred in connection with a Registration, qualification or compliance pursuant to this Section 4 ("Registration Expenses") shall be borne by RIBOGENE. All underwriting discounts and selling commissions applicable to such Registration shall be borne by ABBOTT. RIBOGENE shall not, however, be required to pay for expenses of any Registration proceeding begun pursuant to this Section 4 which has been subsequently withdrawn at the request of ABBOTT unless the withdrawal is based upon material adverse information concerning RIBOGENE of which ABBOTT was not aware at the time such Registration was initiated.

4.3 OBLIGATIONS OF RIBOGENE. When required to effect the Registration of the Shares, RIBOGENE shall, as expeditiously as reasonably possible:

(a) Prepare and file with the SEC a registration statement with respect to such Registrable Shares and use all reasonable efforts to cause such registration statement to become effective, and keep such registration statement effective until ABBOTT has completed the distribution related thereto.

(b) Prepare and file with the SEC such amendments and supplements to such registration statement and the prospectus used in connection with such registration statement as may be necessary to comply with the provisions of the 1933 Act with respect to the disposition of the Registrable Shares covered by such registration statement for the period set forth in paragraph (a) above.

(c) Furnish to ABBOTT such number of copies of a prospectus, including a preliminary prospectus, in conformity with the requirements of the 1933 Act, and such other documents as they may reasonably request in order to facilitate the disposition of the Registrable Shares then owned by them.

(d) Use its reasonable best efforts to register and qualify the Registrable Shares covered by such registration statement under such other securities or Blue Sky laws of such jurisdictions as shall be reasonably requested by ABBOTT; PROVIDED that RIBOGENE shall not be required in connection therewith or as a condition thereto to qualify to do business or to file a general consent to service of process in any such states or jurisdictions.

(e) In the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the

managing underwriter(s) of such offering. Should ABBOTT participate in such underwriting, ABBOTT shall also enter into and perform its obligations under such an agreement.

(f) Notify ABBOTT of the happening of any event as a result of which the prospectus included in such registration statement, as then in effect, includes an untrue statement of a material fact or omits to state a material fact required to be stated therein or necessary to make the statements therein not misleading in the light of the circumstances then existing.

(g) Use its best efforts to furnish, on the date that such Registrable Shares are delivered to the underwriters for sale, if such Registrable Shares are being sold through underwriters, (i) an opinion, dated as of such date, of the counsel representing RIBOGENE for the purposes of such Registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and (ii) a letter dated as of such date, from the independent certified public accountants of RIBOGENE, in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering addressed to the underwriters.

4.4 DELAY OF REGISTRATION; FURNISHING INFORMATION.

(a) ABBOTT shall not have any right to obtain or seek an injunction restraining or otherwise delaying any such Registration as the result of any controversy that might arise with respect to the interpretation or implementation of this Section 4.

(b) It shall be a condition precedent to the obligations of RIBOGENE to take any action pursuant to this Section 4 that ABBOTT shall furnish to RIBOGENE such information regarding themselves, the Shares held by them and the intended method of disposition of such Shares as shall be required to effect the registration of the Shares.

5. CONDITIONS TO CLOSING.

5.1 CONDITIONS TO OBLIGATIONS OF ABBOTT. ABBOTT's obligation to purchase the Shares at the Closing is subject to the fulfillment, at or prior to the Closing, of all of the following conditions:

(a) REPRESENTATIONS AND WARRANTIES TRUE; PERFORMANCE OF OBLIGATIONS. The representations and warranties made by RIBOGENE in Section 2 hereof shall be true and correct in all material respects on the date of the Closing with the same force and effect as if they had been made on and as of said date; and RIBOGENE shall have performed all obligations and conditions herein required to be performed by it on or prior to the Closing.

(b) COMPLETION OF INITIAL PUBLIC OFFERING. The Company shall have completed its Initial Public Offering.

(c) QUALIFICATIONS, LEGAL INVESTMENT. All authorizations, approvals, or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful sale and issuance of the Shares pursuant to this Agreement shall have been duly obtained and shall be effective on and as of the Closing.

No stop order or other order enjoining the sale of the Shares shall have been issued and no proceedings for such purpose shall be pending or, to the knowledge of RIBOGENE, threatened by the SEC or any commissioner of corporations or similar officer of any other state having jurisdiction over this transaction. At the time of the Closing, the sale and issuance of the Shares shall be legally permitted by all laws and regulations to which ABBOTT and RIBOGENE are subject.

(d) CERTIFICATE. The Chief Executive Officer of RIBOGENE shall have delivered to ABBOTT a certificate certifying that the aggregate Price to Public is not less than \$20,000,000 (inclusive of the Shares) as specified in Section 9 of the Series E Purchase Agreement and that the representations and warranties set forth in Section 2 hereof are true and correct, with the same force and effect as if they had been made on the Closing Date.

(e) OPINION OF COUNSEL. Counsel for RIBOGENE shall have delivered to ABBOTT an opinion, dated the Closing Date, substantially to the effect that, on the basis of facts and representation set forth in such opinion or set forth in writing elsewhere and referred to therein:

(i) RIBOGENE has been duly incorporated and is a validly existing corporation in good standing under the laws of the State of Delaware, with corporate power and authority to own its properties and conduct its business as described in Section 2.1 hereof.

(ii) RIBOGENE has corporate power to enter into and perform its obligations under this Agreement.

(iii) The Shares have been duly authorized and validly issued and are fully paid and non-assessable and, to the best of their knowledge and information, have not been issued in violation of or are not otherwise subject to any preemptive rights or other similar rights.

(iv) Assuming the accuracy of the representations and warranties of ABBOTT contained in Section 3, hereof, the offer, issue and sale of the Shares will be exempt from the registration and prospectus delivery requirements of the 1933 Act, and the Shares have been registered or qualified (or are exempt from registration and qualification) under the registration, permit, or qualification requirements of all applicable state securities laws.

(v) The form of certificate used to evidence the Shares is in due and proper form and complies with all applicable statutory requirements.

5.2 CONDITIONS TO OBLIGATIONS OF RIBOGENE. RIBOGENE's obligation to issue and sell the Shares at the Closing is subject to the fulfillment to RIBOGENE's satisfaction, on or prior to the Closing, of the following conditions:

(a) REPRESENTATIONS AND WARRANTIES TRUE. The representations and warranties made by ABBOTT in Section 3 hereof shall be true and correct at the date of the Closing, with the same force and effect as if they had been made on and as of said date.

(b) PERFORMANCE OF OBLIGATIONS. ABBOTT shall have performed and complied with all agreements and conditions herein required to be performed or complied with by it on or before the Closing.

(c) QUALIFICATIONS, LEGAL INVESTMENT. All authorizations, approvals, or permits, if any, of any governmental authority or regulatory body of the United States or of any state that are required in connection with the lawful sale and issuance of the Shares pursuant to this Agreement shall have been duly obtained and shall be effective on and as of the Closing. No stop order or other order enjoining the sale of the Shares shall have been issued and no proceedings for such purpose shall be pending or, to the knowledge of RIBOGENE, threatened by the SEC or any commissioner of corporations or similar officer of any state having jurisdiction over this transaction. At the time of the Closing, the sale and issuance of the Shares shall be legally permitted by all laws and regulations to which ABBOTT and RIBOGENE are subject.

6. MISCELLANEOUS.

6.1 GOVERNING LAW. This Agreement shall be governed by and construed under the laws of the State of Delaware as applied to agreements among Delaware residents, made and to be performed entirely within the State of Delaware.

6.2 SUCCESSORS AND ASSIGNS. Except as otherwise expressly provided herein, the provisions hereof shall inure to the benefit of, and be binding upon, the successors, assigns, heirs, executors, and administrators of the parties hereto.

6.3 ENTIRE AGREEMENT. This Agreement and any other documents delivered pursuant hereto constitute the full and entire understanding and agreement among the parties with regard to the subjects hereof, and no party shall be liable or bound to any other party in any manner by any representations, warranties, covenants, or agreements except as specifically set forth herein or therein. Nothing in this Agreement, express or implied, is intended to confer upon any party, other than the parties hereto and their respective successors and assigns, any rights, remedies, obligations, or liabilities under or by reason of this Agreement, except as expressly provided herein.

6.4 SEVERABILITY. In case any provision of this Agreement shall be invalid, illegal, or unenforceable, it shall, to the extent practicable, be modified so as to make it valid, legal and enforceable and to retain as nearly as practicable the intent of the parties, and the validity, legality, and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

6.5 AMENDMENT AND WAIVER. Any term of this Agreement may be amended and the observance of any term of this Agreement may be waived (either generally or in a particular instance, either retroactively or prospectively, and either for a specified period of time or indefinitely), with the written consent of RIBOGENE and ABBOTT. Any amendment or waiver effected in accordance with this Section shall be binding upon ABBOTT, each future holder of the Shares, and RIBOGENE.

6.6 DELAYS OR OMISSIONS. No delay or omission to exercise any right, power, or remedy accruing to ABBOTT or any subsequent holder of any Shares upon any breach, default

or noncompliance of RIBOGENE under this Agreement, shall impair any such right, power, or remedy, nor shall it be construed to be a waiver of any such breach, default or noncompliance, or any acquiescence therein, or of any similar breach, default or noncompliance thereafter occurring. It is further agreed that any waiver, permit, consent, or approval of any kind or character on ABBOTT's part of any breach, default or noncompliance under this Agreement or any waiver on ABBOTT's part of any provisions or conditions of this Agreement must be in writing and shall be effective only to the extent specifically set forth in such writing, and that all remedies, either under this Agreement, by law, or otherwise afforded to ABBOTT, shall be cumulative and not alternative.

6.7 NOTICES, ETC. All notices and other communications required or permitted hereunder shall be in writing and shall be deemed effectively given (a) upon personal delivery, (b) on report of successful transmission by facsimile machine that automatically generates a printed report indicating whether transmission was completed successfully, at the conclusion of each transmission, (c) on the first business day after receipted delivery to a courier service which guarantees next business-day delivery, under circumstances in which such guaranty is applicable, or (d) on the earlier of delivery or five (5) business days after mailing by United States certified by mail, postage and fees prepaid, to the appropriate party at the address set forth below or to such other address as the part so notifies the other in writing:

(a) if to RIBOGENE, to:

RIBOGENE, INC.
26118 Research Road
Hayward, CA 94545
Attention: President and Chief Executive
Officer

with a copy to:

COOLEY GODWARD LLP
5 Palo Alto Square, 4th Floor
3000 El Camino Real
Palo Alto, CA 94306-2155
Facsimile: (650) 857-0663
Attention: Robert J. Brigham, Esq.

(b) if to ABBOTT, to:

ABBOTT LABORATORIES
100 Abbott Park Road
Abbott Park, IL 60064-3500
Facsimile: (847) 938-5383
Attention: President, Pharmaceutical Products
Division

with a copy to:

ABBOTT LABORATORIES
100 Abbott Park Road
Abbott Park, IL 60064-3500
Facsimile: (847) 939-6277
Attention: General Counsel

Notwithstanding the foregoing, all notices and other communications to an address outside of the United States shall be sent by telecopy and confirmed in writing to be sent by first class mail.

6.8 TITLES AND SUBTITLES. The titles of the sections and subsections of this Agreement are for convenience of reference only and are not to be considered in construing this Agreement.

6.9 COUNTERPARTS. This Agreement may be executed in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute one instrument.

The foregoing Agreement is hereby executed as of the date first above written.

RIBOGENE, INC.

ABBOTT LABORATORIES

By: _____

By: _____

Printed Name:_____

Printed Name:_____

Title:_____

Title:_____