

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

SCHEDULE 13D
Under the Securities Exchange Act of 1934*

CytoTherapeutics, Inc.
(Name of Issuer)

Common Stock
(Title of Class of Securities)

232923 10 2
(CUSIP Number)

CytoTherapeutics, Inc.

Frederic A. Eustis, III, Secretary
Two Richmond Square, Providence, RI 02906 (401) 272-3310
(Name, Address and Telephone Number of Person Authorized
to Receive Notices and Communications)

December 12, 1996
(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 which is the subject of this Schedule 13D, and is filing this schedule of Rule 13d-1(b)(3) or (4), check the following box [].

Check the following box if a fee is being paid with this statement. [X] (A fee is not required only if the reporting person: (1) has a previous statement on file reporting beneficial ownership of more than five percent of the class of securities described in Item 1; and (2) has filed no amendment subsequent thereto reporting beneficial ownership of less than five percent of such class). (See Rule 13d-7.)

Note: This document is being electronically filed with the Commission, using the EDGAR system. Additionally, one paper copy of the filing will subsequently be sent to the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

*The remainder of this cover page should 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 on 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) Names of Reporting Persons S.S. or I.R.S. Identification Nos. of Above Persons

Genentech, Inc.
94-2347624

(2) Check the Appropriate Box if a Member of a Group
Not Applicable (a) [] (b) []

(3) SEC Use Only

(4) Source of Funds
WC

(5) Check if Disclosure of Legal Proceedings is Required Pursuant to Items 2(d) or 2(e) []

(6) Citizenship or Place of Organization

Delaware

Number of	(7)	Sole Voting Power: 1,329,171 shares of Common Stock.
Shares Bene-	(8)	Shared Voting Power:
fici ally		0
Owned by	(9)	Sole Dispositive Power: 1,329,171 shares of Common Stock.
Each	(10)	Shared Dispositive Power:
Reporting		0
Person		

(11) Aggregate Amount Beneficially Owned by Each Reporting Person:
1,329,171 shares of Common Stock.

(12) Check if the Aggregate Amount in Row (11) Excludes
Certain Shares []
Not Applicable

(13) Percent of Class Represented by Amount in Row (11)

8.2% of Common Stock

(14) Type of Reporting Person (See Instructions)

C0

ITEM 1: SECURITY AND ISSUER

1. Class of Securities: Common Stock
2. Issuer: CytoTherapeutics, Inc. ("CTI")
3. Principal Address: Two Richmond Square, Providence, RI 02906

ITEM 2: IDENTITY AND BACKGROUND

- a. Reporting Person: Genentech, Inc. ("Genentech")
- b. Place of Organization: Delaware
- c. Principal Business: Pharmaceutical company
- d. Principal Business Address: 460 Point San Bruno Blvd., South San Francisco, CA 94080
- e. Principal Office: As above
- f. Criminal Convictions: None
- g. Civil Adjudication of Violation of Securities Laws: None

Attached hereto as Exhibit A is a list of Genentech's executive officers and directors as required by Instruction C to Schedule 13D.

ITEM 3: SOURCE AND AMOUNT OF FUNDS

Pursuant to the terms of a Common Stock Purchase Agreement between Genentech and CTI (collectively, the "Parties") dated as of November 22, 1996 (the "Purchase Agreement"), Genentech purchased 829,171 shares of CTI's Common Stock, par value \$.01 per share (the "CTI Common Stock") for \$10.01 per share. The total purchase price of \$8,300,000 for the CTI Common Stock was paid in cash from Genentech's working capital.

ITEM 4: PURPOSE OF TRANSACTION

The purpose of the purchase of the shares of Common Stock described in Item 3 is investment. Depending on its evaluation of CTI's business, prospects, financial condition, the market for CTI securities, other opportunities available to Genentech, general economic conditions, general market conditions, other future developments and the contractual restrictions described in Item 6, Genentech may decide to sell some or all of its investment in the capital stock of CTI through open market sales or in negotiated transactions, to or through one or more broker dealers, or in underwritten offerings, block trades, agency placements, brokerage transactions or otherwise. Depending on the same factors, Genentech may in the future purchase additional capital stock of CTI as described below or enter into hedging or similar transactions.

The Parties entered into a Development Collaboration and License Agreement Relating to Parkinson's Disease dated as of November 22, 1996 (the "Collaboration Agreement"). Pursuant to the Collaboration Agreement, CTI will perform pre-clinical and clinical development of Neurturin in CTI's proprietary delivery technology for Parkinson's Disease (the "Licensed Product"). Upon commercialization, Genentech will market the Licensed Product worldwide, will share profits from such commercialization in the United States with CTI, and will pay CTI a royalty on sales of such Licensed Product outside the United States. CTI will retain manufacturing rights and will be paid manufacturing costs for Licensed Product supplied by CTI.

Under the Collaboration Agreement, should Genentech decide to proceed from Phase I to a Phase II clinical trial of the Licensed Product, Genentech will purchase additional shares of CTI Common Stock. In addition, Genentech may purchase additional shares of CTI Common Stock if the costs and expenses of pre-clinical or clinical development of the Licensed Product exceed those expected and agreed upon in advance by Genentech and CTI.

Under the Collaboration Agreement, should Genentech decide to proceed to Phase III trials of the Licensed Product, Genentech will bear the costs of development outside the United States, Genentech and CTI will share the costs of development in the United States, and Genentech will fund CTI's share of such United States development costs by means of a loan (with interest on the outstanding principal amount) that CTI will be entitled to draw down upon to cover such costs (the "Loan"). CTI will be entitled to prepay the Loan or any portion thereof at any time on at least one hundred eighty (180) days advance notice to Genentech, and the outstanding Loan will be required to be repaid in full by CTI within one hundred eighty (180) days after the earlier of (i) seven (7) years from the date funds are first drawn down by CTI or (ii) the earlier of (A) the completion of the analysis of all United States Phase III clinical trials of the Licensed Product, (B) termination of the last such United States Phase III clinical trial, or (C) termination of the Collaboration Agreement in accordance with its terms (except that if the Collaboration Agreement is terminated in accordance with its terms due to Genentech's uncured default thereunder, CTI will be obligated to repay only fifty percent (50%) of the outstanding Loan). CTI will be entitled to make any payment to Genentech under such Loan in whole or in part in the form of cash or shares of CTI Common Stock (at the then prevailing market price).

Under the Collaboration Agreement, (a) if the amount of funding provided by Genentech is greater than the Phase I or Phase II development costs incurred by CTI for the Licensed Product, and (b) if the amount of such overfunding is greater than \$1,000,000, and (c) if Genentech has determined not to proceed forward with the development program or the Collaboration Agreement has been terminated in accordance with its terms (except that if the Collaboration Agreement is terminated in accordance with its terms due to Genentech's uncured default thereunder, CTI will be entitled to retain overfunding in an amount equal to CTI's already incurred costs for development work under the Collaboration Agreement), then in such circumstances and subject to the foregoing Genentech shall be entitled to deliver to CTI that number of shares of CTI Common Stock equal to the amount of such overfunding divided by the price for such CTI Common Stock originally paid by Genentech and CTI must pay to Genentech the amount of such overfunding.

Except as described in the foregoing, Genentech does not have any other plan or proposal relating to, or which would result in, any event described in (a) - (j) of the instructions to this Item 4.

ITEM 5: INTEREST IN SECURITIES OF ISSUER

- a. Beneficial Ownership by Genentech: 1,329,171
 Percentage Ownership by Genentech: 8.2%

To the best of Genentech's knowledge, none of the persons listed on Exhibit A hereto beneficially owns any Common Stock of CTI.

- b. Sole Voting Power of Genentech: 1,329,171
 Shared Voting Power: 0
 Sole Dispositive Power of Genentech: 1,319,171
 Shared Dispositive Power: 0

To the best of Genentech's knowledge, none of the persons listed on Exhibit A hereto has any sole or shared power to vote or to direct the vote of any CTI Common Stock nor sole or shared power to dispose of or direct the disposition of any CTI Common Stock.

- c. Recent Transactions: Except as set forth in Item 3 above, no transactions in CTI's Common Stock have been effected during the past 60 days by Genentech nor, to the best of its knowledge, by any of the persons listed on Exhibit A hereto.

- d. Receipt of dividends, etc.: Not applicable
- e. Ownership below 5%: Not applicable

ITEM 6: CONTRACTS, ARRANGEMENTS, UNDERSTANDINGS OR RELATIONSHIP WITH RESPECT TO SECURITIES OF THE ISSUER

Under the Purchase Agreement, Genentech has the right to include shares of the CTI Common Stock in a registration of securities of CTI at any time at least one (1) year after the closing of the transaction pursuant to the Purchase Agreement.

Under the Purchase Agreement, Genentech has agreed that during each Restricted Period (as hereinafter defined) it will not, except as otherwise required by law and except to comply with contractual commitments entered into prior to the start of such Restricted Period, sell or agree to sell any shares of CTI capital stock or purchase or sell any options, puts, calls or other securities with respect to CTI's capital stock during a Restricted Period. During each Restricted Period, CTI has agreed that it will not, except as otherwise required by law and except to comply with contractual commitments entered into prior to the start of such Restricted Period, purchase or agree to purchase any shares of its capital stock or purchase or sell any options, puts, calls or other securities with respect to CTI's capital stock (except that such restriction shall not prohibit CTI from issuing stock options, shares of stock or other awards under its stock option, 401(k), employee stock purchase or other similar plans). For purposes of the foregoing, the term "Restricted Period" means a period beginning ten (10) days prior to the first day used in calculating the 20 Day Average (as hereinafter defined) and ending on the day following the last day used in calculating such 20 Day Average, and the "20 Day Average" means the twenty (20) day trading period for shares of CTI Common Stock preceding the closing date agreed upon by the Parties for additional purchases of CTI Common Stock by Genentech as contemplated by the Parties under the Purchase Agreement, as described in Item 4 above.

Under the Purchase Agreement, Genentech has agreed that without the prior consent of the board of directors of CTI, Genentech will not at any time directly or indirectly acquire (or offer to or agree to acquire) any shares or rights or options to acquire shares of CTI Common Stock if following such action Genentech would beneficially own in excess of ten percent (10%) of outstanding CTI Common Stock, except that the foregoing shall not limit any additional purchases of CTI Common Stock by Genentech as contemplated by the Parties under the Purchase Agreement, as described in Item 4 above.

Under the Purchase Agreement, Genentech has agreed that without the prior consent of the board of directors of CTI, Genentech will not make or become a participant in any solicitation of proxies to vote shares of CTI Common Stock, or seek to advise or influence any person with respect to the voting of any voting securities of CTI, or form, joint in or participate in a group with respect to any voting securities of CTI.

ITEM 7: EXHIBITS

Exhibit 1: Additional information regarding Item 2 hereof.

Exhibit 2: Purchase Agreement

Exhibit 3: Collaboration Agreement(1)

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(1) Confidential portions have been omitted. CTI intends to seek confidential treatment of such portions in connection with the filing of the Collaboration Agreement as an Exhibit to its Current Report on Form 8-K.

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.

Date: December 23, 1996

GENENTECH, INC.

/s/ Stephen G. Juelsgaard
Stephen G. Juelsgaard
Vice President and
General Counsel

EXHIBIT 1

ITEM 2 (ADDITIONAL INFORMATION):

LIST OF EXECUTIVE OFFICERS AND DIRECTORS OF GENENTECH, INC.

NAME	Present Principal Occupation
EXECUTIVE OFFICERS	
William R. Arathoon	Vice President, Process Sciences
Gregory P. Baird	Vice President, Corporate Communications
David W. Beier	Vice President, Government Affairs
Robert L. Garnick, Ph.D.	Vice President, Quality
Marty Glick	Vice President and Treasurer
Bradford S. Goodwin	Vice President and Controller
Susan D. Desmond-Hellman	Vice President, Medical Affairs
Dennis Henner	Vice President, Research Technology
Judy Heyboer	Senior Vice President, Human Resources
Paul F. Hohenschuh	Vice President, Manufacturing
Edmon R. Jennings	Vice President, Corporate Development
Stephen G. Juelsgaard	Vice President, General Counsel and Assistant Secretary
Cynthia J. Ladd	Vice President, Corporate Law
Louis J. Lavigne, Jr.	Senior Vice President and Chief Financial Officer
Arthur D. Levinson, Ph.D.	Director and President and Chief Executive Officer
Ted W. Love	Vice President, Product Development
M. David MacFarlane, Ph.D.	Vice President, Regulatory Affairs
John P. McLaughlin	Executive Vice President and Secretary
Polly Moore	Vice President, Information Resources
James P. Panek	Vice President, Engineering & Facilities
Kim Popovits	Vice President, Sales

David Roche Senior Vice President, Sales & Marketing
Nicholas J. Simon, III Vice President, Business and
Corporate Development
David Stump Vice President and Genentech Fellow
William D. Young Executive Vice President

DIRECTORS

Herbert W. Boyer, Ph.D. Director of Genentech
Dr. Jurgen Drews President, International Research and
Development of the Roche Group
Dr. Franz B. Humer Director and Head of the Pharmaceuticals
Division of Roche Holding Ltd
Linda Fayne Levinson President of Fayne Levinson Associates,
Inc.
J. Richard Munro Chairman of the Executive Committee of
the Board of Time Warner Inc.
Donald L. Murfin General Manager of Chemical and
Materials Enterprise Associates, L.P.
John T. Potts, Jr., M.D. Physician-in-Chief at Massachusetts
General Hospital
C. Thomas Smith, Jr. President and Chief Executive Officer of
VHA, Inc.
Robert A. Swanson Chairman of the Board of Genentech, Inc.
David S. Tappan, Jr. Director of Genentech, Inc.

MAILING ADDRESS FOR ALL

EXECUTIVE OFFICERS AND DIRECTORS:

460 Point San Bruno Boulevard
South San Francisco, CA 94080-4990

During the last five years: (i) none of the individuals described above has been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); and (ii) none of the individuals described above has been a party to a civil proceeding of a judicial or administrative body of competent jurisdiction which 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. Each of the individuals listed above is a U.S. citizen, except Dr. Humer who is a citizen of Switzerland and Dr. Drews who is a citizen of Germany.

COMMON STOCK PURCHASE AGREEMENT

This Common Stock Purchase Agreement (the "Agreement") is made and entered into as of the 22nd day of November 1996, by and between CytoTherapeutics, Inc., a Delaware corporation ("CTI"), and Genentech, Inc., a Delaware corporation ("Genentech").

Recital

The parties hereto are entering into to a Development Collaboration and License Agreement relating to Parkinson's Disease of even date herewith (the "Development Agreement"), pursuant to which the parties have agreed to collaborate on the development and commercialization of products consisting of certain encapsulated-neurotrophic-factor-producing cells for the treatment of Parkinson's Disease. Pursuant to the terms of the Development Agreement, and subject to the terms and conditions of this Agreement, Genentech has agreed to purchase, and CTI has agreed to sell to Genentech, shares of CTI's Common Stock, \$.01 par value ("Common Stock").

Agreement

In consideration of the mutual covenants and agreements hereinafter set forth, the parties to this Agreement agree as follows:

1. Sale and Purchase of Common Stock. In reliance upon the representations and warranties contained herein and subject to the terms and conditions hereof, CTI agrees to sell and issue to Genentech, and Genentech agrees to purchase from CTI, at one or more Closings as identified in the table below (each, a "Closing"), for the aggregate Total Purchase Price (as referred to below) for such Closing the aggregate number of shares of Common Stock (the "Shares") equal to the Total Purchase Price for such Closing divided by the Per Share Purchase Price (as referred to below) for such Closing rounded down to the nearest whole number as referred to below:

Closing	Purchase/ Development Agr. Provision	Event	Closing Date	Per Share Purchase Price	Total Purchase Price
1.	Initial Equity Purchase [Section 8.01]*	First public announcement of the signing of the Development Agreement	30 days after the date hereof or on such other date as the parties may agree.	110% of 20 Day Average	\$8,300,000

2.	Additional Initial Equity Purchase, if agreed upon [Sections 4.07(a) and 8.01(a)]*	Upon mutual agreement on additional projected expenses under the Development Agreement	As determined pursuant to the Development Agreement	20 Day Average	To be determined based on agreed upon additional projected expenses under the Development Agreement.
3.	Phase II Equity Purchase [Section 8.01(b)]*	Prior to start of the Clinical Development Program	As determined pursuant to the Development Agreement	20 Day Average	To be determined pursuant to the Development Agreement based on agreed upon Phase II Clinical Development.
4.	Additional Phase II Equity Purchase, if agreed upon [Sections 4.07(b) and 8.01(b)]*	Upon mutual agreement on additional projected expenses exceeding Phase II Equity Purchase amount	As determined pursuant to Development Agreement	20 Day Average	To be determined based on agreed upon additional projected expenses exceeding original Phase II Equity Purchase amount.

*References are to sections of the Development Agreement.

Each Closing shall be held at the offices of CTI, Two Richmond Square, Providence, Rhode Island 02906 on the date, in the case of the first purchase, that is thirty (30) days after the date hereof, or on such other date as the parties may agree. Subsequent Closings shall occur at the times indicated above and in the Development Agreement. Payment for the Shares shall be by wire transfer to an account designated by CTI against the delivery by CTI of a stock certificate evidencing the Shares to be sold at such Closing. The date of each such Closing is called a "Closing Date."

The "Per Share Purchase Price" of Shares at each Closing shall be equal to the average (the "20 Day Average") of the high and the low price of a share of Common Stock on the NASDAQ National Market System or if not there quoted on a National Security Exchange or other market on which the Common Stock is then traded as agreed upon by the parties) for the twenty (20) trading day period preceding the Closing Date for each Closing, except that in the case of the first Closing above the 20 Day Average shall be based on the ten (10) trading days before and ten (10) trading after the date of the first public announcement by the parties of the Development Agreement.

Other capitalized terms used herein without further definition shall have the meanings ascribed thereto in the Development Agreement.

2. Representations and Warranties of CTI. Except as set forth on a Disclosure Schedule (the "Disclosure Schedule"), which shall be updated and provided to Genentech prior to each Closing, CTI represents and warrants to Genentech as follows:

(a) Organization and Standing. CTI is a corporation duly organized, and validly existing under the laws of the State of Delaware and is in good standing under such laws. CTI is duly qualified to do business as a foreign corporation in the State of Rhode Island.

(b) Authorization. This Agreement has been duly authorized, executed and delivered by CTI and constitutes the valid and binding obligation of CTI, enforceable in accordance with its terms. The Shares have been duly authorized and, when delivered against payment therefore in accordance with the terms hereof, will be duly and validly issued and outstanding, fully paid and nonassessable, and are free to Genentech of any liens, encumbrances and restrictions (except as set forth in Section 7).

(c) Authorized Capital Stock. The authorized capital stock of CTI consists of 45,000,000 shares of Common Stock, 15,428,576 of which were outstanding as of October 31, 1996, and 1,000,000 shares of Preferred Stock, \$.01 par value (the "Preferred Stock"), none of which are outstanding. No person has any right of first refusal or any preemptive rights in connection with the issuance of the Shares, or with respect to any future, offer sale or issuance of securities by CTI.

(d) Compliance With Other Instruments. CTI is not in violation of any term of its Certificate of Incorporation or Bylaws, or any material agreement, mortgage, indenture, debenture, trust, instrument, judgment, decree, order, law, statute, rule or governmental regulation to which it is subject (the "Other Instruments"). The execution, delivery and performance of this Agreement and the issuance and sale of the Shares or the taking of any other action contemplated by this Agreement will not result in any violation of or be in conflict with or constitute a default (with or without notice, lapse of time or both) under any of the Other Instruments.

(e) Litigation. Except as set forth in the Disclosure Schedule or the SEC Documents, there are no litigation, claims, actions, proceedings or investigations pending against CTI.

(f) Governmental Consents. Except for filings required to comply with (i) state and federal securities' laws, and (ii) the NASDAQ National Market System, no permit, consent, approval or authorization of, or declaration to or filing with, any governmental authority is required in connection with the execution, delivery or performance of this Agreement or the sale of the Shares pursuant hereto.

(g) SEC Documents; Financial Statements. CTI has filed all the documents (the "SEC Documents") required to be filed by it with the Securities and Exchange Commission (the "SEC") under Sections 13, 14(a), and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), since the date on which its last Annual Report on Form 10-K was filed. As of their respective filing dates, the SEC Documents complied in all material respects with the requirements of the Exchange Act or the Securities Act of 1933, as amended (the "Act"), as applicable. The SEC Documents did not, as of their respective dates, contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements made therein, in light of the circumstances under which they were made, not misleading. The financial statements of CTI included in such documents (the "Financial Statements") comply as to form in all material respects with applicable accounting requirements and with all applicable published rules and regulations of the SEC with respect thereto. Except as may be indicated in the notes to the Financial Statements or, in the case of unaudited statements, as permitted by Form 10-Q of the SEC, the Financial Statements have been prepared in accordance with generally accepted accounting principles consistently applied and fairly present the consolidated financial position of CTI at the dates thereof and the consolidated results of its operations and consolidated cash flows for the periods then ended (subject, in the case of unaudited statements, to normal year-end adjustments).

(h) No Material Change. Since the end of the most recent fiscal quarter of CTI for which a Quarterly Report on Form 10-Q has been filed with the SEC, there has been no material adverse change in the business, prospects, financial condition, net worth or results of operations of CTI, other than changes occurring in the ordinary course of business which changes have not, individually or in the aggregate, had a material adverse effect on the business, prospects, properties or financial condition of CTI.

3. Representations and Warranties of Genentech. Genentech represents and warrants to CTI that:

(a) Investment Intent. The Shares are being acquired by Genentech solely for its own account, for investment purposes only, and with no present intention of distributing, selling or otherwise disposing of them.

(b) Economic Risk; Sophistication. Genentech is able to bear the economic risk of an investment in the Shares and can afford to sustain a total loss on such investment and has such knowledge and experience in financial and business matters that it is capable of evaluating the merits and risks of the proposed investment and therefore has the capacity to protect its own interests in connection with the purchase of the Shares.

(c) Authority. Genentech has all requisite power and authority to enter into this Agreement and perform its obligations hereunder, and this Agreement constitutes a valid and binding obligation of Genentech enforceable against Genentech in accordance with its terms.

(d) Accredited Investor. Genentech is an "accredited investor" within the meaning of Rule 501 of Regulation D promulgated under the Act.

4. Conditions.

4.1. Genentech's Conditions to Closing. Genentech's obligation to purchase the Shares at each Closing is subject to the satisfaction, prior to or at such Closing, of the following conditions:

(a) Representations and Warranties. The representations and warranties contained in Section 2 shall be true, correct and complete in all material respects on and as of such Closing Date as though made on and as of such Closing Date and CTI shall have delivered Genentech an updated Disclosure Schedule in advance of such Closing.

(b) Compliance Certificate. Genentech shall have received a certificate of an officer of CTI certifying that CTI has performed and complied with all conditions and agreements required to be performed or complied with by it prior to such Closing under this Agreement and certifying as to the matters set forth in paragraph (a).

(c) Certificates. Genentech shall have received: (i) a copy of CTI's Certificate of Incorporation, as amended, certified by the Secretary of State of the State of Delaware; (ii) a certificate of the Secretary of State of the State of Delaware as to the legal existence and good standing of CTI and listing all amendments to CTI's Certificate of Incorporation then on file in his office; and (iii) a copy, certified by the Secretary of CTI, of the resolutions adopted by the directors of CTI authorizing the execution and delivery of this Agreement and the Development Agreement, the issuance, sale and delivery of the Shares hereunder, and the performance of all other obligations of CTI contemplated by this Agreement and the Development Agreement.

4.2. CTI Conditions to Closing. CTI's obligation to issue and sell the Shares is subject to the satisfaction, prior to or at each Closing, of the following condition:

(a) Representations and Warranties. The representation and warranties contained in Section 3 shall be true, correct and complete in all material respects on and as of such Closing Date as though made on and as of such Closing Date.

5. Information. CTI will provide to Genentech copies of all reports (financial or otherwise) mailed to CTI's stockholders generally. Such reports shall be sent to Genentech simultaneous with the mailing of such reports to CTI's other stockholders.

6. Covenants of Genentech and CTI. The parties agree as follows:

(a) Standstill. Genentech agrees that, without the prior written consent of the Board of Directors of CTI, Genentech will not, at any time, directly or indirectly in any manner whatsoever, acquire, or offer to or agree to acquire any shares or any rights or options to acquire shares of CTI Common Stock if following such action Genentech would beneficially own (as defined under the Act) in excess of ten percent (10%) of CTI's outstanding Common Stock; provided, however, that the foregoing shall not in any way limit purchases of CTI Common Stock provided for in the Development Agreement. In addition, Genentech agrees that, without the prior written consent of the Board of Directors of CTI, Genentech will not (a) make, or in any way become a "participant" in any "solicitation" of "proxies" (as such terms are defined in Regulation 14A under the Exchange Act) to vote shares of Common Stock, or seek to advise or influence any person with respect to the voting of any voting securities of CTI, or (b) form, join or in any way participate in a "group" (within the meaning of Section 13(d)(3) of the Exchange Act) with respect to any voting securities of CTI.

(b) Actions Affecting CTI Stock Price. During each Restricted Period (as defined below) (i) Genentech agrees that, except as otherwise required by law and except to comply with contractual commitments entered into prior to the start of such Restricted Period, it will not sell or agree to sell any shares of CTI capital stock, or purchase or sell any options, puts, calls or other securities with respect to CTI stock during a Restricted Period, and (ii) CTI agrees that, except as otherwise required by law and except to comply with contractual commitments entered into prior to the start of such Restricted Period, it will not purchase or agree to purchase any shares of its capital stock or purchase or sell any options, puts, calls or other securities relating to CTI stock, provided that the foregoing restriction shall not prohibit CTI from issuing stock options, shares of stock or other awards under its stock option, 401(k), employee stock purchase or other similar plans.

The term "Restricted Period" shall mean, with respect to each period used in calculating a 20 Day Average hereunder, a period beginning (10) days prior to the first day used in calculating such 20 Day Average and ending on the day following the last day used in calculating such 20 Day Average.

7. Restrictions on Transfer. None of the Shares purchased hereunder shall be sold, transferred, assigned, pledged, hypothecated or otherwise disposed of unless and until one of the following events shall have occurred:

(a) Compliance With the Act. Such securities are disposed of pursuant to and in conformity with an effective registration statement filed with the SEC pursuant to the Act or pursuant to Rule 144 of the SEC thereunder; or

(b) Opinion of Counsel. Genentech shall have delivered to CTI a written opinion by counsel which is reasonably acceptable to CTI to the effect that the proposed transfer is exempt from the registration and prospectus delivery requirements of the Act.

The parties hereto further agree that any certificate evidencing the Shares shall bear the following legend in addition to any legend required to comply with state securities law:

THE SECURITIES EVIDENCED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, HAVE BEEN ACQUIRED FOR INVESTMENT, AND MAY NOT BE SOLD, TRANSFERRED, ASSIGNED, PLEDGED, HYPOTHECATED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR AN EXEMPTION THEREFROM.

8. Registration Rights.

8.1. Certain Definitions. As used in this Agreement, the following terms shall have the following respective meanings:

"Registrable Securities" shall mean (i) the Shares and (ii) any Common Stock of CTI issued or issuable with respect to, or in exchange for or in replacement of (a) the Shares. or (b) other securities convertible into or exercisable for Common Stock issued upon any stock split, stock dividend, recapitalization, or similar event; provided, however, that such shares of Common Stock or other securities shall only be treated as Registrable Securities for the purposes of Section 8.2 if and for 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) otherwise transferred to a transferee in whose hands such shares are not (1) restricted securities under the Act or (2) subject to the volume limitations of Rule 144.

The term "register," "registered" and "registration" refer to a registration effected by preparing and filing a registration statement in compliance with the Act, and the declaration or ordering of the effectiveness of such registration statement.

"Registration Expenses" shall mean all expenses, except as otherwise stated below, incurred by CTI, in complying with Section 8.2 hereof, including, without limitation, all registration, qualification and filing fees, printing expenses, escrow fees, fees and disbursements of counsel for CTI, blue sky fees and expenses, the expense of any special audits incident to or required by any such registration (but excluding the compensation of

regular employees of CTI which shall be paid in any event by CTI) and up to \$25,000 for fees and disbursements of one counsel to the holders of CTI's Common Stock participating in such registration.

"Selling Expenses" shall mean all underwriting discounts, selling commissions and stock transfer taxes and fees applicable to the securities registered by Genentech and disbursements of counsel to Genentech, if any, in excess of the \$25,000 payable to one counsel for the holders of CTI's Common Stock participating in such registration as provided in the definition of the Registration Expenses.

8.2. Piggyback Registration Rights.

(a) Notice of Registration. If, at any time after the date that is one (1) year from the initial Closing Date, CTI shall determine to register any of its securities, either for its own account or the account of a security holder or holders, other than (i) a registration relating solely to employee benefit plans, or (ii) a registration relating solely to a Rule 145 transaction, CTI will:

(i) promptly give Genentech written notice thereof;
and

(ii) include in such registration (and any related qualification under blue sky laws or other compliance), and in any underwriting involved therein, all the Registrable Securities specified in a written request, made within 20 days after receipt of such written notice from the CTI, by Genentech.

(b) Underwriting. If the registration of which CTI gives notice is for a registered public offering involving an underwriting, CTI shall so advise Genentech as a part of the written notice given pursuant to Section 8.2. In such event the right of Genentech to registration pursuant to Section 8.2 shall be conditioned upon Genentech's participation in such underwriting and the inclusion of Registrable Securities in the underwriting to the extent provided herein. In such event Genentech (together with all other holders of Common Stock proposing to distribute their securities through such underwriting and CTI) shall enter into an underwriting agreement in customary form with the managing underwriter selected for such underwriting by CTI. Notwithstanding any other provision of this Section 8.2, if the managing underwriter determines that marketing factors require a limitation of the number of shares to be underwritten, the managing underwriter may limit the securities to be distributed through such underwriting. CTI shall so advise all holders of Common Stock distributing their securities through such underwriting of such limitation and the number of shares of Genentech's Registrable Securities that may be included in the registration and underwriting shall be allocated among all such holders in proportion, as nearly as practicable, to the respective amounts of securities eligible to be included in such registration held by such holders at the time of filing the

registration statement. To facilitate the allocation of shares in accordance with the above provisions, CTI may round the number of shares allocated to any holder to the nearest 100 shares. If, in the case of a registration initiated pursuant to the exercise by other holders of CTI's Common Stock of so-called "demand" registration rights, the managing underwriter selected for such registration determines that marketing factors require a limitation of the number of shares to be underwritten, Genentech shall have no right to include any shares of its Registrable Securities in such registration unless all shares requested by the holders exercising such "demand" registration rights to be included in such registration are permitted to be included in such registration. If Genentech disapproves of the terms of any such underwriting, Genentech may elect to withdraw therefrom by written notice to CTI and the managing underwriter. Any securities excluded or withdrawn from such underwriting shall be withdrawn from such registration, and shall not be transferred in a public distribution prior to 90 days after the effective date of the registration statement relating thereto, or such other shorter period of time as the underwriters may require.

(c) Right to Terminate Registration. CTI shall have the right to terminate or withdraw any registration initiated by it under this Section 8.2 prior to the effectiveness of such registration whether or not Genentech or any other holder of Common Stock has elected to include securities in such registration. The Registration Expenses of such withdrawn registration shall be borne by CTI in accordance with Section 8.3 hereof.

8.3. Expenses of Registration. All Registration Expenses incurred in connection with registrations pursuant to this Section 8 shall be borne by CTI. All Selling Expenses relating to securities registered on behalf of Genentech shall be borne by Genentech and holders of securities included in such registration pro rata with CTI and among each other on the basis of the number of shares so registered.

8.4. Representations of Genentech. Notwithstanding anything to the contrary contained herein, in connection with any underwritten offering, Genentech shall not be required to make any representations or warranties to or agreements with CTI or the underwriters except as relate to Genentech, the Registrable Securities held by it and its intended method of distribution.

8.5. Registration Procedures. In the case of each registration, qualification or compliance effected by CTI pursuant to this Section 8 in which Genentech participates, CTI will keep Genentech advised in writing as to the initiation of each registration, qualification and compliance and as to the completion thereof. At its expense CTI will:

(a) Prepare and file with the SEC a registration statement with respect to such securities and use its best efforts to cause such registration statement to become

and remain effective for at least one hundred eighty (180) days or until the distribution described in the Registration Statement has been completed;

(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 Genentech and to the underwriters, if any, such reasonable number of copies of the registration statement, preliminary prospectus, final prospectus and such other documents as Genentech and underwriters may reasonably request in order to facilitate the public offering of such securities;

(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 Genentech, provided that CTI 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. Genentech shall also enter into and perform its obligations under such an agreement;

(f) Notify Genentech at any time when a prospectus relating thereto is required to be delivered under the Act or 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) As soon as practicable after the effective date of the registration statement, and in any event within 16 months thereafter, have "made generally available to its security holders" (within the meaning of Rule 158 under the Act) an earnings statement (which need not be audited) covering the period of at least twelve months beginning after the effective date of the registration statement and otherwise complying with Section 11(a) of the Act;

(h) Furnish, at the request of Genentech, on the date that such Registrable Securities are delivered to the underwriters for sale in connection with a registration pursuant to this Section 8 if being sold through underwriters, or, if such securities are not being sold through underwriters, on the date the registration statement becomes effective, (i) an opinion, dated such date, of the counsel representing CTI 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 Genentech and (ii) a letter dated such date, from the independent accountants of CTI, in form and substance as is customarily given by independent accountants to underwriters in an underwritten public offering, addressed to the underwriters, if any, and to Genentech; and

(i) Make available for inspection by Genentech and any underwriter participating in any distribution pursuant to such registration statement, and any attorney, accountant or financial advisor retained by Genentech or underwriter, financial and other pertinent records, pertinent corporate documents and properties of CTI, and cause CTI's officers, directors and employees to supply information reasonably requested by Genentech, and any such underwriter, attorney, accountant or financial advisor in connection with such registration statement.

(j) Use its best efforts to list the securities covered by such registration statement with any securities exchange on which the Common Stock of CTI is then listed.

8.6. Indemnification.

(a) CTI will indemnify Genentech, each of its officers, directors, partners, employees and affiliates, and legal counsel, and each person controlling Genentech within the meaning of the Act, with respect to which registration, qualification or compliance has been effected pursuant to this Section 8, and each underwriter for Genentech, if any, and each person who controls any underwriter within the meaning of the Act, against all expenses, claims, losses, damages or liabilities (joint or several) (or actions in respect thereof), including any of the foregoing incurred in settlement of any litigation, commenced or threatened, arising out of or based on any untrue statement (or alleged untrue statement) of a material fact contained in any registration statement, prospectus (preliminary or final), offering circular or other document, or any amendment or supplement thereto, incident to any such registration, qualification or compliance, and any documents filed under state securities laws in connection therewith, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances in which they were made, not misleading, or any violation by CTI of the Act, the Exchange Act, and state securities laws or any rule or regulation promulgated thereunder applicable to CTI in connection with any such registration, qualification or compliance, and CTI will reimburse, as incurred, Genentech, each of its officers, directors, partners, and legal counsel and each person controlling Genentech, each such underwriter and each person who controls any such underwriter, for any legal and any other expenses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability or action, provided that CTI will not

be liable in any such case to the extent that any such claim, loss, damage, liability or expense arises out of or is based on any untrue statement or omission or alleged untrue statement or omission, made in reliance upon and in conformity with written information furnished to CTI by an instrument duly executed by Genentech, controlling person or underwriter and stated to be specifically for use therein.

(b) Genentech will, if Registrable Securities held by Genentech are included in the securities as to which such registration, qualification or compliance is being effected, indemnify CTI, each of its directors, officers, employees, affiliates and legal counsel, each underwriter, if any, of CTI's securities covered by such a registration statement, each person who controls CTI or such underwriter within the meaning of the Act, and each other holder of CTI's securities, each of their officers, directors, partners, employees, affiliates and legal counsel and each person controlling such holder within the meaning of the Act, against all claims, losses, damages and liabilities (or actions in respect thereof) arising out of or based on any untrue statement or alleged untrue statement) of a material fact contained in any such registration statement, prospectus, offering circular or other document, or any omission (or alleged omission) to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement (or alleged untrue statement) or omission (or alleged omission) is made in such registration statement, prospectus, offering circular or other document in reliance upon and in conformity with written information furnished to CTI by an instrument duly executed by Genentech and stated to be specifically for use therein, and will reimburse, as incurred, CTI, such other holders, such directors, officers, persons, underwriters or control persons for any legal or any other expenses reasonably incurred in connection with investigating or defending any such claim, loss, damage, liability or action to the extent entitled to indemnification hereunder. Notwithstanding the foregoing, the liability of Genentech under this subsection (b) shall be limited to an amount equal to the net proceeds to Genentech of Registrable Securities sold as contemplated herein, unless such liability resulted from willful misconduct by Genentech. Genentech will not be required to enter into any agreement or undertaking in connection with any registration under this Section 8 providing for any indemnification or contribution on the part of Genentech greater than Genentech's obligations under this Section 8.6.

(c) Each party entitled to indemnification under this Section 8.6 (the "Indemnified Party") shall give notice to the party required to provide indemnification (the "Indemnifying Party") promptly after such Indemnified Party has actual knowledge of any claim as to which indemnity may be sought, and shall permit the Indemnifying Party, if it so desires, to assume the defense of any such claim or any litigation resulting therefrom, provided that counsel for the Indemnifying Party, who shall conduct the defense of such claim or litigation, shall be approved by the Indemnified Party (whose approval shall not unreasonably be withheld), and the Indemnified Party

may participate in such defense at such party's expense, and provided further that the failure of any Indemnified Party to give notice as provided herein shall not relieve the Indemnifying Party of its obligations under this Section 8.4, except and only to the extent that the failure to give such notice is materially prejudicial to an Indemnifying Party's ability to defend such action and provided further, that the Indemnifying Party shall not be entitled to assume the defense for matters as to which there is a conflict of interest or separate and different defenses but shall bear the expense of such defense nevertheless. No Indemnified Party shall consent to the entry of any judgment or enter into any settlement without the prior written consent of the Indemnifying Party, which consent shall not be unreasonably withheld; and in no event shall it be unreasonable so to withhold consent to entry of any judgment or any settlement which does not include as an unconditional term thereof the giving by the claimant or plaintiff to such Indemnified Party of a release from all liability in respect to such claim or litigation.

8.7. Information by Holder. In the event Genentech elects to include Registrable Securities in any registration, Genentech shall furnish to CTI such information regarding Genentech, the Registrable Securities held by them and the distribution proposed by Genentech as CTI may request in writing and as shall be required in connection with any registration, qualification or compliance referred to in this Section 8.

8.8. Rule 144 Reporting. With a view to making available the benefits of certain rules and regulations of which may at any time permit the sale of the restricted securities to the public without registration, CTI agrees to use its best efforts to:

(a) Make and keep public information available, as those terms are understood and defined in Rule 144 under the Act, at all times during which CTI is subject to the reporting requirements of the Act or the Exchange Act;

(b) Use its best efforts to file with the SEC in a timely manner all reports and other documents required of CTI under the Act and the Exchange Act (at all times during which it is subject to such reporting requirements); and

(c) So long as Genentech owns any Shares, furnish to Genentech forthwith upon request a written statement by CTI as to its compliance with the reporting requirements of said Rule 144 and of the Act and the Exchange Act (at any time during which it is subject to such reporting requirements), a copy of the most recent annual or quarterly report of CTI, and such other reports and documents of CTI and other information in the possession of or reasonably obtainable by CTI as Genentech may reasonably request in availing itself of any rule or regulation of the SEC allowing Genentech to sell any such securities without registration.

8.9. Standoff Agreement. Genentech agrees, so long as Genentech holds at least one percent (1%) of CTI's outstanding voting equity securities, in connection with any public

offering of CTI's securities, upon request of CTI or the underwriters managing any underwritten offering of CTI's securities, not to sell, make any short sale of, loan, grant any option for the purchase of, or otherwise dispose of any Registrable Securities (other than those included in the registration) without the prior written consent of CTI or such underwriters, as the case may be, for such period of time from the date of such request through the period of time (not to exceed ninety (90) days) following the effective date of such registration as may be requested by the underwriters; provided, that in either such case the executive officers, directors and major shareholders of CTI who own stock of CTI also agree to at least such restrictions.

9. Miscellaneous Provisions.

9.1. Notices. All notices, demands or other communications hereunder shall be in writing and shall be deemed to have been duly given if delivered in person, or by United States mail, certified or registered, with return receipt requested, or otherwise actually delivered:

(i) if to Genentech, at the address set forth below:

Genentech, Inc.
460 Point San Bruno Boulevard
South San Francisco, CA 94080
Attention: Corporate Secretary
Telephone: (415) 266-1000
Telecopier: (415) 952-9881

(ii) if to CTI, at the address set forth below:

CytoTherapeutics, Inc.
Two Richmond Square
Providence, Rhode Island 02906
Attention: General Counsel
Telephone: (401) 272-3310
Telecopier: (401) 272-3485

with a copy to:

Ropes & Gray
30 Kennedy Plaza
Providence, Rhode Island 02903
Attention: Geoffrey B. Davis

or at such other address as may have been furnished by such person in writing to the other parties. Any such notice, demand or other communication shall be deemed to have been given on the date actually delivered or as of the date mailed, as the case may be.

9.2. Severability and Governing Law. Should any Section or any part of a Section within this Agreement be rendered void, invalid or unenforceable by any court of law for any reason, such invalidity or unenforceability shall not void or render invalid or unenforceable any other Section or part of a Section in this Agreement. This Agreement shall be governed by and construed in accordance with the substantive domestic laws of the State of Delaware.

9.3. Amendments and Waivers. The provisions of this Agreement may not be changed, waived, discharged or terminated orally or in writing, without the written consent of CTI and Genentech.

9.4. Survival of Representations and Warranties, etc. All agreements, representations and warranties contained herein shall survive the execution and delivery of this Agreement, any investigation at any time made, the sale and purchase of the Shares and payment therefor.

9.5. Expenses. CTI and Genentech shall each bear its own expenses incurred on its behalf in connection with this Agreement and the transactions contemplated hereby including fees of legal counsel.

9.6. Entire Agreement. This Agreement contains the entire understanding of the parties and there are no further or other agreements or understandings, written or oral, in effect between the parties relating to the subject matter hereof unless expressly referred to herein.

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IN WITNESS WHEREOF, the parties hereto have executed and delivered this Agreement as of the date first above written.

CYTOTHERAPEUTICS, INC.

By: /s/ Illegible Signature

Title:

GENENTECH, INC.

By: /s/ John P. McLaughlin

Title: Executive Vice President

COMPANY DISCLOSURE SCHEDULE

The Company has granted an investor rights, similar to preemptive rights, which provide that if the Company issues additional shares of its stock or securities convertible into or exchangeable for the Company's stock, the investor will have the right to purchase, at the then current market price, the number of shares of the Company's stock necessary to permit the investor to maintain its ownership percentage of the Company's stock. These rights expire April 30, 2000 and were granted pursuant to a Nontransferable Warrant for the Purchase of Shares of Common Stock dated May 1, 1995.

DEVELOPMENT COLLABORATION
AND LICENSE AGREEMENT

This Agreement is made and entered into as of the 22nd day of November 1996 (the "Effective Date") by and between Genentech, Inc., a corporation organized and existing under the laws of the State of Delaware ("Genentech"), and CytoTherapeutics, Inc., a corporation organized and existing under the laws of the State of Delaware ("CTI").

WHEREAS:

Genentech has particular expertise in the areas of molecular biology, production of monoclonal antibodies, assay development and the use of recombinant DNA technology to construct mammalian cell lines capable of producing various proteins useful in treating human disorders, including, NGF, NT4/5, NT3, CT-1, Neurturin and other neurotrophic factors, and in developing and commercializing products based on such proteins; and

CTI has particular expertise in the area of cellular therapies based on proprietary membrane encapsulation technologies and in the development and application of implantable delivery systems for biologically active products for the treatment of central nervous system disorders; and

Genentech and CTI wish to develop products for the treatment of Parkinson's Disease, initially using Neurturin, and potentially also using NGF, NT3, NT4/5 and/or CT-1, all on the terms and conditions set forth herein.

NOW, THEREFORE, Genentech and CTI agree as follows:

ARTICLE I

DEFINITIONS

1 CERTAIN DEFINITIONS.

1.1 "ACCOUNTING PERIOD" shall mean (i) initially the period from the date of First Commercial Introduction of a Licensed Product approved for sale by an appropriate regulatory agency until the end of the first full calendar quarter after the First Commercial Introduction occurred, and (ii) thereafter, each subsequent calendar quarter.

1.2 "AFFILIATE" shall mean any entity or person which controls, is controlled by, or is under common control with Genentech or CTI. For purposes of this Section 1.2, "control" shall mean in the case of corporate entities, the direct or indirect ownership of greater than one-half (1/2) of the shares of stock or participating shares entitled to vote for the election of directors.

1.3 "BIOLOGICS LICENSE APPLICATION" shall mean a U.S. License application for a well characterized biologic as provided under applicable U.S. laws and regulations.

1.4 "CLINICAL DEVELOPMENT EXPENSES" shall mean all expenses incurred during development of Licensed Product(s) subsequent to analysis of the results of the Initial Clinical Trial, as directed by the Development Committee, including, without limitation, the costs of conducting ongoing research and development directly related to obtaining regulatory approvals; conducting human clinical trials other than the Initial Clinical Trial (including the cost of Clinical Product for such trials); refining the design of the Licensed Product; manufacturing process development and modifications fairly allocated to Licensed Product; cell line research; cell banking; stability studies; toxicology, carcinogenicity and immunology studies; developing QA/QC procedures and obtaining regulatory approvals (as required by this Agreement). "Clinical

Development Expenses" shall not include any expenses included in "Development Expenses", "Fully Burdened Manufacturing Cost", "Launch Expenses", "Phase IV Clinical Trial Expenses", "Cost of Sales" or "Sales, General and Administrative Expense", and in every case shall only include costs directly allocable to Licensed Product in accordance with U.S. generally accepted accounting principles consistently applied.

1.5 "CLINICAL DEVELOPMENT PROGRAM" shall mean the program described in Article IV of this Development Agreement.

1.6 "CLINICAL PRODUCT" shall mean Licensed Product used in clinical studies in humans.

1.7 "COMMERCIAL PRODUCT" shall mean Licensed Product commercially sold or used.

1.8 "COMMON STOCK" shall mean CTI's common stock, par value \$0.01 per share.

1.9 "COST OF SALES" shall be comprised of (i) cost of goods sold, defined as Fully Burdened Manufacturing Cost, during such Accounting Period plus any additional costs incurred in preparing the Licensed Product for commercial sale or other disposition during such Accounting Period, (ii) royalties owed to third parties by Genentech as a result of manufacture, use or sales of Licensed Product (except for royalties included in Fully Burdened Manufacturing Cost) and (iii) any other reasonable and customary expenses includable in this category of costs in accordance with generally accepted accounting principles in the U.S. The determination of the "Cost of Sales" shall be subject to approval by the Finance Committee under Section 8.08. The foregoing shall be determined in accordance with U.S. generally accepted accounting principles consistently applied.

1.10 "CT-1" shall mean the human protein cardiotrophin-1, having the amino acid sequence set forth in Exhibit D-1 attached hereto, and any substitute molecule to which the Parties mutually agree.

1.11 "CTI KNOWHOW" shall mean all proprietary information, methods,

biological materials, processes, techniques and data, whether or not patentable, owned, controlled or licensed by CTI, to the extent related to the manufacture, use or sale of Licensed Product in the Territory and, in the case where licensed by CTI, which CTI is free to transfer or disclose without violating contractual obligations to third parties.

1.12 "CTI PATENTS" shall mean (i) those United States patents and patent applications listed on Exhibit A hereto, and any other patents or patent applications throughout the world owned, or licensed by CTI with the right to grant sublicenses, as of the Effective Date (except that the right to grant sublicenses may be as of the Effective Date or at any future time) that are necessary to make, have made, use or sell Licensed Product, (ii) any future patents and patent applications throughout the world that CTI owns, or licenses from a third party with the right to grant sublicenses (at any time) that are necessary to make, have made, use or sell Licensed Product, (iii) all foreign counterparts of United States patents and patent applications described in (i) above, (iv) all patents that issue on applications described in (i), (ii) and (iii) above, and (v) all substitutions, extensions (including patent term extensions), reissues, renewals, divisions, continuations, and continuations-in-part of any of the foregoing but only to the extent that with respect to any such patent or patent applications described in clauses (i) through (v) above, the licenses granted in this Agreement could not be practiced without infringing such patent or patent application. "CTI Patents" shall include, without limitation, CTI's rights under patents jointly owned pursuant to Section 7.04.

1.13 "DEVELOPMENT COMMITTEE" shall mean the committee organized and acting pursuant to Article II of this Agreement.

1.14 "DEVELOPMENT EXPENSES" shall mean all expenses incurred by CTI at the direction of the Development Committee subsequent to the Effective Date, but prior to the date, if any, that Genentech determines to initiate the Clinical Development Program after the review under Section 4.05(b), including, without limitation, the costs of conducting ongoing research and development directly related to obtaining regulatory approvals, conducting the Initial Clinical Trial (including the costs of Clinical Product for such trial); refining the design of the Licensed Product; manufacturing process development and modifications fairly allocated to Licensed Product; cell line research; and developing QA/QC procedures. "Development Expenses" shall not

include any expenses included in "Clinical Development Expenses", "Fully Burdened Manufacturing Cost", "Launch Expenses", "Phase IV Clinical Trial Expenses", "Cost of Sales" or "Sales, General and Administrative Expense", and in every case shall only include costs directly allocable to Licensed Product in accordance with U.S. generally acceptable accounting principles consistently applied. The Development Expenses anticipated by the Parties are contained in the budget attached to the Development Plan (Exhibit F).

1.15 "DEVELOPMENT PROGRAM" shall mean the program described in Article III.

1.16 "ENCAPSULATION TECHNOLOGY" shall have the meaning set forth in Exhibit B.

1.17 "FACTOR(S)" shall mean Neurturin. Subject to Section 3.01, the Parties may consider adding NGF, NT4/5, NT3 and/or CT-1 to the definition of "Factor(s)" during the term of this Agreement.

1.18 "FACTOR-BASED PATENTS" shall mean Genentech's right, title and interest in those third party patents covering one or more Factor(s) and the DNA encoding it or them or the use of any of the foregoing which are licensed by Genentech, which Genentech has the right to sublicense, and which, in the absence of such license, would be infringed by the manufacture, use or sale of Licensed Product.

1.19 "FDA" shall mean the U.S. Food and Drug Administration.

1.20 "FIELD OF USE" shall mean the treatment of Parkinson's Disease [*] but shall not include [*]. For the purposes of this Agreement, [*]

1.21 "FIRST COMMERCIAL INTRODUCTION" shall mean the date of the first commercial sale to an independent third party by Genentech or a permitted sublicensee of Genentech of a Licensed Product following approval of a Submission.

* Confidential Treatment Requested

1.22 "FULLY BURDENED MANUFACTURING COST" shall mean the actual cost of the production of either Clinical Product or Commercial Product, as the case may be, which shall be comprised of the sum of (a) the cost of goods produced as determined in accordance with U.S. generally accepted accounting principles as consistently applied by CTI, including, but not limited to, direct labor, packaging, and material and product testing costs incurred in connection with the manufacture or quality control testing of Clinical Product or Commercial Product, startup and validation costs associated with manufacturing capacity under this Agreement incurred prior to the first approval of a Submission for a Licensed Product, as well as overhead and amortized capital depreciation allocated in accordance with U.S. generally accepted accounting principles as consistently applied by CTI, and (b) all royalties (earned or paid up) payable to third parties under license(s) taken by CTI to patents or patent applications that, but for such license(s), would be infringed by the manufacture of Licensed Product. The determination of "Fully Burdened Manufacturing Cost" shall be subject to review by the Finance Committee under Section 8.08. In the case of any paid-up licenses, the cost of such licenses shall be fairly allocated between Licensed Product and other product(s) giving rise to payment obligations under such license.

1.23 "GENENTECH KNOWHOW" shall mean all proprietary information, methods, biological materials, processes, techniques and data, whether or not patentable, owned, controlled or licensed by Genentech to the extent related to the manufacture, use or sale of Licensed Product and, in the case where licensed by Genentech, which Genentech is free to transfer or disclose without violating contractual obligations to third parties.

1.24 "GENENTECH PATENTS" shall mean (i) those United States patents and patent applications listed on Exhibit C hereto, and any other patents or patent applications throughout the world owned, or licensed by Genentech with the right to grant sublicenses as of the Effective Date (except that the right to grant sublicenses may be as of the Effective Date or at any future time) that are necessary to make, have made, use or sell Licensed Product, (ii) any future patents and patent applications throughout the world that Genentech owns, or licenses from a third party with the right to grant sublicenses (at any time), that are necessary to make, have made, use or sell Licensed Product, (iii) all foreign counterparts of United States patents and patent applications described in (i) above, (iv) all patents that issue on applications described in (i), (ii) and (iii) above, and (v) all substitutions, extensions (including patent term

extensions), reissues, renewals, divisions, continuations, and continuations-in-part of any of the foregoing, but only to the extent that with respect to any such patent or patent applications described in clauses (i) through (v) above, the licenses granted in this Agreement could not be practiced without infringing such patent or patent application. "Genentech Patents" shall include, without limitation, the Factor-Based Patents and Genentech's rights under patents jointly owned pursuant to Section 7.04.

1.25 "INITIAL CLINICAL TRIAL" shall mean the initial clinical trial of Licensed Product as referred to in Exhibit F.

1.26 "KNOWHOW" shall mean CTI Knowhow or Genentech Knowhow, or both or either, as the context requires.

1.27 "LAUNCH EXPENSES" shall mean promotional and training expenses incurred by Genentech or its permitted sublicensees for the period from [*] of such market launch. All such "Launch Expenses" shall be included to the extent directly allocable to Licensed Product in accordance with U.S. generally accepted accounting principles consistently applied, subject to approval by the Finance Committee under Section 8.08.

1.28 "LICENSED PRODUCT" shall mean any product of commercial value or utility in the Field of Use which contains mammalian cells producing one or more Factor(s), which cells are encapsulated through use of the Encapsulation Technology.

1.29 "MAJOR MARKET COUNTRY" shall mean, in the singular, any of France, Germany, Italy, the United Kingdom or the United States, and, in the plural, all of such countries.

1.30 "NET PROFIT" shall mean for each Accounting Period, Net Sales in that Accounting Period less the sum of the Cost of Sales, and Sales, General and Administrative Expense (including Launch Expenses and Phase IV Clinical Trial Expenses) during such Accounting Period. To the extent that minimum purchases of Licensed Product by Genentech pursuant to Section 4.06 are not included in Cost of Sales by expiration of product life, the cost of such purchases shall also be subtracted from Net Sales for the purpose of calculating Net Profit; provided, however, that if the

* Confidential Treatment Requested

Licensed Product so purchased is subsequently sold, the cost so subtracted shall be added back to Net Profit. Such calculation shall not take into account income tax. However, the foregoing shall not be intended to double-count such purchases for purposes of Net Profits.

1.31 "NET SALES" shall mean as to each Accounting Period, the gross invoiced sales price charged for all Licensed Products sold or commercially disposed of for value by Genentech or any of its permitted sublicensees in arm's length sales to independent third parties in that Accounting Period, after deduction of the following items incurred by Genentech or any of its permitted sublicensees during such Accounting Period with respect to sales of Licensed Products hereunder regardless of the Accounting Period in which such sales were made, provided that such items are included in the price charged, and do not exceed reasonable and customary amounts in the market in which such sale occurred:

(i) trade, cash and quantity discounts or rebates actually taken or allowed;

(ii) credits or allowances given or made for rejection or return of, and for uncollectible amounts on, previously sold Licensed Products or for retroactive price reductions;

(iii) any tax or government charge (including any tax such as a value added or similar tax or government charge other than an income tax) levied on the sale, transportation or delivery of a Licensed Product and borne by the seller thereof; and

(iv) any charges for freight or insurance billed to the final customer.

If a Licensed Product is sold, leased or otherwise commercially disposed of for value in a transaction that is not an arm's length transaction with an independent third party, and is not for resale, etc. to an independent party in an arm's length transaction, then the gross sales price in such transaction shall be deemed to be the greater of the actual sales price or the gross sales price in the most similar substantially contemporaneous arm's length transaction with an independent third party for such Licensed Product, or if there is none, for the most similar Licensed Product for which there is such a transaction.

1.32 "NEURTURIN" shall mean the human protein Neurturin, having the amino acid sequence set forth in Exhibit D-2 attached hereto, and any substitute molecule to which the Parties mutually agree.

1.33 "NEURTURIN MTA" shall mean that certain Material Transfer Agreement dated as of [*]. For purposes of this Agreement, the Neurturin MTA is hereby incorporated herein in its entirety by this reference, and in the event of any conflict between the terms of the Neurturin MTA and this Agreement, the terms of the Neurturin MTA shall govern.

1.34 "NEW DRUG APPLICATION" shall mean a U.S. license application for a drug product under applicable U.S. laws and regulations.

1.35 "NGF" shall mean the human protein nerve growth factor, having the amino acid sequence set forth in Exhibit D-4 attached hereto, and any substitute molecule to which the Parties mutually agree.

1.36 "NGF AGREEMENT" shall mean that certain Development Collaboration and License Agreement, dated as of February 1, 1994, between the Parties.

1.37 "NT3" shall mean the human protein neurotrophin 3, having the amino acid sequence set forth in Exhibit D-5 attached hereto, and any substitute molecule to which the Parties mutually agree.

1.38 "NT 4/5" shall mean the human protein neurotrophin factor 4/5, having the amino acid sequence set forth in Exhibit D-3 attached hereto, and any substitute human molecule to which the Parties mutually agree.

1.39 "PARKINSON'S DISEASE" shall mean the disease in humans known as Parkinson's disease and any related syndromes or symptoms. Parkinson's disease is an idiopathic, progressive, neurodegenerative disorder characterized clinically by resting tremor, rigidity, slowness of movement (bradykinesia), paucity of movement (hypokinesia) and degeneration of dopaminergic neurons in the substantia nigra and/or their projections into the striatum.

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1.40 "PARTY" shall mean Genentech or CTI and, when used in the plural, shall mean both Genentech and CTI.

1.41 "PATENT RIGHTS" shall mean CTI Patents and Genentech Patents, or either, as the context may require.

1.42 "PHASE II CLINICAL DEVELOPMENT EXPENSES" shall mean all Clinical Development Expenses incurred by CTI or its permitted sublicensees from [*].

1.43 "PHASE III CLINICAL DEVELOPMENT EXPENSES" shall mean all Clinical Development Expenses incurred by CTI or Genentech or their respective permitted sublicensees [*] for Licensed Product in each of the United States, all countries of the European Union and Japan.

1.44 "PHASE II CLINICAL TRIAL" shall mean a clinical trial in humans of a Licensed Product designed to confirm initial safety data and provide initial efficacy data which provides the basis for a Phase III Clinical Trial in the United States; Phase II Clinical Trial(s) are expected to be conducted prior to any Phase III Clinical Trial.

1.45 "PHASE III CLINICAL TRIAL" shall mean a trial in humans of both the safety and efficacy of a Licensed Product for a specific indication or indications in patients having the disease or condition under study directed toward receipt of approval by the appropriate regulatory authority for marketing of such Licensed Product for such specific indication or indications.

1.46 "PHASE IV CLINICAL TRIAL EXPENSES" shall mean all costs and expenses incurred by Genentech or its permitted sublicensees associated with any clinical trial of a Licensed Product after the first approval of a Submission by the FDA for such Licensed Product where such trial is required by the FDA. All such "Phase IV Clinical Trial Expenses" shall be included to the extent directly allocable to Licensed Product in accordance with U.S. generally accepted accounting principles consistently applied, subject to approval by the Finance Committee under Section 8.08.

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1.47 "SALES, GENERAL AND ADMINISTRATIVE EXPENSE" shall mean all costs incurred for the sales and marketing of a Licensed Product and for all related general, administrative and other matters not a part of Cost of Sales, in accordance with U.S. generally accepted accounting principles consistently applied, subject to approval by the Finance Committee under Section 8.08. "Sales, General and Administrative Expense" shall include expenses included in "Launch Expenses" and "Phase IV Clinical Trial Expenses".

1.48 "STOCK PURCHASE AGREEMENT" shall mean the agreement attached as Exhibit E.

1.49 "SUBMISSION" shall mean the submission to an appropriate regulatory authority (such as the FDA) of appropriate applications seeking approval of the marketing and, when appropriate, approval of the pricing, of a Licensed Product, e.g., an "NDA" or a "BLA".

1.50 "TERRITORY" shall mean all the countries of the world.

1.51 "U.S. PHASE III CLINICAL DEVELOPMENT EXPENSES" shall mean all Phase III Clinical Development Expenses incurred for clinical development of Licensed Product(s) by CTI or Genentech or their respective permitted sublicensees for approval to market and sell Licensed Products in the United States.

It is the intent of the Parties that "U.S. Phase III Clinical Development Expenses" shall only include those clinical expenses necessary for obtaining approval(s) to market and sell Licensed Products in the United States.

1.52 "U.S. PHASE III CLINICAL TRIAL" shall mean a Phase III Clinical Trial in the United States.

1.53 "20 DAY AVERAGE" shall mean, in each instance, a price per share equal to the average [*] agreed on by the Parties (as evidenced by this Agreement, the Stock Purchase Agreement or other mutual written agreement of the Parties) of the average of each day's high and low price per share of CTI's Common Stock in the NASDAQ National Market System or, if not there quoted, on a national

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securities market or exchange on which CTI is then traded and agreed upon by the Parties.

ARTICLE II

DEVELOPMENT COMMITTEE

2.01 CREATION OF THE DEVELOPMENT COMMITTEE. The Parties hereby agree to the creation of a Development Committee which shall consist of three representatives of each Party. Within sixty (60) days following the Effective Date, each Party shall notify the other Party of its initial appointees to the Development Committee. Each Party shall be free to change its representatives upon written notice to the other Party.

2.02 MEETINGS. So long as the development collaboration activities set forth in Articles III and IV are on-going or contemplated by the Parties, the Development Committee shall meet regularly at least once a quarter, unless otherwise agreed by the members of the Development Committee. Additional meetings may be called by either Party on 10 days' notice to the other and, unless otherwise agreed, all meetings shall alternate between the offices of the Parties.

2.03 DUTIES. Subject to the other terms of this Agreement (including, without limitation, Section 4.05), the Development Committee shall be responsible for directing the Development Program and Clinical Development Program, making the decisions it is required to make pursuant to the terms of this Agreement and making recommendations to the Parties regarding other decisions necessary or appropriate to implement this Agreement (including, without limitation, adjustments to the budget in case of expenses necessary for work not originally contemplated by the budget, but later agreed upon by the Parties).

All decisions and recommendations of the Development Committee shall require the agreement of a majority of the representatives of each Party to be effective. In the event the representatives of the two Parties cannot agree on a matter, the vote of the Genentech representatives shall decide matters except that (i) the vote of the CTI representatives shall decide matters [*] and (ii) both

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Parties shall [*] after its commencement (and assuming that Genentech has determined that it should commence, after the review under Section 4.05(c)). If one Party objects to such a decision made by the representatives of the other Party, a member of senior management of each Party shall confer and resolve the dispute. For this purpose, a "member of senior management" shall be a management-level employee who has the authority to bind a Party. If the members of senior management do not resolve such dispute within 60 days of such objection, the Parties shall attempt to resolve such dispute in accordance with Sections 11.19 and 11.20.

Any material decision of the Development Committee (e.g., budget and/or timeline for approvals) shall be reduced to a writing agreed to by both Parties.

ARTICLE III

DEVELOPMENT PROGRAM

3.01. OBJECTIVES OF THE PARTIES. The Parties agree that the goal under this Agreement is the development of Licensed Products. The initial Factor to be investigated shall be Neurturin. The Parties may agree on investigating other Factor(s) in addition to or instead of Neurturin, based on the data and results arising from the "Development Plan" (as defined below) for Licensed Product containing Neurturin as the only Factor. If the Parties agree on Factor(s) in addition to or other than Neurturin for the definition of "Factor(s)," they shall so indicate in a writing signed by both Parties.

The Parties further agree that the Development Program consists of the development plan attached hereto as Exhibit F (the "Development Plan"), which includes, among other items, the primate efficacy study and large animal study described therein and the Initial Clinical Trial. The Development Committee shall revise the work comprising the Development Program from time to time as necessary, including, if agreed, to reflect development of Licensed Products in addition to or other than Licensed Products containing only Neurturin as a Factor. If the Parties decide to develop Licensed Products beyond Licensed Product containing only Neurturin as a Factor, they shall agree on a "Development Plan" for such Licensed Product(s), including a budget and time line.

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In the case of any conflict between the Development Plan and this Agreement, the provisions of this Agreement shall control.

3.02 INITIAL DEVELOPMENT OBLIGATIONS OF CTI. CTI agrees to contribute the following materials and to commit the time and efforts of the number of its full-time equivalent research staff set forth in the Development Plan to use their reasonable best efforts to accomplish the following for Neurturin and, if relevant, any other Factor(s) which the Parties agree upon under Section 3.01, consistent with the plans of the Development Committee:

- (i) determine the [*] in a large animal model;
- (ii) develop a cell line(s) producing the relevant Factor(s) for clinical development which is suitable for master cell banking and which has been approved by the Development Committee;
- (iii) encapsulate the cell line(s) producing the relevant Factor(s) and, as the following are required to meet requirements of the FDA and other applicable regulatory agencies, provide: documentation regarding the stability of production of such Factor(s), the extent of such Factor(s) release and the release of non-Factor proteins and other biomolecules by the encapsulated cell line(s) and lack of contamination of such encapsulated cell line by viruses, prions and bacteria;
- (iv) conduct pre-clinical development activities, including animal experiments and IND-enabling toxicology, safety and pharmacokinetic studies, as directed by the Development Committee;
- (v) file a U.S. IND or other appropriate regulatory application(s) to conduct the Initial Clinical Trial;
- (vi) conduct the Initial Clinical Trial; and
- (vii) pay for all Development Expenses (except for internal Genentech costs incurred pursuant to Section 3.03).

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CTI shall keep the Development Committee informed of the identities of the CTI research staff members who are committed to the Development Program and shall provide documentation of expenses as requested by the Development Committee. Genentech shall have the right one time annually, upon written request and after reasonable notice, to audit the time allocations of the research staff committed to the Development Program and other documentation of expenses incurred.

3.03 INITIAL DEVELOPMENT OBLIGATIONS OF GENENTECH. Genentech agrees to contribute the following and to use its reasonable best efforts to accomplish the following for Neurturin and, if relevant, any other Factor(s) which the Parties agree on under Section 3.01, consistent with the plans of the Development Committee:

- (i) supply antibodies (monoclonal and polyclonal), cDNA and/or genomic clones, plasmids, protein(s), ELISA and other assay materials and methods, provided such materials and methods are within the Genentech Knowhow and relate to the Factor(s) currently under development hereunder;
- (ii) provide funding in the form of an equity investment within 30 days of the date of execution of this Agreement by both Parties, as set forth in Section 8.01;
- (iii) assist, as reasonably requested by CTI, with experimental design and evaluation and, [*] of injected animals;
- (iv) assist, as reasonably requested by CTI, with the selection and optimization of the cell line(s) producing relevant Factor(s) to be used in Licensed Products; and
- (v) assist, as reasonably requested by CTI, in CTI's filing of regulatory applications (as described in Section 3.02 (v)) by allowing CTI to cross reference or otherwise get the benefit of relevant Genentech regulatory filings, if any.

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3.04 TERM OF DEVELOPMENT PROGRAM. Unless otherwise agreed in writing by the Parties, the Development Program shall have a duration of [*]. At the earlier of the end of the term of the Development Program or the completion of the Initial Clinical Trial, Genentech will decide whether to continue the Development Program, proceed to the Clinical Development Program, or terminate the program, all as provided in Section 4.05.

ARTICLE IV

CLINICAL DEVELOPMENT PROGRAM

4.01 OBJECTIVES OF CLINICAL DEVELOPMENT PROGRAM. The Parties agree that the "Clinical Development Program" includes, among other items, all human clinical studies of Licensed Products directed toward approval of a Submission in the United States (after the Initial Clinical Trial), manufacturing scale-up and other work to develop and commercialize Licensed Products. The Parties agree that the success of the Clinical Development Program depends on the achievement of the following objectives:

- (i) performing any further pre-clinical studies required to complete the comprehensive data package necessary to make regulatory filings;
- (ii) scaling up the manufacturing process so that it can be used to make Clinical Product and Commercial Product;
- (iii) performing clinical studies designed to obtain regulatory approval for the sale of Licensed Product(s); and
- (iv) filing Submissions to obtain approvals to market and sell Licensed Products, provided that the product labeling for all Licensed Product shall be in the name of Genentech or as Genentech or its permitted sublicensees may reasonably designate (consistent with applicable law and regulation). Each Party agrees to take such further actions as to regulatory matters as are appropriate and reasonably requested by the other Party to carry out the purposes of this Agreement (including, without limitation, adjusting the name of the Party(s) in which regulatory filings

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are made).

The Parties further agree that the initial goal of the Clinical Development Program is to file Submissions to gain approvals to market and sell Licensed Product in the Major Market Countries, in each case, as soon as is commercially and technically reasonable from the date of the decision of Genentech, if any, to continue the Clinical Development Program after the Phase II Clinical Trial after the review pursuant to Section 4.05(c).

4.02 OBLIGATIONS OF GENENTECH IN THE CLINICAL DEVELOPMENT PROGRAM. Genentech shall provide the following assistance and be responsible for the following items in the conduct of the Clinical Development Program:

- (i) perform and pay for clinical studies designed to obtain regulatory approval for the sale of Licensed Product(s) outside the United States;
- (ii) make regulatory filings in the name of Genentech (or its permitted sublicensees) with regulatory authorities to obtain approvals to market and sell Licensed Products outside the United States;
- (iii) be responsible for all regulatory matters with respect to Licensed Products outside the United States, subject to Sections 4.01(iv) and 4.03(vi);
- (iv) provide financing for CTI, if needed, pursuant to Section 4.07;
- (v) assist, as reasonably requested by CTI, in CTI's filing of regulatory applications (as described in Section 4.01(iv)) by allowing CTI to cross reference or otherwise get the benefit of relevant Genentech regulatory filings, if any, solely for use in connection with the development or manufacture of Licensed Product; and
- (vi) conduct and pay for any Phase IV Clinical Trials, subject to the other terms of this Agreement relating to sharing of Net Profits.

4.03 OBLIGATIONS OF CTI IN THE CLINICAL DEVELOPMENT PROGRAM. CTI shall provide the following assistance and be responsible for the following items in the conduct of the Clinical Development Program as set forth in the Development Plan:

- (i) upon Genentech's decision(s), if any, to proceed with the Clinical Development Program after the reviews pursuant to Sections 4.05(b) and 4.05(c), conduct Phase II Clinical Trial(s) and U.S. Phase III Clinical Trial(s) as directed by the Development Committee;
- (ii) pay all Phase II Clinical Development Expenses pursuant to Section 4.07(b);
- (iii) pay [*] of U.S. Phase III Clinical Development Expenses pursuant to Section 4.07(c);
- (iv) be responsible for all regulatory matters with respect to Licensed Product in the United States, pursuant to Section 4.01 (iv) above;
- (v) develop a commercial-scale manufacturing process to produce Clinical Product and then Commercial Product for the first U.S. Phase III Clinical Trial at a time that is mutually agreed upon by both Parties, but no later than [*] after Genentech commits, if at all, to commence the first Phase III Clinical Trial after the review pursuant to Section 4.05(c); and
- (vi) assist, as reasonably requested by Genentech or its permitted sublicensees, in filing of regulatory applications (as described in Sections 4.01(iv)) by allowing Genentech and its permitted sublicensees to cross reference or otherwise get the benefit of relevant CTI regulatory filings, if any, solely for use in connection with the development, use or sale of Licensed Product.

Each Party shall keep records of all Clinical Development Expenses incurred by it and shall provide the other Party with a reasonably detailed accounting setting forth such Clinical Development Expenses within sixty (60) days of the end of each calendar quarter during which such expenses are incurred. Each Party shall have the

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right, one time annually, upon written request and after reasonable notice, to audit the other Party's records of its Clinical Development Expenses.

Neither CTI nor Genentech shall be responsible for expenses incurred by the other Party not in the agreed-upon budgets for Clinical Development Expenses.

4.04 SHARING OF DATA. Each Party shall promptly and thoroughly disclose to the other all information and data relating to Licensed Products (but excluding information regarding fiber or implant manufacture and any Factor(s) not currently under development hereunder) resulting from any activities undertaken as a result of the Development Program or the Clinical Development Program. In addition, each Party shall promptly disclose to the other Party all safety and toxicity information it obtains on the Factor(s) currently under development hereunder from human clinical studies or pre-clinical studies (where such clinical or pre-clinical data is or should, under applicable laws and regulations, be filed as part of a U.S. IND or as part of a subsequent regulatory document including a Submission). Absent agreement to the contrary, all such information and data shall be considered Genentech or CTI Knowhow, as the case may be, and held confidential pursuant to Section 9.01.

4.05 REVIEW OF RESULTS; GENENTECH RIGHTS. The Parties shall review the results of each of the following promptly upon completion of the following:

- (a) The [*] (as each are described in the Development Plan);
- (b) The Initial Clinical Trial; and
- (c) The first Phase II Trial which will allow the Parties to meet with the FDA to discuss the first U.S. Phase III Clinical Trial.

Genentech shall have the right in its sole discretion to decide whether or not the Parties shall continue the development of Licensed Product hereunder, after each of the reviews set forth in clauses (a), (b) and (c) above; as provided in Section 2.03 above, after a Genentech decision (if any) to proceed forward after the review under Section 4.05(c), both Parties shall have an equal vote in decisions affecting a U.S. Clinical Phase III Trial. If Genentech decides to continue the development of Licensed

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Product after each of the reviews referred to above, the Parties shall proceed with the Development Program (in the case of (a)) or the Clinical Development Program (in the case of (b) and (c)). If Genentech decides not to proceed with the Development Program and Clinical Development Program, as the case may be, the Parties shall in good faith consider alternatives, including without limitation, modifying the Development Program and Clinical Development Program and/or licensing CTI to make, use and sell Licensed Product, or terminating this Agreement under Section 10.06(a). Notwithstanding the foregoing, Genentech shall not be obligated to grant CTI a license. If the Parties do not agree to work together further as provided in Section 10.06(a), either Party shall have the right to terminate this Agreement pursuant to Section 10.06(a).

4.06 SUPPLY AGREEMENT. Genentech and CTI shall negotiate in good faith a supply agreement for Clinical Product for Genentech and its permitted sublicensees for clinical trials outside the United States at such time as Genentech believes it is appropriate but no later than [*] after a decision by Genentech, if any, under Section 4.05(b) to proceed with the Clinical Development Program (the "Clinical Supply Agreement") and a supply agreement for Commercial Product for Genentech and its permitted sublicensees (the "Commercial Supply Agreement") at such time as the Development Committee believes it is appropriate, provided that negotiations for the Commercial Supply Agreement shall begin no later than the commencement of the first Phase II Clinical Trial and conclude no later than [*] prior to the expected commencement of the first Phase III Clinical Trial. The Parties shall use their best efforts to conclude the Clinical Supply Agreement within 90 days after Genentech's decision, if any, under Section 4.05(b) to proceed forward with the Clinical Development Program. CTI shall have the obligation to supply Genentech and its permitted sublicensees as provided herein and in such supply agreements. For purposes of this Agreement and each Supply Agreement, for supply of Clinical Product and Commercial Product by CTI to Genentech and its permitted sublicensees, CTI shall be entitled to CTI's Fully Burdened Manufacturing Cost for such Clinical Product, and, commencing with the First Commercial Introduction of the Licensed Product that is such Commercial Product, CTI's Fully Burdened Manufacturing Cost for such Commercial Product. The parties recognize that as part of such supply, there will be risks due to carrying inventory. Inside the United States, the Parties will apportion that inventory risk in proportion to the relevant profit participation of each Party pursuant to Sections 8.02 and 8.04. Outside the United States, such inventory risk

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shall be borne by Genentech pursuant to Sections 8.03 and 8.04. For these purposes, "inventory risk" shall be the risk of loss for Licensed Product subsequent to delivery of such Licensed Product to Genentech pursuant to a binding purchase order from Genentech.

At the time the Parties begin to negotiate the Commercial Supply Agreement, they shall negotiate and agree in good faith a cap on both CTI's Fully Burdened Manufacturing Costs and Genentech's Sales, General and Administrative Expense. If either Party subsequently determines in good faith that its costs for these items will exceed the agreed upon cap, subject to review and approval by the Finance Committee, the Parties shall agree in writing to adjust the cap upward to equal the actual costs, for the period of time in which they exceed that cap.

At the time the Parties enter into either Supply Agreement, they shall discuss whether and under what terms Genentech may purchase a joint ownership interest in the facilities producing Licensed Product.

In addition to the above terms, the Commercial Supply Agreement shall contain a provision setting forth the minimum purchases that Genentech and its permitted sublicensees (in the aggregate) shall be required to make thereunder and the minimum supply capacity CTI must maintain to supply Licensed Product hereunder. Genentech, on behalf of itself and its permitted sublicensees, shall make first estimates (based on market projections) for purposes of required minimum purchases at the time of Genentech's entering into the Supply Agreement, and annually thereafter. CTI intends to use such estimates to determine the capacity of the plant it must build. Accordingly, CTI will not be required to produce more than [*] but shall be required to produce at least [*], of Genentech's purchase estimate, on behalf of itself and its permitted sublicensees, made closest to, but not less than, 18 months prior to First Commercial Introduction for each of the first three years that it supplies Commercial Product to Genentech and its permitted sublicensees. Actual purchases of Licensed Product supplied by CTI shall be pursuant to firm purchase orders from Genentech, but for purposes of maintaining the foregoing capacity protections for each Party in the Commercial Supply Agreement the Parties shall agree upon appropriate percentages beyond which such firm orders for supply of Licensed Product may not vary (above or below) the [*] range of the previously provided estimates, and CTI shall be obligated to supply, and Genentech (on behalf of itself and its permitted sublicensees)

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shall be obligated to purchase at least [*] of amounts of Licensed Product under such firm purchase orders in accordance with the foregoing and the "inventory risk" provisions set forth above in this Section 4.06. Genentech shall be permitted to revise its minimum purchase projections yearly, but such revision shall not affect the maximum amount of Commercial Product CTI must supply for the first three years. The Supply Agreement shall also provide for good faith, rolling forecasts covering a time period of at least 24 months with maximum supply obligations determined so as to allow Genentech and its permitted sublicensees to meet market needs and allow CTI reasonable time to build, validate and obtain approval of necessary facilities to supply Licensed Products in the Territory. The Supply Agreement shall contain a provision to protect CTI against idle plant capacity after expansion of such facilities, to the extent such facilities were built to supply such Licensed Product (with reasonable apportionment where other parties, including CTI, are also supplied by such plant capacity). The Supply Agreement shall provide that CTI shall treat Genentech and its permitted sublicensees as CTI's highest priority customer for supply of Licensed Product, and shall provide for flexibility for Genentech and its permitted sublicensees to change purchase orders and require CTI to promptly replace non-conforming or otherwise defective product supplied thereunder.

In addition, each Supply Agreement shall contain provisions regarding breach similar to those set forth in this Agreement, including those governing the transfer of manufacturing technology from CTI to Genentech for manufacture of Licensed Product in the Territory and shall provide that a breach under such Supply Agreement shall be a breach hereunder. During the period of such a transfer, CTI shall continue to treat Genentech on behalf of it and its permitted sublicensees as its highest priority customer for supply of Licensed Product. The Parties agree that the technology transfer will involve the need for CTI employees to train Genentech employees. CTI will pay the salaries of its employees doing such training, and Genentech will pay the salaries of its employees receiving such training as well as all expenses incurred in constructing a Genentech facility for producing Licensed Product.

4.07 (a) FUNDING OF DEVELOPMENT THROUGH THE INITIAL CLINICAL TRIAL.

Pursuant to Section 8.01(a), Genentech has agreed to purchase the agreed-upon amount of Common Stock to provide funding for Development Expenses. If CTI reasonably determines that Development Expenses will exceed those previously agreed-upon, it shall notify Genentech. The Parties shall meet and agree if additional

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Development Expenses beyond those agreed-upon will be required. If the Parties agree additional Development Expenses will be incurred and on the amount of such additional Development Expenses, to the extent that such agreed-upon CTI Development Expenses will exceed the funding provided by Genentech's equity purchase pursuant to Section 8.01(a), Genentech shall purchase sufficient additional equity, pursuant to an agreement in the form of the Stock Purchase Agreement and at a price equal to one hundred percent (100%) of the 20 Day Average of CTI's Common Stock, to fund in advance, the remainder of such agreed-upon CTI Development Expenses. In no case shall CTI be required to fund such additional expenses unless Genentech, in fact, makes the additional equity purchase contemplated hereunder to cover such Development Expenses.

If the amount of funding received by CTI pursuant to Sections 4.07(a) and 8.01(a) exceeds the Development Expenses incurred by CTI through the completion of analysis of the results of the Initial Clinical Trial or as of any earlier termination of the Development Program or this Agreement, CTI shall provide written notice to Genentech of the amount of such "overfunding". CTI shall apply such "overfunding" to the Clinical Development Expenses to be incurred by CTI under Section 4.07(b), except as otherwise provided hereinbelow, and except that if such "overfunding" totals [*] or less, CTI shall be entitled to retain such excess and shall not be required to apply it against any future work under this Agreement or against redemption of CTI's Common Stock as otherwise provided hereinbelow. Subject to the foregoing, if the amount of such funding under Sections 4.07(a) and 8.01(a) exceeds the Development Expenses incurred by CTI and CTI cannot apply such "overfunding" to the Clinical Development Expenses to be incurred because (i) Genentech has determined pursuant to Section 4.05 not to proceed forward with the Clinical Development Program or (ii) this Agreement has been terminated at any time for any other reason (except termination by CTI in accordance with this Agreement due to Genentech's uncured default, in which case the provisions of this paragraph shall apply except that CTI shall be entitled to retain "overfunding" in an amount equal to CTI's already incurred costs for its work under this Agreement), then Genentech shall have the rights and CTI the obligations set forth hereinbelow. If Genentech so requests in writing within sixty (60) days after, as applicable, Genentech's decision under Section 4.05 not to proceed forward or the effective date of termination of this Agreement (except as otherwise provided above with respect to Genentech's uncured default), within thirty (30) days after such request CTI shall pay such overfunding

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amount to Genentech against Genentech's delivery to CTI of that number of shares of CTI's Common Stock equal to such overfunding amount divided by the price for such Common Stock paid by Genentech under Section 8.01(a) (or, if such overfunding is attributable only to CTI's receipt of additional funding from Genentech under 4.07(a), the price paid for such Common Stock under Section 4.07(a)). In calculating the overfunding amount, CTI shall calculate the total amount of expenses incurred by CTI hereunder based on the total expenses incurred for performance of the tasks approved by the Development Committee (without regard to categories of budgeted amounts).

(b) FUNDING OF DEVELOPMENT THROUGH PHASE II CLINICAL TRIAL ANALYSIS.

Upon Genentech's decision pursuant to Section 4.05(b) to commence the Clinical Development Program, pursuant to Section 8.01(b) Genentech will purchase Common Stock pursuant to an agreement in the form of the Stock Purchase Agreement, in an amount equal to the agreed-upon Phase II Clinical Development Expenses. If CTI reasonably determines that its Phase II Clinical Development Expenses will exceed those previously agreed-upon (subject to the following paragraph), it shall notify Genentech. The Parties shall meet and agree if additional Phase II Clinical Development Expenses beyond those agreed-upon will be required. If the Parties agree additional Phase II Clinical Development Expenses will be incurred and on the amount of such additional expenses, to the extent that such agreed-upon CTI Phase II Clinical Development Expenses will exceed the funding provided by Genentech's equity purchase pursuant to Section 8.01(b), Genentech shall purchase sufficient additional equity, pursuant to an agreement in the form of the Stock Purchase Agreement and at a price equal to one hundred percent (100%) of the 20 Day Average of CTI's Common Stock, to fund, in advance, the remainder of such agreed-upon CTI Phase II Clinical Development Expenses. In no case shall CTI be required to fund such additional Phase II Clinical Development Expenses unless Genentech, in fact, makes the additional equity purchase contemplated hereunder to cover such Phase II Clinical Development Expenses.

If the amount of funding received by CTI pursuant to Sections 4.07(a) and (b) and 8.01(b) exceeds the Development Expenses and Clinical Development Expenses incurred by CTI through the completion of analysis of the results of the last Phase II Clinical Trial of a Licensed Product prior to commencement of funding under Section 4.07(d), or as of any earlier termination of the Clinical Development Program or this

Agreement, CTI shall provide written notice to Genentech of the amount of such "overfunding". CTI shall apply such "overfunding" to CTI's share of the U.S. Phase III Clinical Development Expenses to be borne by CTI pursuant to Section 4.07(d), except that if such "overfunding" totals [*] or less, CTI shall be entitled to retain such excess and shall not be required to apply it against any future work under this Agreement or redemption of CTI's Common Stock as otherwise provided hereinbelow. Subject to the foregoing, if the amount of funding under Sections 4.07(a) and (b) and 8.01(b) exceeds the Development Expenses and Clinical Development Expenses incurred by CTI and CTI cannot apply such "overfunding" to its share of the U.S. Phase III Clinical Development Expenses to be borne by CTI because (i) Genentech has determined pursuant to Section 4.05 not to proceed forward with the Clinical Development Program or (ii) this Agreement has been terminated at any time for any other reason (except termination by CTI in accordance with this Agreement due to Genentech's uncured default, in which case the provisions of this paragraph shall apply except that CTI shall be entitled to retain "overfunding" in an amount equal to CTI's already incurred costs for its work under this Agreement), then Genentech shall have the rights and CTI the obligations set forth hereinbelow. If Genentech so requests in writing within sixty (60) days after, as applicable, Genentech's decision under Section 4.05 not to proceed forward or the effective date of termination of this Agreement (except as otherwise provided above with respect to Genentech's uncured default), within thirty (30) days after such request CTI shall pay such overfunding amount to Genentech against Genentech's delivery to CTI of that number of shares of CTI's Common Stock equal to such overfunding amount divided by the price for such Common Stock paid by Genentech under Section 8.01(b) (or, if such overfunding is attributable only to CTI's receipt of additional funding from Genentech under 4.07(b), the price paid for such Common Stock under 4.07(b)). In calculating the overfunding amount, CTI shall calculate the total amount of expenses incurred by CTI hereunder based on the total expenses incurred for performance of the tasks approved by the Development Committee (without regard to categories of budgeted amounts).

(c) RECORDS. In connection with any application of "overfunding" to future work or redemption of CTI Common Stock as provided in Sections 4.07(a) or (b), CTI shall keep complete and accurate records of its expenses hereunder, and Genentech shall have the right, upon written request after reasonable notice, to have an independent certified public accountant reasonably acceptable to CTI, review such records for the

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purposes of verifying such "overfunding", if any. This right may not be exercised more than once in any calendar year. Results of such review shall be made available to both Parties. The provisions of Sections 4.07(a), (b) and (c) regarding overfunding shall survive any termination of this Agreement.

(d) FUNDING OF U.S. PHASE III CLINICAL DEVELOPMENT EXPENSES. If Genentech decides to continue the Clinical Development Program after the review under Section 4.05(c), the Parties shall agree on a budget for U.S. Phase III Clinical Development Expenses. As provided below in this Section 4.07(d), CTI shall pay [*] of the agreed-upon U.S. Phase III Clinical Development Expenses; such [*] shall be financed by Genentech providing CTI with a revolving line of credit in the principal amount of the to be agreed-upon [*] of U.S. Phase III Clinical Development Expenses (less the amount of any overfunding, if any, applied by CTI as provided in Section 4.07(b)), which line of credit shall bear interest on the outstanding principal amount at a rate equal to LIBOR (as quoted for one month in The Wall Street Journal) plus [*] compounded quarterly. Subject to Section 10.07(a), such revolving loan shall be repaid in full (and shall not be available for further borrowing by CTI) within [*] days after the earlier of (i) seven (7) years from the date funds are first drawn down under such line of credit or (ii) the earlier of (A) of the completion of the analysis of all U.S. Phase III Clinical Trial(s) directed by the Development Committee, (B) termination of the last U.S. Phase III Trial (if terminated prior to its term), or (C) termination of this Agreement (as provided in Section 10.07(a)(ii)). Notwithstanding the foregoing, under the loan documentation to be entered into by the Parties, in the event of any event of default under such loan documentation, including any CTI failure to repay the total amount of the loan (principal plus interest) then outstanding, Genentech shall have the right to convert the total amount of the loan outstanding into registered shares of Common Stock of CTI.

Such revolving loan may be prepaid by CTI at any time; CTI shall give Genentech at least [*] days notice of any such prepayment. CTI may make any payment under such loan in whole or in part by issuing to Genentech shares of CTI stock, which shall be valued at price per share equal to one hundred percent (100%) of the 20 Day Average of CTI's Common Stock. The loan under the revolving line of credit shall be unsecured and fully subordinated to all other CTI liabilities.

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At the time, if any, that Genentech elects to proceed under Section 4.05(c) to a U.S. Phase III Clinical Trial, the Parties shall agree on any additional necessary terms of the line of credit.

The Parties expect to pay for U.S. Phase III Clinical Development Expenses equally. The Parties shall invoice each other for actual U.S. Phase III Clinical Development Expenses; [*] is payable by Genentech. Genentech shall pay the full amount it owes under such invoices and shall draw down from the line of credit the amount CTI owes under such invoices, as contemplated by this Section 4.07(d). If at any time either Party has paid more than its share of such expenses, as provided in this Agreement, the Parties shall fairly adjust the reimbursement of such expenses.

Each Party shall keep complete and accurate records of the latest three (3) years of its U.S. Phase III Clinical Development Expenses. Each Party shall have the right at its own expense to have an independent certified public accountant, reasonably acceptable to the other Party, review such records upon reasonable notice and during reasonable business hours for the purposes of verifying reimbursement hereunder. This right may not be exercised more than once in any calendar year. Results of such review shall be made available to both Parties. If the review reflects an overpayment of U.S. Phase III Clinical Development Expenses by either Party, any such overpayment shall be promptly remitted to the other Party with interest as provided in Section 8.04. If the overpayment is equal to or greater than five percent (5%) of invoiced U.S. Phase III Clinical Development Expenses, the overpaying Party shall be entitled to have the other Party pay all of the costs of such review. The provisions of this Section 4.07(d) shall survive termination of this Agreement.

ARTICLE V

GRANT OF RIGHTS

5.01 GRANT BY CTI. CTI hereby grants to Genentech, under the CTI Patent Rights and CTI Knowhow, (i) a [*] license (with CTI) [*] such Patent Rights and Knowhow for [*] of Licensed Products in the United States in accordance with the Development Program agreed upon by the Parties, and (ii) an

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[*] license (even as to CTI) to [*] Licensed Products in the Territory outside the United States, and to [*] Licensed Products throughout the Territory and (iii) in the event that manufacturing technology is transferred to Genentech pursuant to Section 10.04, an [*] Licensed Products in the Territory.

5.02 GRANT BY GENENTECH. Genentech hereby grants to CTI, under the Genentech Patent Rights and Genentech Knowhow, (i) a [*] to use such Patent Rights and Knowhow for [*] of Licensed Products in the Territory in accordance with the Development Program agreed upon by the Parties, and (ii) an [*] license for the [*] of Licensed Products in the Territory up through review of results of the primate efficacy study and diffusion study referred to in Section 4.05 (a), and (iii) if and only if Genentech elects to continue development after the review under Section 4.05(a), an [*] of Licensed Products in the Territory up through the review of results of the Initial Clinical Trial, and (iv) if and only if Genentech elects to continue development after the review under Section 4.05(b), an [*] of Licensed Products in the Territory up through review of results of the relevant Phase II Clinical Trial and (v) if and only if Genentech elects to continue development after the review under Section 4.05(c), an [*] Licensed Products in the Territory for supply to Genentech and its permitted sublicensees hereunder (so long as [*] are met and CTI is not in breach under this Agreement).

5.03 DUE DILIGENCE. Genentech and CTI shall use due diligence in developing and seeking marketing approvals for Licensed Products as contemplated by this Agreement. As used in this Section 5.03, "due diligence" shall mean a reasonable effort consistent with sound business judgment and shall include all steps reasonably necessary to enable and facilitate the development and marketing of Licensed Products. In particular, CTI shall use its reasonable best efforts to complete the work under the Development Program within the [*] specified in Section 3.04, and, if Genentech elects to proceed forward with development after the reviews under Sections 4.05(b) and (c), to complete the first Phase II Clinical Trial and the first U.S. Phase III Clinical Trial in accordance with timelines agreed upon by the Parties.

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5.04 SUBLICENSES. Neither Genentech nor CTI shall have the right to grant sublicenses to third parties under the licenses received under Sections 5.01 or 5.02 unless otherwise mutually agreed in writing; provided, however, that (i) Genentech may grant sublicenses of its rights hereunder to Affiliates without obtaining CTI's consent and (ii) Genentech may sublicense the rights granted to it hereunder to market and sell Licensed Product in the Territory to any third party without obtaining CTI's consent. Any permitted sublicensee shall commit in writing to abide by all applicable terms and conditions of this Agreement. Each party shall be responsible for compliance by its sublicensee(s) with such sublicensee's obligations under its sublicense.

5.05 OTHER MOLECULES. During the term of this Agreement, CTI agrees that it will [*].

ARTICLE VI

MARKETING OF LICENSED PRODUCT

6.01 MARKETING RESPONSIBILITIES. Genentech shall have the sole responsibility for sales and marketing of Licensed Product in the Territory.

6.02 MARKETING DUE DILIGENCE. In addition to the due diligence obligations of the Parties set forth in Section 5.03, Genentech agrees to use its reasonable best efforts to market and sell Licensed Product throughout the Territory, provided that with respect to a given country or territory in the Territory, approvals to market and sell Licensed Product have been received in such country or territory.

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ARTICLE VII

PATENTS, KNOWHOW AND INVENTIONS

7.01 OWNERSHIP. Genentech shall retain sole title to the Genentech Knowhow and the Genentech Patent Rights as presently existing and as developed or invented by Genentech or on its behalf during the term of this Agreement, and shall have sole title to any improvements to the CTI Knowhow or CTI Patent Rights developed or invented solely by Genentech or on its behalf during the term of this Agreement. CTI shall retain sole title to the CTI Knowhow and the CTI Patent Rights as presently existing and as developed or invented by CTI or on its behalf during the term of this Agreement, and shall have sole title to any improvements to the Genentech Knowhow or Genentech Patent Rights developed or invented solely by CTI or on its behalf during the term of this Agreement. The Parties shall jointly own any improvements to any Knowhow or Patent Rights developed or invented by both Parties or on their behalf during the term of this Agreement. Designation of inventor(s) on any patent application is a matter of applicable laws, and shall be solely within the discretion of qualified patent counsel of Genentech and CTI to determine in accordance with applicable laws of inventorship and competent evidence of the Parties.

7.02 PURSUIT OF SOLE PATENT APPLICATIONS.

Each Party shall, to the extent it elects to do so and at its own cost and expense, prepare, file, prosecute and maintain patent applications and patents covering (i) any of its own Knowhow or solely owned improvements to its Knowhow or Patent Rights (under Section 7.01), or (ii) any improvements to its own Knowhow or Patent Rights developed and owned solely by the other Party (under Section 7.01). Neither Party shall withdraw or abandon any of such Patent Rights or any of such applications and/or resulting Patent Rights without providing the other Party a free of charge option for a period of 90 days to assume the prosecution and/or maintenance thereof at its own expense.

7.03 RESIDUAL RIGHTS; GRANT BACK. Subject to the grant of exclusive rights under Article V during the term of this Agreement, each Party shall be free to use,

license and/or transfer as it sees fit (i) its own Patent Rights and Knowhow, (ii) any improvements to its own Patent Rights or Knowhow solely owned by it under Section 7.01, (iii) its interest in jointly owned improvements to Knowhow or Patent Rights under Section 7.01, and (iv) its interest in Joint Patent Rights under Section 7.04. During the term of this Agreement, Genentech hereby grants back to CTI an exclusive (except as to Genentech under Article V) right and license to use, sublicense and/or transfer as CTI sees fit any improvements to CTI Knowhow or CTI Patent Rights solely owned by Genentech under Section 7.01, and during the term of this Agreement CTI hereby grants back to Genentech an exclusive (except as to CTI under Article V) right and license to use, sublicense and/or transfer as Genentech sees fit any improvements to Genentech Knowhow or Genentech Patent Rights solely owned by CTI under Section 7.01. Each Party shall notify the other Party promptly if it solely develops or invents any improvements to the other Party's Knowhow or Patent Rights as contemplated in Section 7.01.

7.04 JOINT PATENTS. In the event that it is determined, in accordance with Section 7.01, that both: (i) employees or agents of Genentech or any other persons obliged to assign such invention to Genentech, and (ii) employees or agents of CTI or any other persons obliged to assign such invention to CTI, are joint inventors of an invention, the Parties shall jointly own patents, inventor's certificates and applications therefor covering such invention. Genentech shall prosecute all such patents claiming Factors, and CTI shall prosecute all such patents claiming the Encapsulation Technology. If a patent claims both Factors and the Encapsulation Technology, Genentech shall determine whether and how to prosecute any such potential patent application and be responsible for all costs incurred in prosecution. In making such determination, Genentech shall take into account the interests of both Parties and CTI shall have the right to file (or continue, as the case may be) at its expense, a patent application claiming the Encapsulation Technology to the extent that Genentech decides not to file or to continue to prosecute a patent application claiming such Encapsulation Technology. Notwithstanding the foregoing, the Parties shall assist each other to the maximum extent reasonable in securing intellectual property rights resulting from activities conducted hereunder. Either Party may withdraw from or abandon any jointly-owned patent or patent application, on notice to the other providing a free-of-charge option to assume the prosecution and/or maintenance thereof at its own cost and expense.

7.05 INFRINGEMENT OF SOLE PATENTS. If a Party considers that any of the Patent Rights of the other is being infringed by a third party, the former shall promptly notify the latter and shall provide it with any evidence of any infringement which is reasonably available. The Party owning the Patent Rights shall have the first opportunity at its own expense to attempt to remove such infringement by appropriate steps including suit. In such event, the other Party will assist in taking such steps, including suit, within reasonable limits, and any amount recovered as a result thereof shall be for the account of the Party owning the Patent Rights. In the event the Party owning the Patent Rights fails to take appropriate steps, including suit and legal action with respect to any such infringement within a period of six months following such notice of infringement, the other Party shall have the right to take any appropriate steps, including suit, against the infringer at its own expense and in its name. In such event, the owner of the Patent Rights shall assist the Party bringing suit as reasonably requested and shall permit the Party bringing suit to use its name in the suit. The expenses reasonably incurred in taking such steps, including suit and legal action, and any amount recovered as a result thereof shall be for the account of the Party taking such action, and the Party not taking such action shall be reimbursed for its out-of pocket expenses in connection with such suit or action.

7.06 INFRINGEMENT OF JOINT PATENT RIGHTS. In the event that any jointly-owned Patent Right shall be infringed, then the Parties agree to consult with each other as to the best manner in which to proceed. Should the Parties fail to agree on a joint program of action and the understanding relating thereto with respect to distribution of expenses and recoveries, then either Party shall have the right to enforce such jointly-owned patent at its sole expense and any recovery shall be first applied to reimbursing the Party for the out-of-pocket expenses incurred in bringing such suit or action and the remainder, if any, shall be divided appropriately between the Parties with reference to the relative monetary injury suffered by each by reason of the past infringement for which said amounts are recovered. The other Party shall agree to be joined in such suit and may, at its option, be represented by counsel of its choosing and at its own expense.

7.07 THIRD PARTY INTELLECTUAL PROPERTY RIGHTS. Subject to the other terms of this Agreement, each of the Parties shall be responsible for [*] hereunder. Each Party shall promptly notify the other Party of it becoming aware of

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any payments which will be due to third parties on account of intellectual property rights and the amount of such payments.

[*]

7.08 SURVIVAL. Sections 7.01, 7.02, 7.03 and 7.04 shall survive the termination or expiration of this Agreement.

ARTICLE VIII

PAYMENTS AND PROFIT SHARING

8.01 EQUITY INVESTMENT.

(a) Initial Equity Purchase. Pursuant to an agreement in the form of the Stock Purchase Agreement, Genentech shall purchase Eight Million Three Hundred Thousand Dollars (\$8,300,000) worth of CTI Common Stock on the date approximately thirty (30) days after the execution of this Agreement by both Parties, at a price per share equal to one hundred ten percent (110%) of the 20 Day Average of CTI's Common Stock. For purposes of the foregoing, the Parties agree that the 20 Day Average shall be calculated using the [*] of this Agreement. In addition Genentech shall purchase additional stock, if necessary, pursuant to Section 4.07(a), at a price per share equal to one hundred percent (100%) of the 20-Day Average of CTI's Common Stock on a purchase date to be agreed upon.

(b) Phase II Equity Purchase. Pursuant to an agreement in the form of the Stock Purchase Agreement, if Genentech has decided to proceed with the Clinical Development Program after the review under Section 4.05(b), and prior to starting the first Phase II Clinical Trial, if at all, Genentech shall purchase CTI Common Stock in an amount equal to the agreed-upon Phase II Clinical Development Expenses, at a price equal to one hundred percent (100%) of the 20 Day Average of CTI's Common Stock. In addition Genentech shall purchase additional stock, if necessary, pursuant to

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Section 4.07(b), at a price per share equal to one hundred percent (100%) of the 20-Day Average of CTI's Common Stock on a purchase date to be agreed upon.

8.02 NET PROFITS INSIDE THE UNITED STATES. Commencing with the First Commercial Introduction of a Licensed Product in the United States and subject to the other terms of this Agreement, during the term of this Agreement, CTI shall be entitled to [*] of the Net Profits for each Licensed Product sold or disposed of for value in the United States by Genentech and its permitted sublicensees and Genentech shall be entitled to [*] of such Net Profits; CTI shall also be entitled to payment for such License Product, if supplied by CTI hereunder, as provided in Section 4.06 and the Commercial Supply Agreement.

If in any Accounting Period "Net Profits" are negative, such loss shall, for CTI, be carried forward and offset against CTI's share of future Net Profits. Such loss shall bear interest on the outstanding principal amount at a rate equal to LIBOR (for one month as quoted in The Wall Street Journal) plus [*] compounded quarterly.

8.03 NET SALES OUTSIDE THE UNITED STATES. Commencing with the First Commercial Introduction of the Licensed Product outside the United States and subject to the other terms hereof (including, without limitation, Section 10.04), during the term of this Agreement, Genentech agrees to pay CTI, as consideration for the rights granted hereunder, [*] of Net Sales of Licensed Product by Genentech and its sublicensees in the Territory outside the United States and (ii) payment for such Licensed Product, if supplied by CTI hereunder, as provided in Section 4.06 and the Commercial Supply Agreement.

8.04 PAYMENT DATES AND STATEMENTS. Within sixty (60) days of the end of each Accounting Period in which Net Sales occurred for purposes of Section 8.02 and ninety (90) days of the end of each Accounting Period in which Net Sales occurred for purposes of Section 8.03, Genentech shall calculate all amounts owed by Genentech to CTI under Section 8.02 or 8.03 and shall send to CTI the net amount owed to CTI or, if appropriate, a statement of the loss carried forward by Genentech on behalf of CTI plus interest thereon as specified herein. Such payment shall be accompanied by a statement for the Accounting Period showing the calculation of the amount owed and for each country in the Territory, the total Net Sales of each Licensed Product by

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Genentech and its permitted sublicensees, the exchange rate used to directly convert any of the above amounts into U.S. Dollars, and, in the case of Net Sales inside the United States, the Cost of Sales for each Licensed Product during that Accounting Period, the Sales, General and Administrative Expense (and the calculation thereof), the Launch Expenses, the Phase IV Clinical Trial Expenses, the Net Profit, and the amount of any CTI loss carried forward. For purposes of determining when a sale of a Licensed Product occurs, the sale shall be deemed to occur on the date the Licensed Product is shipped to a third party. Any payment owed under Section 8.02 or 8.03 that is not paid on or before the date such payment is due under this Agreement shall bear interest, to the extent permitted by applicable law, at two percentage points (2%) over the prime rate of interest as reported by Bank of America NT&SA in San Francisco, California from time to time, calculated on the number of days such payment is delinquent.

8.05 RECORDS AND ACCOUNTING

(a) Genentech and its permitted sublicensees shall keep complete and accurate records of the latest three (3) years of Net Sales and, for sales of Licensed Products in the United States, Cost of Sales, Sales, General and Administrative Expense, Launch Expenses and Phase IV Clinical Trial Expenses. CTI shall have the right at its own expense to have an independent, certified public accountant, reasonably acceptable to Genentech (or any relevant sublicensee), review such records upon reasonable notice and during reasonable business hours for the purposes of verifying royalties payable to CTI, Net Sales, and Net Profits. This right may not be exercised more than once in any calendar year. Results of such review shall be made available to both Parties. If the review reflects an underpayment of royalties or Net Profits to CTI, such underpayment shall be promptly remitted to CTI with interest as provided in Section 8.04. If the underpayment is equal to or greater than five percent (5%) of Net Profits that was otherwise due, CTI shall be entitled to have Genentech pay all of the costs of such review. If the review reflects an overpayment of royalties and Net Profits to CTI, royalties and Net Profits for the period of such overpayment shall be recalculated and any amount due to Genentech shall be promptly paid.

(b) CTI and its permitted sublicensees shall keep complete and accurate records of the latest three (3) years of Fully Burdened Manufacturing Cost, and shall provide Genentech with a report setting forth all such items within forty-five (45) days of

the end of each Accounting Period. Genentech shall have the right at its own expense to have an independent, certified public accountant, reasonably acceptable to CTI, review such records upon reasonable notice and during reasonable business hours for the purposes of verifying the Fully Burdened Manufacturing Cost. This right may not be exercised more than once in any calendar year. Results of such review shall be made available to both Parties. If the review reflects an overpayment of the Fully Burdened Manufacturing Cost to CTI, such overpayment shall be promptly refunded to Genentech with interest as provided in Section 8.04. If the overpayment is equal to or greater than five percent (5%) of the Fully Burdened Manufacturing Cost, Genentech shall be entitled to have CTI pay all of the costs of such review. If the review reflects underreporting of CTI's Fully Burdened Manufacturing Cost, Fully Burdened Manufacturing Cost for the period of such underreporting shall be re-calculated and any amounts due to CTI shall be promptly paid.

8.06 CURRENCY OF PAYMENTS. All payments under this Agreement shall be made in United States Dollars by check or wire transfer (or such other reasonable means as a receiving Party may direct) to such bank account as may be designated from time to time. Any payments due hereunder on Net Sales outside of the United States shall be payable in United States Dollars calculated pursuant to U.S. generally accepted accounting principles consistently applied at the rate of exchange of the currency of the country in which the Net Sales were made, with such rate as is equal to the average of the rates reported in The Wall Street Journal for the first and last business day of the Accounting Period for which the Net Profit Amount or royalties are payable.

8.07 TAX WITHHOLDING. If any withholding taxes are required under the applicable laws of any country or any applicable treaty on royalty payments made hereunder, the selling Party will pay such taxes to the proper taxing authority and such tax payment will be deducted by the selling Party from the royalty payable to the owed Party. Written documentation of any such payment sufficient to satisfy the reasonable requirements of an appropriate tax authority concerning an application by the owed Party for a foreign tax credit for such payment or for similar treatment shall be secured and sent to the owed Party. The selling Party agrees to take such reasonable and lawful steps as the owed Party may request to minimize the amount of withholding taxes that must be paid pursuant to any applicable treaty to the extent permitted by such treaty. If either Party to this Agreement, by reason of the assignment of its rights

under this Agreement, as specified in Section 11.02, increases the withholding tax payable by the non-assigning Party in any taxing jurisdiction, then the assigning Party agrees to pay the non-assigning Party an amount which, net of any tax benefits which the non-assigning Party may use, would be the same as if the assignment had not occurred.

8.08 FINANCE COMMITTEE.

In connection with the sharing of Net Profits contemplated under Section 8.02, within thirty (30) days after Genentech's notice of exercise of its right to continue the Clinical Development Program after the review under Section 4.05(c), the Parties will establish a joint finance committee (the "Finance Committee"), to be comprised of two (2) representatives appointed and replaced by each Party. Such representatives will include individuals with expertise and responsibilities in the areas of accounting, cost allocation, budgeting or financial reporting. The Finance Committee will meet as requested by either Party by notice to the other Party (but in any event not more frequently than quarterly), at such times and locations as are reasonably acceptable to the Parties. All decisions and recommendations of the Finance Committee shall require the agreement of a majority of the representatives of each Party to be effective. In the event the representatives of the two Parties cannot agree on a matter, a member of senior management of each party shall confer and resolve the dispute. For this purpose, a "member of senior management" shall be a management-level employee who has the authority to bind a Party. If the members of senior management do not resolve such dispute within 60 days of such objection, the Parties shall attempt to resolve such dispute in accordance with Sections 11.19 and 11.20. The Finance Committee shall address financial, budgeting and accounting issues which arise in connection with the sharing of Net Profits contemplated under Section 8.02 above (including, without limitation, review of the Parties' respective cost structures and generally accepted accounting principles and other practical aspects of implementation of the terms of this Agreement and the amount of Cost of Sales, Fully Burdened Manufacturing Cost, Sales, General and Administrative Expense, Launch Expenses and Phase IV Clinical Trial Expenses) and the proper allocation of such costs in determining Net Profits. The Finance Committee (if any) automatically will cease to operate upon the expiration of the term of this Agreement.

ARTICLE IX

CONFIDENTIALITY AND DISTRIBUTION OF KNOWHOW

9.01 NON-DISCLOSURE. Except to the extent expressly authorized by this Agreement, the Parties agree that, for the term of this Agreement and for seven years thereafter (15 years in the case of manufacturing technology), the receiving Party shall keep completely confidential and shall not publish or otherwise disclose and shall not use for any purpose other than as contemplated by this Agreement any information furnished to it by the other Party pursuant to this Agreement (other than to employees or consultants on a need-to-know and confidential basis), except to the extent that it can be established by the receiving Party by competent proof that such information:

(a) was already known to the receiving Party, other than under an obligation of confidentiality, at the time of disclosure by the other Party;

(b) was generally available to the public or otherwise part of the public domain at the time of its disclosure to the receiving Party;

(c) became generally available to the public or otherwise part of the public domain after its disclosure and other than through any act or omission of the receiving Party in breach of this Agreement; or

(d) was subsequently lawfully disclosed to the receiving Party by a third party.

Information that is disclosed other than in written form shall be subject to the terms of this Section 9.01 only if confirmed in writing within thirty (30) days of disclosure and specifying that such information is subject to this Agreement. Each Party may disclose the other's information to the extent such disclosure is reasonably necessary in filing or prosecuting patent applications, prosecuting or defending litigation, complying with applicable governmental regulations or conducting clinical trials, provided that, if a Party proposes to make any such disclosure of the other Party's secret or confidential information, it will give reasonable advance notice to the other Party of such disclosure and, save to the extent inappropriate in the case of patent applications, will use its best efforts to secure confidential treatment of such information required to be disclosed. A Party may disclose confidential information to

a potential sublicensee or assignee to the extent reasonably required to negotiate a sublicense or assignment permitted hereunder; provided, however, that such potential sublicensee or assignee shall first execute a binding confidentiality agreement of term and scope at least as restrictive as the terms of this Article IX, and which confidentiality agreement shall expressly provide that the non-disclosing Party is intended to be a third-party beneficiary thereof.

9.02 PUBLICATION. Notwithstanding Section 9.01, each Party shall be free to publish the results of its activities conducted hereunder, to the extent that publication will not result in the disclosure of otherwise confidential data or Knowhow and will not conflict with the terms of the Neurturin MTA. Subject to the foregoing, at least 30 days prior to making any such publication (14 days in the case of an abstract), the publishing Party shall provide the other Party a draft of the proposed publication to afford an opportunity for comment and securing of intellectual property rights. Publication shall be delayed an additional 30 days to permit filing of patent applications upon request. Neither Party may publish the other's Knowhow without the prior written consent of the other Party.

9.03 DISTRIBUTION OF KNOWHOW.

Neither Party shall transfer any of the other Party's Knowhow (including without limitation, any Factors or genetic materials encoding therefor provided by such other Party or any proprietary information of such other Party under Section 9.01) to any third party without the express prior consent of the Party which provided such Knowhow, provided either Party may make such disclosures as are required by law or a court order (but before any such required disclosure it shall notify the other Party) or as are required as part of regulatory submissions or as required in sublicensing (provided that in cases of sublicensing, the entity receiving such Knowhow agrees to confidentiality and nonuse provisions at least as restrictive as those in this Article IX).

ARTICLE X

TERM AND TERMINATION

10.01 TERM. The term of this Agreement shall commence as of the Effective

Date set forth above. Unless sooner terminated pursuant to Sections 10.02, 10.03, 10.05 or 10.06, the term of this Agreement, the licenses granted in Sections 5.01 and 5.02 and Genentech's obligations with respect to Net Profits and royalties under Sections 8.02 and 8.03 shall expire on a [*] years from the date of First Commercial Introduction in that country. Subject to the other terms of this Agreement (including this Section 10.01), upon expiration of this Agreement on such country-by-country and Licensed Product-by-Licensed Product basis, Genentech shall have a perpetual, fully paid up, non-exclusive right and license under the CTI Knowhow and CTI Patent Rights, and any improvements thereto solely or jointly owned by CTI under Section 7.01, to develop, make, have made, use and sell such Licensed Products in such country in the Territory, and a perpetual, fully paid up, exclusive right and license in such country in the Territory to improvements to the Genentech Knowhow or Genentech Patent Rights solely developed or invented and solely owned by CTI under Section 7.01. Subject to the other terms of this Agreement, upon expiration of this Agreement CTI shall have a perpetual, fully paid-up, exclusive right and license in such country in the Territory to improvements to the CTI Knowhow or CTI Patent Rights solely developed or invented and solely owned by Genentech under Section 7.01. No later than [*] prior to the expiration of the term of the licenses granted hereunder, the Parties shall discuss the status of their relationship and shall agree, if Licensed Product is still being marketed hereunder anywhere in the world solely by Genentech or its sublicensee(s), either to extend the Supply Agreements or to transfer manufacturing technology and all necessary licenses to Genentech. Any such extended Supply Agreement(s) shall provide for a supply price of [*] of (i) Fully Burdened Manufacturing Cost plus [*] or (ii) the cap on Fully Burdened Manufacturing Cost agreed upon pursuant to Section 4.06. If no agreement is reached on supply prior to two years before such expiration, CTI shall transfer all necessary manufacturing technology in CTI's possession or control and grant all necessary licenses under the CTI Patents and CTI Knowhow (including any improvements hereunder) to Genentech (with right to sublicense) for the nonexclusive rights to make, have made, use and sell Licensed Product then under sale in the Field of Use in the Territory (but for no other purpose) and CTI shall permit Genentech and its sublicensees to reference or otherwise get the benefit of any necessary regulatory filings necessary to permit such manufacture and sale of Licensed Product. All such licenses shall be fully paid up (subject to the cost reimbursement provided below). In the event of a transfer of such technology and granting all necessary licenses to

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Genentech upon the expiration of this Agreement, Genentech shall reimburse CTI for all reasonable costs incurred by it as part of such transfer, and Genentech shall be responsible for the payment of all royalties and other amounts contractually required to be paid by CTI to third parties on account of such manufacture, use or sale by Genentech or its sublicensees.

10.02 BREACH. Failure by either Party to comply with any of its material obligations contained in this Agreement shall entitle the other Party to give to the Party in default notice specifying the nature of the default and requiring it to make good such default. If such default is not cured within 60 days after the receipt of such notice, the notifying Party shall be entitled, without prejudice to any of its other rights conferred on it by this Agreement, in addition to any other remedies available to it by law or in equity, to terminate this Agreement unless the defaulting Party shall cure such default within said 60 days. The right of either Party to terminate this Agreement, as hereinabove provided, shall not be affected in any way by its waiver of failure to take action with respect to any previous default.

10.03 INSOLVENCY OR BANKRUPTCY. Either Party may, in addition to any other remedies available to it by law or in equity, terminate this Agreement by written notice to the other Party in the event the other Party shall have become insolvent or bankrupt, or shall have made an assignment for the benefit of its creditors, or there shall have been appointed a trustee or receiver of the other Party or for all or a substantial part of its property, or any case or proceeding shall have been commenced or some other action taken by or against the other Party in bankruptcy or seeking reorganization, liquidation, dissolution, winding-up, arrangement, composition or readjustment of its debts or any other relief under any bankruptcy, insolvency, reorganization or other similar act or law of any jurisdiction now or hereafter in effect or there shall have been issued a warrant of attachment, execution, distraint or similar process against any substantial part of the property of the other Party, and any such event shall have continued for 60 days undismissed, unbounded and undischarged; provided, however, that no such right to terminate shall pertain solely by virtue of a voluntary reorganization for the purpose of solvent amalgamation or reconstruction.

10.04 TRANSFER OF TECHNOLOGY. (a) Upon termination of this Agreement due to Genentech's fundamental breach (including, without limitation, a failure to pay CTI Net Profits or royalties on Net Sales owed hereunder) or bankruptcy, the licenses

granted in Article V to Genentech shall terminate, and, Genentech shall grant to CTI a Territory-wide, exclusive license to develop, make, have made, use and sell Licensed Product in the Field of Use in the Territory (but for no other purpose) under the Genentech Patents and Knowhow solely or jointly owned by Genentech with CTI hereunder (including any improvements hereunder) with the right to sublicense and the right to reference or otherwise get the benefit of any necessary regulatory filings of Genentech or its sublicensees, and, upon the request of CTI, Genentech shall transfer to CTI any technology in its possession or control under the scope of such license and necessary for CTI to develop, make, have made, use or sell Licensed Product in the Field of Use in the Territory (but for no other purpose). CTI shall pay Genentech royalties in the amount of [*] of Net Sales of Licensed Product by CTI and its sublicensees and shall be responsible for all of Genentech's obligations hereunder. In addition to the royalties to be paid to Genentech, CTI shall be responsible for reimbursing Genentech for the payment of all royalties and other amounts contractually required to be paid by Genentech to third parties on account of such manufacture, sale or use of Licensed Product by CTI or its sublicensees.

(b) Upon termination of this Agreement due to CTI's fundamental breach (e.g., failure to supply Licensed Product as provided herein or in the Supply Agreement(s)) or bankruptcy, the licenses granted to CTI in Article V shall terminate, and, CTI shall grant to Genentech a Territory-wide, exclusive license to develop, make, have made, use and sell Licensed Product in the Field of Use in the Territory (but for no other purpose) under the CTI Patents and Knowhow, solely or jointly owned hereunder by CTI with Genentech (including any improvements hereunder) with the right to sublicense and the right to reference or otherwise get the benefit of any necessary regulatory filings of CTI or its sublicensees, and upon the request of Genentech, CTI shall transfer to Genentech any technology in its possession or control under the scope of such license and necessary for Genentech to develop, make, have made, use and sell Licensed Product in the Field of Use in the Territory (but for no other purpose). Genentech shall pay CTI royalties in the amount of [*] of Net Sales of Licensed Product in the Field of Use in the Territory by Genentech and its sublicensees and shall be responsible for all of CTI's obligations hereunder. In addition to the royalties to be paid to CTI, Genentech shall be responsible for reimbursing CTI for payment of all royalties and other amounts contractually required to be paid by CTI to third parties on account of such manufacture, sale or use of Licensed Product by Genentech or its sublicensees, but Genentech shall be entitled to

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offset against such royalty and other payments to CTI all of Genentech's out-of-pocket costs and expenses incurred in constructing facilities to manufacture Licensed Product in the Territory and obtaining approval of an establishment license application or equivalent regulatory approval of such manufacturing facilities. Genentech's right to offset its out-of-pocket costs of construction and approval shall be limited to those expenses reasonably incurred related to constructing a facility similar to the plant being used by CTI to produce Licensed Product hereunder. CTI shall have the option, in lieu of the foregoing offsets, of transferring to Genentech the ownership and/or control of the plant (with all liabilities incurred in connection with the construction, validation and approval of such plant) it is using at the time to supply Licensed Product hereunder. Genentech may reasonably refuse to accept such transfer, in which case Genentech's right to offset shall continue. Genentech may request that CTI transfer its technology to a third party solely for the manufacture of Licensed Product. CTI may reasonably withhold its consent to a transfer to a particular third party, but may not reject all possible reasonable third party candidates for such a transfer put forth by Genentech. During the period of such a transfer, CTI shall treat Genentech as its first priority customer for supply of Licensed Product. The Parties agree that the technology transfer will involve the need for CTI employees to train Genentech or its third party designee's employees. CTI will pay the salaries of its employees doing such training but will not be responsible for the payment of the salaries of Genentech or third party employees receiving training. Genentech will be responsible for all other obligations of CTI under this Agreement.

10.05 MUTUAL AGREEMENT. The Parties may terminate any development program or this Agreement by mutual agreement at any time.

10.06 SPECIAL TERMINATION RIGHTS.

(a) If Genentech elects not to continue the Development Program or the Clinical Development Program pursuant to Section 4.05 and the Parties do not agree to a new program hereunder within ninety (90) days, either Party may terminate this Agreement on ninety (90) days written notice to the other Party.

(b)(i) With respect to any Licensed Product, CTI may provide Genentech with a written notice at any time within thirty (30) days of Genentech's election under Section 4.05(b) to proceed with the Phase II Clinical Trial, of CTI's election not to proceed

further with the Clinical Development Program for such Licensed Product. After such notice, CTI shall have no further obligation to develop such Licensed Product or fund any costs hereunder for such Licensed Product, except as provided herein. Genentech shall have the option for a period of one hundred twenty (120) days after CTI's notice, [*] CTI shall continue to develop such Licensed [*] (and approval of the costs to be incurred) and the terms and conditions of this Agreement (including CTI's obligation to manufacture and supply, and Genentech's obligation to purchase, Licensed Product hereunder) shall remain in full force and effect, except that in lieu of the sharing of Net Profits on Net Sales of Licensed Products in the United States under Section 8.02 and the royalty on Net Sales of Licensed Products in the Territory outside the United States under Section 8.03, CTI shall be entitled to a royalty of only [*] of Net Sales of such Licensed Products by Genentech and its permitted sublicensees in the Territory, and its Fully Burdened Manufacturing Cost for such Licensed Product, if supplied by CTI hereunder. CTI shall be obligated to repay the full amount of the loan outstanding at a date to be agreed upon but in any event no later than [*] from each [*] to CTI thereunder. At CTI's election, such [*] shall be in cash and/or stock (pursuant to an agreement in the form of the Stock Purchase Agreement) valued at the 20 Day Average.

(ii) With respect to any Licensed Product, CTI may provide Genentech with a written notice at any time within thirty (30) days of Genentech's election under Section 4.05(c) to proceed with any Phase III Clinical Trial, of CTI's election not to proceed further with the Clinical Development Program for such Licensed Product. After such notice, CTI shall have no further obligation to develop such Licensed Product or fund any costs hereunder for such Licensed Product, except as provided herein. Genentech shall have the option for a period of one hundred twenty (120) days after CTI's notice, to [*]. If Genentech elects to make such loan, CTI shall continue to develop such Licensed [*] (and approval of the costs to be incurred) and the terms and conditions of this Agreement (including CTI's obligation to manufacture and supply, and Genentech's obligation to purchase, such Licensed Product hereunder) shall remain in full force and effect, except that in lieu of the sharing of Net Profits on

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Net Sales of Licensed Products in the United States under Section 8.02 and the royalty on Net Sales of Licensed Products in the Territory outside the United States under Section 8.03, CTI shall be entitled to a royalty of only [*] of Net Sales of Licensed Products by Genentech and its sublicensees in the United States, a royalty of only [*] of Net Sales of Licensed Products by Genentech and its sublicensees in the Territory outside the United States, and its Fully Burdened Manufacturing Cost for such Licensed Product, if supplied by CTI hereunder. CTI shall be obligated to [*] at a date to be agreed upon but in any event no later than five (5) years from each transfer of funds to CTI thereunder. At CTI's election, such [*] shall be in cash and/or stock (pursuant to an agreement in the form of the Stock Purchase Agreement) valued at the 20 Day Average.

10.07 EFFECT OF TERMINATION.

(a) Equity Purchases/Line of Credit. If this Agreement is terminated, (i) any equity purchase previously made by Genentech pursuant to Section 8.01 shall not be affected (subject to Sections 4.07(a) and (b) regarding overfunding), (ii) if such termination is not a result of Genentech's uncured default, CTI shall within one hundred eighty (180) days repay in full (in stock at a price equal to the 20 Day Average and/or in cash, at CTI's election) any outstanding loan balance (principal and interest) under the line of credit referred to in Section 4.07(d), and (iii) if such termination is a result of Genentech's uncured default, CTI shall within one hundred eighty (180) days repay (in stock at a price equal to the 20 Day Average and/or in cash, at CTI's election) in [*] under the line of credit referred to in Section 4.07(d).

(b) Materials/Knowhow. Except as otherwise provided herein, upon termination of this Agreement, each Party shall destroy (and provide a certificate of destruction) or return to the other Party, all Knowhow provided by the other Party including all biological materials and proprietary information provided by the other Party.

(c) Improvements. On any termination of this Agreement, Genentech shall have a perpetual, fully paid up, exclusive right and license in the Territory to improvements to the Genentech Knowhow or Genentech Patent Rights solely developed or invented and solely owned by CTI under Section 7.01, and CTI shall have a perpetual, fully

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paid up, exclusive right and license in the Territory to improvements to the CTI Knowhow or CTI Patent Rights solely developed or invented and solely owned by Genentech under Section 7.01, and each Party shall promptly transfer any such improvements that are in its possession or control to the other Party.

(d) Sublicenses. If this Agreement is terminated by one Party upon the breach of the other Party (the "Breaching Party"), all permitted sublicenses shall continue in force, provided that in the case of the Breaching Party's sublicensees, such sublicensee(s) cure the breach of the Breaching Party and agree to be responsible for the obligations of the Breaching Party.

(e) Access to Regulatory Documents. Except as otherwise provided herein, upon termination of this Agreement neither Party shall have any right to cross-reference or otherwise obtain the benefit of any regulatory filings made by the other Party.

10.08 SURVIVAL OF CERTAIN PROVISIONS. The provisions of Article VIII (to the extent any payment obligations have accrued prior to termination), IX and XI and Sections 10.04, 10.07 and 10.09 shall survive any termination or expiration of this Agreement.

10.09 ACCRUED RIGHTS, SURVIVING OBLIGATIONS. Termination, relinquishment or expiration of this Agreement for any reason shall be without prejudice to any rights which shall have accrued to the benefit of either Party prior to such termination, or expiration. Such termination, relinquishment or expiration shall not relieve either Party from obligations which are expressly indicated to survive termination or expiration of this Agreement.

ARTICLE XI

MISCELLANEOUS PROVISIONS

11.01 NO PARTNERSHIP. Nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, employer, employee or joint venture relationship between the Parties. No Party shall incur any debts or make any

commitments for the other.

11.02 ASSIGNMENTS. Except as otherwise provided herein, neither this Agreement nor any interest hereunder shall be assignable by any Party or by operation of law or otherwise without the prior written consent of the other; provided, however, that either Party may assign its rights and delegate its obligations under this Agreement, without the consent of the other Party, to any direct or indirect wholly-owned subsidiary or to any successor by merger or sale of substantially all of its assets to which this Agreement relates (e.g., one or more Factors) in a manner such that the assignor shall remain liable and responsible for the performance and observance of all its duties and obligations hereunder, or if the assignor disappears because of such transaction, the assignee must agree to abide by the terms and conditions of this Agreement. This Agreement shall be binding upon the successors and permitted assigns of the Parties and the name of a Party appearing herein shall be deemed to include the names of such Party's successor's and permitted assigns to the extent necessary to carry out the intent of this Agreement. Any assignment not in accordance with this Section 11.02 shall be void.

11.03 REPRESENTATIONS AND WARRANTIES. Each Party warrants and represents to the other Party that, to the best of the representing and warranting Party's knowledge: (i) it is free to enter into this Agreement; (ii) so doing will not violate any other agreement to which it is party; and (iii) it currently has the right to grant the licenses granted hereunder. Neither Party makes any representation or warranty that any patent applications licensed hereunder will issue as patents or that any patent licensed hereunder is valid or enforceable or that the exercise of the licenses granted hereunder will not infringe the rights of any third party.

11.04. FORCE MAJEURE. Neither Party shall be liable to the other for loss or damages or shall have any right to terminate this Agreement for any default or delay (including, without limitation, an inability to supply Licensed Product) attributable to any act of God, earthquake, flood, fire, explosion, strike, lockout, labor dispute, casualty or accident, war, revolution, civil commotion, act of public enemies, blockage or embargo, injunction, law, order, proclamation, regulation, ordinance, demand or requirement of any government or subdivision, authority (including, without limitation, drug regulatory authorities) or representative of any such government, or any other cause beyond the reasonable control of such Party, if the Party affected shall give

prompt notice of any such cause to the other Parties. The Party given such notice shall thereupon be excused from such of its obligations hereunder as it is so disabled and for 30 days thereafter. Notwithstanding the foregoing, nothing in this Section 11.04 shall excuse or suspend the obligation to make any payment due hereunder in the manner and at the time provided.

11.05 NO TRADEMARK RIGHTS. No right, express or implied, is granted by this Agreement to use in any manner any trade name or trademark of CTI or Genentech in connection with the performance of this Agreement or the exploitation of any license granted hereunder.

11.06 PUBLIC ANNOUNCEMENTS. The Parties shall consult and obtain mutual consent before making any public announcement concerning this Agreement or the subject matter hereof, except as required by law or applicable rules or regulations. Copies of press releases or similar written communications containing a Party's name shall be provided to that Party prior to release.

11.07 ENTIRE AGREEMENT OF THE PARTIES; AMENDMENT. This Agreement, the Neurturin MTA, and the Stock Purchase Agreement(s) to be entered into as provided herein constitute and contain the entire understanding and agreement of the Parties with respect to the subject matter hereof and cancel and supersede any and all prior negotiations, correspondence, understandings and agreements, whether verbal or written, between the Parties respecting the subject matter hereof, including the NGF Agreement except for those sections of the NGF Agreement which are intended to survive expiration or termination, all of which remain in full force and effect. No waiver, modification or amendment of any provision of this Agreement shall be valid or effective unless made in writing and signed by a duly authorized officer of each of the Parties.

11.08 SEVERABILITY. In the event any one or more of the provisions of this Agreement should for any reason be held by any court or authority having jurisdiction over this Agreement or either of the Parties to be invalid, illegal or unenforceable, such provision or provisions shall be validly reformed by addition or deletion of wording as appropriate to avoid such result and as nearly as possible approximate the intent of the Parties and, if unreformable, shall be divisible and deleted in such jurisdiction; elsewhere, this Agreement shall not be affected.

11.09 CAPTIONS. The captions to this Agreement are for convenience only, and are to be of no force or effect in construing or interpreting any of the provisions of this Agreement.

11.10 NOTICE AND DELIVERY. Any notice, requests, delivery, approval or consent required or permitted to be given under this Agreement shall be in writing and shall be deemed to have been sufficiently given if delivered in person, transmitted by telegraph or telecopier (with confirmed answer-back) or sent by registered air mail letter to the Party (which notice shall be considered effective five days after it is sent) to whom it is directed at its address shown below or such other address as such party shall have last given by notice to the other Party.

IF TO CTI, ADDRESSED TO:

CytoTherapeutics, Inc.
Two Richmond Square
Providence, RI 02906
Attention: President
Telephone: (401) 272-3310
Telecopier: (401) 272-3485
with a copy addressed to the General Counsel

IF TO GENENTECH, ADDRESSED TO:

Genentech, Inc.
460 Point San Bruno Boulevard
South San Francisco, CA 94080
Attention: Corporate Secretary
Telephone: (415) 225-1000
Telecopier: (415) 952-9881

11.11 LIMITATION OF LIABILITY. Neither Party shall be liable to the other for indirect, incidental or consequential damages arising out of any of the terms or conditions of this Agreement or with respect to their performance or lack thereof.

11.12 GENENTECH INDEMNIFICATION. Genentech shall indemnify, defend and hold harmless CTI and its officers, directors, Affiliates, employees and agents from and against all third party costs, claims, suits, expenses (including reasonable attorneys' fees) and damages arising out of or resulting from any willful or negligent act or omission by Genentech related to the subject matter of this Agreement or the use by or administration to any person of any Licensed Product that arises out of sales of Licensed Product by Genentech (except where such cost, claim, suit, expense or damage arose or resulted from any negligent act or omission by CTI or its sublicensees or from any defect in the manufacture of Licensed Product by CTI or its sublicensees which was not discovered by Genentech), provided that CTI gives reasonable notice to Genentech of any such claim or action, tenders the defense of such claim or action to Genentech and assists Genentech at Genentech's expense in defending such claim or action and does not compromise or settle such claim or action without Genentech's prior written consent.

11.13 CTI INDEMNIFICATION. CTI shall indemnify, defend and hold harmless Genentech and its officers, directors, Affiliates, employees and agents from and against all third party costs, claims, suits, expenses (including reasonable attorney's fees) and damages arising out of or resulting from any willful or negligent act or omission by CTI relating to the subject matter of this Agreement (except where such cost, claim, suit, expense or damage arose or resulted from any negligent act or omission by Genentech or its sublicensees) or from any defect in the manufacture of Licensed Product by CTI or its sublicensees which was not discovered by Genentech, provided that Genentech gives reasonable notice to CTI of any such claims or action, tenders the defense of such claim or action to CTI and assists Genentech at Genentech's expense in defending such claim or action and does not compromise or settle such claim or action without Genentech's prior written consent.

11.14 LIABILITY INSURANCE. Each Party shall maintain (i) prior to the first clinical trial in humans of any Licensed Product conducted by or on behalf of a Party comprehensive general and products liability and completed operations insurance with at least a Best-rated A-XIV insurance company covering that Party's activities related to this Agreement in an amount of not less than \$3,000,000 per occurrence and annual aggregate and (ii) during the remaining term of this Agreement either (1) net worth of no less than \$100,000,000 or (2) comprehensive general and products

liability and completed operations insurance covering that Party's activities related to this Agreement in an amount of not less than \$3,000,000 per occurrence and annual aggregate. Upon request, each Party shall provide to the other satisfactory evidence of that Party's compliance with this provision. The obligations under this Section 11.14 shall terminate upon the expiration of the statute of limitations applicable to any liability covered by the above-referenced insurance.

11.15 NO AGENCY. Nothing herein shall be deemed to constitute either Party as the agent or representative of the other Party, or both Parties as joint venturers or partners for any purpose. Each Party shall be an independent contractor, not an employee or partner of the other. Neither Party shall be responsible for the acts or omissions of the other Party, and neither Party will have authority to speak for, represent or obligate the other Party in any way without prior written authority from the other Party.

11.16 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 and the same instrument.

11.17 JOINT DRAFTING. This Agreement was jointly drafted and prepared by both Parties hereto and no presumption in favor of or against either Party hereto shall be deemed to exist with respect to the interpretation of any provision to this Agreement.

11.18 GOVERNING LAW. This Agreement shall be governed by and construed in accordance with the laws of the State of California as applied to contracts entered into and wholly performed within the State of California by California residents.

11.19 MEDIATION. The Parties agree that the prompt resolution of disputes that may arise hereunder is of critical importance. In the case of a dispute hereunder which the Parties fail to resolve, including, if applicable, after referral to a "member of senior management" pursuant to Sections 2.03 or 8.08, either side may demand mediation by written notice to the other. Within 10 business days of the giving of such notice, the Parties shall agree on an unaffiliated mediator, failing agreement within such 10 days, the Party requesting mediation shall select the mediator from a list of mediators provided by both Parties. Within 30 days of the choice of the mediator, each Party shall

submit to the other and the mediator, a brief of 20 pages or less outlining its position. Within five business days of the exchange of briefs, the mediation shall be held at a time and place to be selected by the Party that did not request the mediation. In no event shall the duration of the mediation be greater than one day unless otherwise agreed by the Parties. Each Party shall bear all of its own expenses incurred in connection with the mediation and the Parties shall share equally the fees and expenses of the mediator.

11.20 ARBITRATION. In the event that the parties are unable to resolve a dispute within 30 days after the commencement of mediation efforts under Section 11.19, either Party may submit the matter to nonbinding arbitration in accordance with the procedures set forth in this Section 11.20. If a party intends to commence arbitration to resolve a dispute, such Party shall provide written notice to the other Party of such intention, and shall designate one arbitrator. Within 10 days of receipt of such notice, the other Party shall designate in writing a second arbitrator. The two arbitrators so designated shall, within 10 days thereafter, designate a third arbitrator. The arbitrators so designated shall not be employees, consultants, officers, directors or shareholders of or otherwise associated with either Party or an Affiliate of either Party. The arbitration shall be conducted in accordance with the rules of, and under the auspices of, the International Chamber of Commerce and the location of the arbitration shall be a location in the United States selected by the Party that did not submit the matter to arbitration hereunder. Any such procedure shall be conducted as a "baseball" arbitration.

Within 15 days after the designation of the third arbitrator, the arbitrators and the Parties shall meet at which time each Party shall be required to set forth in writing the issues which need to be resolved and a proposed ruling on each such issue.

The arbitrators shall set a date for a hearing, which shall be no later than 30 days after the submission of written proposals from each Party, to discuss each of the issues identified by the Parties. Each Party shall have the right to be represented by counsel. The arbitrators shall have sole discretion with regard to the admissibility of any evidence.

The arbitrators shall use their best efforts to rule on each disputed issue within 30 days after the completion of the hearings described above. The arbitrators' ruling

shall be, in the absence of fraud or manifest error, binding and conclusive upon both Parties and may be enforced in a court of competent jurisdiction. The arbitrators may not award punitive or exemplary damages.

The arbitrators shall be paid a reasonable fee plus expenses, which fees and expenses shall be paid as designated by the arbitrators or if the arbitrators do not so designate such costs shall be shared equally by the Parties.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their respective duly authorized officers as of the day and year set forth below, each

copy of which shall for all purposes be deemed to be an original.

GENENTECH, INC.

CYTOTHERAPEUTICS, INC.

By: /s/ Illegible Signature

By: /s/ Illegible Signature

Title: Executive V.P.

Title: CEO

Date: 11/21/96

Date: 11/26/96