

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

SCHEDULE 13D
(RULE 13d-101)
UNDER THE SECURITIES EXCHANGE ACT OF 1934

INFORMATION TO BE INCLUDED IN STATEMENTS FILED
PURSUANT TO 13d-1(a) AND AMENDMENTS
THERE TO FILED PURSUANT TO 13d-2(a)

(AMENDMENT NO. ___)*

GUILFORD PHARMACEUTICALS, INC.
(Name of Issuer)

COMMON STOCK, \$.01 PAR VALUE
(Title of Class of Securities)

401829106
(CUSIP Number)

George A. Vandeman, Esq. Senior Vice President, General Counsel and Secretary Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789 (805) 447-1000	with a copy to: Gary Olson, Esq. Latham & Watkins 633 West Fifth Street Suite 4000 Los Angeles, California 90071 (213) 485-1234
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(Name, Address and Telephone Number of Person
Authorized to Receive Notices and Communications)

October 1, 1997
(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 because of Rule 13d-1(b)(3) or (4), check the following box .

Note: Six copies of this statement, including all exhibits, should be filed with the Commission. See Rule 13d-1(a) for other parties to whom copies are to be sent.

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

The information required 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 NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON
Amgen Inc.

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

3 SEC USE ONLY

4 SOURCE OF FUNDS*
WC

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

6 CITIZENSHIP OR PLACE OF ORGANIZATION
Delaware

		SOLE VOTING POWER
NUMBER OF	7	1,340,095
SHARES		
		SHARED VOTING POWER
BENEFICIALLY	8	N/A
OWNED BY		
		SOLE DISPOSITIVE POWER
EACH	9	1,340,095
REPORTING		
PERSON		SHARED DISPOSITIVE POWER
WITH	10	N/A

11 AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON
1,340,095

12 CHECK BOX IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES*
N/A

13 PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)
6.9%

14 TYPE OF REPORTING PERSON*
CO

*SEE INSTRUCTIONS BEFORE FILLING OUT!

ITEM 1. SECURITY AND ISSUER.

This statement relates to the shares of Common Stock, \$.01 par value per share (the "Common Stock"), of Guilford Pharmaceuticals, Inc., a Delaware corporation (the "Issuer"). The principal executive offices of the Issuer are located at 6611 Tributary Street, Baltimore, Maryland 21224.

ITEM 2. IDENTITY AND BACKGROUND.

(a)-(c). This statement is being filed by Amgen Inc., a Delaware corporation (the "Reporting Person"). The Reporting Person is a global biotechnology company that discovers, develops, manufactures and markets human therapeutics based upon advances in cellular and molecular biology. Its principal offices are located at Amgen Center, 1840 DeHavilland Drive, Thousand Oaks, California 91320-1789.

For information with respect to the identity and background of each executive officer and director of the Reporting Person, see Schedule I attached hereto.

(d)-(e). During the last five years, neither the Reporting Person nor, to the best knowledge of the Reporting Person, none of the other persons identified in Schedule I: (i) have been convicted in a criminal proceeding (excluding traffic violations or similar misdemeanors); or (ii) was a party to a civil proceeding of a judicial or administrative body of competent jurisdiction and as a result of such proceeding was or is subject to a judgement, decree or final order enjoining future violations of, or prohibiting or mandating activities subject to, federal or state securities laws or finding any violation with respect to such laws.

ITEM 3. SOURCE AND AMOUNT OF FUNDS OR OTHER CONSIDERATION.

The source of the \$20,000,000 used for the Reporting Person's purchase of 640,095 shares of Common Stock (the "Shares") and a Warrant to purchase up to 700,000 shares of Common Stock, subject to customary anti-dilution protections (the "Warrant"), was the working capital of the Reporting Person. The Reporting Person plans to use working capital to acquire any Common Stock issued upon any of the Warrants as described herein.

ITEM 4. PURPOSE OF TRANSACTION.

The Reporting Person acquired the Shares and the Warrant for investment purposes pursuant to the Purchase Agreement (see Item 6 below).

Subject to the Standstill Restriction (see Item 6 below) and depending on general market and economic conditions affecting the Issuer and other relevant factors, the Reporting Person may purchase additional Shares or dispose of some or all of its Shares from time to time in open market transactions, private transactions or otherwise.

Except as set forth herein, the Reporting Person has no present plans or proposals with respect to any material change in the Issuer's business or corporate structure or which relate to or would result in:

(1) the acquisition by any person of additional securities of the Issuer, or the disposition of securities of the Issuer;

(2) an extraordinary corporate transaction, such as a merger, reorganization or liquidation, involving the Issuer or any of its subsidiaries;

(3) a sale or transfer of a material amount of assets of the Issuer or any of its subsidiaries;

(4) any change in the present board of directors or management of the Issuer, including any plans or proposals to change the number or term of directors or to fill any existing vacancies on the board;

(5) any material change in the present capitalization or dividend policy of the Issuer;

(6) any other material changes in the Issuer's business or corporate structure;

(7) changes in the Issuer's charter, bylaws or instruments corresponding thereto or other actions which may impede the acquisition of control of the Issuer by any person;

(8) causing a class of securities of the Issuer to be delisted from a national securities exchange or cease to be authorized to be quoted in an inter-dealer quotation system of a registered national securities association;

(9) a class of equity securities of the Issuer becoming eligible for termination of registration pursuant to Section 12(g)(4) of the Securities Exchange Act of 1934; or

(10) any action similar to any of those enumerated above.

ITEM 5. INTEREST IN SECURITIES OF THE ISSUER.

(a) At the close of business on October 1, 1997, the Reporting Person beneficially owned 1,340,095 shares of Common Stock (which includes 700,000 shares of Common Stock issuable upon exercise of the Warrant). Such shares of Common Stock constitute approximately 6.9% of the total number of shares of Common Stock based upon 18,700,335 shares of Common Stock outstanding as of September 26, 1997 as set forth in the Purchase Agreement (see Item 6 below).

(b) The Reporting Person has the sole power to vote or to direct the vote, and the sole power to dispose or to direct the disposition of, the Shares beneficially owned by the Reporting Person.

(c) Except as described herein, the Reporting Person has not during the past 60 days or since the most recent filing of a SEC Schedule 13D been involved in any transaction concerning the Issuer's Common Stock.

(d) Not applicable.

(e) Not applicable.

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

On August 20, 1997, the Issuer entered into a Binding Term Sheet (the "Guilford Agreement") with the Reporting Person respecting the research, development and commercialization of the Issuer's FKBP-based neuroimmunophilin ligand technology ("Neuroimmunophilin Technology") for all human therapeutic and diagnostic applications. Pursuant to the terms of the Guilford Agreement, on October 1, 1997, the Issuer and the Reporting Person entered into a Stock and Warrant Purchase Agreement (the "Purchase Agreement") whereby the Issuer sold to the Reporting Person 640,095 shares of Common Stock and the Warrant for an aggregate consideration of \$20 million. The Warrant is exercisable at any time prior to October 1, 2002 at an exercise price of \$35.15 per share of Common Stock, subject to customary anti-dilution protections.

Pursuant to Section 7 of the Purchase Agreement, during the ten year period commencing October 1, 1997, without the written consent of the Issuer, the Reporting Person shall not directly or indirectly acquire more than 10% of the Issuer's outstanding capital stock. (the "Standstill Restriction"). Limited exceptions are provided in the event that any person or group acquires more than 10% of the Issuer's outstanding capital stock or if any person or group makes a tender offer for the Issuer's capital stock.

Also, on October 1, 1997, the Issuer and the Reporting Person entered into a Registration Rights Agreement pursuant to which the Reporting Person has customary "demand" and "piggyback" registration rights under the Securities Act of 1933, as amended, covering the Shares and Common Stock issuable upon exercise of the Warrant.

The above description of the Purchase Agreement, Warrant and the Registration Rights Agreement, as well as the description set forth in Item 4, are summaries only and do not purport to be complete descriptions of the terms thereof. These summaries are subject to, and are qualified in their entirety by reference to, the detailed provisions of the Purchase Agreement, Warrant and the Registration Rights Agreement, which are filed as Exhibits 7.1, 7.2 and 7.3 hereto, respectively.

ITEM 7. MATERIAL TO BE FILED AS EXHIBITS.

- 7.1 Stock and Warrant Purchase Agreement dated October 1, 1997 by and between the Issuer and the Reporting Person.
- 7.2 Warrant dated October 1, 1997 by and between the Issuer and the Reporting Person.
- 7.3 Registration Rights Agreement dated October 1, 1997 by and between the Issuer and the Reporting Person.

SIGNATURE

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.

AMGEN INC.

By: /s/ George A. Vandeman

Name: George A. Vandeman
Title: Senior Vice President,
General Counsel
and Secretary

Dated: October 28, 1997

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SCHEDULE I

AMGEN INC.
EXECUTIVE OFFICERS AND DIRECTORS

EXECUTIVE OFFICERS AND EMPLOYEE DIRECTORS

Name	Present Business Address	Present Principal Occupation	Citizenship
-----	-----	-----	-----
N. Kirby Alton	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, Development	U.S.
Robert S. Attiyeh	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, Finance and Corporate Development	U.S.
Stan Benson	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, Sales and Marketing	U.S.
Gordon M. Binder	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Chairman of the Board and Chief Executive Officer	U.S.
Dennis M. Fenton	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, Operations	U.S.
Kevin W. Sharer	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	President, Chief Operating Officer and Director	U.S.
Lawrence M. Souza	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, Research	U.S.
George A. Vandeman	Amgen Inc. Amgen Center 1840 DeHavilland Drive Thousand Oaks, CA 91320-1789	Senior Vice President, General Counsel and Secretary	U.S.

NON-EMPLOYEE DIRECTORS

Name	Present Business Address	Present Principal Occupation	Citizenship
-----	-----	-----	-----
William K. Bowes, Jr.	U.S. Venture Partners 2180 Sand Hill Road, Suite 300 Menlo Park, CA 94025	General Partner, U.S. Venture Partners	U.S.
Franklin P. Johnson, Jr.	Asset Management Partners 2275 East Bayshore Road, Suite 150 Palo Alto, CA 94303	General Partner, Asset Management Partners	U.S.
Steven Lazarus	ARCH Venture Partners 135 South La Salle Street, Suite 3702 Chicago, IL 60603	Managing General Partner, ARCH Venture Partners, L.P.	U.S.
Edward J. Ledder	Medicine Bow River Ranch P.O. Box 410 Medicine Bow, WY 82329	Retired Chairman of the Board and Chief Executive Officer, Abbott Laboratories	U.S.
Gilbert S. Omenn	School of Public Health SC-30 University of Washington Seattle, WA 98195	Dean, School of Public Health and Community Medicine, University of Washington	U.S.
Judith C. Pelham	Mercy Health Services 34605 Twelve Mile Road Farmington Hills, MI 48331- 3221	President and Chief Executive Officer, Mercy Health Services	U.S.

EXHIBIT INDEX

- 7.1 Stock and Warrant Purchase Agreement dated October 1, 1997 by and between the Issuer and the Reporting Person.
- 7.2 Warrant Agreement dated October 1, 1997 by and between the Issuer and the Reporting Person.
- 7.3 Registration Rights Agreement dated October 1, 1997 by and between the Issuer and the Reporting Person.

STOCK AND WARRANT PURCHASE AGREEMENT

BY AND BETWEEN

GUILFORD PHARMACEUTICALS INC.

AND

AMGEN INC.

Dated as of October 1, 1997

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STOCK AND WARRANT PURCHASE AGREEMENT

THIS STOCK AND WARRANT PURCHASE AGREEMENT (the "Agreement") is dated as of

October 1, 1997 and entered into by and between GUILFORD PHARMACEUTICALS INC., a
Delaware corporation (the "Company") and AMGEN INC., a Delaware corporation

("Buyer").

RECITALS

WHEREAS, the Company, GPI NIL Holdings, Inc., a Delaware corporation and
wholly-owned subsidiary of the Company, and Buyer have entered into a
collaboration with respect to the research, development and commercialization of
certain small molecule neuroimmunophilin compounds, and have executed a Binding
Term Sheet dated as of August 20, 1997 relating thereto (the "Binding Term

Sheet").

WHEREAS, in connection with the foregoing, Buyer has agreed to purchase
from the Company, and the Company has agreed to sell to Buyer, (i) 640,095
shares of the Company's Common Stock (the "Shares"), and (ii) a Warrant for the

purchase of 700,000 Shares of Common Stock of the Company (the "Warrant," and

together with the Shares, the "Securities"). The Warrant is attached hereto as

Exhibit A. Subject to adjustment as set forth in the Warrant, the Warrant shall

be exercisable for 700,000 shares of Common Stock (individually, a "Warrant

Share" and collectively, the "Warrant Shares"); and

WHEREAS, Buyer and the Company desire to provide for the foregoing
purchases and sales and to establish various rights and obligations in
connection therewith;

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and premises
contained herein and for other good and valuable consideration the receipt and
adequacy of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. Definitions.

(a) As used in this Agreement, the terms below shall have the following
meanings:

"Charter Documents" shall mean the Amended and Restated Certificate of

Incorporation and the Amended and Restated Bylaws of the Company, each as
amended to date and presently in effect.

"Closing Date" shall mean October 1, 1997.

"Collateral Agreements" shall mean the Binding Term Sheet, the Warrant and

the Registration Rights Agreement.

"Commission" shall mean the Securities and Exchange Commission.

"Common Stock" shall mean the shares of the Common Stock, \$.01 par value

per share, of the Company.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as amended,

and the rules and regulations of the Commission thereunder.

"HSR Act" shall mean the Hart-Scott-Rodino Antitrust Improvements Act of

1976, as amended.

"Person" shall mean any individual, firm, corporation, partnership, limited

liability company, trust, unincorporated organization or other entity or a
government or agency or political subdivision thereof, and shall include any
successor (by merger or otherwise) of such Person.

"Preferred Stock" shall mean the shares of undesignated Preferred Stock,

par value \$.01 per share, of the Company.

"Registration Rights Agreement" shall mean the Registration Rights

Agreement to be entered into as of the date hereof by and between the Company
and Buyer.

"Securities Act" shall mean the Securities Act of 1933, as amended, and the

rules and regulations of the Commission thereunder.

"Series A Preferred Stock" shall mean the shares of the Series A Junior

Participating Preferred Stock, par value \$.01 per share, of the Company.

(b) Other Defined Terms. The following terms shall have the meanings

defined for such terms in the Sections set forth below:

Term ----	Section -----
Binding Term Sheet	Preamble
Buyer	Preamble
Closing	3(a)
Company	Preamble
Company SEC Reports	4(g)
Securities	Recitals
Securities Purchase Price	2
Shares	Recitals
Warrant	Recitals
Warrant Agreement	Recitals
Warrant Share	Recitals
Warrant Shares	Recitals

SECTION 2. Issuance and Sale of Securities.

Upon the terms set forth herein, the Company hereby agrees to issue and sell to Buyer, and Buyer hereby agrees to purchase the Securities for an aggregate purchase price of \$20 Million (the "Securities Purchase Price").

Buyer hereby subscribes for and agrees to purchase from the Company, in immediately available funds, (i) 640,095 Shares of the Company's Common Stock for a cash purchase price of \$15 million (calculated by reference to the closing prices of the Company's Common Stock for the 20 consecutive trading days ending on and including August 19, 1997 amounting to \$23.434 per share), and (ii) a Warrant to purchase 700,000 shares of the Company's Common Stock for a cash purchase price of \$5 million.

SECTION 3. Closing.

(a) Closing. The closing of the transactions contemplated hereby (the "Closing") will take place on the Closing Date at 9:00 a.m. local time at the offices of Latham & Watkins, 633 West Fifth Street, Los Angeles, California 90071 or at such other time or place as the parties hereto shall mutually agree.

(b) Documents to be Delivered. At the Closing, the Company shall deliver to Buyer, against payment in full of the Securities Purchase Price by wire transfer in same day funds to the account(s) the Company shall have designated in writing at least one business day prior to the Closing Date, the agreements, certificates and documents as set forth in Section 6.

SECTION 4. Representations and Warranties of the Company.

The Company hereby represents and warrants to Buyer as of the date hereof as follows:

(a) Organization and Standing. The Company is a corporation duly organized and validly existing under the laws of the State of Delaware and has requisite corporate power and authority to own and lease its property, to conduct its business as presently conducted and as proposed to be conducted by it and to execute and deliver this Agreement and each of the Collateral Agreements. The Company has requisite corporate power and authority to perform and to carry out the transactions contemplated by this Agreement and each of the Collateral Agreements. The Company is qualified to do business and in good standing in Delaware and in each jurisdiction where it does business or owns property except those jurisdictions where the failure to be so qualified and in good standing would not have a material adverse effect on its business or property. The Company has furnished to Buyer true and complete copies of the Charter Documents.

(b) Capitalization. As of the date hereof, the authorized capital stock of the Company consists of the following: (i) 40,000,000 shares of Common Stock, of which 18,700,335 shares are issued and outstanding as of September 26, 1997, (ii) 4,700,000 shares of Preferred Stock, of which no shares are issued and outstanding, and (iii) 300,000 shares of Series A Preferred Stock, of which no shares are issued and outstanding. All of the issued and outstanding shares of Common Stock, have been duly authorized, and are validly issued and are fully paid and non-assessable. Except as set forth in the Company SEC Reports or on Schedule 4(b) hereto or as provided in this Agreement, there is not, nor upon the consummation of the

transactions contemplated herein, will there be, (i) any subscription, warrant, option, convertible security or other right (contingent or otherwise) to purchase or acquire any shares of capital stock of the Company, (ii) any commitment of the Company to issue any subscription, warrant, option, convertible security or other such right or to issue or distribute to holders of any shares of its capital stock any evidences of indebtedness or assets of the Company, or (iii) any obligation of the Company (contingent or otherwise) to purchase, redeem or otherwise acquire any shares of its capital stock or any interest therein or to pay any dividend or make any other distribution in respect thereof. Except as set forth in the Company SEC Reports or on Schedule

4(b) or as provided in this Agreement, no Person is entitled to, nor upon the

consummation of the transactions contemplated herein will any Person be entitled to, (i) any preemptive or similar right with respect to the issuance of any capital stock of the Company, or (ii) any rights with respect to the registration of any capital stock of the Company under the Securities Act. In addition, as of September 26, 1997, a total of 2,892,546 shares of Common Stock were reserved for issuance under outstanding options, warrants and exchange rights.

(c) Issuance of Shares. The issuance, sale and delivery of the

Securities in accordance with this Agreement, and the issuance and delivery of the Warrant Shares issuable upon exercise of the Warrant, have been duly authorized and reserved for issuance, as the case may be, by all necessary corporate action on the part of the Company (no consent or approval of the stockholders of the Company being required by law, by the Charter Documents, or the qualification criteria of the Nasdaq National Market), and the Securities when so issued, sold and delivered against payment therefor in accordance with the provisions of this Agreement, and the Warrant Shares issuable upon exercise of the Warrant, when issued upon such exercise, will be (i) duly and validly issued, fully paid and non-assessable and not subject to preemptive or any other similar rights of the shareholders of the Company or others and free, at time of issuance, of all restrictions on transfer subject to restrictions on transfer resulting from applicable federal and state securities laws and (ii) free and clear of all liens, charges, restrictions, claims and encumbrances.

(d) Authority for Agreement. The execution, delivery and performance

by the Company of this Agreement and each of the Collateral Agreements have been duly authorized by all necessary corporate action, and this Agreement and each of the Collateral Agreements have been duly executed and delivered and constitute valid and binding obligations of the Company enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws in effect relating to or affecting the rights of creditors generally and subject, as to enforceability, to general principles of equity. Except as disclosed in the Binding Term Sheet, the execution and delivery by the Company of this Agreement and each of the Collateral Agreements, and the consummation by the Company of the transactions contemplated hereby and thereby (including, without limitation, the issuance and sale of the Securities and the Warrant Shares), will not violate any provision of law to which the Company is subject and will not in any material respect conflict with or result in any breach of any of the terms, conditions or provisions of, or constitute a default under, or result in the creation of any lien, security interest, charge or encumbrance upon any of the properties, assets or outstanding capital stock of the Company, the Charter Documents, or any indenture, lease, agreement or other instrument to which the Company is a party or by which it or any of its properties is bound, or any decree, judgment, order, statute, rule

or regulation applicable to the Company; provided, however, that no such conflict, without respect to materiality, will cause any provision of this Agreement or each of the Collateral Agreements to become invalid or unenforceable.

(e) Governmental Consents. No consent, approval, order or

authorization of, or registration, qualification, designation, declaration or filing with, any governmental or regulatory authority is required on the part of the Company in connection with the execution and delivery of this Agreement and each of the Collateral Agreements, and the consummation of the transactions contemplated hereby and thereby (including, without limitation, the offer, issue, sale and delivery of the Securities and the Warrant Shares issuable upon exercise of the Warrant), except such filings as shall have been made or consents or approvals obtained prior to and which shall be effective on and as of the Closing. Based in part on the representations made by Buyer in Section 5

of this Agreement, the offer and sale of the Securities to Buyer will be in compliance with applicable federal and state securities laws.

(f) Litigation. Except as set forth in the Company SEC Reports and

the Binding Term Sheet, there are no material actions, suits, proceedings or investigations, either at law or in equity, or before any commission or other administrative authority in any United States or foreign jurisdiction, of any kind now pending or, to the best of the Company's knowledge, threatened or proposed involving the Company or any of its properties or assets or which question the validity or legality of the transactions contemplated hereby, or to the best of the Company's knowledge, against its employees or consultants with respect to the Company's business.

(g) SEC Filings; Financial Statements.

(i) The Company has filed all forms, reports and documents required to be filed with the Commission under the Exchange Act since January 1, 1995 (collectively, the "Company SEC Reports"). The Company SEC Reports (i) were

prepared in all material respects in accordance with the requirements of the Exchange Act, and (ii) did not at the time they were filed (or if amended or superseded by a filing prior to the date of this Agreement, then on the date of such filing) contain any untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(ii) Each of the financial statements (including, in each case, any related notes thereto) contained in the Company SEC Reports was prepared in accordance with generally accepted accounting principles applied on a consistent basis throughout the periods involved (except as may be indicated in the notes thereto), and each was complete and correct in all material respects and presented fairly in all material respects presented the financial position of the Company as at the respective dates thereof and the results of its operations and cash flows for the periods indicated, except that the unaudited interim financial statements were or are subject to normal and recurring year-end adjustments which were not or are not expected to be material in amount.

(h) No Undisclosed Liabilities. The Company does not have any

material liabilities (absolute, accrued, contingent or otherwise) except liabilities (i) in the aggregate adequately provided for or otherwise disclosed in the Company's balance sheet (including any related notes thereto) for the fiscal quarter ended June 30, 1997 included in the Company's Quarterly Report on Form 10-Q for the fiscal quarter ended June 30, 1997 or in the Company SEC Reports, or (ii) incurred since June 30, 1997 in the ordinary course of business.

(i) Absence of Changes. Since June 30, 1997, there has been no

material adverse change in the financial condition, business, or assets of the Company.

(j) Intellectual Property.

(i) To the best of the Company's knowledge, it has done nothing to compromise in any material respect the secrecy, confidentiality or value of any of its trade secrets, know-how, inventions, prototypes, designs, processes or technical data required to conduct its business as now conducted or as proposed to be conducted. The Company will continue to take reasonable security measures in the future, as it presently is doing, to protect the secrecy, confidentiality, and value of all of its trade secrets, know-how, inventions, prototypes, designs, processes, and technical data important to the conduct of its business.

(ii) Except as set forth in the Company SEC Reports and Schedule 4(j) hereto, the Company has not granted rights to manufacture, produce, license, market or sell its products to any other Person and is not bound by any agreement that affects the Company's exclusive right to develop, manufacture, distribute, market or sell its products.

(k) No Defaults. The Company is not in default (i) under its Charter

Documents, or any indenture, mortgage, lease agreement, contract, purchase order or other instrument to which it is a party or by which it or any of its property is bound or affected, or (ii) with respect to any order, writ, injunction or decree of any court of any federal, state, municipal or other governmental department, commission, board, bureau, agency or instrumentality, domestic or foreign, which defaults, either singly or in the aggregate, would have a material adverse effect on the Company. At the time of the Closing, to the best knowledge of the Company, there will exist no condition, event or act which constitutes, or which after notice, lapse of time or both would constitute, a material default under any of the foregoing which, either singly or in the aggregate, would have a material adverse effect on the Company.

(l) Offerings. Except as contemplated by this Agreement or as

otherwise disclosed by the Company to Buyer, the Company has no current plans or intentions, within six months from the date hereof, to issue any shares of its capital stock or any other securities or any securities convertible or exchangeable into shares of its capital stock or any other securities, except for securities issuable under approved employee benefit plans.

(m) Brokers. No broker, finder or investment banker is entitled to

any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of the Company.

SECTION 5. Representations and Warranties of Buyer.

Buyer hereby represents and warrants to the Company as of the date hereof as follows:

(a) Investment. Buyer is acquiring the Securities, and the Warrant

Shares into which the warrants may be exercised, for its own account (and not for the account of others) for investment and not with a view to any distribution thereof within the meaning of the Securities Act.

(b) Authority. Buyer has requisite power and authority to execute,

deliver and perform this Agreement and each of the Collateral Agreements in accordance with their respective terms. The execution, delivery and performance by Buyer of this Agreement and each of the Collateral Agreements have been duly authorized by all necessary corporate action, and this Agreement and each of the Collateral Agreements have been duly executed and delivered and constitute valid and binding obligations of Buyer enforceable in accordance with their respective terms, subject to applicable bankruptcy, insolvency, fraudulent conveyance, reorganization, moratorium and other similar laws in effect relating to or affecting the rights of creditors generally and subject, as to enforceability, to general principles of equity. The execution and delivery by Buyer of this Agreement and each of the Collateral Agreements, and the consummation by Buyer of the transactions contemplated hereby and thereby, will not violate any provision of law to which Buyer is subject and will not conflict with or result in any breach of any of the terms, conditions or provisions of, or constitute a default under, or result in the creation of any lien, security interest, charge or encumbrance upon any of the properties, assets or outstanding capital stock of Buyer, the Charter Documents, or any indenture, lease, agreement or other instrument to which Buyer is a party or by which it or any of its properties is bound, or any decree, judgment, order, statute, rule or regulation applicable to Buyer. Buyer represents that it has not been organized, reorganized or recapitalized specifically for the purpose of investing in the Company.

(c) Accredited Investor. Buyer is an Accredited Investor within the

definition set forth in Rule 501(a) under the Securities Act.

(d) Brokers. No broker, finder or investment banker is entitled to

any brokerage, finder's or other fee or commission in connection with the transactions contemplated by this Agreement based upon arrangements made by or on behalf of Buyer.

SECTION 6. Closing Conditions.

(a) Conditions to Buyer's Obligation to Close. The obligation of

Buyer to consummate the transactions contemplated hereby are subject to the satisfaction, on or prior to the Closing Date, of the delivery by the Company of the following: (i) certificates for the Shares in such denominations as Buyer has requested, dated the Closing Date and registered in the name of Buyer or its nominees as specified by Buyer, (ii) the Warrant, dated the Closing Date and registered in the name of Buyer or its nominees as specified by Buyer, (iii) each of the Collateral Agreements, which shall have been duly authorized, executed and delivered by the Company and

shall be in full force and effect, (iv) an officers' certificate certifying as to the incumbency of the officers of the Company executing this Agreement and the Collateral Agreements and the resolutions of the Board of Directors authorizing the execution, delivery and performance of the Agreement and the Collateral Agreements, (v) a Certificate of Good Standing (long-form if available), and (vi) an opinion of Hogan & Hartson, L.L.P., counsel to the Company, in form and substance reasonably satisfactory to Buyer, and attached hereto as Exhibit A, with such exceptions and qualifications as are customary and reasonable under the law of the applicable jurisdiction. In rendering such opinion, such counsel may rely upon certificates of public officers and, as matters of fact, upon certificates of duly authorized representatives of the Company; provided, that copies of such certificates shall be contemporaneously delivered to Buyer.

(b) Conditions to Company's Obligation to Close. The obligation of

the Company to consummate the transactions contemplated hereby is subject to the satisfaction, on or prior to the Closing Date, of the payment by Buyer of the Securities Purchase Price as provided for in Section 2 hereof.

SECTION 7. Standstill.

During the ten-year period commencing on the date hereof, without the written consent of the Company, Buyer shall not directly or indirectly acquire more than 10% of the Company's then outstanding capital stock. Notwithstanding the foregoing, if any person or group (for the purposes of this Section 7,

"person" and "group" shall have the respective meanings ascribed to such terms

pursuant to Regulation 13D adopted by the Commission under the Exchange Act, as in effect on the date hereof), directly or indirectly acquires more than 10% of the Company's then outstanding capital stock, Buyer may acquire up to the same percentage acquired by such person or group; provided, however, Buyer is not and does not become a member of such group. If any person or group, directly or indirectly, makes an offer to tender or exchange for the Company's capital stock, Buyer shall be relieved of its obligations hereunder; provided, however, that Buyer shall not be so relieved if Buyer solicits, encourages or participates in any such offer to tender or exchange. Nothing herein shall prohibit Buyer from making any proposal to the Company's Board of Directors.

SECTION 8. Survival and Indemnification.

(a) Survival of Representations, Etc. All representations and

warranties contained herein shall survive the execution and delivery of this Agreement and the Collateral Agreements and the closing of the transactions contemplated hereby and thereby until the first anniversary of the date of this Agreement (or until final resolution of any claim or action arising from the untruth, inaccuracy or breach of any such representation and warranty, if notice of such untruth, inaccuracy or breach was given prior to such first anniversary) without regard to any investigation made by any of the parties hereto. All statements contained in any certificate or other instrument delivered by the Company pursuant to this Agreement and denominated as representations and warranties shall constitute representations and warranties by the Company under this Agreement. All agreements and covenants contained herein shall survive indefinitely until, by their respective terms, they are no longer operative.

(b) Indemnification. The parties shall, with respect to the

representations, warranties, covenants and agreements made herein or in certificates or other instruments delivered in connection therewith, indemnify, defend and hold the non-breaching party harmless against all liability, together with all reasonable costs and expenses related thereto (including legal and accounting fees and expenses), arising from the untruth, inaccuracy or breach of any such representations, warranties, covenants or agreements of the breaching party.

SECTION 9. Miscellaneous.

(a) Legend. (i) Each certificate representing Shares sold pursuant

to the provisions hereof, if deemed advisable by the Company, shall bear the following legends:

"THE SHARES REPRESENTED BY THIS CERTIFICATE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL SUCH SHARES ARE REGISTERED UNDER SUCH ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY IS OBTAINED TO THE EFFECT THAT SUCH REGISTRATION IS NOT REQUIRED."

(ii) Buyer hereby agrees not to offer, sell or otherwise transfer the Shares in violation of the foregoing legend or applicable state and federal securities laws.

(iii) The Company shall have no obligation to register a transfer of the Shares on its books, unless the conditions specified in the legend in subclause (i) above are satisfied, and the Company may instruct its transfer agent not to register the transfer of any of the Shares unless the conditions specified in the foregoing legend are satisfied.

(b) Successors and Assigns. This Agreement shall be binding upon and

inure to the benefit of the parties hereto and their respective successors and assigns, and no other Person shall have any right, benefit or obligation hereunder.

(c) Notices. Unless otherwise provided herein, any notice, request,

instruction or other document to be given hereunder by any party to the others shall be in writing and delivered in person or by courier, or by facsimile transmission (with receipt confirmed) or mailed by certified mail, postage prepaid, return receipt requested (such mailed notice to be effective on the date of such receipt is acknowledged), as follows:

If to the Company:

Guilford Pharmaceuticals Inc.
6611 Tributary Street
Baltimore, Maryland 21224
Attn: Corporate Secretary
Telecopy No.: (410) 631-6899

With a copy to:

Hogan & Hartson, L.L.P.
111 South Calvert Street, 16th Floor
Baltimore, Maryland 21202
Attn: Michael Silver, Esq.
Telecopy No.: (410) 539-6981

If to Buyer:

Amgen Inc.
Amgen Center
1840 DeHavilland Drive
Thousand Oaks, California 91320-1789
Attn: Corporate Secretary
Telecopy No.: (805) 499-8011

With a copy to:

Latham & Watkins
633 West Fifth Street, Suite 4000
Los Angeles, California 90071
Attn: Gary Olson, Esq.
Telecopy No.: (213) 891-8763

or to such other place and with such other copies as either party may designate as to itself by written notice to the others.

(d) Choice of Law. This Agreement shall be construed, interpreted and

the rights of the parties determined in accordance with the laws of the State of Delaware (excluding choice of law provisions).

(e) Entire Agreement; Amendments and Waivers. This Agreement,

together with the Collateral Agreements, constitutes the entire agreement among the parties pertaining to the subject matter hereof and thereof and supersedes all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. No waiver of any of the provisions of this Agreement shall be deemed or shall

constitute a waiver of any other provision hereof (whether or not similar), nor shall such waiver constitute a continuing waiver unless otherwise expressly provided.

(f) Counterparts. This Agreement may be executed in one or more

counter parts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument.

(g) Invalidity. In the event that any one or more of the provisions

contained in this Agreement or in any other instrument referred to herein, shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement or any other such instrument.

(h) Headings. The headings of the Articles and Sections herein are

inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

(i) Expenses. Each of the Company and Buyer will each be liable for

its own costs and expenses incurred in connection with the negotiation, preparation, execution and performance of this Agreement.

(j) Specific Enforcement. The Company and Buyer acknowledge and agree

that if any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached, irreparable damage would occur and it would be extremely impracticable and difficult to measure damages. Accordingly, in addition to any other rights and remedies to which the parties may be entitled by law or equity, the parties shall be entitled to an injunction or injunctions to prevent or cure breaches of the provisions of this Agreement and to enforce specifically the terms and provisions hereof, and the parties expressly waive (i) the defense that a remedy in damages will be adequate and (ii) any requirement, in an action for specific performance, for the posting of a bond.

(k) Further Assurances. On and after the date hereof, the Company and

Buyer will take all appropriate action and execute all documents, instruments or conveyances of any kind which may be reasonably necessary to carry out any of the provisions hereof.

[Signature Page to follow]

IN WITNESS WHEREOF, the parties hereto have executed this Agreement, or have caused this Agreement to be duly executed on their respective behalf by their respective officers thereunto duly authorized, as of the day and year first above written.

GUILFORD PHARMACEUTICALS INC.

By /s/ Craig R. Smith, M.D.

Name: Craig R. Smith, M.D.
Title: President and Chief Executive Officer

AMGEN INC.

By /s/ George A. Vandeman

Name: George A. Vandeman
Title: Senior Vice President, General Counsel and
Secretary

WARRANT

Dated as of October 1, 1997

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THIS WARRANT AND THE SHARES OBTAINABLE UPON EXERCISE HEREOF HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED, AND MAY NOT BE OFFERED, SOLD OR OTHERWISE TRANSFERRED, PLEDGED OR HYPOTHECATED UNLESS AND UNTIL SUCH WARRANT OR SHARES ARE REGISTERED UNDER SUCH ACT OR AN OPINION OF COUNSEL REASONABLY SATISFACTORY TO THE COMPANY IS OBTAINED TO THE EFFECT THAT SUCH REGISTRATION IS NOT REQUIRED.

GUILFORD PHARMACEUTICALS INC.

WARRANT

This certifies that, for the sum of \$5 million, the receipt of which is hereby acknowledged, Amgen Inc., or its registered permitted assigns (the "Holder") is entitled to subscribe for and purchase up to 700,000 shares (subject to adjustment as described herein) of fully paid and nonassessable Common Stock of Guilford Pharmaceuticals Inc., a Delaware corporation (the "Company"), upon exercise of this Warrant and subject to the provisions and upon the terms and conditions hereinafter set forth.

SECTION 1. Term; Exercise of Warrant. Subject to the terms of this

Warrant, the Holder shall have the right, which may be exercised commencing at the opening of business on October 2, 1997 and until 5:00 p.m., Maryland time on October 1, 2002, to receive from the Company the number of fully paid and nonassessable Warrant Shares which the Holder may at the time be entitled to receive on exercise of such Warrant and payment to the Company of the Exercise Price (as defined below) then in effect for such Warrant Shares; provided, however, that such Warrant shall be exercised in minimum increments of 100,000 shares or as proportionately adjusted for any stock splits or stock dividends or the like. If not exercised prior to 5:00 p.m., Maryland time on October 1, 2002, this Warrant shall become void and all rights thereunder and all rights in respect thereof shall cease as of such time.

This Warrant may be exercised upon surrender to the Company at its office designated for such purpose (the address of which is set forth in Section 10 hereof) this Warrant with the form of election to purchase duly filled in and signed, which signature shall be guaranteed by a bank or trust company having an office or correspondent in the United States or a broker or dealer which is a member of a registered securities exchange or the National Association of Securities Dealers, Inc., and upon payment to the Company of the Exercise Price (as defined in Section 3), subject to adjustment pursuant to Section 7, for the number of Warrant Shares in respect of which the Warrant is then exercised. Payment of the aggregate Exercise Price shall be made in cash or by certified or official bank check payable to the order of the Company.

Subject to the provisions of Section 2 hereof, upon such surrender of

this Warrant and payment of the Exercise Price the Company shall issue and cause to be delivered with all reasonable dispatch to or upon the written order of the Holder and in such name or names as the Holder may designate, a certificate or certificates for the number of full Warrant Shares issuable upon the exercise of such Warrant together with cash as provided in Section 8; provided,

however, that if any reclassification, consolidation, merger or lease or sale of assets is proposed to be effected by the Company as described in subsection (j) of Section 7 hereof, or a tender offer or an exchange offer for shares of Common

Stock of the Company shall be made, upon such surrender of Warrant and payment of the Exercise Price as aforesaid, the Company shall, as soon as possible, but in any event not later than two business days thereafter, issue and cause to be delivered the full number of Warrant Shares issuable upon the exercise of such Warrant in the manner described in this sentence together with cash as provided in Section 8. Such certificate or certificates shall be deemed to have been

issued and any person so designated to be named therein shall be deemed to have become a holder of record of such Warrant Shares as of the date of the surrender of such Warrant and payment of the Exercise Price.

The Warrant shall be exercisable, at the election of the Holder, either in full or from time to time in part (in minimum increments of 100,000 shares) and, in the event that the Warrant is exercised in respect of fewer than all of the Warrant Shares issuable on such exercise at any time prior to the date of expiration of the Warrant, a new Warrant will be issued and delivered pursuant to the provisions of this Section.

All Warrants surrendered upon exercise of Warrants shall be cancelled and disposed of by the Company. The Company shall keep copies of this Warrant and any notices given or received hereunder available for inspection by the Holder during normal business hours at its office.

SECTION 2. Payment of Taxes. The Company will pay all documentary

stamp taxes, if any, attributable to the initial issuance of Warrant Shares upon the exercise of Warrants.

SECTION 3. Exercise Price. The purchase price for each share of

Common Stock deliverable upon exercise of this Warrant (the "Exercise Price") is

\$35.15 per share, subject to adjustment as described in Section 7 herein.

SECTION 4. Mutilated or Missing Warrant Certificates. In case the

Warrant shall be mutilated, lost, stolen or destroyed, the Company shall issue, in exchange and substitution for and upon cancellation of the mutilated Warrant, or in lieu of and substitution for the Warrant lost, stolen or destroyed, a new Warrant of like tenor and representing an equivalent number of Warrant Shares, but only upon receipt of evidence reasonably satisfactory to the Company of such loss, theft or destruction of such Warrant and indemnity, if requested, also reasonably satisfactory to it.

SECTION 5. Reservation of Warrant Shares. The Company will at all

times reserve and keep available, free from preemptive rights, out of the aggregate of its authorized but unissued Common Stock or its authorized and issued Common Stock held in its treasury, for the purpose of enabling it to satisfy any obligation to issue Warrant Shares upon exercise of the Warrant, the maximum number of shares of Common Stock which may then be deliverable upon the exercise of the outstanding Warrant.

The Company or, if appointed, the transfer agent for the Common Stock (the "Transfer Agent") and every subsequent transfer agent for any shares of the

Company's capital

stock issuable upon the exercise of any of the rights of purchase aforesaid will be irrevocably authorized and directed at all times to reserve such number of authorized shares as shall be required for such purpose. The Company will keep a copy of this Warrant on file with the Transfer Agent and with every subsequent transfer agent for any shares of the Company's capital stock issuable upon the exercise of the rights of purchase represented by the Warrants. The Company will furnish such Transfer Agent a copy of all notices of adjustments and certificates related thereto, transmitted to each Holder pursuant to Section 9 hereof.

Before taking any action which would cause an adjustment pursuant to Section 7 hereof to reduce the Exercise Price below the then par value (if any) of the Warrant Shares, the Company will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Company may validly and legally issue fully paid and nonassessable Warrant Shares at the Exercise Price as so adjusted.

The Company covenants that all Warrant Shares which may be issued upon exercise of this Warrant will, upon issue, be fully paid, nonassessable, free of preemptive rights and free from all documentary stamp taxes, and liens, charges and security interests with respect to the issue thereof.

SECTION 6. Obtaining Stock Exchange Listings. The Company will from time to time take all action which may be necessary so that the Warrant Shares, immediately upon their issuance upon the exercise of this Warrant, will be listed on the principal securities exchanges and automated quotation systems within the United States of America, if any, on which other shares of Common Stock are then listed.

SECTION 7. Adjustment of Exercise Price and Number of Warrant Shares Issuable. The Exercise Price and the number of Warrant Shares issuable upon the exercise of the Warrant are subject to adjustment from time to time upon the occurrence of the events enumerated in this Section 7. For purposes of this Section 7, "Common Stock" means shares now or hereafter authorized of any class of common stock of the Company and any other stock of the Company, however designated, that has the right (subject to any prior rights of any class or series of preferred stock) to participate in any distribution of the assets or earnings of the Company without limit as to per share amount.

(a) Adjustment for Change in Capital Stock.

If the Company: (i) pays a dividend or makes a distribution on its Common Stock in shares of its Common Stock; (ii) subdivides its outstanding shares of Common Stock into a greater number of shares; or (iii) combines its outstanding shares of Common Stock into a smaller number of shares; then the Exercise Price in effect immediately prior to such action shall then be adjusted in accordance with the formula:

$$E' = E \times \frac{O}{A}$$

Where:

E' = the adjusted Exercise Price

E = the current Exercise Price

O = the number of shares of Common Stock outstanding prior to such action

A = the number of shares of Common Stock outstanding immediately after such action

In the case of a dividend or distribution the adjustment shall become effective immediately after the payment date for such dividend or distribution, or the effective date of such other corporate action including, but not limited to, a subdivision or combination.

If after an adjustment the Holder upon exercise of the Warrant may receive shares of two or more classes of capital stock of the Company, the Company shall determine the allocation of the adjusted Exercise Price between the classes of capital stock. After such allocation, the exercise privilege, the number of shares issuable upon such exercise, and the Exercise Price of each class of capital stock shall thereafter be subject to adjustment on terms comparable to those applicable to Common Stock in this Section 7.

Such adjustment shall be made successively whenever any event listed above shall occur.

(b) Adjustment for Rights Issue.

If the Company distributes any rights, options or warrants to all holders of its Common Stock entitling them at any time after the record date mentioned below to purchase shares of Common Stock at a price per share less than the Fair Market Value (as defined in Section 7(d)) per share on such record

date relating to such distribution, the Exercise Price shall be adjusted in accordance with the formula:

$$E' = E \times \frac{O + \frac{N \times P}{M}}{O + N}$$

where:

- E' = the adjusted Exercise Price.
- E = the current Exercise Price.
- O = the number of shares of Common Stock outstanding on the record date.
- N = the number of additional shares of Common Stock issuable upon exercise of the rights, options or warrants offered.
- P = the exercise price per share of the additional shares issuable upon exercise of the rights, options or warrants.
- M = the Fair Market Value per share of Common Stock on the record date.

The adjustment shall be made successively whenever any such rights, options or warrants are issued and shall become effective immediately after the record date for the determination of stockholders entitled to receive the rights, options or warrants. If at the end of the period during which such rights, options or warrants are exercisable, not all rights, options or warrants shall have been exercised, the Exercise Price shall be immediately readjusted to what it would have been if "N" in the above formula had been the number of shares actually issued.

Notwithstanding the foregoing, if the Company distributes or issues rights to all holders of its Common Stock pursuant to a shareholder rights plan, then no adjustment shall be made pursuant to this Section 7(b) upon such distribution or issuance if, upon exercise of the Warrant, the Holder receives the same type and number of unexpired rights it would have received (as adjusted for any event described in Sections 7(a) or (g) had it exercised the Warrant, and been a holder of the shares of Common Stock issuable upon exercise thereof, prior to the record date for such distribution or issuance.

(c) Adjustment for Other Distributions.

If the Company distributes to all holders of its Common Stock any of its assets (including but not limited to securities and cash), debt securities, capital stock, or any rights or warrants to purchase assets, debt securities, capital stock, or other securities, the Exercise Price shall be adjusted in accordance with the formula:

$$E' = E \times \frac{M - F}{M}$$

where:

- E' = the adjusted Exercise Price.
- E = the current Exercise Price.
- M = the Fair Market Value per share of Common Stock on the record date mentioned below.
- F = the Fair Market Value on the record date of the assets, debt securities, capital stock or rights or warrants applicable to one share of Common Stock.

The adjustment shall be made successively whenever any such distribution is made and shall become effective immediately after the record date for the determination of stockholders entitled to receive the distribution.

This subsection does not apply to (i) dividends, distributions, combinations or issuances referred to in subsection (a) of this Section 7, or (ii) rights, options or warrants referred to in subsection (b) of this Section 7.

(d) Fair Market Value.

"Fair Market Value" per share of Common Stock or any other security (herein collectively referred to as a "Security") or for any other asset at any date shall be:

(1) if the Security is registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), the average of the daily Market Prices for each business day during the period commencing 30 business days before such date and ending on the date one day prior to such date or, if the Security has been registered under the Exchange Act for less than 30 consecutive business days before such date, then the average of the daily Market Prices for all of the business days before such date for which daily Market Prices are available. If the Market Price is not determinable for at least 15 business days in such period, the Fair Market Value of the Security shall be determined as if the Security was not registered under the Exchange Act; or

(2) if the asset or Security is not registered under the Exchange Act, (i) the value of the asset or Security determined in good faith by the Board of Directors of the Company and certified in a board resolution, based on the most recently completed arm's length transaction between the Company and a person other than an affiliate of the Company in which such determination is necessary and the closing of which occurs on such date or shall have occurred within the six months preceding such date, or (ii) if no such transaction shall have occurred on

such date or within such six-month period, the value of the asset or Security determined pursuant to the procedures set forth in Section 7(i).

The "Market Price" for any Security on any business day means: (i) if

such Security is listed or admitted to trading on any securities exchange, the closing price, regular way, on such day on the principal exchange on which such Security is traded, or if no sale takes place on such day, the average of the closing bid and asked prices on such day, (ii) if such Security is not then listed or admitted to trading on any securities exchange, the last reported sale price on such day, or if there is no such last reported sale price on such day, the average of the closing bid and the asked prices on such day, as reported by a reputable quotation source designated by the Company, or (iii) if neither clause (i) nor (ii) is applicable, the average of the reported high bid and low asked prices on such day, as reported by a reputable quotation service, or a newspaper of general circulation in the Borough of Manhattan, City of New York, customarily published on each business day, designated by the Company. If there are no such prices on a business day, then the Market Price shall not be determinable for such business day.

(e) When De Minimis Adjustment May Be Deferred.

No adjustment in the Exercise Price need be made unless the adjustment would require an increase or decrease of at least 1% in the Exercise Price. Any adjustments that are not made shall be carried forward and taken into account in any subsequent adjustment.

All calculations under this Section shall be made to the nearest cent or to the nearest 1/20th of a share, as the case may be.

(f) When No Adjustment Required.

No adjustment shall be made for a transaction referred to in subsections (a), (b) or (c) of this Section 7 if Holder is to participate in the transaction on a basis and with notice that is fair and appropriate in light of the basis and notice on which holders of Common Stock participate in the transaction.

No adjustment shall be made for rights to purchase Common Stock pursuant to a Company plan for reinvestment of dividends or interest.

No adjustment shall be made for a change in the par value of the Common Stock.

To the extent this Warrant becomes convertible into cash, no adjustment need be made thereafter as to the cash. Interest will not accrue on the cash.

(g) Reorganization of Company.

If any reclassification of the Common Stock of the Company or any consolidation or merger of the Company with another entity, or the sale or lease of all or substantially all of the Company's assets to another entity shall be effected in such a way that holders of the Common Stock of the Company shall be entitled to receive stock, securities or assets with respect

to or in exchange for such Common Stock, then, as a condition precedent to such reclassification, consolidation, merger, sale or lease, lawful and adequate provisions shall be made whereby the Holder shall thereafter have the right to purchase and receive upon the basis and the terms and conditions specified in this Warrant and in lieu of the shares of Common Stock immediately theretofore purchasable and receivable upon the exercise of the rights represented hereby, such shares of stock, securities or assets as may be issued or payable in such reclassification, consolidation, merger, sale or lease with respect to or in exchange for the number of shares of Common Stock purchasable and receivable upon the exercise of the rights represented hereby had such rights been exercised immediately prior thereto, and in any such case appropriate provision shall be made with respect to the rights and interests of the Holder to the end that the provisions hereof (including without limitation provisions for adjustments of the Exercise Price and of the number of shares of Common Stock purchasable and receivable upon the exercise of the Warrant) shall thereafter be applicable, as nearly as may be, in relation to any shares of stock, securities or assets thereafter deliverable upon the exercise hereof. The Company will not effect any such reclassification, consolidation, merger, sale or lease, unless prior to or as soon as practicable following the consummation thereof the successor corporation (if other than the Company) resulting from such reclassification, consolidation or merger or the corporation purchasing or leasing such assets shall assume by a supplemental Warrant, executed and mailed or delivered to the Holder, the obligation to deliver to the Holder such shares of stock, securities or assets as, in accordance with the foregoing provisions, Holder may be entitled to purchase.

If the issuer of securities deliverable upon exercise of the supplemental Warrant is an affiliate of the formed, surviving, transferee or lessee corporation, that issuer shall join in the supplemental Warrant.

If this subsection (g) applies, subsections (a), (b) and (c) of this Section 7 do not apply.

(h) Adjustment in Number of Shares of Common Stock.

Upon each adjustment of the Exercise Price pursuant to this Section 7, the Warrant outstanding prior to the making of the adjustment in the Exercise Price shall thereafter evidence the right to receive upon payment of the adjusted Exercise Price that number of shares of Common Stock (calculated to the nearest 1/20th of a share) obtained from the following formula:

$$N' = N \times \frac{E}{E'}$$

where:

N' = the adjusted number of Warrant Shares issuable upon exercise of the Warrant by payment of the adjusted Exercise Price.

N = the number of Warrant Shares previously issuable upon exercise of the Warrant by payment of the Exercise Price prior to adjustment.

E' = the adjusted Exercise Price.

E = the Exercise Price prior to adjustment.

(i) Disputes; Fair Market Value Determination.

If a dispute shall at any time arise between the Company and the Holder with respect to any matters hereunder including adjustments to the number of shares of Common Stock, the Exercise Price, or a determination as to Fair Market Value provided for herein, such dispute shall be conclusively determined by either the Holder and the Company agreeing on a single independent investment bank of recognized national standing to resolve the dispute or, if the Holder and the Company cannot agree on a single investment bank after an additional seven days, each of the Holder and the Company shall appoint an independent investment bank of recognized national standing with appropriate experience involving companies comparable to the Company and the dispute shall be mutually resolved by the two investment banks. If the two investment banks are not able to reach agreement within 20 days, then they shall within five days appoint a third independent investment bank of recognized national standing with appropriate experience involving companies comparable to the Company and the dispute shall be definitively resolved by such third investment bank within 20 days. Each party shall pay the costs, fees and expenses of its respective investment bankers and the parties shall split the costs of the third investment bank.

(j) Form of Warrant.

Irrespective of any adjustments in the Exercise Price or the number or kind of shares purchasable upon the exercise of the Warrant, any Warrant theretofore or thereafter issued may continue to express the same price and number and kind of shares as are stated in the Warrant initially issuable.

SECTION 8. Fractional Interests. The Company shall not be required

to issue fractional Warrant Shares on the exercise of the Warrant. The number of full Warrant Shares which shall be issuable upon the exercise thereof shall be computed on the basis of the aggregate number of Warrant Shares purchasable on exercise of the Warrants so presented. If any fraction of a Warrant Share would, except for the provisions of this Section 8, be issuable on the exercise

of Warrant (or specified portion thereof), the Company shall pay an amount in cash equal to the Fair Market Value on the day immediately preceding the date the Warrant is presented for exercise, multiplied by such fraction.

SECTION 9. Notices to the Holder. Upon any adjustment of the

Exercise Price pursuant to Section 7, the Company shall promptly thereafter (i)

cause to be filed with the Secretary of the Company a certificate setting forth the Exercise Price after such adjustment and setting forth in reasonable detail the method of calculation and the facts upon which such calculations are based and setting forth the number of Warrant Shares (or portion thereof) issuable after such adjustment in the Exercise Price, upon exercise of this Warrant and payment of the adjusted Exercise Price, and (ii) cause to be given to the Holder written notice of such adjustments by first-class mail, postage prepaid. Where appropriate, such notice may be given

in advance and included as a part of the notice required to be mailed under the other provisions of this Section 9.

In case:

(a) the Company shall authorize the issuance to all holders of shares of Common Stock of rights, options or warrants to subscribe for or purchase shares of Common Stock or of any other subscription rights or warrants; or

(b) the Company shall authorize the distribution to all holders of shares of Common Stock of evidences of its indebtedness or assets (other than cash dividends or cash distributions payable out of earnings or earned surplus or dividends or distributions payable in shares of Common Stock); or

(c) of any consolidation or merger to which the Company is a party and for which approval of any shareholders of the Company is required, or of the conveyance or transfer of all or substantially all of the properties and assets of the Company, or of any reclassification or change of Common Stock issuable upon exercise of the Warrant (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), or a tender offer or exchange offer for shares of Common Stock; or

(d) of the voluntary or involuntary dissolution, liquidation or winding up of the Company; or

(e) the Company proposes to take any action that would require an adjustment in the Exercise Price pursuant to subsections (a), (b) or (c) of Section 7 and if the Company does not arrange for the Holder to participate

pursuant to subsection (f) of Section 7, or if the Company takes any action

that would require a supplemental Warrant pursuant to subsection (g) of Section 7;

then the Company shall cause to be given to the Holder, at least 10 days prior to the applicable record date hereinafter specified, or promptly in the case of events for which there is no record date, by first-class mail, postage prepaid, a written notice stating (i) the date as of which the holders of record of shares of Common Stock to be entitled to receive any such rights, options, warrants or distribution are to be determined, or (ii) the initial expiration date set forth in any tender offer or exchange offer for shares of Common Stock, or (iii) the date on which any such consolidation, merger, conveyance, transfer, dissolution, liquidation or winding up is expected to become effective or consummated, and the date as of which it is expected that holders of record of shares of Common Stock shall be entitled to exchange such shares for securities or other property, if any, deliverable upon such reclassification, consolidation, merger, conveyance, transfer, dissolution, liquidation or winding up; provided, however, that the Holder shall not be entitled to receive notice prior to any public announcement thereof by the Company. The failure to give the notice required by this Section 9 or any defect therein shall not affect the

legality or validity of any distribution, right, option, warrant, consolidation, merger, conveyance, transfer, dissolution, liquidation or winding up, or the vote upon any action.

Nothing contained in this Warrant shall be construed as conferring upon the Holder the right to vote or to consent or to receive notice as shareholders in respect of the meetings of shareholders or the election of Directors of the Company or any other matter, or any rights whatsoever as shareholders of the Company.

SECTION 10. Notices to Company and the Holder. Unless otherwise

provided herein, any notice, request, instruction or other document to be given hereunder by any party to the others shall be in writing and delivered in person or by courier or by facsimile transmission (with receipt confirmed), or mailed by certified mail, postage prepaid, return receipt requested (such mailed notice to be effective on the date such receipt is acknowledged), as follows:

If to the Company:

Guilford Pharmaceuticals Inc.
6611 Tributary Street
Baltimore, Maryland 21224
Attn: Corporate Secretary
Telecopy No.: (410) 631-6899

With a copy to:

Hogan & Hartson, L.L.P.
111 South Calvert Street, 16th Floor
Baltimore, Maryland 21202
Attn: Michael Silver, Esq.
Telecopy No.: (410) 539-6981

If to the Holder:

Amgen Inc.
Amgen Center
1840 DeHavilland Drive
Thousand Oaks, California 91320-1789
Attn: Corporate Secretary
Telecopy No.: (805) 499-8011

With a copy to:

Latham & Watkins
633 West Fifth Street, Suite 4000
Los Angeles, California 90071
Attn: Gary Olson, Esq.
Telecopy No.: (213) 891-8763

or to such other place and with such other copies as either party may designate as to itself by written notice to the others.

SECTION 11. Supplements and Amendments. The Company may not

supplement or amend this Warrant without the prior written approval of the Holder.

SECTION 12. Successors and Assignment. All the covenants and

provisions of this Warrant by or for the benefit of the Company shall bind and inure to the benefit of its respective successors and assigns hereunder. This Warrant is not assignable or transferable by the Holder except in increments of 100,000 Warrant Shares or by operation of law.

SECTION 13. Governing Law. This Warrant shall be deemed to be a

contract made under the laws of the State of Delaware and for all purposes shall be construed in accordance with the internal laws of said State, excluding choice of law provisions.

SECTION 14. Benefits of This Warrant. Nothing in this Warrant shall

be construed to give to any person or corporation other than the Company and the Holder any legal or equitable right, remedy or claim under this Warrant; but this Warrant shall be for the sole and exclusive benefit of the Company and the Holder.

SECTION 15. Counterparts. This Warrant may be executed in any number

of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

[Signature Page To Follow]

Date: October 1, 1997

GUILFORD PHARMACEUTICALS INC.

By: /s/ Craig R. Smith, M.D.

Name: Craig R. Smith, M.D.
Title: President and Chief Executive
Officer

- - - - -
Seal

Attest: _____

RECEIVED BY:

AMGEN INC.

By: /s/ George A. Vandeman

Name: George A. Vandeman
Title: Senior Vice President, General
Counsel and Secretary

- - - - -
Seal

Attest: _____

[Form of Election to Purchase

(To Be Executed Upon Exercise Of Warrant)

The undersigned hereby irrevocably elects to exercise the right, represented by this Warrant, to receive _____ shares of Common Stock and herewith tenders payment for such shares to the order of GUILFORD PHARMACEUTICALS INC. in the amount of \$_____ in accordance with the terms hereof. The undersigned requests that a certificate for such shares be registered in the name of _____, whose address is _____ and that such shares be delivered to _____ whose address is _____. If said number of shares is less than all of the shares of Common Stock purchasable hereunder, the undersigned requests that a new Warrant representing the remaining balance of such shares be registered in the name of _____, whose address is _____, and that such Warrant be delivered to _____, whose address is _____.

The undersigned represents that the aforesaid shares of Common Stock are being acquired for the account of the undersigned for investment and not with a view to, or for resale in connection with, the distribution thereof and that the undersigned has no present intention of distributing or reselling such shares.

The undersigned is an "accredited investor" as defined in Securities and Exchange Commission Rule 501(a) pursuant to the Securities Act of 1933, as amended.

Signature: _____

Date: _____

Signature Guaranteed: _____

REGISTRATION RIGHTS AGREEMENT

BY AND BETWEEN

GUILFORD PHARMACEUTICALS INC.

and

AMGEN INC.

Dated as of October 1, 1997

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REGISTRATION RIGHTS AGREEMENT

THIS REGISTRATION RIGHTS AGREEMENT (the "Agreement") is dated as of October 1, 1997 and entered into by and between GUILFORD PHARMACEUTICALS INC., a Delaware corporation (the "Company"), and AMGEN INC., a Delaware corporation (the "Purchaser").

RECITALS

WHEREAS, the Company, GPI NIL Holdings, Inc., a Delaware corporation and wholly-owned subsidiary of the Company, and the Purchaser have entered into a collaboration with respect to the research, development and commercialization of certain small molecule neuroimmunophilin compounds, and have executed a Binding Term Sheet dated as of August 20, 1997 relating thereto (the "Binding Term Sheet");

WHEREAS, in connection with the Binding Term Sheet, the Purchaser has agreed to purchase from the Company, and the Company has agreed to sell to the Purchaser, 640,095 shares of Common Stock and a Warrant for 700,000 shares of Common Stock for an aggregate cash consideration of \$20 million;

WHEREAS, in connection with the foregoing, the Company and the Purchaser have entered into a Stock and Warrant Purchase Agreement (the "Purchase Agreement") dated as of October 1, 1997; and

WHEREAS, as contemplated by the Binding Term Sheet, the Company has agreed to provide the registration rights set forth in this Agreement;

AGREEMENT

NOW, THEREFORE, in consideration of the mutual covenants and premises contained herein and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

SECTION 1. Definitions.

(a) As used in this Agreement, the terms below shall have the following meanings:

"Agent" shall mean any Person authorized to act and who acts on behalf of the Purchaser with respect to the transactions contemplated by this Agreement.

"Collateral Agreements" shall mean the Binding Term Sheet, the Warrant and the Purchase Agreement.

"Common Stock" shall mean the Common Stock, \$.01 par value, of the Company.

"Exchange Act" shall mean the Securities Exchange Act of 1934, as

amended from time to time.

"NASD" shall mean the National Association of Securities Dealers, Inc.

"Person" shall mean an individual, firm, corporation, partnership,

limited liability company, trust or unincorporated organization, or other
entity, or a government or agency or political subdivision thereof, and shall
include any successor (by merger or otherwise) of such Person.

"Prospectus" shall mean the prospectus included in any Registration

Statement, as amended or supplemented by any prospectus supplement with respect
to the terms of the offering of any portion of the Registrable Securities
covered by the Registration Statement and by all other amendments and
supplements to the prospectus, including post-effective amendments and all
material incorporated by reference in such prospectus.

"Registrable Securities" shall mean (i) the Common Stock acquired by

the Purchaser pursuant to the terms of the Purchase Agreement, and (ii) the
Warrant Shares. Registrable Securities shall also include any securities which
may be issued or distributed with respect to, or in exchange for, such
Registrable Securities pursuant to a stock dividend, stock split or other
distribution, merger, consolidation, recapitalization or reclassification or
similar transaction; provided, however, that any such Registrable Securities
shall cease to be Registrable Securities to the extent (i) a Registration
Statement with respect to the sale of such Registrable Securities has been
declared effective under the Securities Act and such Registrable Securities have
been disposed of in accordance with the plan of distribution set forth in such
Registration Statement, or (ii) such Registrable Securities can be disposed of
pursuant to Rule 144 without regard to Rule 144(k) (or any similar provisions
then in force) under the Securities Act.

"Registration" shall mean a Registration of the Company's securities

for sale to the public under a Registration Statement.

"Registration Statement" shall mean any Registration Statement of the

Company filed with the Securities and Exchange Commission under the rules and
regulations promulgated under the Securities Act, including the Prospectus,
amendments and supplements to such Registration Statement, including post-
effective amendments, and all exhibits and all material incorporated by
reference in such Registration Statement.

"Securities Act" shall mean the Securities Act of 1933, as amended

from time to time.

"SEC" shall mean the Securities and Exchange Commission.

"Underwritten Registration" or "Underwritten Offering" shall mean a

Registration in which securities of the Company are sold to an underwriter for
reoffering to the public.

"Warrant" shall mean the Warrant to purchase shares of Common Stock,

issued and sold pursuant to the Purchase Agreement dated as of the date hereof,
by and between the Company and the Purchaser.

"Warrant Shares" shall mean any shares of Common Stock issued or

issuable upon exercise of the Warrant.

(b) Other Defined Terms. The following terms shall have the meanings

defined for such terms in the Sections set forth below:

Term ----	Section -----
Agreement	Preamble
Company	Preamble
Demand Registration Holdback Period	6(b)
Demand Registration	3(a)
Exchange and Registration Rights Agreement	5
Holder	2(b)
Indemnified Holder	9(a)
Piggyback Registration	4(a)
Piggyback Securities	4(b)
Preferred Stock Purchase Agreement	5
Priority Agreements	5
Purchase Agreement	Recitals
Purchaser	Preamble
Registration Expenses	8(a)(7)
Underwriter's Warrant	5

SECTION 2. Securities Subject to this Agreement.

(a) Registrable Securities. The securities entitled to the benefits

of this Agreement are the Registrable Securities.

(b) Holders of Registrable Securities. Initially, Purchaser is the

only holder of Registrable Securities, and Registrable Securities shall only
refer to such securities owned of record or beneficially by Purchaser or by a
transferee (or subsequent transferee) of Purchaser pursuant to Section 10 hereof

who has thereby acquired rights hereunder (each a "Holder"). Subject to the

foregoing, a Person is deemed to be a Holder of Registrable Securities whenever
such Person owns Registrable Securities or has the right to acquire such
Registrable Securities, whether or not such ownership or right was acquired
pursuant to the Purchase Agreement or the Warrant, and whether or not such
acquisition has actually been effected and disregarding any legal restrictions
upon the exercise of such right.

SECTION 3. Demand Registrations.

(a) Demand by Holders. During the five-year period commencing on the

date hereof, the Holders of at least 50% of the Registrable Securities then outstanding may make a total of three written requests to the Company for Registration of Registrable Securities under and in accordance with the provisions of the Securities Act of all or part of the Registrable Securities. Any such Registration requested shall hereinafter be referred to as a "Demand Registration." Each request for a Demand Registration shall specify the kind and aggregate amount of Registrable Securities to be registered, the intended methods of disposition thereof and the information required by Item 507 of Regulation S-K under the Securities Act. Upon such request for a Demand Registration, subject to Section 3(g) below, the Company shall use its best efforts to promptly effect the Registration of such Registrable Securities under (i) the Securities Act, and (ii) subject to Section 7(h), the blue sky laws of such jurisdictions as any Holder of such Registrable Securities requesting such Registration or any underwriter, if any, may reasonably request. The Company shall also use its best efforts to have all such Registrable Securities registered with or approved by such other federal or state governmental agencies or authorities as may be necessary in the opinion of counsel to the Company and counsel to such Holders of at least 50% of such Registrable Securities to consummate the disposition of such Registrable Securities.

(b) Effective Registration. Subject to the last paragraph of Section

7, the Company shall be deemed to have effected a Demand Registration if the Registration Statement relating to such Demand Registration is filed with the SEC but the requesting Holders inform the Company that they desire that the Registration Statement be withdrawn or abandoned; provided, however, that such withdrawal does not result from action or inaction on the part of the Company that has materially and adversely affected the value of such registration to the participating Holders, or if the Registration Statement is declared effective by the SEC and remains effective until the earlier of the date on which (i) all the Registrable Securities subject to such Registration Statement have been disposed of pursuant thereto or (ii) nine months have elapsed from the date of such effectiveness; provided, however, that no Demand Registration shall be deemed to have been effected if (i) such Registration, after it has become effective, is the subject of any stop order, injunction or other order or requirement of the SEC or other governmental agency or court for any reason not primarily attributable to the selling Holders of Registrable Securities, or (ii) the conditions to closing specified in the purchase agreement or underwriting agreement entered into in connection with such Registration are not satisfied, other than by reason of a failure on the part of the selling Holders of Registrable Securities or any underwriter referred to in Section 3(d).

(c) Registration Statement Form. Registrations under this Section 3

shall be on such appropriate registration form of the SEC as shall permit the disposition of such Registrable Securities in accordance with the intended method or methods of disposition specified in such Holders' requests for such Registration. If, in connection with any Registration under this Section 3 which is proposed by the Company to be on Form S-3 or any successor form to such Form, the managing underwriter (if any) or Holders of at least 50% of the Registrable Securities requesting a Demand Registration shall advise the Company in writing that in its opinion additional disclosure not required by such form is of material importance to the success of the

offering, then the Company shall consider including such additional disclosure, subject at all times to the Company's ultimate discretion to include or not include any additional disclosure.

(d) Selection of Underwriters. If at any time or from time to time

during the time period applicable to Demand Registrations any of the Holders of the Registrable Securities covered by a Registration Statement desire to sell Registrable Securities in an Underwritten Offering, the investment banker or investment bankers that will manage the offering will be selected by the Holders of at least 50% of the Registrable Securities included in such offering; provided that the selection of any such investment banker or investment bankers is subject to consent by the Company, which consent shall not be unreasonably withheld.

(e) Registration of Other Securities. Subject to Section 5 hereof,

whenever the Company shall effect a Registration pursuant to this Section 3 in connection with an Underwritten Offering by one or more Holders of Registrable Securities, securities other than Registrable Securities shall be reduced to the extent determined necessary by the managing underwriter of such offering if such managing underwriter shall have advised such selling Holders to be covered by such Registration in writing (with a copy to the Company) that, in its opinion, the number of securities requested to be included in such Registration exceeds the number which can be sold in such offering within a price range acceptable to the selling Holders of at least 50% of the Registrable Securities requested to be included in such Registration. If no such notice or letter is provided, the Company may include shares of Common Stock for its own account or for the account of other shareholders of the Company having the right to include such shares in a Registration Statement filed by the Company with the SEC.

(f) Priority Among Holders of Registrable Securities in Requested

Registration. If the managing underwriter of an Underwritten Offering pursuant to this Section 3 advises each of the Holders in writing (with a copy to the Company) that less than all of the Registrable Securities proposed to be included in such offering should be included (using the same standard described in subsection (e) hereof), then the amount of Registrable Securities to be offered for the accounts of Holders shall be reduced pro rata, based on the number of Registrable Securities owned by such Holders.

(g) Registration Requirements. Anything in this Section 3 to the

contrary notwithstanding, the Company shall not be required to file any Registration Statement pursuant to this Section 3, (i) within a period of six months after the effective date of any other Registration Statement filed pursuant to a Demand Registration, (ii) for a deferral period of up to 90 days if the Board of Directors of the Company in good faith determines that such Registration would interfere with any proposed offering of shares of the Company's capital stock, pending financing transaction, or acquisition, corporate reorganization or other significant transaction involving the Company; provided that the Company shall be able to defer Registration under this subclause (ii) only one time in any 12-month period, (iii) for a period beginning on the effective date of any Registration Statement and ending 90 days thereafter, or (iv) if the estimated aggregate proceeds of an offering of Registrable Securities (less underwriting discounts and commissions) will be less than \$15 million.

SECTION 4. Piggyback Registrations.

(a) Participation. Subject to Sections 4(b) and 5 hereof, if at any

time from and after the date hereof, the Company proposes to file or files a
Registration Statement under the Securities Act with respect to any offering of
securities of the same type as the Registrable Securities for its own account
(other than a Registration Statement on Form S-8 or Form S-4 or any successor
form thereto), or for the account of any securityholder of securities of the
same type as the Registrable Securities, then, as promptly as practicable, the
Company shall give written notice of such proposed filing to each Holder of
Registrable Securities and such notice shall offer the Holders of Registrable
Securities the opportunity to include in such registration such number of
Registrable Securities as each such Holder may request (a "Piggyback

Registration"). Subject to Section 5, the Company shall include in such

Registration Statement all Registrable Securities requested within 20 days after
the receipt of any such notice (which request shall specify the Registrable
Securities intended to be disposed of by such Holder) to be included in the
Registration for such offering pursuant to a Piggyback Registration. Each
Holder electing to participate in such Registration Statement shall do so
pursuant to the terms of such proposed registration and shall execute such usual
and customary custody agreements, powers of attorney, underwriting agreements,
holdback agreements or other documents as are reasonably requested or required
by the Company and any underwriter of such offering as provided in Section 12

hereof; provided that Holder shall not be required to represent and warrant to,
or to indemnify, any party with respect to any matters other than as to the
Holder's ownership of the Registrable Securities and with respect to any other
information provided by Holder and required to be included in the Registration
Statement pursuant to SEC Rules and Regulations. Each Holder of Registrable
Securities shall be permitted to withdraw all or part of such Holder's
Registrable Securities from a Piggyback Registration at any time prior to the
effective date thereof.

(b) Underwriter's Cutback. The Company shall use its best efforts to

cause the managing underwriter or underwriters of a proposed Underwritten
Offering to permit the Registrable Securities requested to be included in the
Registration for such offering under Section 4(a) (the "Piggyback Securities")

to be included on the same terms and conditions as any similar securities
included therein. Notwithstanding the foregoing, but subject to Section 5

hereof, if the managing underwriter or underwriters participating in such
offering advises each of the Holders in writing (with a copy to the Company)
that the total amount of securities requested to be included in such Piggyback
Registration exceeds the amount which can be sold in (or during the time of)
such offering without delaying or jeopardizing the success of the offering
(including the price per share of the securities to be sold), then, after
including all shares proposed to be sold by the Company in a Company-initiated
registration, the amount of securities to be offered for the account of the
Holders shall be reduced pro rata with all other holders participating in such
offering on the basis of the number of shares to be registered by all
stockholders participating in such offering; provided, however that, subject to
Section 5 hereof, the managing underwriter or underwriters may not limit the

Registrable Securities or other securities to be included in such Registration
to less than 25% of the securities included therein. Notwithstanding the
foregoing, the Company shall have the right to withdraw or delay the
Registration Statement at any time; provided, however, that written notice of
such withdrawal or delay shall be given to the Holders thereunder.

(c) No Effect on Demand Registrations. No Registration of Registrable

Securities effected pursuant to a request under this Section 4 shall be deemed to have been effected pursuant to Section 3 hereof or shall relieve the Company of its obligation to effect any Registration upon request under Section 3 hereof.

SECTION 5. Priority of Other Registration Rights.

The parties expressly agree and understand that a Holder's right to priority in a Registration of Registrable Securities shall at all times be subordinate to the rights granted under (i) the Series A Preferred Stock Purchase Agreement, dated as of September 30, 1993, as amended (the "Preferred Stock Purchase Agreement"), (ii) the Underwriter's Warrant, dated as of June 24, 1994 (the "Underwriter's Warrant"), and (iii) the Exchange and Registration Rights Agreement, dated as of February 17, 1995 (the "Exchange and Registration Rights Agreement" and collectively, with the Preferred Stock Purchase Agreement and the Underwriter's Warrant, the "Priority Agreements") so that inclusion of any Registrable Securities in any Registration requested to be made pursuant to Sections 3(a) and 4(a) is subject to the prior right to include in such Registration any securities requested to be registered by a securityholder under the Priority Agreements as provided for therein. Notwithstanding the foregoing, except in the case of a limitation imposed under Sections 3(f) and 4(b), and subject to the conditions of this Section 5, the Company shall use its best efforts to cause all Registrable Securities to be registered that are requested to be registered, regardless of the number of securities to be registered under the Priority Agreements. As a result of the foregoing, if any Registrable Security is excluded from a Demand Registration due to the existing rights of such other securityholders, such Registration shall not count as a Demand Registration.

SECTION 6. Hold-Back Agreements.

(a) Restrictions Applicable to Holders of Registrable Securities. If

(i) the Company shall file a Registration Statement with respect to its Common Stock or similar securities or securities convertible into, or exchangeable or exercisable for, such securities in an Underwritten Offering and (ii) the managing underwriter or underwriters advises the Company in writing (in which case the Company shall notify the Holders) that a public sale or distribution of Registrable Securities (other than those which may be sold, after application of Section 4(b), by a Holder in connection with a Piggyback Registration) would have material adverse effect on such offering, then such Holder shall, to the extent not inconsistent with applicable law, refrain from effecting any public sale or distribution of Registrable Securities during the period following the effective date of such Registration Statement and until the earliest of (A) the abandonment of such offering and (B) 90 days, or such shorter date as the managing underwriter shall require, after the effective date of such Registration Statement.

(b) Registration Restrictions Applicable to the Company. In the event

of a Demand Registration, the Company, if requested by the Holders of at least 50% of the Registrable Securities to be included in such Demand Registration, (i) shall agree not to, and shall cause its executive officers and directors not to, effect any public sale or distribution of its Common Stock or similar securities or securities convertible into, or exchangeable or exercisable for, such securities during the 90-day period following the effective date of a Registration

Statement relating to an Underwritten Offering of Registrable Securities if the managing underwriter or underwriters determine such public sale or distribution would have a material adverse effect on such offering and (ii) shall (x) cause each securityholder of the Company's privately placed equity securities issued in connection with a financing transaction involving at least 5% of the Company's then outstanding equity securities at any time after the date hereof (provided that the foregoing shall not apply with respect to securities issued in connection with corporate partnering transactions or off-balance sheet financing transactions to fund early stage research, and (y) use its reasonable best efforts to cause each other securityholder of the Company owning at least 10% of the Company's then outstanding equity securities (other than a securityholder permitted to file a Schedule 13G under the Exchange Act) to agree, not to effect a public sale or distribution of the Common Stock during the 90-day period following the effective date of a Registration Statement relating to an underwritten public offering of the Common Stock if the managing underwriter or underwriters determine such public sale or distribution would have a material adverse effect on such offering.

SECTION 7. Registration Procedures.

In connection with the Company's Registration obligations pursuant to Sections 3 and 4 hereof, the Company will use its best efforts to effect such

Registration to permit the sale of such Registrable Securities in accordance with the intended method or methods of disposition thereof, and pursuant thereto the Company will as expeditiously as possible:

(a) before filing a Registration Statement thereto, furnish to the Holders of the Registrable Securities covered by such Registration Statement and the underwriters, if any, copies of such Registration Statement proposed to be filed, and any participating Holder or the underwriters, may suggest such changes thereto and the Company will consider including such changes, subject at all times to the Company's ultimate discretion to include or not include such changes;

(b) prepare and file with the SEC a Registration Statement or Registration Statements relating to the applicable Demand Registration or Piggyback Registration including all exhibits and financial statements required by the SEC to be filed therewith, and use its best efforts to cause such Registration Statement to become effective under the Securities Act; and prepare and file with the SEC such amendments and post-effective amendments to such Registration Statement, and such supplements to the Prospectus, as may be requested by any underwriter of Registrable Securities or as may be required by the rules, regulations or instructions applicable to the Registration form utilized by the Company or by the Securities Act or rules and regulations otherwise necessary to keep the Registration Statement effective for a period of not less than nine months (or such shorter period which will terminate when all Registrable Securities covered by such Registration Statement have been sold or withdrawn); and cause the Prospectus as so supplemented to be filed pursuant to Rule 424 under the Securities Act; and comply with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all securities covered by such Registration Statement during the applicable period in accordance with the intended methods of disposition by the selling Holders thereof set forth in such Registration Statement or supplement to the Prospectus;

(c) notify the selling Holders of Registrable Securities and the managing underwriters, if any, promptly, and (if requested by any such Person) confirm such advice in writing,

(1) when the Prospectus or any Prospectus supplement or post-effective amendment has been filed, and, with respect to the Registration Statement or any post-effective amendment, when the same has become effective,

(2) of the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement or the initiation of any proceedings for that purpose,

(3) if at any time the representations and warranties of the Company contemplated by paragraph (n)(1) below cease to be true and -----
correct,

(4) of the receipt by the Company of any notification with respect to the suspension of the qualification of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose, and

(5) of the existence of any fact which results in the Registration Statement, the Prospectus or any document incorporated therein by reference containing an untrue statement of material fact or omitting to state a material fact required to be stated therein or necessary to make the statements therein not misleading;

(d) make every reasonable effort to obtain the withdrawal of any order suspending the effectiveness of the Registration Statement at the earliest possible moment;

(e) if requested by the managing underwriter or underwriters or a Holder of Registrable Securities being sold in connection with an Underwritten Offering pursuant to Section 3 hereof, incorporate in a Prospectus supplement or post-effective amendment such information as the managing underwriters and the Holders of at least 50% of the Registrable Securities being sold agree should be included therein relating to the plan of distribution with respect to such Registrable Securities, including, without limitation, information with respect to the amount of Registrable Securities being sold to such underwriters, the purchase price being paid therefor by such underwriters and with respect to any other terms of the underwritten (or best efforts underwritten) offering of the Registrable Securities to be sold in such offering; and make all required filings of such Prospectus supplement or post-effective amendment as soon as notified of the matters to be incorporated in such Prospectus supplement or post-effective amendment;

(f) furnish to each selling Holder of Registrable Securities and each managing underwriter, without charge, at least one copy of the Registration Statement and any post-effective amendment thereto, including financial statements and schedules, all documents incorporated therein by reference and all exhibits (including those incorporated by reference);

(g) deliver to each selling Holder of Registrable Securities and the underwriters, if any, without charge, as many copies of the Prospectus (including each preliminary prospectus) and any amendment or supplement thereto as such Persons may reasonably request; the Company consents to the use of the Prospectus or any amendment or supplement thereto by each of the selling Holders of Registrable Securities and the underwriters, if any, in connection with the offering and sale of the Registrable Securities covered by the Prospectus or any amendment or supplement thereto;

(h) prior to any public offering of Registrable Securities, register or qualify or cooperate with the selling Holders of Registrable Securities, the underwriters, if any, and their respective counsel in connection with the Registration or qualification of such Registrable Securities for offer and sale under the securities or blue sky laws of such jurisdictions as any selling Holder of Registrable Securities or any underwriter reasonably requests in writing and do any and all other acts or things reasonably necessary to enable the disposition in such jurisdictions of the Registrable Securities covered by the Registration Statement; provided that the Company will not be required to qualify generally to do business in any jurisdiction where it is not then so qualified or to take any action which would subject it to taxation or general service of process in any such jurisdiction where it is not then so subject;

(i) cooperate with the selling Holders of Registrable Securities and the managing underwriters, if any, to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be sold and not bearing any restrictive legends; and enable such Registrable Securities to be in such denominations and registered in such names as the managing underwriters may request at least two business days prior to any sale of Registrable Securities to the underwriters;

(j) use its best efforts to cause the Registrable Securities covered by the applicable Registration Statement to be registered with or approved by such other foreign governmental agencies or authorities, and the NASD, as may be necessary to enable the seller or selling Holders thereof or the underwriters, if any, to consummate the disposition of such Registrable Securities; provided, however, that the Holders shall pay any and all costs associated with any such registration or approval with any foreign governmental agency or authority;

(k) if any fact contemplated by paragraph (c)(6) above shall exist,

prepare a supplement or post-effective amendment to the Registration Statement or the related Prospectus or any document incorporated therein by reference or file any other required document so that, as thereafter delivered to the purchasers of the Registrable Securities, the Prospectus will not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading;

(l) cause all Registrable Securities covered by the Registration Statement to be listed on each securities exchange on which similar securities issued by the Company

are then listed if requested by the Holders of at least 50% of such Registrable Securities or the managing underwriters, if any;

(m) not later than the effective date of the applicable Registration Statement, provide a CUSIP number for all Registrable Securities and provide the applicable transfer agent with printed certificates for the Registrable Securities which are in a form eligible for deposit with Depositary Trust Company;

(n) enter into agreements (including underwriting agreements in customary form for such underwriter and consistent with then current market practice) and take all other appropriate and reasonable actions in order to expedite or facilitate the disposition of such Registrable Securities and in such connection, whether or not an underwriting agreement is entered into and whether or not the Registration is an Underwritten Registration:

(1) make such representations and warranties to the Holders of such Registrable Securities and the underwriters, if any, in form, substance and scope as are customarily made by issuers to underwriters in Underwritten Offerings in customary form and consistent with then current market practice;

(2) obtain opinions of counsel to the Company (which counsel and opinions (in form, scope and substance) shall be reasonably satisfactory to the managing underwriters, if any, addressed to the underwriters, if any, in customary form covering the matters customarily covered in opinions requested in primary Underwritten Offerings and such other matters as may be reasonably requested by such underwriters;

(3) obtain "cold comfort" letters and updates thereof from the Company's independent certified public accountants addressed to the underwriters, if any, such letters to be in customary form and consistent with then current market practice and covering matters of the type customarily covered in "cold comfort" letters by underwriters in connection with primary Underwritten Offerings;

(4) if an underwriting agreement is entered into, cause the same to set forth in full the indemnification provisions and procedures substantially to the effect set forth in Section 9 hereof with respect

to all parties to be indemnified pursuant to said Section; and

(5) deliver such documents and certificates as may be reasonably requested in writing by the Holders of at least 50% of the Registrable Securities being sold or the managing underwriters, if any, to evidence compliance with paragraph (k) above and with any customary

conditions contained in the underwriting agreement or other agreement entered into by the Company.

The above shall be done at each closing under such underwriting or similar agreement or as and to the extent required thereunder;

(o) make available for inspection by any underwriter (including any "qualified independent underwriter" that is required to be retained in accordance with the rules and regulations of the NASD) participating in any disposition pursuant to such Registration Statement, and any attorney or accountant retained by underwriter, all financial and other records, pertinent corporate documents and properties of the Company, and cause the Company's officers, directors and employees to supply all information reasonably requested by any such representative, underwriter, attorney or accountant in connection with the Registration; provided that any records, documents, properties or information that are designated by the Company in writing as confidential shall be kept confidential by such Person and shall not be used for any purpose other than in connection with such Registration Statement unless disclosure of such records, documents, properties and information is required by court or administrative order;

(p) otherwise use its best efforts to comply with all applicable rules and regulations of the SEC, and make generally available to its security holders, earnings statements satisfying the provisions of Section 11(a) of the Securities Act and Rule 158 promulgated thereunder; and

(q) cooperate and assist in any filings required to be made with the NASD and, subject to Section 7(o), in the performance of any due diligence -----
investigation by any underwriter (including any "qualified independent underwriter" that is required to be retained in accordance with the rules and regulations of the NASD).

The Company may require each Holder of Registrable Securities as to which any Registration is being effected to furnish to the Company such information regarding such Holder and such Holder's intended method of distribution of such Registrable Securities, as the Company may from time to time reasonably request in writing.

Each Holder of Registrable Securities agrees by acquisition of such Registrable Securities that, upon receipt of any notice from the Company of the happening of any event of the kind described in Section 7(c)(6) hereof, such -----

Holder will forthwith discontinue disposition of Registrable Securities until such Holder's receipt of the copies of the supplemented or amended Prospectus contemplated by Section 7(k) hereof, or until it is advised in writing by the -----

Company that the use of the Prospectus may be resumed, and has received copies of any additional or supplemental filings which are incorporated by reference in the Prospectus, and, if so directed by the Company, such Holder will deliver to the Company (at the Company's expense) all copies, other than permanent file copies then in such Holder's possession, of the Prospectus covering such Registrable Securities current at the time of receipt of such notice. In the event the Company shall give any such notice, the time periods during which such Registration Statement shall be maintained effective shall be extended by the number of days during the period from and including the date of the giving of such notice to and including the date when each seller of Registrable Securities covered by such Registration Statement either receives the copies of the

supplemented or amended prospectus contemplated by Section 7(k) hereof or is

advised in writing by the Company that the use of the Prospectus may be resumed.

SECTION 8. Registration Expenses.

(a) All expenses incident to the Company's performance of or compliance with this Agreement will be paid by the Company, regardless of whether the Registration Statement becomes effective, including without limitation:

(1) all Registration and filing fees (including with respect to filings required to be made with the SEC);

(2) fees and expenses of compliance with securities or blue sky laws (including fees and disbursements of counsel for the underwriters or selling Holders in connection with blue sky qualifications of the Registrable Securities and determination of their eligibility for investment under the laws of such jurisdictions as the managing underwriters or Holders of at least 50% of the Registrable Securities being sold may designate);

(3) printing (including expenses of printing certificates for the Registrable Securities in a form eligible for deposit with the Depository Trust Company and of printing prospectuses), messenger, telephone and delivery expenses;

(4) fees and disbursements of counsel for the Company;

(5) fees and disbursements of all independent certified public accountants of the Company (including the expenses of any "cold comfort" letters required by or incident to such performance);

(6) fees and expenses of other Persons retained by the Company;
and

(7) all Registration, filing and other fees and expenses associated with any NASD filing required to be made in connection with the Registration Statement (all such expenses being herein called "Registration Expenses").

The Company will, in any event, pay its internal expenses (including, without limitation, all salaries and expenses of its officers and employees performing legal or accounting duties), the expense of any annual audit, the fees and expenses incurred in connection with the listing of the securities to be registered on each securities exchange on which similar securities issued by the Company are then listed, rating agency fees and the fees and expenses of any Person, including special experts, retained by the Company. Notwithstanding any provision to the contrary, if a registration initiated under Section 3 is

withdrawn by the Holders initiating such registration under circumstances that would nevertheless be considered a Demand Registration under Section 3(b), the

Company shall have no obligation to pay expenses of such registration and all such expenses shall be paid by the Holders initiating such registration.

(b) Each selling Holder of the Registrable Securities shall pay all discounts, commissions, fees and expenses of the underwriters, selling brokers, dealer managers and similar industry professionals, transfer taxes and any out-of-pocket costs and expenses of such selling Holder including the fees and expenses of counsel for such selling Holder relating to the distribution of such Registrable Securities.

SECTION 9. Indemnification.

(a) Indemnification by Company. The Company agrees to indemnify and

hold harmless each Holder of Registrable Securities, its officers, directors, employees and Agents and each Person who controls such Holder within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act (each such person being sometimes hereinafter referred to as an "Indemnified

Holder") from and against all losses, claims, damages, liabilities and expenses

(including reasonable costs of investigation and legal expenses) arising out of or based upon any untrue statement or alleged untrue statement of a material fact contained in any Registration Statement or Prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or arising out of or based upon 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, except insofar as such losses, claims, damages, liabilities or expenses arise out of or are based upon any such untrue statement or omission or allegation thereof based upon information furnished in writing to the Company by such Holder or any underwriter expressly for use therein; provided, however, that the Company shall not be liable in any such case to the extent that any such loss, claim, damage, liability or expense arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission in any Prospectus or preliminary prospectus, if such untrue statement or alleged untrue statement, omission or alleged omission is completely corrected in an amendment or supplement to the Prospectus or preliminary prospectus and if, having previously been furnished by or on behalf of the Company with copies of the Prospectus or preliminary prospectus as so amended or supplemented, such Holder thereafter fails to deliver such Prospectus or preliminary prospectus as so amended or supplemented, prior to or concurrently with the sale of a Registrable Security to the person asserting such loss, claim, damage, liability or expense who purchased such Registrable Security which is the subject thereof from such Holder. This indemnity will be in addition to any liability which the Company may otherwise have.

If any action or proceeding (including any governmental investigation or inquiry) shall be brought or asserted against an Indemnified Holder in respect of which indemnity may be sought from the Company, such Indemnified Holder shall promptly notify the Company in writing, and the Company shall assume the defense thereof, including the employment of counsel satisfactory to such Indemnified Holder and the payment of all expenses. Such Indemnified Holder shall have the right to employ separate counsel in any such action and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Holder unless (a) the Company has agreed to pay such fees and expenses or (b) the Company shall have failed to assume the defense of such action or proceeding and has failed to employ counsel satisfactory to such Indemnified Holder in any such action or proceeding or (c) the named parties to any such action or proceeding (including any impleaded parties) include both such Indemnified Holder and the Company, and such Indemnified Holder shall have been

advised by counsel that there may be one or more legal defenses available to such Indemnified Holder which are different from or additional to those available to the Company (in which case, if such Indemnified Holder notifies the Company in writing that it elects to employ separate counsel at the expense of the Company, the Company shall not have the right to assume the defense of such action or proceeding on behalf of such Indemnified Holder, it being understood, however, that the Company shall not, in connection with any one such action or proceeding or separate but substantially similar or related actions or proceedings in the same jurisdiction arising out of the same general allegations or circumstances, be liable for the reasonable fees and expenses of more than one separate firm of attorneys at any time for such Indemnified Holder and any other Indemnified Holders, which firm shall be designated in writing by such Indemnified Holders). The Company shall not be liable for any settlement of any such action or proceeding effected without its written consent, but if settled with its written consent, or if there be a final judgment for the plaintiff in any such action or proceeding, the Company agrees to indemnify and hold harmless such Indemnified Holders from and against any loss or liability by reason of such settlement or judgment.

(b) Indemnification by Holder of Registrable Securities. Each Holder

of Registrable Securities agrees to indemnify and hold harmless the Company, its directors and officers and each Person, if any, who controls the Company within the meaning of either Section 15 of the Securities Act or Section 20 of the Exchange Act to the same extent as the foregoing indemnity from the Company to such Holder, but only with respect to (i) information relating to such Holder furnished in writing by such Holder expressly for use in, and information provided under Section 3(a) hereof for use in, any Registration Statement or Prospectus, or any amendment or supplement thereto, or any preliminary prospectus and (ii) any loss, claim, damage, liability or expense described in the proviso to the first sentence of Section 9(a). In case any action or

proceeding shall be brought against the Company or its directors or officers or any such controlling person, in respect of which indemnity may be sought against a Holder of Registrable Securities, such Holder shall have the rights and duties given the Company and the Company or its directors or officers or such controlling person shall have the rights and duties given to each Holder by the preceding paragraph. In no event shall the liability of any selling Holder of Registrable Securities hereunder be greater in amount than the dollar amount of the proceeds received by such Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation.

The Company shall be entitled to receive indemnities from underwriters, selling brokers, dealer managers and similar securities industry professionals participating in the distribution, to the same extent as provided above with respect to information so furnished in writing by such Persons specifically for inclusion in any Prospectus or Registration Statement or any amendment or supplement thereto, or any preliminary prospectus.

(c) Contribution. If the indemnification provided for in this Section

9 is unavailable to an indemnified party under Section 9(a) or Section 9(b)
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hereof (other than by reason of exceptions provided in those Sections) in respect of any losses, claims, damages, liabilities or expenses referred to therein, then each applicable indemnifying party, in lieu of indemnifying such indemnified party, shall contribute to the amount paid or payable by such indemnified party as a result of such losses, claims, damages, liabilities or expenses in such

proportion as is appropriate to reflect the relative fault of the Company on the one hand and of the Indemnified Holder on the other in connection with the statements or omissions which resulted in such losses, claims, damages, liabilities or expenses, as well as any other relevant equitable considerations. The relative fault of the Company on the one hand and of the Indemnified Holder on the other shall be determined by reference to, among other things, whether the untrue or alleged untrue statement of a material fact or the omission or alleged omission to state a material fact relates to information supplied by the Company or by the Indemnified Holder and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such statement or omission. The amount paid or payable by a party as a result of the losses, claims, damages, liabilities and expenses referred to in Section 9(a) or

Section 9(b) shall be deemed to include, subject to the limitations set forth in

the second paragraph of Section 9(a), any legal or other fees or expenses

reasonably incurred by such party in connection with investigating or defending any action or claim.

The Company and each Holder of Registrable Securities agree that it would not be just and equitable if contribution pursuant to this Section 9(c)

were determined by pro rata allocation or by any other method of allocation which does not take account of the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section

9(c), an Indemnified Holder shall not be required to contribute any amount in

excess of the amount by which the total price at which the Registrable Securities sold by such Indemnified Holder or its affiliated Indemnified Holders and distributed to the public were offered to the public exceeds the amount of any damages which such Indemnified Holder, or its affiliated Indemnified Holder, has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation.

SECTION 10. Transfer of Registration Rights.

The rights to cause the Company to register securities granted by the Company hereunder may be transferred or assigned by Purchaser or a subsequent Holder in writing to a transferee or assignee; provided, however, that such transfer is in connection with the sale of Registrable Securities covering a minimum of the greater of 25% of the Registrable Securities then outstanding or 200,000 shares of Common Stock. Such Holder within a reasonable time after said transfer shall give written notice to the Company, stating the name and address of said transferee or assignee and identifying the securities with respect to which such registration rights are being assigned. Subsequent transfers or assignments of such registration rights may also be effected in accordance with the foregoing requirements.

SECTION 11. Rule 144.

The Company covenants that it will file the reports required to be filed by it under the Exchange Act and the rules and regulations adopted by the SEC thereunder, all to the extent required from time to time to enable such Holder to sell Registrable Securities without Registration under the Securities Act within the limitation of the exemptions provided by (a) Rule 144 under the Securities Act, as such Rule may be amended from time to time, or (b) any similar

rule or regulation hereafter adopted by the SEC. Upon the request of any Holder of Registrable Securities, the Company will deliver to such Holder a written statement as to whether it has complied with such information and requirements.

SECTION 12. Participation in Underwritten Registrations.

Subject to Section 5 hereof, no Person may participate in any

Underwritten Registration hereunder unless such Person (a) agrees to sell such Person's securities on the basis provided in any underwriting arrangements approved by the Persons entitled hereunder to approve such arrangements and (b) completes and executes all questionnaires, powers of attorney, indemnities, underwriting agreements and other documents required under the terms of such underwriting arrangements.

SECTION 13. Miscellaneous.

(a) Remedies. Each of the parties hereto, in addition to being

entitled to exercise all rights provided herein, in the Purchase Agreement and granted by law, including recovery of damages, will be entitled to specific performance of its rights under this Agreement. Each of the parties hereto agrees that monetary damages would not be adequate compensation for any loss incurred by reason of a breach by it of the provisions of this Agreement and hereby agrees to waive the defense in any action for specific performance that a remedy at law would be adequate.

(b) No Inconsistent Agreements. From and after the date hereof,

except with respect to registration rights granted by the Company pursuant to the Priority Agreements, the Company shall not enter into any agreement granting any holder or prospective holder of any securities of the Company registration rights with respect to such securities unless such new registration rights are pari passu with, subordinate to, or otherwise do not materially adversely affect the rights of Holders granted hereunder. The Company represents and warrants that the rights granted to the Holders of Registrable Securities hereunder do not in any way conflict with and are not inconsistent with the rights granted to the holders of the Company's securities under any agreement in effect on the date hereof.

(c) Amendments and Waivers. The provisions of this Agreement,

including the provisions of this sentence, may not be amended, modified or supplemented, and waivers or consents to departures from the provisions hereof may not be given unless the Company has obtained the written consent of Holders of at least 50% of the then outstanding Registrable Securities. Notwithstanding the foregoing, a waiver or consent to departure from the provisions hereof that relates exclusively to the rights of Holders of Registrable Securities whose securities are being sold pursuant to a Registration Statement and that does not directly or indirectly affect the rights of other Holders of Registrable Securities may be given by the Holders of a majority of the Registrable Securities being sold.

(d) Notices. Unless otherwise provided herein, any notice, request,

instruction or other document to be given hereunder by any party to the others shall be in writing and delivered in person or by courier or by facsimile transmission (with receipt confirmed), or mailed

by certified mail, postage prepaid, return receipt requested (such mailed notice to be effective on the date of such receipt is acknowledged), as follows:

If to the Holder of Registrable Securities, at the most current address given by such Holder to the Company in accordance with the provisions of this Section 12(d), which address initially is, with respect to the Purchaser:

Amgen Inc.
Amgen Center
1840 DeHavilland Drive
Thousand Oaks, California 91320-1789
Attn: Corporate Secretary
Telecopy No.: (805) 499-8011

With a copy to:

Latham & Watkins
633 West Fifth Street
Los Angeles, California 90071
Attn: Gary Olson, Esq.
Telecopy No.: (213) 891-8763

(ii) if to the Company, initially to:

Guilford Pharmaceuticals Inc.
6611 Tributary Street
Baltimore, Maryland 21224
Attn: Corporate Secretary
Telecopy No.: (410) 631-6899

With a copy to:

Hogan & Hartson, L.L.P.
111 South Calvert Street, 16th Floor
Baltimore, Maryland 21202
Attn: Michael Silver, Esq.
Telecopy No.: (410) 539-6981

or to such other place and with such other copies as either party may designate as to itself by written notice to the others.

(e) Successors and Assigns. Except as otherwise expressly provided

herein, this Agreement shall inure to the benefit of and be binding upon the successors and assigns of each of the parties, including without limitation, subsequent Holders of Registrable Securities; provided, however, that this Agreement shall not inure to the benefit of or be binding upon a

successor or assign of a Holder of Registrable Securities unless and to the extent such successor or assign acquired Registrable Securities from such Holder.

(f) Counterparts. This Agreement may be executed in any number of

counterparts and by the parties hereto in separate counterparts, each of which when so executed shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

(g) Headings. The headings in this Agreement are for convenience of

reference only and shall not limit or otherwise affect the meaning hereof.

(h) Governing Law. This Agreement shall be governed by and construed

in accordance with the laws of the State of Delaware (without regard to choice of law provisions).

(i) Severability. In the event that any one or more of the provisions

contained herein, or the application thereof in any circumstance, is held invalid, illegal or unenforceable, the validity, legality and enforceability of any such provision in every other respect and of the remaining provisions contained herein shall not be affected or impaired thereby.

(j) Entire Agreement. This Agreement together with the Collateral

Agreements are intended by the parties as a final expression of their agreement and intended to be a complete and exclusive statement of the agreement and understanding of the parties hereto in respect of the subject matter contained herein. There are no restrictions, promises, warranties or undertakings, other than those set forth or referred to herein with respect to the registration rights granted by the Company with respect to the securities sold pursuant to the Purchase Agreement. This Agreement supersedes all prior agreements and understandings between the parties with respect to such subject matter including without limitation Exhibit A to the Binding Term Sheet.

[Signature Page To Follow]

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

GUILFORD PHARMACEUTICALS INC.

By: /s/ Craig R. Smith, M.D.

Name: Craig R. Smith, M.D.
Title: President and Chief Executive Officer

AMGEN INC.

By: /s/ George A. Vandeman

Name: George A. Vandeman
Title: Senior Vice President, General Counsel
and Secretary

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