

AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON OCTOBER 15, 1996

REGISTRATION NO. 333-11105

SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549

AMENDMENT NO. 3

TO

FORM S-1
REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

ARQULE, INC.
(EXACT NAME OF REGISTRANT AS SPECIFIED IN ITS CHARTER)

DELAWARE	2834	04-3221586
(STATE OR OTHER JURISDICTION OF INCORPORATION OR ORGANIZATION)	(PRIMARY STANDARD INDUSTRIAL CLASSIFICATION CODE NUMBER)	(I.R.S. EMPLOYER IDENTIFICATION NUMBER)

200 BOSTON AVENUE
MEDFORD, MASSACHUSETTS 02155
(617) 395-4100
(ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE, OF
REGISTRANT'S PRINCIPAL EXECUTIVE OFFICES)

ERIC B. GORDON
PRESIDENT AND CHIEF EXECUTIVE OFFICER
ARQULE, INC.
200 BOSTON AVENUE
MEDFORD, MASSACHUSETTS 02155
(617) 395-4100
(NAME, ADDRESS, INCLUDING ZIP CODE, AND TELEPHONE NUMBER, INCLUDING AREA CODE,
OF AGENT FOR SERVICE)

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125 HIGH STREET
BOSTON, MASSACHUSETTS 02110
(617) 248-7000

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

If any of the securities being registered on this Form are to be offered on
a delayed or continuous basis pursuant to Rule 415 under the Securities Act of
1933, check the following box. / /

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

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INFORMATION CONTAINED HEREIN IS SUBJECT TO COMPLETION OR AMENDMENT. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. THESE SECURITIES MAY NOT BE SOLD NOR MAY OFFERS TO BUY BE ACCEPTED PRIOR TO THE TIME THE REGISTRATION STATEMENT BECOMES EFFECTIVE. THIS PROSPECTUS SHALL NOT CONSTITUTE AN OFFER TO SELL OR THE SOLICITATION OF AN OFFER TO BUY NOR SHALL THERE BE ANY SALE OF THESE SECURITIES IN ANY STATE IN WHICH SUCH OFFER, SOLICITATION OR SALE WOULD BE UNLAWFUL PRIOR TO REGISTRATION OR QUALIFICATION UNDER THE SECURITIES LAWS OF ANY SUCH STATE.

SUBJECT TO COMPLETION, DATED OCTOBER 15, 1996

PROSPECTUS

2,000,000 SHARES

ARQULE, INC.

[ARQULE LOGO]

COMMON STOCK

All of the 2,000,000 shares of Common Stock offered hereby are being sold by ArQule, Inc. Prior to this offering, there has been no public market for the Common Stock of the Company. It is currently anticipated that the initial public offering price will be between \$11.00 and \$13.00 per share. See "Underwriting" for a discussion of the factors to be considered in determining the initial public offering price. The Common Stock has been approved for quotation on the Nasdaq National Market under the symbol ARQL.

THE SHARES OFFERED HEREBY INVOLVE A HIGH DEGREE OF RISK.
SEE "RISK FACTORS" BEGINNING ON PAGE 5.

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

	PRICE TO PUBLIC	UNDERWRITING DISCOUNT (1)	PROCEEDS TO COMPANY (2)
Per Share.....	\$	\$	\$
Total (3).....	\$	\$	\$

<FN>

- (1) See "Underwriting" for indemnification arrangements with the several Underwriters.
- (2) Before deducting expenses payable by the Company estimated at \$775,000.
- (3) The Company has granted to the Underwriters a 30-day option to purchase up

to 300,000 additional shares of Common Stock solely to cover over-allotments, if any. If all such shares are purchased, the total Price to Public, Underwriting Discount and Proceeds to Company will be \$, \$ and \$, respectively. See "Underwriting."

The shares of Common Stock are offered by the several Underwriters subject to prior sale, receipt and acceptance by them and subject to the right of the Underwriters to reject any order in whole or in part and certain other conditions. It is expected that certificates for such shares will be available for delivery on or about , 1996, at the offices of the agent of Hambrecht & Quist LLC in New York, New York.

HAMBRECHT & QUIST

OPPENHEIMER & CO., INC.

VECTOR SECURITIES INTERNATIONAL, INC.

October , 1996

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[FOUR COLOR WORK]

IN CONNECTION WITH THIS OFFERING, THE UNDERWRITERS MAY OVER-ALLOT OR EFFECT TRANSACTIONS WHICH STABILIZE OR MAINTAIN THE MARKET PRICE OF THE COMMON STOCK OF THE COMPANY AT A LEVEL ABOVE THAT WHICH MIGHT OTHERWISE PREVAIL IN THE OPEN MARKET. SUCH TRANSACTIONS MAY BE EFFECTED ON THE NASDAQ NATIONAL MARKET OR OTHERWISE. SUCH STABILIZING, IF COMMENCED, MAY BE DISCONTINUED AT ANY TIME.

AMAP(TM), Directed Array(TM) and Mapping Array(TM) are trademarks of the Company for which there are pending applications for registration in the U.S. Patent and Trademark Office.

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PROSPECTUS SUMMARY

The following summary is qualified in its entirety by the more detailed information and financial statements, including notes thereto, appearing elsewhere in this Prospectus.

ArQule, Inc. (the "Company" or "ArQule") has created a new technology platform for the discovery and production of novel chemical compounds with commercial potential. The Company's initial focus is on providing these novel compounds to the pharmaceutical and biotechnology industries. The Company has developed a proprietary technology for the identification and optimization of drug development candidates. This technology uses a modular building block approach to the development of compounds, together with structure-guided drug design, high speed parallel chemical synthesis and information technology, to rapidly develop large, diverse collections of compounds that have the potential to be biologically active. To date, the Company has entered into collaborative arrangements with Roche Bioscience, Pharmacia Biotech AB, Abbott Laboratories and Solvay Duphar B.V., and has formed joint discovery programs with several biotechnology companies. ArQule believes that its technology will allow its collaborative partners to accelerate the drug discovery process by several years, permitting them to realize significant cost reductions and the earlier recovery of research and development expenditures for successful drugs.

Using its proprietary "automated molecular assembly plant" (AMAP(TM)) system and structure-activity relationship ("SAR") data regarding biological targets and molecular components, ArQule produces significant quantities of pure small organic compounds in logically structured spatially addressable arrays. Unlike most current approaches to compound development, ArQule's compound arrays are created by using structure-guided and rational drug design tools to systematically assemble molecular components with properties the Company's scientists believe are likely to exhibit biological activity. ArQule's compound arrays are designed around certain core structures or themes. Each compound in the array is different from the adjacent compounds as a result of a single structural modification. Each ArQule array omits compounds that are closely analogous to other compounds in the array, using representative diversity to create a logical representation of a virtual library of hundreds of times as many compounds as are in the array. Drug developers are able to realize

significant savings by screening the thousands of compounds in each ArQule array rather than the millions of compounds they represent.

ArQule manufactures and delivers two types of arrays of synthesized compounds to its pharmaceutical and biotechnology partners: (i) Mapping Array(TM) compound sets, which are arrays of novel, diverse small molecule compounds used for screening and (ii) Directed Array(TM) compound sets, which are arrays of compounds that are closely related, often referred to as "analogs" of a particular lead compound. Both Mapping Array and Directed Array sets are shipped in industry-standard 96-well microtiter plates that are compatible with most drug developers' screening protocols. Under its Mapping Array program, ArQule ships a minimum of 100,000 compounds per year in 15 to 20 separate Mapping Array sets, each consisting of 3,000 to 10,000 individual compounds based on a different theme or core structure chosen by ArQule.

ArQule conducts drug discovery programs primarily with partners in the pharmaceutical and biotechnology industries. To date, ArQule has entered into collaborative arrangements with Roche Bioscience, Pharmacia Biotech AB, Abbott Laboratories and Solvay Duphar B.V., and has formed joint discovery programs with several biotechnology companies. In exchange for non-exclusive access to ArQule's Mapping Array program, the Company's pharmaceutical partners pay ArQule a combination of up-front and annual subscription fees. In addition, these companies agree to pay a fixed amount for Directed Array sets, as well as to make payments upon the achievement of certain milestones and to pay royalties upon the commercialization of drugs developed from ArQule compounds. In exchange for providing the arrays to the Company's biotechnology partners, the Company receives joint ownership of any potential drugs identified by the biotechnology partner.

ArQule's integrated technologies also present the Company with opportunities in a number of biological and non-biological fields outside of drug discovery. These opportunities include the production of separations media for the purification of therapeutic proteins, novel agricultural chemicals, industrial catalysts and the development of nano-scale polymeric structures for specialized mechanical applications.

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THE OFFERING

Common Stock offered by the Company.....	2,000,000 shares
Common Stock to be outstanding after the offering.....	8,976,487 shares(1)
Use of proceeds.....	To fund research and product development programs and for general corporate and working capital purposes.
Proposed Nasdaq National Market symbol.....	ARQL

SUMMARY FINANCIAL INFORMATION
(IN THOUSANDS, EXCEPT PER SHARE DATA)

	PERIOD FROM INCEPTION (MAY 6, 1993) THROUGH DECEMBER 31,		YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	1993	1994	1995	1995	1996	
	-----	-----	-----	-----	-----	
				(UNAUDITED)		
STATEMENT OF OPERATIONS DATA:						
Revenue.....	\$ --	\$ 85	\$ 3,330	\$ 1,521	\$ 2,975	
Loss from operations.....	(1,456)	(4,067)	(1,966)	(890)	(907)	
Net loss.....	\$(1,465)	\$(4,206)	\$(2,252)	\$(1,069)	\$(754)	
Unaudited pro forma net loss per share(2).....			\$ (0.33)		\$(0.10)	
Shares used in computing unaudited pro forma net loss per share(2).....			6,853		7,443	

JUNE 30, 1996

ACTUAL PRO FORMA (3) AS ADJUSTED (3) (4)

(UNAUDITED)

BALANCE SHEET DATA:

Cash, cash equivalents and marketable securities.....	\$ 6,367	\$ 6,367	\$27,912
Working capital.....	1,394	1,394	22,939
Total assets.....	11,848	11,848	33,393
Capital lease obligations, less current portion.....	1,426	1,426	1,426
Series B mandatorily redeemable convertible preferred stock.....	6,898	--	--
Total stockholders' equity (deficit).....	(1,622)	5,276	26,821

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- (1) Excludes 1,135,920 shares issuable upon the exercise of options outstanding as of June 30, 1996 with a weighted average exercise price of \$2.21 per share.
- (2) Unaudited pro forma net loss per share is determined by dividing Net loss by Shares used in computing unaudited pro forma net loss per share. For information regarding Shares used in computing unaudited pro forma net loss per share, see Notes 2 and 10 of Notes to Financial Statements.
- (3) Reflects the conversion of all outstanding shares of preferred stock into 6,219,948 shares of Common Stock upon the closing of this offering and the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants immediately prior to the effectiveness of the registration statement of which this Prospectus is a part. See Notes 8 and 10 of Notes to Financial Statements.
- (4) As adjusted to give effect to the sale of 2,000,000 shares of Common Stock offered hereby, after deducting the underwriting discount and offering expenses, at an assumed initial public offering price of \$12.00 per share and the application of the estimated net proceeds therefrom as set forth in "Use of Proceeds."

Except as otherwise noted, all information in this Prospectus assumes (i) a one-for-two reverse stock split of the Common Stock effected on October 4, 1996, (ii) the conversion of all outstanding shares of Series A Convertible Preferred Stock and Series B Convertible Preferred Stock into an aggregate of 6,219,948 shares of Common Stock immediately prior to the closing of this offering (after giving effect to the reverse stock split), (iii) the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants immediately prior to the effectiveness of the registration statement of which this Prospectus is a part and (iv) no exercise of the Underwriters' over-allotment option. The shares of Common Stock offered hereby involve a high degree of risk. Investors should carefully consider the information set forth under "Risk Factors."

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RISK FACTORS

An investment in the shares of Common Stock being offered hereby involves a high degree of risk. Prospective investors should carefully consider the following risk factors, in addition to the other information contained in this Prospectus, before purchasing the shares of Common Stock offered hereby.

Limited Operating History; History of Operating Losses; Uncertainty of Future Profitability. The Company has had a limited operating history. For the year ended December 31, 1994, the year ended December 31, 1995 and the six months ended June 30, 1996, the Company had net losses of approximately \$4.2 million, \$2.3 million and \$0.8 million, respectively. As of June 30, 1996, the Company had an accumulated deficit of approximately \$8.7 million. The Company's

expansion of its operations and enhancements to its technology will result in significant expenses over the next several years that may not be offset by significant revenues. The Company expects that revenues for the foreseeable future and the Company's ability to achieve profitability will be dependent upon the ability of the Company to enter into additional collaborative arrangements with customers. To date, all revenue received by the Company has been from up-front fees and research and development funding paid pursuant to collaborative agreements with the Company's collaborative partners. The Company has not realized any revenues from the achievement of milestones or royalties from the discovery, development or sale of a commercial product by one of the Company's collaborative partners, and there can be no assurance that any such revenues will be realized. The Company is unable to predict when, or if, it will become profitable. See "Selected Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Unproven Business Strategy. The Company's modular building block approach to chemistry has not yet resulted in the commercialization of a product. The Company uses chemical building blocks for the purpose of rapidly identifying, optimizing and obtaining proprietary rights to as many compounds with commercial potential as possible. The pricing and nature of the Company's compound sets are such that there may only be a limited number of companies that are potential customers for such sets. The Company's ability to succeed is dependent upon the acceptance by potential customers of the Company's approach to chemistry and compound analysis as an effective tool in the discovery and development of compounds with commercial potential. Due to the highly proprietary nature of the activities being conducted, the central importance of these activities to their drug discovery and development efforts, and the desire to obtain maximum patent and other proprietary protection on the results of their internal programs, pharmaceutical and biotechnology companies have historically conducted lead compound identification and optimization within their own research departments. There can be no assurance that the Company's present or future collaborators will not pursue existing or alternative technology, either independently or in collaboration with others, in preference to that of the Company or that the Company will be able to attract future collaborators on acceptable terms or develop a sustainable, profitable business. See "Business."

Competition and the Risk of Obsolescence of Technology. Competition among the many organizations actively attempting to identify and optimize compounds for development in the pharmaceutical industry and in other areas is intense. In the pharmaceutical industry, ArQule competes with the research departments of pharmaceutical companies, biotechnology companies, combinatorial chemistry companies and research and academic institutions. Many of these competitors have greater financial and human resources, and more experience in research and development, than the Company. Historically, pharmaceutical companies have maintained close control over their research activities, including the synthesis, screening and optimization of chemical compounds. Many of these pharmaceutical companies, which represent the greatest potential market for ArQule's products and services, have developed or are developing internal combinatorial chemistry and other methodologies to improve productivity, including major investments in robotics technology to permit the automated parallel synthesis of compounds. In addition, ArQule competes with biotechnology and combinatorial chemistry companies that offer a range of products and services. Academic institutions, governmental agencies and other research organizations are also conducting research in areas in which the Company

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is working, either on their own or in collaboration with others. The Company anticipates that it will face increased competition in the future as new companies enter the market and advanced technologies, including more sophisticated information technologies, become available. The Company's technological approaches may be rendered obsolete or uneconomical by advances in existing technological approaches or the development of different approaches by one or more of the Company's competitors. See "Business--Competition."

Limited Sales and Marketing Experience; Expansion of Sales Activities. To date, the Company has sold its products to its collaborative partners primarily through the efforts of its senior management. The Company's senior management has limited experience in marketing products similar to those of the Company. In order to achieve significant long-term growth in revenues and its overall strategic goals, the Company intends to hire at least one or two dedicated sales and marketing personnel. There can be no assurance that the Company will be able

to achieve anticipated expansion of its business, attract a significant number of new collaborative partners as customers or build an efficient and effective sales and marketing organization. In the event the Company is unable to achieve any one or more of the foregoing goals, the Company's business, financial condition and results of operations could be materially adversely affected. In addition to the risks inherent in the Company's efforts to market its own products, the Company's revenues from royalties and milestone payments from its collaborative partners is substantially dependent upon the marketing efforts of such collaborative partners as discussed below under "Risk Factors--Dependence on Third Parties."

Dependence on Third Parties. The Company's strategy for the development and commercialization of its products and services involves the formation of collaborative arrangements with third parties, initially pharmaceutical and biotechnology companies. To date, the Company has entered into numerous such arrangements. There can be no assurance that the Company's existing collaborations will not be terminated under certain circumstances by its collaborators and any such terminations could have a material adverse effect on the Company. There can be no assurance that the Company will be able to establish additional collaborative arrangements, that any such arrangements will be on terms favorable to the Company, or that current or future collaborative arrangements will ultimately be successful. Further, ArQule's receipt of revenues from collaborative arrangements is affected by the timing of efforts expended by third parties. The Company's products and services will only result in commercialized pharmaceutical products generating milestone payments and royalties after significant preclinical and clinical development efforts, the receipt of the requisite regulatory approvals, and the integration of manufacturing capabilities and successful marketing efforts. With the exception of certain aspects of preclinical development, the Company does not currently intend to perform any of these activities. Therefore, the Company will be dependent upon the expertise of, and dedication of sufficient resources by, third parties to develop and commercialize products. Should a collaborative partner fail to develop or commercialize a compound or product to which it has obtained rights from the Company, the Company may not receive any future milestone payments or royalties associated with such compound or product. Furthermore, there can be no assurance that any such development or commercialization would be successful or that disputes will not arise over the application of payment provisions to such drugs. There can be no assurance that current or future collaborative partners will not pursue alternative technologies or develop alternative products, either on their own or in collaboration with others, including the Company's competitors, as a means for developing treatments for the diseases targeted by collaborative arrangements with the Company. See "Business--ArQule's Drug Discovery Programs."

Dependence on Key Employees. The Company is highly dependent on the principal members of its scientific and management staff, in particular, Dr. Joseph C. Hogan, Jr. and Dr. David L. Coffen. The loss of one or more members of its staff could have a material adverse effect on the Company's business, financial condition and results of operations. The Company does not maintain key person life insurance on the life of any employee. The Company's future success also will depend in part on its ability to identify, hire and retain additional qualified personnel, including individuals with doctorates in basic sciences. There is intense competition for such personnel in the areas of the Company's

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activities, and there can be no assurance that the Company will be able to continue to attract and retain personnel with the advanced technical qualifications necessary for the development of the Company's business. Failure to attract and retain key personnel could have a material adverse effect on the Company's business, financial condition and results of operations. See "Business--Employees" and "Management."

Future Capital Needs; Uncertainty of Additional Funding. There can be no assurance that the net proceeds from this offering, together with the Company's existing capital resources and revenue from operations, will be adequate to fund the Company's operations through December 1998. The Company may be required to raise additional capital over a period of several years in order to conduct its operations. Such capital may be raised through additional public or private equity financings, as well as collaborative arrangements, borrowings and other available sources. The Company's capital requirements depend on numerous factors, including entering into additional collaborative arrangements,

competing technological and market developments, changes in the Company's existing collaborative relationships, the cost of filing, prosecuting, defending and enforcing patent claims and other intellectual property rights, the purchase of additional capital equipment, the progress of the Company's drug discovery programs and the progress of the Company's collaborators' milestone and royalty-producing activities. The Company does not currently plan to independently develop, manufacture or market any drugs it discovers. Should the Company, however, choose to develop any such drugs, the Company will require substantial funds to conduct research and development, preclinical studies and clinical trials and to market any pharmaceutical products that may be developed from such drugs. There can be no assurance that additional funding, if necessary, will be available on favorable terms, if at all. If adequate funds are not available, the Company may be required to curtail operations significantly or to obtain funds by entering into arrangements with collaborative partners or others that may require the Company to relinquish rights to certain of its technologies, product candidates, products or potential markets. To the extent that additional capital is raised through the sale of equity or securities convertible into equity, the issuance of such securities could result in dilution to the Company's existing stockholders. See "Management's Discussion and Analysis of Financial Condition and Results of Operations."

Dependence on Scale Up and Management of Growth. The Company's success will depend on the expansion of its operations and the management of these expanded operations. To be cost-effective in its delivery of services and products, the Company must enhance productivity through further automation of its processes and improvements to its technology. The Company also must successfully structure and manage multiple additional collaborative relationships. There can be no assurance that the Company will be successful in its engineering efforts to further automate its processes or that the Company will be successful in managing and meeting the staffing requirements of additional collaborative relationships. Failure to achieve any of these goals could have a material adverse effect on the Company's business, financial condition or results of operations. See "Business--ArQule's Drug Discovery Programs" and "--Employees."

Control By Management and Existing Stockholders. Upon completion of this offering, the Company's significant stockholders, executive officers, directors and affiliated entities together will beneficially own approximately 71.9% of the outstanding shares of Common Stock (69.6% if the Underwriters' over-allotment option is exercised in full). As a result, these stockholders, acting together, will be able to control most matters requiring approval by the stockholders of the Company, including the election of directors. Such a concentration of ownership may have the effect of delaying or preventing a change in control of the Company, including transactions in which stockholders might otherwise receive a premium for their shares over then current market prices. See "Principal Stockholders."

Dependence on Patents and Proprietary Rights. ArQule has one issued patent and has filed a number of patent applications. There can be no assurance that patent applications filed by ArQule will result in patents being issued, that the claims of such patents will offer significant protection of the Company's technology, or that any patents issued to or licensed by ArQule will not be challenged, narrowed, invalidated or circumvented. The Company believes its success will depend in large part on

its ability, and the ability of its licensees and its licensors, to obtain patents for its technologies and the compounds and other products, if any, resulting from the application of such technologies, to defend such patents once obtained and to maintain trade secrets, both in the United States and in foreign countries. In the absence of such patents, the Company may be unable to prevent others from utilizing the Company's technology and may need to rely upon expertise developed during pre-commercial implementation of the technology, which may not provide the same level of competitive advantages. The commercial success of the Company will also depend upon avoiding the infringement of patents issued to others and maintaining the technology licenses upon which certain of the Company's current products are, or any future products under development might be, based.

Some of the Company's competitors have, or are affiliated with companies having, substantially greater resources than the Company, and such competitors may be able to sustain the costs of complex patent litigation to a greater degree and for longer periods of time than the Company. Uncertainties resulting from the initiation and continuation of any patent or related litigation could have a material adverse effect on the Company's ability to compete in the marketplace pending resolution of the disputed matters. To date, one patent has been issued to the Company. There can be no assurance that other patents will issue to the Company or its licensors as a result of their pending applications or that, if issued, such patents will contain claims sufficiently broad to afford protection against competitors with similar technology. Moreover, there can be no assurance that the Company or its customers will be able to obtain significant patent protection for lead compounds or pharmaceutical products based upon the Company's technology. There can be no assurance that any patents issued to the Company or its collaborative partners, or for which the Company has license rights, will not be challenged, narrowed, invalidated or circumvented, or that the rights granted thereunder will provide competitive advantages to the Company. Litigation, which could result in substantial cost to the Company, may be necessary to enforce the Company's patent and license rights, to enforce or defend an infringement claim, or to determine the scope and validity of others' proprietary rights. If competitors of the Company prepare and file patent applications in the United States or abroad that claim technology also claimed by the Company, the Company may have to participate in interference proceedings declared by the U.S. Patent and Trademark Office to determine the priority of invention, or opposition proceedings in a foreign patent office, both of which could result in substantial cost to the Company, even if the outcome is favorable to the Company. An adverse outcome could subject the Company to significant liabilities to third parties, and require the Company to cease using the technology or to license disputed rights from third parties, which licenses may not be available at reasonable cost.

A number of pharmaceutical and biotechnology companies, and research and academic institutions have developed technologies, filed patent applications or received patents on various technologies that may be related to the Company's business. Some of these technologies, applications or patents may conflict with the Company's technologies or patent applications. Such conflicts could also limit the scope of the claim of any patents that the Company may be able to obtain, or result in the rejection of the Company's patent applications. The Company currently has certain licenses to patents and patent applications from third parties, and in the future may require additional licenses from other parties. There can be no assurance that: (i) such licenses will be obtainable on commercially reasonable terms, if at all; (ii) the patents underlying such licenses will be valid and enforceable; (iii) patents having commercially valuable claims will issue from any licensed patent applications; or (iv) the proprietary nature of any other technology underlying such licenses will remain proprietary.

The Company relies substantially on certain technologies that are not patentable or proprietary and are therefore available to the Company's competitors. The Company also relies on certain proprietary trade secrets and know-how that are not patentable. Although the Company has taken steps to protect its unpatented trade secrets and know-how, in part through the use of confidentiality agreements with its employees, consultants and certain of its collaborators, there can be no assurance that (i) the agreements will not be breached; (ii) the Company would have adequate remedies for any breach; or (iii) the Company's trade secrets will not otherwise become known or be independently developed or discovered by competitors. See "Business--Patents and Proprietary Rights."

No Prior Public Market for Common Stock; Possible Volatility of Stock Price. Prior to this offering, there has been no public market for the Common Stock and there can be no assurance that an active public market for the Common Stock will develop or be sustained after the offering. The initial public offering price will be determined by negotiations between the Company and the Underwriters and is not necessarily indicative of the market price at which the Common Stock of the Company will trade after this offering. The market prices for securities of comparable companies have been highly volatile and the market has experienced significant price and volume fluctuations that are unrelated to the operating performance of particular companies. Announcements of

technological innovations or new commercial products by the Company or its competitors, developments concerning proprietary rights, including patents and litigation matters, publicity regarding actual or potential results with respect to products or compounds under development by the Company or its collaborative partners, regulatory developments in both the United States and foreign countries, public concern as to the efficacy of new technologies, general market conditions, as well as quarterly fluctuations in the Company's revenues and financial results and other factors, may have a significant impact on the market price of the Common Stock. In particular, the realization of any of the risks described in these "Risk Factors" could have a dramatic and adverse impact on such market price. See "Underwriting."

Anti-Takeover Effect of Certain Charter and By-Law Provisions and Delaware Law. The Company's Certificate of Incorporation as it is proposed to be amended and restated concurrently with the closing of this offering (the "Restated Certificate") authorizes the Board of Directors to issue, without stockholder approval, up to 1,000,000 shares of preferred stock ("Preferred Stock") with voting, conversion and other rights and preferences that could adversely affect the voting power or other rights of the holders of Common Stock. The issuance of Preferred Stock or of rights to purchase Preferred Stock could be used to discourage an unsolicited acquisition proposal. In addition, the possible issuance of Preferred Stock could discourage a proxy contest, make more difficult the acquisition of a substantial block of the Company's Common Stock or limit the price that investors might be willing to pay for shares of the Company's Common Stock. The Restated Certificate provides for staggered terms for the members of the Board of Directors. A staggered Board of Directors and certain provisions of the Company's By-laws (the "By-laws") and of Delaware law applicable to the Company could delay or make more difficult a merger, tender offer or proxy contest involving the Company. The Company, for example, will be subject to Section 203 of the General Corporate Law of Delaware which, subject to certain exceptions, restricts certain transactions and business combinations between a corporation and a stockholder owning 15% or more of the corporation's outstanding voting stock (an "interested stockholder") for a period of three years from the date the stockholder becomes an interested stockholder. These provisions may have the effect of delaying or preventing a change of control of the Company without action by the stockholders and, therefore, could adversely affect the price of the Company's Common Stock. See "Management," "Description of Capital Stock--Preferred Stock" and "--Anti-Takeover Measures."

Potential Liability Regarding Hazardous Materials. The research and development processes of the Company involve the controlled use of hazardous materials. The Company is subject to federal, state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. The risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any such liability could exceed the resources of the Company. In addition, there can be no assurance that the Company will not be required to incur significant costs to comply with environmental laws and regulations in the future.

Government Regulation. Although the manufacture, transportation and storage of the Company's products are subject to the laws and regulations regarding hazardous materials discussed in the preceding risk factor, the sale of the Company's products is not subject to significant government regulations. However, the Company's future profitability is dependent on the sales of pharmaceuticals and other products developed from the Company's compounds by its customers and collaborators. Regulation by governmental entities in the United States and other countries will be a significant

factor in the production and marketing of any pharmaceutical products that may be developed by a customer or collaborative partner of the Company. The nature and the extent to which such regulation may apply to the Company's customers or its collaborative partners will vary depending on the nature of any such pharmaceutical products. Virtually all pharmaceutical products developed by the Company's customers or its collaborative partners will require regulatory approval by governmental agencies prior to commercialization. In particular, human pharmaceutical products are subject to rigorous preclinical and clinical testing and other approval procedures by the U.S. Food and Drug Administration

(the "FDA") and by foreign regulatory authorities. Various federal and, in some cases, state statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of such pharmaceutical products. The process of obtaining these approvals and the subsequent compliance with appropriate federal and foreign statutes and regulations are time consuming and require the expenditure of substantial resources. Generally, in order to gain FDA approval, a company first must conduct preclinical studies in the laboratory and in animal models to gain preliminary information on a compound's efficacy and to identify any safety problems. The results of these studies are submitted as a part of an Investigational New Drug application ("IND") that the FDA must review before human clinical trials of an investigational drug can start. In order to commercialize any products, the Company or its customers or its collaborative partners will be required to sponsor and file an IND and will be responsible for initiating and overseeing the clinical studies to demonstrate the safety and efficacy that are necessary to obtain FDA approval of any such products. Clinical trials are normally done in three phases and generally take two to five years, but may take longer, to complete. After completion of clinical trials of a new product, FDA and foreign regulatory authority marketing approval must be obtained. If the product is classified as a new drug, a New Drug Application ("NDA") must be filed and approved before commercial marketing of the drug. The testing and approval processes require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. NDAs submitted to the FDA can take several years to obtain approval. Even if FDA regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. For marketing outside the United States, the Company will also be subject to foreign regulatory requirements governing human clinical trials and marketing approval for pharmaceutical products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country. See "Business--Government Regulation."

Shares Eligible for Future Sale and Potential Adverse Effect on Market Price. Future sales of Common Stock in the public market following this offering could adversely affect the market price of the Common Stock. Upon completion of this offering, the Company will have 8,976,487 shares of Common Stock outstanding, assuming no exercise of currently outstanding options. Of these shares, the 2,000,000 shares sold in this offering (plus any additional shares sold upon exercise of the Underwriters' over-allotment option) will be freely transferable without restriction under the Securities Act of 1933, as amended (the "Securities Act"), unless they are held by "affiliates" of the Company as that term is used under the Securities Act and the regulations promulgated thereunder. Of the 6,976,487 remaining shares, approximately 151,972 shares of Common Stock will be eligible for sale under Rules 144 and 701 on the ninety-first day after the effectiveness of this offering. Stockholders of the Company, holding in the aggregate 6,824,515 shares of Common Stock, have agreed, subject to certain limited exceptions, not to sell or otherwise dispose of any of the shares held by them as of the date of this Prospectus for a period of 180 days after the date of this Prospectus (the "lock-up period") without the prior written consent of the representatives of the Underwriters of this offering. At the end of such lock-up period, an additional 5,916,781 shares of Common Stock (plus approximately 223,726 shares issuable upon exercise of vested options) will be eligible for immediate resale, subject to compliance with Rule 144 and Rule 701. The remainder of the approximately 907,734 shares of Common Stock held by existing stockholders will become eligible for sale at various times over a period of less than two years and could be sold earlier if the holders exercise any available registration

rights. The holders of 6,219,948 shares of Common Stock have the right in certain circumstances to require the Company to register their shares under the Securities Act for resale to the public beginning at the end of the lock-up period. If such holders, by exercising their demand registration rights, cause a large number of shares to be registered and sold in the public market, such sales could have an adverse effect on the market price for the Company's Common Stock. If the Company were required to include in a Company-initiated registration shares held by such holders pursuant to the exercise of their piggyback registration rights, such sales may have an adverse effect on the Company's ability to raise needed capital. In addition, approximately 180 days

after the date of this Prospectus, the Company expects to file a registration statement on Form S-8 registering a total of approximately 2,845,000 shares of Common Stock subject to outstanding stock options or reserved for issuance under the Company's stock option plans. See "Management--Stock Plans," "Shares Eligible for Future Sale" and "Underwriting."

Broad Management Discretion in Use of Proceeds. The Company's management will have broad discretion to allocate proceeds of this offering to uses that it believes are appropriate. There can be no assurance that the proceeds of this offering can or will be invested to yield a positive return. See "Use of Proceeds."

Immediate and Substantial Dilution. Purchasers of the shares of Common Stock offered hereby will experience immediate and substantial dilution estimated at \$9.01 in the net tangible book value of their investment from the initial public offering price. Additional dilution will occur upon exercise of outstanding options. See "Dilution" and "Shares Eligible for Future Sale."

Absence of Dividends. The Company has never paid dividends on its Common Stock and does not anticipate paying any cash dividends in the foreseeable future. The Company currently intends to retain its earnings, if any, for the development of its business.

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THE COMPANY

ArQule was incorporated in Delaware in December 1993 and is the successor to a partnership formed on May 6, 1993. The Company's principal executive offices are located at 200 Boston Avenue, Medford, Massachusetts 02155, and its telephone number is (617) 395-4100. The Company is a subsidiary of ArQule Partners, L.P. (the "Partnership"), which owns 61.57% of the shares of Common Stock of the Company before this offering and will own 47.85% of the shares of Common Stock after this offering.

The partners of the Partnership have agreed to dissolve the Partnership and distribute the shares held by it 180 days after the effective date of this offering. Sevin Rosen Fund IV L.P., Atlas Venture Fund II, L.P. and Atlas Venture Europe B.V., which are direct significant stockholders of the Company (collectively, the "Venture Fund Investors"), Legomer Investors, Inc. ("LII"), Legomer Technologies, Inc. ("LTI"), Dr. Joseph C. Hogan, Jr., Chairman of the Board, Senior Vice President of Research and Development and Chief Scientific Officer of the Company, and certain other individuals are partners of the Partnership and will receive shares of Common Stock of the Company upon such Partnership distribution. The Venture Fund Investors hold all of the outstanding shares of LII. Dr. Hogan holds 50% of the outstanding stock of LTI. See "Principal Stockholders."

USE OF PROCEEDS

The net proceeds to the Company from the sale of the Common Stock offered hereby, after deducting the underwriting discount and offering expenses, are estimated to be \$21.5 million (\$24.9 million if the Underwriters' over-allotment option is exercised in full), assuming an initial public offering price of \$12.00 per share.

The principal purposes of this offering are to increase the Company's equity capital and to create a public market for the Company's Common Stock in order to facilitate future access by the Company to public equity markets as well as to create liquidity for its existing stockholders. The Company intends to use the net proceeds of the offering, together with the Company's existing cash, cash equivalents, short-term investments and cash generated from operations, for research and development, working capital and general corporate purposes. Such general corporate purposes may include acquisitions of other businesses, technologies or products. The Company is not in any negotiations with respect to any such acquisitions. The amount and timing of the Company's actual expenditures for the purposes described above will depend upon a number of factors, including the Company's ability to enter into additional collaborative or licensing arrangements, as well as the timing and terms of such arrangements. In addition, the Company's research and development expenditures will vary as programs are expanded or abandoned and as a result of variability in funding from its collaborative partners. The Company's management will have broad discretion to allocate the net proceeds of this offering to uses that it

believes are appropriate. There can be no assurance that the proceeds of this offering can or will be invested to yield a positive return.

The Company currently believes the net proceeds of the offering, together with the Company's existing cash, cash equivalents, short-term investments, cash generated from operations and research funding from corporate collaborators, will enable the Company to maintain its current and planned operations at least through December 1998. However, there can be no assurance that this will be the case. See "Risk Factors--Future Capital Needs; Uncertainty of Additional Funding" and "Management's Discussion and Analysis of Financial Condition and Results of Operations--Liquidity and Capital Resources."

Pending use as set forth above, the net proceeds of the offering will be invested primarily in interest-bearing, investment-grade securities.

DIVIDEND POLICY

The Company has never paid cash dividends on its Common Stock and does not anticipate paying any cash dividends in the foreseeable future. The Company currently intends to retain future earnings, if any, to fund the development of its business.

CAPITALIZATION

The following table sets forth, as of June 30, 1996, (i) the actual capitalization of the Company, (ii) the pro forma capitalization of the Company after giving effect to (a) the conversion of all issued and outstanding preferred stock into 6,219,948 shares of Common Stock and (b) the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants, and (iii) the pro forma capitalization of the Company as adjusted to reflect (a) the sale of the 2,000,000 shares of Common Stock offered hereby, after deducting the underwriting discount and offering expenses, at an assumed initial public offering price of \$12.00 per share and the application of the estimated net proceeds therefrom as set forth in "Use of Proceeds" and (b) the filing of the Restated Certificate to increase the number of authorized shares of Common Stock and to authorize 1,000,000 shares of undesignated preferred stock. This table should be read in conjunction with the financial statements, related notes and other financial information included herein.

	JUNE 30, 1996		
	ACTUAL	PRO FORMA	AS ADJUSTED
	(IN THOUSANDS)		
Capital lease obligations, less current portion.....	\$ 1,426	\$ 1,426	\$ 1,426
Series B mandatorily redeemable convertible preferred stock.....	6,898	--	--
Stockholders' equity (deficit):			
Preferred stock, \$0.01 par value, 15,000,000 shares authorized actual and pro forma, 1,000,000 shares authorized as adjusted:			
Series A convertible preferred stock, 10,624,429 shares issued and outstanding actual, none issued and outstanding pro forma and as adjusted.....	2,628	--	--
Common stock, \$0.01 par value, 20,000,000 shares authorized actual and pro forma, 30,000,000 authorized as adjusted; 523,047 shares issued and outstanding actual, 6,977,987 shares issued and outstanding pro forma, 8,977,987 shares issued and outstanding as adjusted(1).....	5	70	90
Additional paid-in capital.....	4,435	13,896	35,421
Accumulated deficit.....	(8,690)	(8,690)	(8,690)
Total stockholders' equity (deficit).....	(1,622)	5,276	26,821
Total capitalization.....	\$ 6,702	\$ 6,702	\$28,247

(1) Excludes 1,135,920 shares issuable upon the exercise of options outstanding as of June 30, 1996 with a weighted average exercise price of \$2.21 per share.

DILUTION

The pro forma net tangible book value of the Company as of June 30, 1996 was \$5,276,000 or approximately \$0.76 per share. Pro forma net tangible book value per share represents the total tangible assets of the Company, less total liabilities, divided by 6,977,987 shares of Common Stock outstanding after giving effect to the conversion of all outstanding shares of convertible preferred stock into 6,219,948 shares of Common Stock upon the completion of this offering and the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants immediately prior to the effectiveness of the registration statement of which this Prospectus is a part. Assuming the receipt by the Company of the net proceeds from the sale of the 2,000,000 shares of Common Stock offered hereby at an assumed initial public offering price of \$12.00 per share, the pro forma net tangible book value of the Company as of June 30, 1996 would have been \$26,821,000, or \$2.99 per share. This represents an immediate increase in the pro forma net tangible book value of \$2.23 per share to existing stockholders of the Company and an immediate dilution of \$9.01 per share to new investors purchasing Common Stock in this offering. The following table illustrates the per share dilution to be incurred by new investors as of June 30, 1996:

Assumed initial public offering price.....		\$12.00
Pro forma net tangible book value per share at June 30, 1996.....	\$0.76	
Increase per share attributable to new investors.....	2.23	

Pro forma net tangible book value per share after the offering.....		2.99

Dilution per share to new investors.....		\$ 9.01
		=====

The following table sets forth, on a pro forma basis as of June 30, 1996 (after giving effect to the conversion of all outstanding preferred stock into 6,219,948 shares of Common Stock upon the completion of this offering and for the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants immediately prior to the effectiveness of the registration statement of which this Prospectus is a part), the differences between the existing stockholders and the new investors with respect to the number of shares of Common Stock acquired from the Company, the total consideration paid and the average price per share (assuming an initial public offering price of \$12.00 per share):

	SHARES PURCHASED		TOTAL CONSIDERATION		AVERAGE PRICE PER SHARE
	NUMBER	PERCENT	AMOUNT	PERCENT	
	-----	-----	-----	-----	-----
Existing stockholders.....	6,977,987	77.7%	\$13,737,000	36.4%	\$ 1.97
New investors.....	2,000,000	22.3	24,000,000	63.6	12.00
	-----	-----	-----	-----	-----
Total.....	8,977,987	100.0%	\$37,737,000	100.0%	
	=====	=====	=====	=====	

The above information excludes an aggregate of 1,135,920 shares of Common Stock issuable upon the exercise of options outstanding as of June 30, 1996 with a weighted average exercise price of \$2.21 per share. To the extent that such

options are exercised, there will be further dilution to new investors.

SELECTED FINANCIAL DATA
(IN THOUSANDS, EXCEPT PER SHARE DATA)

The following data, insofar as it relates to the period from inception (May 6, 1993) through December 31, 1993 and for the years 1994 and 1995, have been derived from the Company's audited financial statements, including the balance sheet as of December 31, 1994 and 1995 and the related statements of operations and of cash flows for the two years ended December 31, 1995 and for the period from inception (May 6, 1993) through December 31, 1993 and notes thereto appearing elsewhere herein. The selected data presented below at June 30, 1996 and for the six months ended June 30, 1995 and 1996 have been derived from, and are qualified by reference to, the Company's unaudited financial statements also appearing herein. Such unaudited financial statements, in the opinion of management, include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the unaudited interim period. Operating results for the six months ended June 30, 1996 are not necessarily indicative of the results that may be expected for the entire year ending December 31, 1996. The data should be read in conjunction with the Financial Statements and the Notes thereto and "Management's Discussion and Analysis of Financial Condition and Results of Operations" appearing elsewhere in this Prospectus. The historical results are not necessarily indicative of the results of operations to be expected in the future.

	PERIOD FROM INCEPTION (MAY 6, 1993) THROUGH DECEMBER 31,		YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	1993	1994	1995	1995	1996	
						(UNAUDITED)
STATEMENT OF OPERATIONS DATA:						
Revenue:						
Compound development revenue.....	\$ --	\$ 85	\$ 2,330	\$ 521	\$ 2,975	
License option fees.....	--	--	1,000	1,000	--	
Total revenue.....	--	85	3,330	1,521	2,975	
Costs and expenses:						
Cost of revenue.....	--	--	1,644	392	1,935	
Research and development.....	769	2,806	2,095	1,213	1,119	
General and administrative.....	687	1,346	1,557	806	828	
Total costs and expenses.....	1,456	4,152	5,296	2,411	3,882	
Loss from operations.....	(1,456)	(4,067)	(1,966)	(890)	(907)	
Interest income (expense).....	(9)	(139)	(286)	(179)	153	
Net loss.....	\$ (1,465)	\$ (4,206)	\$ (2,252)	\$ (1,069)	\$ (754)	
Unaudited pro forma net loss per share(1).....			\$ (0.33)		\$ (0.10)	
Shares used in computing unaudited pro forma net loss per share(1).....			6,853		7,443	

	DECEMBER 31,			JUNE 30, 1996		
	1993	1994	1995	ACTUAL	AS ADJUSTED (2)	
						(UNAUDITED)
BALANCE SHEET DATA:						
Cash, cash equivalents and marketable securities.....	\$ 595	\$ 425	\$ 7,791	\$ 6,367	\$ 27,912	
Working capital.....	275	(2,108)	5,074	1,394	22,939	
Total assets.....	1,538	2,321	10,190	11,848	33,393	
Capital lease obligations, less current portion.....	376	962	911	1,426	1,426	
Series B mandatorily redeemable convertible preferred stock.....	--	--	6,888	6,898	--	
Total stockholders' equity (deficit).....	771	(1,203)	(1,000)	(1,622)	26,821	

<FN>

(1) Unaudited pro forma net loss per share is determined by dividing the Net loss by Shares used in computing unaudited pro forma net loss per share. For information regarding Shares used in computing unaudited pro forma net loss per share, see Notes 2 and 10 of Notes to Financial Statements.

(2) Reflects the conversion of all outstanding shares of preferred stock into 6,219,948 shares of Common Stock upon the closing of this offering and the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants immediately prior to the effectiveness of the registration statement of which this Prospectus is a part. See Notes 8 and 10 of Notes to Financial Statements. Also gives effect to the sale of 2,000,000 shares of Common Stock offered by the Company hereby, after deducting the underwriting discount and offering expenses, at an assumed initial public offering price of \$12.00 per share and the application of the estimated net proceeds therefrom as set forth in "Use of Proceeds."

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

OVERVIEW

ArQule is engaged in the discovery and development of novel chemical compounds with commercial potential with an initial focus on the pharmaceutical and biotechnology industries. ArQule manufactures and delivers two types of arrays of synthesized compounds to its pharmaceutical and biotechnology partners: (i) Mapping Array compound sets, which are arrays of novel, diverse small molecule compounds used for screening and (ii) Directed Array compounds sets, which are arrays of analogs of a particular lead compound (identified from a Mapping Array set or otherwise), synthesized for the purpose of optimizing such lead compounds.

The Company currently generates revenue through compound development and through license option fees. Compound development revenue relates to revenue from collaborative agreements, which provide for the development and delivery of Mapping Array and Directed Array sets. License option fee revenue represents payments made to the Company for the option to license certain ArQule compounds. The Company's revenue to date is primarily attributable to three major corporate collaborations: Pharmacia Biotech AB, which was entered into in March 1995; Abbott Laboratories, which was entered into in June 1995; and Solvay Duphar B.V., which was entered into in November 1995. Under these collaborations, the Company has received payments of \$9.3 million through June 30, 1996 (\$1.0 million for license option fees; \$8.3 million for compound development), of which \$6.2 million has been recognized as revenue (\$1.0 million for license option fees; \$5.2 million for compound development). The Company recognizes revenue under its corporate collaborations as related work is performed and arrays are delivered. Payments received from corporate partners prior to the completion of the related work are recorded as deferred revenue. License option fees are recognized as the options are granted because such fees are nonrefundable and the Company has no further obligations to fulfill. Cost of revenue represents the actual costs incurred in connection with the development, production and delivery of compounds. The Company is entitled to receive milestone and royalty payments if products generated under the collaborations are developed. The Company has entered into joint discovery agreements with a number of biotechnology companies to which it has provided Mapping Array and Directed Array sets in exchange for joint ownership of resulting drug candidates. These agreements have not yet yielded any significant revenue for the Company.

The Company has not been profitable since inception and has incurred a cumulative net loss of \$8.7 million through June 30, 1996. Losses have resulted principally from costs incurred in research and development activities related to the Company's efforts to develop its technologies and from the associated administrative costs required to support these efforts. The Company's ability to achieve profitability is dependent on its ability to market its Mapping Array and Directed Array sets to pharmaceutical and biotechnology companies and the joint development and commercialization of products in which it has an economic interest.

RESULTS OF OPERATIONS

SIX MONTHS ENDED JUNE 30, 1996 AND 1995

Revenue. The Company's revenue for the six month period ended June 30, 1996 increased \$1.5 million to \$3.0 million from \$1.5 million for the same period in 1995. This was attributable to a \$2.5 million increase in compound development revenue related to the performance of work and the delivery of Mapping Array and Directed Array sets under the Company's collaborative agreements. The Company began recognizing revenue from the Pharmacia, Abbott and Solvay collaborations in March, June and November 1995, respectively. This increase in compound development revenue was partially offset by a \$1.0 million license option fee related to the Pharmacia collaborative agreement recognized during the six month period ended June 30, 1995. No similar option payment was received during the six month period ended June 30, 1996.

Cost of revenue. The Company's cost of revenue for the six month period ended June 30, 1996 increased \$1.5 million to \$1.9 million from \$0.4 million for the six month period ended June 30, 1995.

This increase was primarily attributable to the costs of additional scientific personnel and the necessary supplies and overhead expenses related to the performance of the work and the delivery of the Mapping Array and Directed Array sets pursuant to its collaborative agreements. The Company anticipates that cost of revenue, in connection with increasing compound development revenue, will increase over the next several years.

Research and development expenses. The Company's research and development expenses for the six month period ended June 30, 1996 decreased \$0.1 million to \$1.1 million from \$1.2 million for the same period in 1995. This decrease was the result of the Company's increased use of its scientific personnel to produce compounds delivered pursuant to its collaborative agreements. The Company has the ability to direct its scientific personnel to work either on its collaborative agreements or on its internal research and development projects as the needs arise. The Company expects research and development spending to increase over the next several years as the Company further expands its chemistry discovery and development programs.

General and administrative expenses. The Company's general and administrative expenses for the six month period ended June 30, 1996, \$0.8 million, were relatively unchanged from the same period in 1995. These expenses will likely increase in future periods to support the projected growth of the Company.

Net interest income (expense). The Company's net interest income for the six month period ended June 30, 1996 was \$0.2 million, which compared to a net expense of \$0.2 million for the same period in 1995. Higher interest income in 1996 resulted primarily from the Company holding higher cash balances following an equity investment by Solvay. See "Business--ArQule's Drug Discovery Programs."

Net loss. The Company's net loss for the six month period ended June 30, 1996 decreased \$0.3 million to \$0.8 million from \$1.1 million for the same period in 1995. The decrease is primarily attributable to additional revenue generated from corporate collaborations during 1996.

YEARS ENDED DECEMBER 31, 1995 AND 1994

Revenue. The Company's revenue for the year ended December 31, 1995 increased to \$3.3 million from \$0.1 million for the same period in 1994. This increase was attributable to compound development revenue related to the performance of work and the delivery of Mapping Array and Directed Array sets under the Company's collaborative agreements which were entered into during 1995. The Company also recognized a \$1.0 million license option fee related to the Pharmacia collaborative agreement entered into in 1995.

Cost of revenue. The Company's cost of revenue for the year ended December 31, 1995 was \$1.6 million, reflecting costs associated with the development, production and delivery of compounds pursuant to the corporate collaborations entered into in 1995. There was no cost of revenue in 1994 as there were no collaborative agreements during this year and as the Company's efforts were directed towards the research and development of its technology.

Research and development expenses. The Company's research and development expenses for the year ended December 31, 1995 decreased \$0.7 million to \$2.1 million from \$2.8 million for the same period in 1994. This decrease was the result of the Company focusing, in 1995, on producing compounds delivered pursuant to its collaborative agreements.

General and administrative expenses. The Company's general and administrative expenses for the year ended December 31, 1995 increased \$0.3 million to \$1.6 million from \$1.3 million for the same period in 1994. This increase was primarily due to costs associated with increased business development activities and administrative support, which accompanied the Company's expansion during 1995.

Net interest expense. The Company's net interest expense for the year ended December 31, 1995 was \$0.3 million, which compared to \$0.1 million for the same period in 1994. This increase was primarily attributable to increased use

of capital equipment lease financing.

Net loss. The Company's net loss for the year ended December 31, 1995 decreased \$1.9 million to \$2.3 million from \$4.2 million for the same period in 1994. The decrease was primarily attributable to the increase in revenue generated from the three corporate collaborations.

YEAR ENDED DECEMBER 31, 1994 AND EIGHT MONTH PERIOD ENDED DECEMBER 31, 1993

Revenue. The Company's revenue for the year ended December 31, 1994 was \$0.1 million. The Company was founded in May 1993, and it did not generate revenue until 1994.

Research and development expenses. The Company's research and development expenses for the year ended December 31, 1994 increased \$2.0 million to \$2.8 million from \$0.8 million for the eight month period ended December 31, 1993. This increase primarily reflects the expansion and development of the Company's combinatorial chemistry technologies and a full year of operations in 1994.

General and administrative expenses. The Company's general and administrative expenses for the year ended December 31, 1994 increased \$0.6 million to \$1.3 million from \$0.7 million for the eight month period ended December 31, 1993, primarily reflecting a full year of operations in 1994.

Net interest expense. The Company's net interest expense for the year ended December 31, 1994 was \$0.1 million which compared to \$9,000 for the eight month period ended December 31, 1993. This increase was primarily attributable to the Company's use of capital equipment lease financing.

Net loss. The Company's net loss for the year ended December 31, 1994 increased \$2.7 million to \$4.2 million from \$1.5 million for the eight month period ended December 31, 1993. This increase was primarily attributable to the Company's scale-up of research and development activities.

LIQUIDITY AND CAPITAL RESOURCES

At June 30, 1996, the Company held cash and cash equivalents and marketable securities with a value of \$6.4 million. The Company's working capital at June 30, 1996 was \$1.4 million. The Company has funded operations to date with sales of preferred stock and common stock totaling \$13.6 million, payments from corporate collaborators totaling \$9.3 million, and the utilization of capital equipment lease financing totaling \$3.1 million. The Company has maintained a master lease agreement since February 1994. Under the terms of this agreement, the Company has funded certain capital expenditures with lease terms ranging from 40 to 42 months in duration. As of June 30, 1996, the Company had utilized \$2.6 million of the available \$5.0 million financing facility.

Net cash used in financing activities for the six months ended June 30, 1996 was \$0.3 million, primarily reflecting financing of capital equipment. Net cash provided by financing activities for the year ended December 31, 1995 was \$7.2 million, largely due to a \$7.0 million equity investment by Solvay. Net cash provided by financing activities for the year ended December 31, 1994 was \$3.8 million, resulting mainly from capital contributions and proceeds from bridge financing.

Net cash provided by operating activities for the six month period ended June 30, 1996 and for the year ended December 31, 1995 was \$1.3 million and \$0.5 million, respectively. The positive cash flow from operating activities primarily reflects additional payments received from the three corporate collaborators. Net cash used in operating activities for the year ended December 31, 1994 was \$3.6 million, largely due to the Company's scale-up of research and development activities prior to generating significant revenue.

Net cash used in investing activities during the six month period ended June 30, 1996 was \$1.4 million, resulting primarily from additional capital equipment purchases. Net cash used in investing activities for the year ended December 31, 1995 was \$5.1 million as compared to \$0.4 million for the year ended December 31, 1994. This increase primarily reflects purchases of marketable securities.

the Company's existing cash equivalents, short-term investments, cash generated from operations and research funding from corporate collaborators, will enable the Company to maintain its current and planned operations at least through December 1998. The Company's cash requirements may vary materially from those now planned depending upon the results of its drug discovery and development strategies, the ability of the Company to enter into any corporate collaborations in the future and the terms of such collaborations, the results of research and development, the need for currently unanticipated capital expenditures, competitive and technological advances, and other factors. There can be no assurance that the Company will be able to obtain additional customers for the Company's products and services, or that such products and services will produce revenues adequate to fund the Company's operating expenses. If the Company experiences increased losses, the Company may have to seek additional financing from public or private sale of its securities, including equity securities. There can be no assurance that additional funding will be available when needed or on acceptable terms.

NEW ACCOUNTING PRONOUNCEMENTS

In March 1995, the Financial Accounting Standards Board ("FASB") issued SFAS No. 121, "Accounting for the Impairment of Long-lived Assets and for Long-lived Assets to be Disposed Of ". In October 1995, the FASB issued SFAS No. 123, "Accounting for Stock-Based Compensation." Both SFAS No. 121 and No. 123 are effective for the Company for the year ending December 31, 1996. The Company has adopted these standards as required, and has adopted SFAS No. 123 through disclosure only. The adoption of these statements is not expected to have a material effect on the Company's financial position, results of operations or cash flows.

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BUSINESS

OVERVIEW

ArQule has created a new technology platform for the discovery and production of novel chemical compounds with commercial potential. The Company's initial focus is on providing these novel compounds to the pharmaceutical and biotechnology industries. The Company has developed a proprietary technology for the identification and optimization of drug development candidates. This technology uses a modular building block approach to the development of compounds, together with structure-guided drug design, high speed parallel chemical synthesis and information technology, to rapidly develop large, diverse collections of compounds that have the potential to be biologically active. To date, the Company has entered into collaborative arrangements with Roche Bioscience, Pharmacia Biotech AB, Abbott Laboratories and Solvay Duphar B.V., and has formed joint discovery programs with several biotechnology companies. ArQule believes that its technology will allow its collaborative partners to accelerate the drug discovery process by several years, permitting them to realize significant cost reductions and the earlier recovery of research and development expenditures for successful drugs.

INDUSTRY BACKGROUND

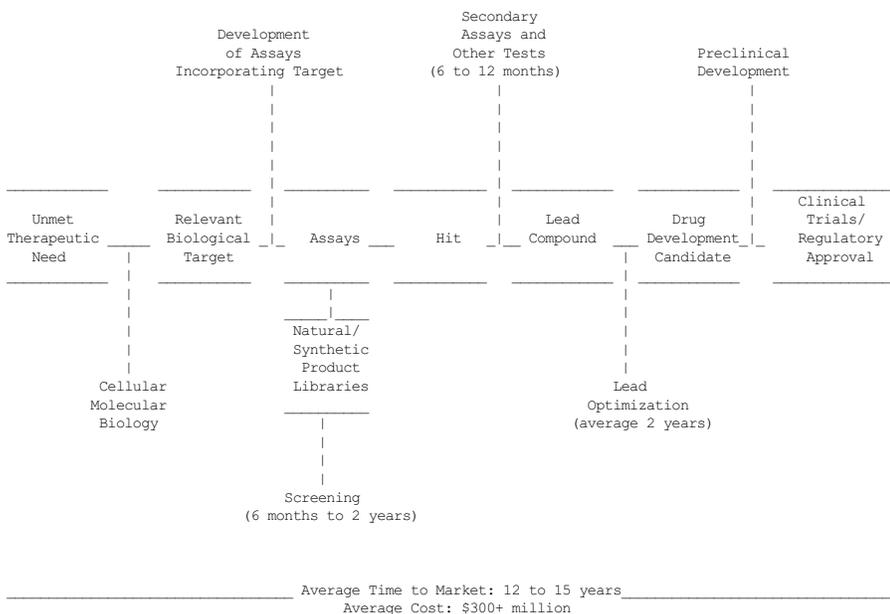
The potential market for ArQule's proprietary modular building block technology is comprised of all consumers of novel chemical compounds, including developers of drugs, separations media, agricultural products, industrial catalysts, specialty materials and other industrial products. The Company's initial business focus has been on the pharmaceutical and biotechnology industries.

Traditional Drug Discovery and Its Limitations. Drugs are chemical compounds that modulate the activity of biological targets associated with particular disease states to achieve a desired therapeutic effect. The discovery and development of drugs has traditionally been a lengthy, expensive and often unsuccessful process. Typically, it takes 12 to 15 years from the original concept of modulating the activity of a particular biological target to the market introduction of a drug that performs such a function. The average cost of bringing a new drug to market has been estimated to be in excess of \$300 million.

The first major step in the drug discovery process is the identification of one or more compounds that interact with a biological target, such as an enzyme,

receptor or other protein, that is associated with a disease state. To identify such a compound, collections of compounds are tested or screened for activity with respect to the biological target. A compound that interacts with a target is referred to as a hit, and a hit with characteristics making it suitable as a potential drug is referred to as a lead compound.

TRADITIONAL DRUG DISCOVERY PROCESS



Historically, drug developers have obtained collections of chemical compounds for screening from natural product sources and by synthesis. These collections are often neither sufficiently diverse to be likely to result in a hit nor preselected to include compounds with promising structures or desirable drug characteristics. This random screening approach has yielded a relatively small percentage of hits and only a relatively small portion of those hits have resulted in lead compounds.

The second major step in the drug discovery process is the optimization of a lead compound by the sequential synthesis and testing of variations, or analogs, of a lead compound to identify promising drug development candidates. A drug development candidate is a lead compound that in preclinical studies demonstrates pharmacological efficacy, lack of toxicity, potency, selectivity and other desirable characteristics such as oral availability, cell penetration and stability. Using traditional medicinal chemistry, lead optimization has required an average of two years of synthesizing hundreds of analogs of a lead compound and has been the most expensive and time consuming part of the drug development process prior to clinical testing. The synthesis of a single compound analog takes approximately 7 to 10 days and costs approximately \$7,500. As a result, a chemist is usually able to synthesize only 100 to 200 analogs per year. On average, as many as 6,000 chemical compounds may be synthesized per successful drug at a cost of approximately \$45 million in chemistry costs.

Drug Development in Transition. Lower profit margins, shorter product lives, the proliferation of generic drugs, managed care and cost containment initiatives, combined with scientific and technological advances, have created powerful incentives for drug developers to explore new technologies to discover novel drugs more quickly and cost effectively. The growing biotechnology and gene discovery (genomics) industries are rapidly identifying numerous new biological targets and developing highly sensitive assays incorporating these targets. Advances in robotics have led to automated high throughput screening systems, allowing biologists to assay large numbers of chemical compounds

against novel targets. These developments have resulted in increased demand for large and diverse collections of novel compounds.

In addition, in recent years, structure-guided and rational drug design approaches have allowed scientists, using structure activity-relationship ("SAR") data about biological targets, to design compounds that are likely to show activity with respect to a biological target. These developments, together with the developments referred to in the preceding paragraph, have resulted in a proliferation of hits, generating demand for tools to rapidly create analogs of hits and optimize lead compounds.

Current Combinatorial Chemistry Technology and Its Limitations. Combinatorial chemistry is the rapid creation of hundreds of thousands of chemical compounds, most of which do not exist in nature, for the purpose of rapidly identifying hits through random screening. Current combinatorial chemistry has been successful in producing large numbers of compounds and correspondingly large numbers of hits. However, current combinatorial chemistry techniques have been less successful in generating lead compounds and, ultimately, drug development candidates for some or all of the following reasons:

- Time-Consuming Isolation of Hits. In certain combinatorial chemistry applications, large numbers of chemical compounds are synthesized and screened in mixtures. Hits must therefore be isolated from the mixtures, which is a costly, slow, labor-intensive process.
- Lack of Structural and SAR Information. Once a hit is isolated, many current combinatorial techniques fail to facilitate the identification of the structure of the hit or to provide SAR data to guide the lead optimization process.
- Incompatibility with Drug Developers' Screening Protocols. Many combinatorial compounds are produced in a format that is incompatible with standard screening protocols of drug developers. In addition, once a hit is found and the compound is isolated, significant additional work must often be performed by the combinatorial chemistry company to determine the structure of the compound. Drug developers relying on this format may therefore be required to transfer hits to the combinatorial chemistry company.

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- Limitations of Solid Phase Chemistry. Several combinatorial chemistry techniques involve the production of compounds using solid phase chemistry in which compounds are attached to small beads. Because many compounds with desirable chemistries cannot be synthesized using solid phase chemistry, collections of compounds based exclusively on solid phase chemistry may have limited diversity.
- Limited Compound Quantities. Certain current combinatorial chemistry techniques produce very small quantities of each compound, which limits further testing once a lead compound is found and precludes archiving of compounds for future testing against additional targets.
- Scale-Up Limitations. Many current combinatorial chemistry techniques involve laboratory methods that cannot be easily translated into large scale manufacturing processes. This creates the possibility that active compounds will be identified that are difficult or impractical to produce in quantities necessary for clinical trials or commercial production.
- Unproductive Screening. Because certain combinatorial chemistry techniques involve the screening of random compounds without preselection for desirable drug characteristics, suitable lead compounds often can be identified only after many unproductive screenings. In addition, testing of mixtures frequently produces equivocal or false positive screening results because the observed activity with a biological target is caused by several compounds within the mixture rather than the interaction of an individual compound with a target, leading to further unproductive screening.

Although recent developments in combinatorial chemistry have shortened the time between identifying a biological target and obtaining a hit in the target assay, the proliferation of hits has not led to a commensurate increase in lead

compounds. In addition, current combinatorial chemistry techniques have not significantly improved the lead optimization process and, therefore, have not significantly shortened the time it takes to produce a drug development candidate from a lead compound.

THE ARQULE REVOLUTION

ArQule believes its modular building block technology overcomes many of the limitations of current combinatorial chemistry approaches by accelerating the identification and optimization of lead compounds.

Many organic molecules, including amino acids, peptides, nucleosides, carbohydrates, steroids and alkaloids, may be viewed as comprised of structural components, consisting of a scaffold, or core structure, around which a set of substituent groups and connectors (bonds) is varied. ArQule's scientists have developed proprietary methods for selecting and combining molecular components, or building blocks, to produce arrays of compounds that possess properties they believe will exhibit activity in biological systems.

Using SAR data regarding biologically active compounds and modular molecular components, ArQule's synthetic and computational chemists work together to rapidly design compound arrays that include all combinations of a set of selected building blocks around a common core structure or theme. ArQule's arrays are created by using structure-guided and rational drug design tools to systematically select and assemble molecular building blocks with properties the Company's scientists believe are likely to exhibit biological activity. Each compound in the array is different from the adjacent compound as a result of a single structural modification. Each ArQule array omits compounds that are closely analogous to other compounds in the array, using representative diversity to create a logical representation of a virtual library of hundreds of times as many compounds as are in the array. Drug developers are able to realize significant savings by screening the thousands of compounds in each ArQule array rather than the millions of compounds they represent. In addition, the SAR data of compounds within the array provides a navigational tool for lead optimization by indicating the most promising investigational direction for analoging.

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In order to enhance the effectiveness of this modular building block technology, ArQule integrates the following tools:

- structure-guided drug design;
- a proprietary "automated molecular assembly plant" (AMAP) system for high speed parallel synthesis, purification and structural verification of chemical compounds; and
- proprietary computer applications that facilitate the integration of all of the Company's proprietary technologies.

Graphical representation displaying the integration of ArQules Combinational Drug Design and Development Platform

Structure-Guided Drug Design. ArQule's scientists believe that the likelihood of generating a drug development candidate can be substantially increased if the collection of compounds used for screening is created using three-dimensional structural and SAR data. The Company designs its arrays based on chemical structures that are believed to be biologically active and also on SAR data regarding a particular target and a particular lead compound. Using this data, as well as knowledge of the chemical reactions that are feasible using high speed parallel synthesis, ArQule's scientists design logically arranged arrays of diverse compounds that can easily be synthesized. The Company believes that this approach will accelerate the lead discovery and optimization process by increasing the probability of identifying a lead compound that will result in a drug development candidate.

The AMAP High Speed Parallel Synthesis System. Using its "automated molecular assembly plant" (AMAP) system, ArQule synthesizes, purifies and verifies structural information for individual compounds through automated high speed parallel synthesis. The AMAP system is capable of synthesizing thousands of compounds per day, each in milligram quantities adequate for multiple screens, analyzing such compounds for structural integrity and purity, registering the structural data in a relational database, and delivering the

compounds in a 96-well microtiter plate format for high throughput screening.

Integrated Proprietary Computer Applications ("Informatics"). ArQule has developed a proprietary information system which incorporates (i) databases of the molecular structures of building blocks and the compounds in its arrays, (ii) multi-dimensional matrix geometry which provides guidance for the creation of the Company's spatially addressable arrays of compounds containing systematic variations of modular building blocks, (iii) instructions for the robotics involved in the AMAP parallel synthesis production process, (iv) resulting databases of structural information regarding the compounds produced in any particular array which can be supplied in a format compatible with customers' own data registration systems and (v) databases of SAR data regarding particular compounds and their molecular components contained in an array generated when these compounds are screened against biological targets. This integrated information system enables ArQule to gather and apply data on an ongoing basis to enhance the efficiency of the production process and to design compounds based on a growing knowledge of the structure and activity of its molecular components.

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ADVANTAGES OF ARQULE'S COMBINATORIAL DRUG DISCOVERY AND DEVELOPMENT PLATFORM

The Company believes the integration of its technological capabilities offers a unique combinatorial drug discovery and development platform. This platform offers the following significant advantages over current combinatorial chemistry approaches:

- Elimination of Isolation Issues. Unlike combinatorial chemistry processes involving the production of synthesized compounds in mixtures, ArQule's AMAP system produces one compound per well, with each well containing a known compound with a high level of purity.
- Enhanced Structural and SAR Data. ArQule produces arrays using preselected modular building blocks that its scientists believe are likely to produce lead compounds with desirable characteristics, and, in the case of Directed Array sets, based upon the SAR data of the target and/or lead compound. As a result, the Company believes the success rate for drugs developed using its arrays will be improved and the risk of downstream clinical failure will be reduced. The wealth of SAR data available with respect to compounds in its arrays will also facilitate the development of analogs for the further optimization of active compounds.
- Compatibility with Drug Developers' Screening Protocols. ArQule's compounds are delivered to its collaborators in 96-well microtiter plates containing one known compound per well. This delivery format is compatible with most existing screening protocols and permits the owner of the assay to screen compounds in its own laboratories, thereby having complete control over the screening process.
- Solution and Solid Phase Chemistry. ArQule's compounds may be produced using either solution or solid phase chemistry, permitting the creation of a broad range of novel chemical compounds.
- Significant Compound Quantities. ArQule's compounds are delivered to its collaborators in milligram quantities, permitting the collaborator to engage in extensive testing of a lead compound or to screen compounds against multiple biological targets without having to obtain additional samples from the Company.
- Ease of Scale-Up. ArQule's compounds are produced using fully reproducible and scalable manufacturing processes.
- Reduction in Unproductive Screening. By creating logical arrays of compounds based on known structural and SAR data and eliminating compounds that are closely analogous to others in the array, ArQule believes that fewer compounds will need to be screened prior to identifying compounds with activity. In addition, because ArQule delivers single compounds for screening, such compounds do not generate the false positives and false negatives associated with screening mixtures of compounds.

ArQule believes these significant advantages will allow its collaborative partners to accelerate the drug discovery process by several years by shortening the time required to identify a lead compound and to optimize that compound into a drug development candidate. This acceleration should permit drug developers to realize significant cost reductions and the earlier recovery of research and development expenditures for successful drugs.

ARQULE'S PRODUCTS

ArQule's integrated technologies result in the production of significant quantities of pure small molecule compounds contained in a logically structured spatially-addressable array. ArQule provides its pharmaceutical and biotechnology collaborative partners with two types of arrays of synthesized compounds: (i) Mapping Array compound sets, which are arrays of novel, diverse, small molecule compounds used for screening against biological targets and (ii) Directed Array compound sets, which are arrays of analogs of a particular lead compound synthesized for the purpose of optimizing that lead compound.

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Mapping Array Sets. ArQule's Mapping Array sets are designed around certain core structures or themes selected by ArQule. ArQule provides its collaborative partners with a subscription to an annual Mapping Array program comprised of a minimum of 100,000 compounds in 15 to 20 Mapping Array sets each containing between 3,000 and 10,000 individual compounds. The Mapping Array program is provided to subscribers without limitation as to the targets against which the compounds may be screened. ArQule believes this approach will maximize the number of targets against which its Mapping Array sets are tested, thereby maximizing the potential for identifying activity for each compound in the array. Initially, the Company provides its Mapping Array sets on a non-exclusive, subscription fee basis for screening purposes only. If a compound shows activity in a subscriber's assay, the subscriber may license that compound from the Company for development purposes on an exclusive basis, unless such compound has already been licensed to another collaborative partner. The Company does not provide any structural information regarding the compounds in the Mapping Array sets until a particular compound is licensed.

Directed Array Sets. Upon request, the Company provides Directed Array sets in order to optimize lead compounds. In a Directed Array set, the Company uses its modular building block technology to create analogs of a lead compound identified by the collaborator, either independently or as a result of screening a Mapping Array set. Directed Array sets are logical representations of a virtual library of compounds closely analogous to a lead compound. Successive Directed Array sets are generated in order to identify the compound or compounds within a virtual library having the greatest biological activity and most desirable drug development characteristics. When delivering a Directed Array set, the Company provides the collaborator with structural information for each compound in the array, and each compound is owned by the collaborator either individually or jointly with ArQule, subject to the payment of fixed fees, milestones and royalties to the Company.

BUSINESS STRATEGY

ArQule's goal is to become the leader in the development of novel chemical compounds with commercial potential, with an initial focus on the pharmaceutical and biotechnology industries. Key elements of the Company's strategy include:

- Collaborations with Pharmaceutical Companies. ArQule has sought collaborations with large pharmaceutical companies who have established manufacturing, marketing and sales resources and a strong commitment to the development of pharmaceutical products. ArQule offers to each of its collaborative partners access to its Mapping Array program for an annual subscription fee and, if requested, customized Directed Array sets for a fixed fee. In addition, the Company is entitled to payments upon the achievement of certain milestones and royalties upon the commercialization of drugs developed by the collaborator from ArQule compounds. The Company plans to pursue additional collaborations aggressively to gain access to additional targets and development expertise, and to generate additional revenue.
- Joint Discovery Programs with Biotechnology Companies. Biotechnology companies represent important potential collaborators for joint discovery and development efforts using ArQule's Mapping Array and Directed Array

sets and the biotechnology company's proprietary biological targets and assays. ArQule provides Mapping Array and Directed Array sets to biotechnology companies in exchange for joint ownership of any lead compounds that exhibit activity in the proprietary assays developed by the biotechnology company collaborators. ArQule seeks collaborators with promising drug development programs in a broad range of therapeutic areas.

- Extension of Chemistry Tools to Areas Other than Drug Discovery. The Company intends to extend its integrated technologies to a wide variety of applications outside the field of drug discovery, including bioseparations and protein purification, industrial catalysts and novel agricultural chemicals, as well as to the development of polymeric structures for non-biological applications.

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- Continued Investment in Proprietary Chemistry Technology. ArQule intends to continue its aggressive investment in proprietary chemistry technologies through internal development and licensing of third party technologies. ArQule will also continue to invest in improving the cost-effectiveness of its products through automation and information technologies.

ARQULE'S DRUG DISCOVERY PROGRAMS

Pharmaceutical Company Collaborations. To date, the Company has entered into the following major collaborations with pharmaceutical companies:

Roche Bioscience. In September 1996, the Company entered into a collaborative agreement with Roche Bioscience ("Roche Bioscience"), a division of Syntex (U.S.A.) Inc. and indirect subsidiary of Roche Holding Ltd., pursuant to which the Company will synthesize Directed Array sets from compounds provided to the Company by Roche Bioscience, developed by the Company internally and/or developed by the Company as a part of the collaboration (the "Roche Bioscience Agreement"). Absent early termination, Roche Bioscience will pay the Company approximately \$12.1 million over three years. The parties may jointly agree to increase the number of Directed Array sets to be provided by the Company under the Roche Bioscience Agreement, which may result in increased payments to the Company. Roche Bioscience is also obligated to make additional payments upon the achievement of certain milestones and to pay royalties on sales of drugs that may result from the relationship. The Roche Bioscience Agreement expires in September 1999 and is terminable by Roche Bioscience on or after September 1998 on six months' advance notice. Assuming such termination occurs on September 30, 1998, the Company will have received payments of approximately \$8.4 million from Roche Bioscience and no further payments, other than milestone payments and royalties, will be due to the Company. To date, Roche Bioscience has paid the Company an aggregate of \$2.0 million under the Roche Bioscience Agreement.

Solvay Duphar B.V. In November 1995, the Company entered into a collaborative agreement with Solvay Duphar B.V. ("Solvay") pursuant to which Solvay has subscribed to the Company's Mapping Array program and has the right to request customized Directed Array sets (the "Solvay Agreement"). To date, the Company has provided Solvay with several Mapping Array and Directed Array sets. Absent early termination, Solvay agreed to pay the Company a minimum of \$17.5 million over five years. Solvay is also obligated to make additional payments upon the achievement of certain milestones and to pay royalties on sales of drugs that may result from the relationship. The Solvay Agreement expires in November 2000. Solvay has the right to terminate the Mapping Array program on twelve months' written notice at any time subject to its payment of a termination fee of approximately \$1.0 million. Solvay may also terminate the delivery of Directed Array sets on six months' written notice at any time subject to its payment of a termination fee equal to a certain percentage of the aggregate research payments made by Solvay in the year in which notice is given. If Solvay gave notice to terminate both programs on the date of this Prospectus, as of the effective termination dates, Solvay would have paid the Company \$3.5 million, not including the termination fees. No further payments would be due from Solvay other than milestone or royalty payments. To date, Solvay has paid the Company an aggregate of \$3.5 million under the Solvay Agreement. In connection with this collaboration, an affiliate of Solvay, Physica B.V., made a \$7.0 million equity investment in the Company. See "Certain Transactions." Under the Solvay Agreement, Solvay has the right to license, on an exclusive basis, lead compounds identified from a Mapping Array set that are active against

specified biological targets and that have not previously been committed to another of ArQule's collaborative partners or to an internal program of the Company. Solvay also has the right to use certain of ArQule's technologies internally.

Abbott Laboratories. In June 1995, the Company entered into a collaborative agreement with Abbott Laboratories ("Abbott") pursuant to which Abbott has subscribed to the Company's Mapping Array program and has the right to request customized Directed Array sets (the "Abbott Agreement"). To date, the Company has provided several Mapping Array and Directed Array sets. In August 1996, the Abbott Agreement was amended to provide for the Company to supply Abbott with additional

Mapping Array sets and to eliminate restrictions on the period during which Abbott may screen the Mapping Array sets. The Abbott Agreement, as amended, expires in June 1997, subject to Abbott's right to extend the term of the Abbott Agreement for three additional one year terms. If Abbott exercises its right to extend the Abbott Agreement for its full term, Abbott will pay the Company a minimum of \$11.0 million over a five year period. If Abbott fails to exercise its right to extend the Abbott Agreement beyond the initial term, Abbott would have paid the Company \$4.4 million and no further payments would be due from Abbott other than payments upon the achievement of certain milestones and to pay royalties on the sale of drugs that may result from the relationship. To date, Abbott has paid the Company an aggregate of \$3.8 million under the Abbott Agreement.

Pharmacia Biotech AB. In March 1995, the Company entered into a collaborative agreement with Pharmacia Biotech AB ("Pharmacia"), a wholly-owned subsidiary of Pharmacia & Upjohn, Inc., to allow Pharmacia to evaluate the utility of the Company's technology for the development of products in the fields of bioseparations, synthesis of biomolecules and cell culture (the "Pharmacia Agreement"). On the same date, the Company and Pharmacia also signed an agreement under which Pharmacia has an option to acquire an exclusive, worldwide license to develop and commercialize specified compounds generated by the Company in additional fields covered under the Pharmacia Agreement, subject to the payment by Pharmacia of additional fees and the negotiation and execution by the parties of a license agreement containing commercially reasonable terms (the "Option Agreement"). To date, Pharmacia has paid the Company an aggregate of \$2.0 million under the Pharmacia Agreement and the Option Agreement.

Joint Discovery Programs with Biotechnology Companies. ArQule has initiated joint programs for lead generation and optimization with a number of biotechnology companies. Some of ArQule's biotechnology collaborators and their areas of focus are listed below:

COMPANY	AREA OF FOCUS
Aurora Biosciences, Inc.	Mammalian Cell-Based Assays
Cadus Pharmaceuticals Corporation	Signal Transduction
Cubist Pharmaceuticals, Inc.	Infectious Diseases
ICAGEN, Inc.	Ion Channel Receptors
Scriptgen Pharmaceuticals, Inc.	RNA/Protein Interaction
SUGEN, Inc.	Signal Transduction
T Cell Sciences, Inc.	T Cell Activation/Inhibition

In the United States, small biotechnology companies have been highly successful in the discovery of biological targets associated with disease states. Many of these companies, however, lack both (i) large libraries of chemical compounds to screen against identified targets and (ii) the sophisticated chemistry expertise required to optimize compounds once a lead compound has been identified. Under the Company's typical arrangement with a biotechnology company, ArQule provides Mapping Array sets for screening without collecting upfront fees, and the biotechnology company executes a preliminary material transfer agreement. If the collaborator detects an active compound within a Mapping Array set, and that compound has not been previously committed to a third party or to an internal ArQule program, the Company and the collaborator establish a joint discovery program and execute the research

collaboration agreement that is attached to the material transfer agreement. If the parties are unable to negotiate the scope of a joint discovery program within a certain period, ArQule has the right to license such compound to any third party.

Although ArQule's formal research collaboration agreement varies from transaction to transaction, it typically establishes a joint drug development program for the lead compound and a particular target, and gives ArQule shared control over the program.

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APPLICATIONS OF THE COMPANY'S TECHNOLOGY TO OTHER INDUSTRIES

ArQule's integrated technology platform permits the rapid design and optimization of chemical compounds having specific properties. This presents the Company with opportunities to address a wide variety of non-drug discovery applications, including both biological and non-biological applications. An example of a biological application is the Company's collaboration with Pharmacia to produce highly selective separations media for the commercial scale purification of therapeutic proteins. Another potential biological application for the Company's technologies is the synthesis of novel agricultural chemicals.

Potential non-biological applications include the development of industrial catalysts and nano-scale polymeric structures for specialized mechanical applications. In general, non-biological applications cannot be evaluated using mixtures produced by current combinatorial chemistry techniques because such applications are not characterized by the sensitivity and selectivity exhibited by biological ligand-target interactions. In addition, non-biological targets require substantial quantities of individual compounds to use in rapid iterative experimental cycles. ArQule believes its technologies can satisfy the needs of non-biological applications by producing large quantities of pure compounds of known structures that may be directly translated to large scale manufacturing procedures.

MARKETING AND SALES

The Company markets its products directly to customers through participation in trade conferences and seminars and publications in scientific and trade journals.

To date, the Company has sold its products to its collaborative partners primarily through the efforts of its senior management. The Company's senior management has limited experience in marketing products similar to those of the Company. In order to achieve significant long-term growth in revenues and its overall strategic goals, the Company intends to hire at least one or two dedicated sales and marketing personnel. There can be no assurance that the Company will be able to achieve anticipated expansion of its business, attract a significant number of new collaborative partners as customers or build an efficient and effective sales and marketing organization. In the event the Company is unable to achieve any one or more of the foregoing goals, the Company's business, financial condition and results of operations could be materially adversely affected. In addition to the risks inherent in the Company's efforts to market its own products, the Company's revenues from royalties and milestone payments from its collaborative partners is substantially dependent upon the marketing efforts of such collaborative partners.

RESEARCH AND DEVELOPMENT

ArQule intends to continue its aggressive investment in its proprietary technologies through internal development and licensing of third party technologies in order to increase the diversity and improve other characteristics of compounds offered. The Company will also continue to invest in improving the cost-effectiveness of its products through automation and information technologies. The Company is actively pursuing research projects aimed at identifying and developing new chemistries to improve and expand on its Mapping Array and Directed Array programs. These projects involve research conducted by the Company, collaborations with other researchers and the acquisition of chemistries and other technologies developed by universities and other academic institutions.

PATENTS AND PROPRIETARY RIGHTS

ArQule has one issued patent and has filed a number of patent applications. There can be no assurance that patent applications filed by ArQule will result in patents being issued, that the claims of such patents will offer significant protection of the Company's technology, or that any patents issued to or licensed by ArQule will not be challenged, narrowed, invalidated or circumvented. The Company may also be subject to proceedings that result in the revocation of patent rights previously owned by or licensed to ArQule, as a result of which the Company may be required to obtain licenses from others to continue to develop, test or commercialize its products. There can be no assurance that

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ArQule will be able to obtain such licenses on acceptable terms, if at all. In addition, there may be pending or issued patents held by parties not affiliated with ArQule that relate to the technology utilized by ArQule. As a result, ArQule may need to acquire licenses, to assert infringement, or contest the validity, of such patents or other similar patents which may be issued. ArQule could incur substantial costs in defending itself against patent infringement claims, interference proceedings, opposition proceedings or other challenges to its patent rights made by third parties, or in bringing such proceedings or enforcing any patent rights of its own.

The Company also relies upon trade secrets, know how and continuing technological advances to develop and maintain its competitive position. In an effort to maintain the confidentiality and ownership of trade secrets and proprietary information, the Company requires employees, consultants and certain collaborators to execute confidentiality and invention assignment agreements upon commencement of a relationship with the Company. These agreements are intended to enable the Company to protect its proprietary information by controlling the disclosure and use of technology to which it has rights and provide for ownership by the Company of proprietary technology developed at the Company or with the Company's resources. There can be no assurance, however, that these agreements will provide meaningful protection for the Company's trade secrets or other confidential information in the event of unauthorized use or disclosure of such information or that adequate remedies would exist in the event of such unauthorized use or disclosure. The loss or exposure of trade secrets possessed by ArQule could have a material adverse effect on its business.

COMPETITION

Many organizations are actively attempting to identify and optimize compounds for potential pharmaceutical development. The Company's services and products face competition based on a number of factors, including size, diversity and ease of use of libraries of compounds, speed and costs of identifying and optimizing potential lead compounds and patent position. ArQule competes with the research departments of pharmaceutical companies, biotechnology companies, combinatorial chemistry companies and research and academic institutions. Many of these competitors have greater financial and human resources and more experience in research and development than the Company. Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and established biotechnology companies. In addition to competition for customers, these companies and institutions also compete with the Company in recruiting and retaining highly qualified scientific and management personnel.

Historically, pharmaceutical companies have maintained close control over their research activities, including the synthesis, screening and optimization of chemical compounds. Many of these companies, which represent a significant potential market for ArQule's products and services, are developing in-house combinatorial chemistry and other methodologies to improve productivity, including major investments in robotics technology to permit the automated parallel synthesis of compounds. In addition, these companies may already have large collections of compounds previously synthesized or ordered from chemical supply catalogs or other sources against which they may screen new targets. Other sources of compounds include extracts from natural products such as plants and microorganisms and compounds created using rational drug design. Academic institutions, governmental agencies and other research organizations are also conducting research in areas in which the Company is working either on their own

or through collaborative efforts.

The Company anticipates that it will face increased competition in the future as new companies enter the market and advanced technologies become available. The Company's processes may be rendered obsolete or uneconomical by technological advances or entirely different approaches developed by one or more of the Company's competitors. The existing approaches of the Company's competitors or new approaches or technology developed by the Company's competitors may be more effective than those developed by the Company.

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There can be no assurance that the Company's competitors will not develop more effective or more affordable technology or products, or achieve earlier product development and commercialization than the Company, thus rendering the Company's technologies and/or products obsolete, uncompetitive or uneconomical. See "Risk Factors -- Competition and the Risk of Obsolescence of Technology."

GOVERNMENT REGULATION

Although the manufacture, transportation and storage of the Company's products are subject to certain laws and regulations discussed in the last paragraph of this Section, the sale of the Company's products is not subject to significant government regulations. However, the Company's future profitability is dependent on the sales of pharmaceuticals and other products developed from the Company's compounds by its customers and collaborators. Regulation by governmental entities in the United States and other countries will be a significant factor in the production and marketing of any pharmaceutical products that may be developed by a customer of the Company, or in the event the Company decides to develop a drug beyond the preclinical phase. The nature and the extent to which such regulation may apply to the Company's customers will vary depending on the nature of any such pharmaceutical products. Virtually all pharmaceutical products developed by the Company's customers will require regulatory approval by governmental agencies prior to commercialization. In particular, human pharmaceutical products are subject to rigorous preclinical and clinical testing and other approval procedures by the FDA and by foreign regulatory authorities. Various federal and, in some cases, state statutes and regulations also govern or influence the manufacturing, safety, labeling, storage, record keeping and marketing of such pharmaceutical products. The process of obtaining these approvals and the subsequent compliance with appropriate federal and foreign statutes and regulations are time consuming and require the expenditure of substantial resources.

Generally, in order to gain FDA approval, a company first must conduct preclinical studies in the laboratory and in animal models to gain preliminary information on a compound's efficacy and to identify any safety problems. The results of these studies are submitted as a part of an IND that the FDA must review before human clinical trials of an investigational drug can start. In order to commercialize any products, the Company or its customer will be required to sponsor and file an IND and will be responsible for initiating and overseeing the clinical studies to demonstrate the safety and efficacy that are necessary to obtain FDA approval of any such products. Clinical trials are normally done in three phases and generally take two to five years, but may take longer, to complete. After completion of clinical trials of a new product, FDA and foreign regulatory authority marketing approval must be obtained. If the product is classified as a new drug, the Company or its customer will be required to file an NDA and receive approval before commercial marketing of the drug. The testing and approval processes require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all. NDAs submitted to the FDA can take several years to obtain approval. Even if FDA regulatory clearances are obtained, a marketed product is subject to continual review, and later discovery of previously unknown problems or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a product or withdrawal of the product from the market as well as possible civil or criminal sanctions. For marketing outside the United States, the Company will also be subject to foreign regulatory requirements governing human clinical trials and marketing approval for pharmaceutical products. The requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary widely from country to country.

The research and development processes of the Company involve the

controlled use of hazardous materials. The Company is subject to federal state and local laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. Although the Company believes that its activities currently comply with the standards prescribed by such laws and regulations, the risk of accidental contamination or injury from these materials cannot be eliminated. In the event of such an accident, the Company could be held liable for any damages that result and any liability could exceed the resources of the Company. In addition, there can be no assurance that the

Company will not be required to incur significant costs to comply with environmental laws and regulations in the future.

EMPLOYEES

As of July 31, 1996, ArQule employed 51 people of whom 23 have Ph.D. degrees. Of these, 31 were engaged in operations, 12 were engaged in research and development and 6 were engaged in marketing and general administration. None of ArQule's employees are covered by collective bargaining agreements. ArQule believes its employee relations are good.

FACILITIES

ArQule's research facilities include approximately 34,800 square feet of laboratory and office space in Medford, Massachusetts pursuant to two lease agreements. These leases extend through July 30, 2000, at which time the Company has an option to renew the leases for an additional five year period.

ArQule believes its current facilities are adequate for its current operations. The Company believes that suitable additional space will be available to it, when needed, on commercially reasonable terms.

LEGAL PROCEEDINGS

Two individuals have asserted that they are entitled to compensation from certain of the Company's stockholders and/or the Company equal to approximately five percent of the equity interests in the Company for services in connection with the initial financing of the Partnership in 1993. The Company intends to vigorously defend any claim brought by such individuals and believes that it has meritorious defenses to such claims. However, no assurance can be given that such individuals will not be successful in any litigation relating to such claims.

Except as stated above, ArQule is not a party to any other legal proceedings.

MANAGEMENT

EXECUTIVE OFFICERS, KEY EMPLOYEES AND DIRECTORS

The following table sets forth certain information regarding the executive officers, key employees and directors of the Company as of August 15, 1996:

NAME	AGE	POSITION
- ----	---	-----
Eric B. Gordon.....	49	President, Chief Executive Officer and Director
Joseph C. Hogan, Jr., Ph.D.	55	Chairman of the Board, Senior Vice President of Research and Development, Chief Scientific Officer and Director
David L. Coffen, Ph.D.	58	Vice President of Chemistry

James R. Fitzgerald, Jr.	51	Vice President, Chief Financial Officer and Treasurer
John M. Sorvillo, Ph.D.	42	Vice President of Business Development
Steven L. Gallion, Ph.D.	39	Director of Computational Chemistry
Adrian de Jonge, Ph.D.(1).....	41	Director
Stephen M. Dow(2).....	41	Director
Allan R. Ferguson(1)(2).....	54	Director

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(1) Member of the Audit Committee.

(2) Member of the Compensation Committee.

Eric B. Gordon has been the President and Chief Executive Officer of the Company since January 1996. From 1987 until he joined the Company, Mr. Gordon served in various capacities with Pasteur Merieux Connaught, a pharmaceutical company, most recently as Vice President, Treasurer and CFO and since 1993 as Chief Executive Officer of Virogenetics Corporation, its wholly-owned subsidiary. Mr. Gordon received his A.M.P. from the Wharton School of Business of the University of Pennsylvania and his B.S. in Accounting and Finance from Syracuse University.

Joseph C. Hogan, Jr., Ph.D. is a founder of the Company and has served as the Chief Scientific Officer and Senior Vice President of Research and Development since its inception. Dr. Hogan has served as the Chairman of the Board since January 1996. From 1990 until he founded the Company, Dr. Hogan was the founder and president of Applied Modular Chemistries, Inc., a chemistry company. Dr. Hogan received his M.S. and B.S. in Chemistry from Boston College and his Ph.D. from Boston College and the Max Planck Institut fuer Kohlenforschung, Muelheim/Ruhr, Germany.

David L. Coffen, Ph.D. has been the Vice President of Chemistry since July 1995. From 1971 until he joined the Company, Dr. Coffen was employed by Hoffman-LaRoche Inc., a pharmaceutical company, in a variety of positions, most recently as Vice President of Molecular Sciences. Dr. Coffen received his Ph.D. in Synthetic Organic Chemistry from the Massachusetts Institute of Technology and his B.S. in Chemistry from the University of Toronto.

James R. Fitzgerald, Jr. joined the Company in July 1996 as the Chief Financial Officer. From 1988 until he joined the Company, Mr. Fitzgerald was the Chief Financial Officer of Hoyts Cinemas Corporation, an owner and operator of cinemas. Mr. Fitzgerald received his M.B.A. and his B.A. in Economics from Northeastern University.

John M. Sorvillo, Ph.D. joined the Company in December 1995 as Vice President of Business Development. Prior to joining the Company, Dr. Sorvillo had provided consulting services to the Company since August 1995. From 1985 until he joined the Company, Dr. Sorvillo was employed by Oncogene Science, Inc., a biotechnology company, in a variety of positions, most recently as Vice President and General Manager. Dr. Sorvillo attended the Massachusetts Institute of Technology

Program for Senior Executives. He received his Ph.D. in Immunology from the New York University Medical Center and his B.A. in Biology from the City University of New York, Hunter College.

Steven L. Gallion, Ph.D. joined the Company in 1994 as Research Fellow in Computational Chemistry. In 1995, he became the Company's Director of Computational Chemistry. Prior to joining the Company, he was employed by Marion Merrell Dow, Inc., a pharmaceutical company, as Senior Associate Scientist of Theoretical Chemistry from 1993 to 1994 and Associate Scientist of Theoretical Chemistry from 1992 to 1993. From 1989 to 1992, he was Director of Product Development of Amber Systems, Inc., a molecular modeling software company. He received his Ph.D. in Physical Chemistry from the University of Georgia and his B.S. in Chemistry from Southampton College of Long Island University.

Adrian de Jonge, Ph.D. has been a director of the Company since November 1995. Dr. de Jonge is the Vice President of Research of Solvay's Pharmaceuticals Division and has held such position since 1994. From 1987 through 1993, Dr. de Jonge was employed by Solvay in a variety of positions, most recently as Sector Manager of Drug Discovery.

Stephen M. Dow has been a director of the Company since its inception. Since 1983, he has been a general partner of Sevin Rosen Funds, a venture capital investment firm. Mr. Dow serves as a director of Citrix Systems, Inc. and several privately held companies.

Allan R. Ferguson has been a director of the Company since its inception. He has been a general partner of Atlas Venture since 1993 and managing partner of Aspen Ventures since 1991, both venture capital firms. From 1986 through 1991, Mr. Ferguson was the President of 3i Ventures, a venture capital firm. Prior to his venture capital experience, Mr. Ferguson held senior level positions in operations at Johnson & Johnson and Damon Biotech. Mr. Ferguson serves as a director of AutoImmune Inc. and several privately held companies.

The Company's Restated Certificate, to be filed concurrently with the closing of this offering, provides for a classified board of directors consisting of three classes, with each class being as nearly equal in number as possible. The term of one class expires and their successors are elected for a term of three years at each annual meeting of the Company's stockholders. The Company has designated two class I directors (Messrs. Dow and Gordon), two class II directors (Mr. Ferguson and Dr. Hogan) and one class III director (Dr. de Jonge). These class I, class II and class III directors will serve until the annual meetings of stockholders to be held in 1997, 1998 and 1999, respectively, and until their respective successors are duly elected and qualified, or until their earlier resignation or removal. The Restated Certificate provides that directors may be removed only for cause by a majority of stockholders. See "Description of Capital Stock--Anti-Takeover Measures." There are no family relationships among any of the directors or executive officers.

BOARD COMMITTEES

The Company has standing Audit and Compensation Committees of the Board of Directors. The Audit Committee consists of Mr. Ferguson and Dr. de Jonge. The primary function of the Audit Committee is to assist the Board of Directors in the discharge of its duties and responsibilities by providing the Board with an independent review of the financial health of the Company and of the reliability of the Company's financial controls and financial reporting systems. The Audit Committee reviews the general scope of the Company's annual audit, the fee charged by the Company's independent accountants and other matters relating to internal control systems.

The Compensation Committee of the Board of Directors determines the compensation to be paid to all executive officers of the Company, including the Chief Executive Officer. The Compensation Committee's duties include the administration of the Company's Amended and Restated 1994 Equity Incentive Plan (the "Equity Plan") and the 1996 Employee Stock Purchase Plan. The Compensation Committee is currently composed of Messrs. Dow and Ferguson.

SCIENTIFIC ADVISORY BOARD

The Company's Scientific Advisory Board consists of individuals with demonstrated expertise in various fields who advise the Company concerning long-term scientific planning, research and development. Members also evaluate the Company's research program, recommend personnel to the Company and advise the Company on technology matters. The Scientific Advisory Board has met collectively and in smaller groups, and its members have also been available individually to advise the Company on specific scientific and technical issues. Scientific Advisory Board members are compensated on a time and expenses basis and have received shares of Common Stock of the Company. In the future, Scientific Advisory Board members also may receive options to purchase shares of Common Stock of the Company. The Company has entered into consulting agreements with a number of the Scientific Advisory Board members.

No member of the Scientific Advisory Board is employed by the Company, and members may have other commitments to or consulting or advisory contracts with their employers or other entities that may conflict or compete with their obligations to the Company. Accordingly, such persons are expected to devote only a small portion of their time to the Company. The members of the Company's Scientific Advisory Board are:

William D. Carlson, M.D., Ph.D. is the Director of Cardiovascular Research for Harvard Community Health Plan, Associate Physician at Brigham and Women's Hospital and Assistant Professor of Medicine at Harvard University Medical School. He is widely known for his work in drug development and structural biology including the renin-angiotensin and osteogenic growth factor systems. He received his Ph.D. in Molecular Biophysics and Biochemistry from Yale University and his M.D. from Yale Medical School.

George L. Kenyon, Ph.D. is the Dean of the School of Pharmacy and Professor of Chemistry and Pharmaceutical Chemistry at the University of California, San Francisco. He is widely known for his work in the mechanisms of enzymatic action, and synthetic and mechanistic chemistry and the development of structure-based approaches to the rational design of enzymatic inhibitions. He received his Ph.D. in Organic Chemistry from Harvard University.

Irwin D. Kuntz, Ph.D. is the Acting Director of the Molecular Design Institute, Chairman of the Graduate Group in Biophysics, and Professor in the Department of Pharmaceutical Chemistry at the University of California, San Francisco. He is widely known for his pioneering work in computational chemistry. He received his Ph.D. in Physical Chemistry from the University of California, Berkley.

Gregory Petsko, Ph.D. is the Lucille P. Markey Professor of Biochemistry and Chemistry, and Director of the Rosenteil Basic Medical Sciences Research Center at Brandeis University. He is widely known for his work in the development of protein crystallography and its application to exploring fundamental aspects of protein folding. He received his Ph.D. in Molecular Biology from Oxford University.

Dagmar Ringe, Ph.D. is the Lucille P. Markey Associate Professor and Chair of the Graduate Program in Biophysics at Brandeis University. She is internationally recognized for her contributions to the use of x-ray crystallography to explore fundamental aspects of drug binding behavior. She received her Ph.D. in Organic Chemistry from Boston University.

William R. Roush, Ph.D. is a Distinguished Professor of Chemistry at Indiana University. He is widely known for his basic studies and applications for a wide variety of synthetic chemical reactions. He received his Ph.D. in Chemistry from Harvard University.

K. Barry Sharpless, Ph.D. is the William M. Keck Professor of Chemistry at The Scripps Research Institute. He is widely known for his pioneering work in asymmetric chemical synthesis. He received his Ph.D. in Organic Chemistry from Stanford University.

1996 DIRECTOR STOCK OPTION PLAN

All of the directors who are not employees of the Company (the "Eligible Directors") are currently eligible to participate in the Company's 1996 Director Stock Option Plan (the "Director Plan"). Upon the adoption of the Director Plan and upon the election of an Eligible Director, such director or directors, as applicable, are automatically granted an option to purchase 7,500 shares of Common Stock (the "Initial Options"). The Initial Options become exercisable with respect to 2,500 shares on the date of the Company's next annual meeting of stockholders following the date of grant and on the date of each annual meeting of stockholders thereafter. In addition, options under the Director Plan are automatically granted once a year, at the annual meeting of stockholders of the Company, to Eligible Directors elected or reelected at the meeting. Each such Eligible Director receives an option to purchase 3,500 shares of Common Stock (the "Annual Options") for each year of the term of office to which the director is elected (normally, 10,500 shares for election to a three-year term of office). The Annual Options become exercisable with respect to 3,500 shares on

the date on which the Annual Option was granted and on the date of each annual meeting of stockholders thereafter, so long as the optionee is then a director of the Company. The Initial Options and Annual Options have a term of ten years, and an exercise price payable in cash or shares of Common Stock. The Director Plan was adopted by the Board of Directors in August 1996 and, therefore, Initial Options for 7,500 shares were issued to each of Mr. Dow, Mr. Ferguson and Dr. de Jonge. The exercise price for the Initial Options granted on the date of the adoption of the Plan was \$11.00, the fair market value on such date as determined by the Board of Directors. The exercise price for the Initial Options and the Annual Options granted after the Company's Common Stock is quoted on the Nasdaq National Market will equal the last sale price for the Common Stock on the business day immediately preceding the date of grant, as reported on the Nasdaq National Market.

EXECUTIVE COMPENSATION

The following table sets forth certain information with respect to the annual and long-term compensation paid or accrued by the Company for services rendered to the Company in all capacities for the fiscal year ended December 31, 1995 by its Chief Executive Officer (both current and former), the current Chief Financial Officer and another executive officer of the Company whose total salary exceeded \$100,000 (the "Named Executive Officer").

SUMMARY COMPENSATION TABLE

NAME AND PRINCIPAL POSITION	ANNUAL COMPENSATION		LONG-TERM COMPENSATION
	SALARY	BONUS	NUMBER OF SECURITIES UNDERLYING OPTIONS
Eric B. Gordon(1)..... President and Chief Executive Officer	--	--	--
Joseph C. Hogan, Jr., Ph.D. Chairman of the Board, Senior Vice President of Research and Development and Chief Scientific Officer	\$150,000	--	--
James R. Fitzgerald, Jr.(2) Vice President, Chief Financial Officer and Treasurer	--	--	--
Seth L. Harrison, M.D.(3)..... Former Chief Executive Officer	56,000(4)	--	--

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- (1) Mr. Gordon commenced employment with the Company in January 1996. Terms of his employment are described under "--Executive Employment Agreements."
- (2) Mr. Fitzgerald commenced employment with the Company in July 1996. Terms of his employment are described under "-- Executive Employment Agreements."
- (3) Dr. Harrison has not been employed by the Company since July 1995.
- (4) This amount was paid to Dr. Harrison by Sevin Rosen Bayless Management Company and the Company then reimbursed Sevin Rosen Bayless Management Company for this payment. In addition, pursuant to the terms of a severance agreement with Dr. Harrison, the Company accelerated the vesting of 8,334 shares of Common Stock.

Options. Neither Dr. Seth L. Harrison nor Dr. Joseph C. Hogan, Jr. have ever been issued options to purchase shares of Common Stock of the Company.

STOCK PLANS

Amended and Restated 1994 Stock Option Equity Plan. The Company's Equity Plan authorizes the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), and nonqualified stock options for the purchase of an aggregate of 2,600,000 shares (subject to adjustment for stock splits and similar capital changes) of Common Stock to employees of the Company and, in the case of non-qualified stock

options, to consultants of the Company or any Affiliate (as defined in the Equity Plan) capable of contributing to the Company's performance. The Board of Directors has appointed the Compensation Committee to administer the Equity Plan. As of June 30, 1996, 1,135,920 shares of Common Stock were subject to outstanding options granted under the Equity Plan, leaving 1,464,080 shares available for issuance upon future grants under the Equity Plan.

1996 Employee Stock Purchase Plan. The Company has also adopted an employee stock purchase plan (the "Purchase Plan") under which employees may purchase shares of Common Stock at a discount from fair market value. There are 120,000 shares of Common Stock reserved for issuance under the Purchase Plan. To date, no shares of Common Stock have been issued under the Purchase Plan. The Purchase Plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Code. Rights to purchase Common Stock under the Purchase Plan are granted at the discretion of the Compensation Committee, which determines the frequency and duration of individual offerings under the Plan and the dates when stock may be purchased. Eligible employees participate voluntarily and may withdraw from any offering at any time before stock is purchased. Participation terminates automatically upon termination of employment. The purchase price per share of Common Stock in an offering is 85% of the lesser of its fair market value at the beginning of the offering period or on the applicable exercise date and may be paid through payroll deductions, periodic lump sum payments or a combination of both. The Purchase Plan terminates on August 14, 2006.

401(k) PLAN

The Company has a 401(k) savings and retirement plan (the "401(k) Plan") which covers substantially all employees of the Company. The 401(k) Plan allows participants to agree to certain salary deferrals which the Company allocates to the participants' plan account. These amounts may not exceed statutorily mandated annual limits set forth in the Code. The Company currently does not match employee contributions to the 401(k) Plan but may do so in the future.

EXECUTIVE EMPLOYMENT AGREEMENTS

The Company has entered into employment agreements with Mr. Gordon and Mr. Fitzgerald. The Company agreed to employ Mr. Gordon as President and Chief Executive Officer of the Company, effective January 2, 1996, at an annual salary of \$225,000. In connection with this agreement, Mr. Gordon was granted options to acquire 387,434 shares of Common Stock at \$0.80 per share, which vest over four years, and options to acquire 77,486 shares of Common Stock at \$0.80 per share, which vest on the earlier of the achievement of certain milestones or five years. Mr. Gordon has also been provided with moving and relocation allowances. The agreement provides for continued employment until termination by either party. If Mr. Gordon is terminated by the Company without cause, the agreement provides that he will be entitled to receive his base salary, plus any benefits to which he is entitled and any options granted to Mr. Gordon which would have otherwise vested, for a period of up to six months following such termination of employment. In July 1996, the Company also made a loan in the principal amount of \$250,000 to Mr. Gordon. The principal amount of the loan will be repaid in three annual installments beginning three years from the date of this offering and bears interest at the

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lowest applicable federal rate of interest as published by the Internal Revenue Service. See "Certain Transactions."

Under Mr. Fitzgerald's Agreement, the Company has agreed to employ Mr. Fitzgerald as Vice President and Chief Financial Officer of the Company, effective July 9, 1996, at an annual salary of \$150,000. In connection with the agreement, Mr. Fitzgerald was granted options, which vest over four years, to acquire 50,000 shares of Common Stock at \$6.00 per share. The agreement provides for continued employment until termination by either party. If Mr. Fitzgerald is terminated without cause by the Company during the first year of the agreement, he will be entitled to receive his base salary, plus any benefits to which he is entitled and any options granted to Mr. Fitzgerald which would have otherwise vested, for a period of up to six months.

COMPENSATION COMMITTEE INTERLOCKS AND INSIDER PARTICIPATION

The Compensation Committee is responsible for determining salaries,

incentives and other forms of compensation for directors, officers and other employees of the Company. The Compensation Committee also administers various incentive compensation and benefit plans. See "Management--Stock Plans." The Compensation Committee currently consists of Stephen M. Dow and Allan R. Ferguson. Mr. Dow is a general partner of Sevin Rosen Funds, a venture capital firm and a principal stockholder of the Company. Mr. Ferguson is a general manager of Atlas Venture, a venture capital firm and a principal stockholder of the Company. See "Principal Stockholders" and "Certain Transactions."

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CERTAIN TRANSACTIONS

In December 1993, in exchange for the transfer to the Company of substantially all of the assets and liabilities of ArQule Partners, L.P., a Delaware limited partnership (the "Partnership"), the Company issued 1,500 shares of its Common Stock to the Partnership, at which time the Partnership became the sole stockholder of the Company. In November 1994, the Company declared a stock dividend of 3,332.33 shares of its Common Stock on each outstanding share of Common Stock held by the Partnership as of October 17, 1994. After certain transfers of Common Stock by the Partnership, in November 1994 all the remaining outstanding shares of Common Stock then held by the Partnership were surrendered to the Company in exchange for shares of Series A Convertible Preferred Stock, \$0.01 par value per share (the "Series A Preferred Stock"), which will convert into 4,295,500 shares of Common Stock concurrently with the closing of this offering.

In November 1993, the Company made a loan in the amount of \$63,000 to Joseph C. Hogan, Jr., Ph.D., Chairman and Chief Scientific Officer of the Company, which loan is represented by a promissory note due and payable in November 1996, and which bears interest at the lowest applicable federal rate of interest as published by the Internal Revenue Service. The entire principal and accrued interest is currently outstanding.

During the period from August 1994 through February 1995, Sevin Rosen Fund IV L.P., Atlas Venture Fund, II, L.P. and Atlas Venture Europe Fund B.V. made a series of bridge loans to the Company in the aggregate amount of \$2,400,000 (the "Bridge Loans") in exchange for promissory notes and warrants to purchase an aggregate of 155,300, 58,229 and 26,471 shares of Common Stock, respectively, exercisable at \$0.25 per share until the earlier of the effective date of an initial public offering or various dates through December 31, 1999 (the "Bridge Warrants"). In November 1995, the principal amount of the promissory notes representing the Bridge Loans was converted into shares of Series A Preferred Stock, which will convert into an aggregate of 960,000 shares of Common Stock concurrently with the closing of this offering. It is anticipated that the Bridge Warrants will be exercised on a cashless basis prior to the closing of this offering.

In November 1995, the Company issued 1,800,000 shares of Series B Convertible Preferred Stock, \$.01 par value per share (the "Series B Preferred Stock"), to Physica B.V. for cash at a purchase price of \$3.89 per share. Such shares of Series B Preferred Stock will convert into 900,000 shares of Common Stock concurrently with the closing of this offering. Physica B.V. is an affiliate of Solvay Duphar B.V., with whom the Company has a major corporate collaboration. See "Business--ArQule's Drug Discovery Programs."

Also in November 1995, the Company made a loan in the amount of \$120,000 to Dr. Hogan. The loan is represented by a promissory note and is secured by shares of Common Stock issuable to Dr. Hogan upon dissolution of the Partnership. The loan bears interest at the lowest applicable federal rate of interest as published by the Internal Revenue Service. The original principal amount of the loan is forgiven at a rate of 25% per year on each anniversary date of the note as long as Dr. Hogan is employed by the Company. The entire principal and accrued interest is currently outstanding.

In April 1996, all accrued interest outstanding on the Bridge Loans through November 1995 in the aggregate amount of \$142,000 was converted into shares of Series A Preferred Stock, which will convert into an aggregate of 56,714 shares of Common Stock concurrently with the closing of this offering. In addition, in consideration of the waiver by Physica B.V. of its anti-dilution rights under the Company's Amended and Restated Certificate of Incorporation and its right of

first refusal with respect to such shares of Series A Preferred Stock, the Company issued to Physica B.V. additional shares of Series B Preferred Stock, which will convert into 7,734 shares of Common Stock concurrently with the closing of this offering.

In July 1996, the Company made a loan in the amount of \$250,000 to Eric B. Gordon, the President, Chief Executive Officer and a director of the Company, which loan is secured by shares of Common Stock issuable to Mr. Gordon upon the exercise of options. The loan is represented by a promissory note which is due and payable in three equal annual installments beginning three years from the date of this offering and which bears interest at the lowest applicable federal rate of interest as published by the Internal Revenue Service. The entire principal and accrued interest is currently outstanding.

PRINCIPAL STOCKHOLDERS

The following table and footnotes set forth certain information regarding the beneficial ownership of the Company's Common Stock as of August 15, 1996, by (i) persons known by the Company to be beneficial owners of more than 5% of the Common Stock, (ii) the Chief Executive Officer (both current and former) and the Named Executive Officer, (iii) each director of the Company and (iv) all current executive officers and directors as a group:

BENEFICIAL OWNERS (2) (3)	NUMBER OF SHARES BENEFICIALLY OWNED (1)	PERCENTAGE OF SHARES BENEFICIALLY OWNED (1)	
		BEFORE OFFERING	AFTER OFFERING
Atlas Venture (4) 222 Berkeley Street Boston, MA 02116	1,355,738	19.43%	15.10%
Physica B.V. (5) C.J. van Houtenlaan, 36 1381 CD Weiss The Netherlands	907,734	13.01%	10.11%
Sevin Rosen Fund IV L.P. (6) 13455 Noel Road, Suite 1670 Dallas, TX 75240	2,362,833	33.87%	26.32%
Adrian de Jonge, Ph.D. (7)	907,734	13.01%	10.11%
Stephen M. Dow (8)	2,362,833	33.87%	26.32%
Allan R. Ferguson (9)	1,355,738	19.43%	15.10%
Eric B. Gordon (10)	38,743	*	*
Seth L. Harrison, M.D. (11)	128,689	1.84%	1.43%
Joseph C. Hogan, Jr., Ph.D. (12)	1,208,194	17.32%	13.46%
All current executive officers and directors as a group (6 persons) (13)	5,873,242	83.72%	65.15%

<FN>

* Indicates less than 1%.

(1) Reflects the conversion, prior to or contemporaneously with the closing of this offering, of all outstanding shares of preferred stock of the Company into an aggregate of 6,219,948 shares of Common Stock of the Company and the issuance of 234,992 shares of Common Stock upon the cashless exercise of outstanding warrants. The number of shares of Common Stock deemed outstanding after this offering includes the 2,000,000 shares of Common Stock of the Company being offered for sale by the Company in this offering. The persons and entities named in the table have sole voting and investment power with respect to the shares beneficially owned by them, except as noted below. Share numbers include shares of Common Stock issuable pursuant to the outstanding options and warrants that may be exercised within 60 days after August 15, 1996.

(2) Except as otherwise indicated above, the address of each stockholder identified above is c/o the Company, 200 Boston Avenue, Medford, MA 02155.

(3) ArQule Partners, L.P., which holds 4,295,500 shares of Common Stock, representing 61.57% before the offering and 47.85% after the offering, has not been included in this table. The partners of the Partnership have

agreed to dissolve the Partnership. The general partners have, pursuant and subject to the Second Amended and Restated Agreement of the Limited Partnership, as amended, delegated to an Investment Committee voting and investment discretion over the shares held by the Partnership. Messrs. Dow, Ferguson, Joseph C. Hogan, III and Dr. Hogan are members of the Investment Committee of the Partnership. Each of Messrs. Dow, Ferguson,

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Joseph C. Hogan, III and Dr. Hogan disclaims beneficial ownership of the shares held by the Partnership, except to the extent of his proportionate pecuniary interest in the Partnership. See "The Company" and footnotes (4), (6) and (12).

- (4) Consists of (i) 303,258 shares owned by Atlas Venture Fund II, L.P., (ii) 138,274 shares owned by Atlas Venture Europe Fund B. V. (collectively, "Atlas Venture"), (iii) 628,300 shares estimated to be distributed by the Partnership to Atlas Venture Fund II, L.P., and (iv) 285,906 shares estimated to be distributed by the Partnership to Atlas Venture Europe Fund B.V. The voting and investment discretion over the shares owned by Atlas Venture Fund II, L.P. is exercised by the general partners of Atlas Venture Associates II, L.P., its general partner. The general partners of Atlas Venture Associates II, L.P. are Allan R. Ferguson, Barry J. Fidelman, Jean-Francois Formela and Christopher J. Spray. Because of this relationship, Allan R. Ferguson, a director of the Company, shares voting and investment discretion over such shares. Atlas Venture Europe Fund B.V. is a corporation wholly-owned by Atlas InvesteringGroep N.V. ("AIG"). The voting and investment discretion over the shares owned by Atlas Venture Europe Fund B.V. is exercised by the managing directors of AIG, Michiel A. de Haan and Evert H. Smid. Three officers of AIG, Gerard H. Montanus, Hans Bosman and Jaap van Hellemond, share voting and investment discretion with these two managing directors over the shares held by Atlas Venture Europe Fund B.V. The numbers of shares of Common Stock attributed to Atlas Venture in clauses (iii) and (iv) are estimates of the number of shares that will be distributed to Atlas Venture upon the dissolution of the Partnership assuming (a) the fair market value per share at the time of dissolution is equal to the assumed initial public offering price of \$12.00 and (b) the further pro rata distribution by LII, a general partner of the Partnership, to its stockholders (which include Atlas Venture) of the ArQule shares distributed to it by the Partnership. See "The Company." The actual number of shares received by each partner in the Partnership will depend on the per share valuation at the time of the distribution.
- (5) The voting and investment discretion over the shares owned by Physica B.V. is exercised by the sole director of Physica B.V., J.W.F. van Ingen.
- (6) Consists of (i) 810,174 shares owned by Sevin Rosen Fund IV L.P. ("Sevin Rosen") and (ii) 1,552,659 shares estimated to be distributed by the Partnership to Sevin Rosen. The voting and investment discretion over the shares owned by Sevin Rosen is exercised by the general partner of SRB Associates IV L.P., its general partner. The general partners of SRB Associates L.P. are Stephen M. Dow, Jon W. Bayless, Charles H. Phipps, Dennis J. Gorman, and John V. Jagers. Because of this relationship, Stephen M. Dow, a director of the Company, shares voting and investment discretion over such shares. The number of shares of Common Stock attributed to Sevin Rosen is an estimate of the number of shares that will be distributed to Sevin Rosen upon the dissolution of the Partnership assuming (a) the fair market value per share at the time of dissolution is equal to the assumed initial public offering price of \$12.00 and (b) the further pro rata distribution by LII, to its stockholders (which include Sevin Rosen) of the ArQule shares distributed to it by the Partnership. See "The Company." The actual number of shares received by each partner in the Partnership will depend on the per share valuation at the time of the distribution.
- (7) Consists of 907,734 shares of Common Stock owned by Physica B.V. Dr. de Jonge is Vice President of Research of Solvay's Pharmaceuticals Division, an affiliate of Physica B.V. Dr. de Jonge disclaims beneficial ownership of the shares held by Physica B.V.
- (8) Consists of 2,362,833 shares owned by or attributed to Sevin Rosen. Mr. Dow is a general partner of SRB Associates IV L.P. which is the general partner of Sevin Rosen. Mr. Dow disclaims beneficial ownership of the shares owned

by or attributed to Sevin Rosen, except to the extent of his pecuniary interest therein. See footnote (6).

- (9) Consists of 1,355,738 shares owned by or attributed to Atlas Venture. Mr. Ferguson is a general partner of Atlas Venture Associates II, L.P., which is the general partner of Atlas Venture Fund II, L.P. Mr. Ferguson disclaims beneficial ownership of the shares owned by or attributed to Atlas Venture, except to the extent of his pecuniary interest therein. See footnote (4).

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- (10) Represents shares of Common Stock subject to options that become exercisable upon the closing of this offering.
- (11) Includes 41,189 shares estimated to be distributed by the Partnership to Dr. Harrison. The number of shares attributed to Dr. Harrison is an estimate of the number of shares that will be distributed to him upon the dissolution of the Partnership assuming the fair market value per share at the time of dissolution is equal to the assumed initial public offering price of \$12.00. See "The Company." The actual number of shares received by each partner in the Partnership will depend on the per share valuation at the time of the distribution.
- (12) Consists of 1,208,194 shares estimated to be distributed by the Partnership to Dr. Hogan. The number of shares attributed to Dr. Hogan is an estimate of the number of shares that will be distributed to Dr. Hogan (187,500 shares) and to a limited partnership of which certain of Dr. Hogan's family members are beneficiaries (1,020,835 shares) upon the dissolution of the Partnership assuming (a) the fair market value per share at the time of dissolution is equal to the assumed initial public offering price of \$12.00 and (ii) the further pro rata distribution by LTI, a general partner of the Partnership, to its stockholders (which include Mr. Hogan) of the ArQule shares distributed to it by the Partnership. See "The Company." The actual number of shares received by each partner in the Partnership will depend on the per share valuation at the time of the distribution.
- (13) Includes 38,743 shares of Common Stock subject to options that are either presently exercisable or will become exercisable within 60 days after August 15, 1996. See footnotes (7), (8), (9), (10) and (12).

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DESCRIPTION OF CAPITAL STOCK

Upon the closing of this offering, the authorized capital stock of the Company will consist of 30,000,000 shares of Common Stock, \$0.01 par value per share, and 1,000,000 shares of Preferred Stock, \$0.01 par value per share, after giving effect to the filing of the Company's Restated Certificate. As of the date of this Prospectus, the Company had 32 shareholders. Upon the closing of this offering, the Company will have 8,976,487 shares of Common Stock outstanding.

The following summary of certain provisions of the Common Stock and Preferred Stock does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of the Company's Restated Certificate, the form of which is included as an exhibit to the Registration Statement, and by the provisions of applicable law.

COMMON STOCK

Holders of Common Stock are entitled to one vote per share on matters to be voted upon by the stockholders. There are no cumulative voting rights. Holders of Common Stock are entitled to receive dividends when, as and if declared by the Board of Directors out of funds legally available therefor. Upon the liquidation, dissolution or winding up of the Company, holders of Common Stock share ratably in the assets of the Company available for distribution to its stockholders, subject to the preferential rights of any then outstanding shares of Preferred Stock. The Common Stock outstanding upon the effective date of the Registration Statement, and the shares offered by the Company hereby, upon issuance and sale, will be fully paid and nonassessable.

PREFERRED STOCK

The Company's Board of Directors has the authority to issue up to 1,000,000 shares of Preferred Stock in one or more series and to fix the relative rights, preferences, privileges, qualifications, limitations and restrictions thereof, including dividend rights, dividend rates, conversion rights, voting rights, terms of redemption, redemption prices, liquidation preferences and the number of shares constituting any series or the designation of such series, without further vote or action by the stockholders. The Board of Directors could, without the approval of the stockholders, issue Preferred Stock having voting or conversion rights that could adversely affect the voting power of the holders of Common Stock and the issuance of Preferred Stock could be used, under certain circumstances, to render more difficult or discourage a hostile takeover of the Company. No shares of Preferred Stock will be outstanding immediately following the closing of the offering and the Company has no present plans to issue any shares of Preferred Stock.

ANTI-TAKEOVER MEASURES

In addition to the Board of Directors' ability to issue shares of Preferred Stock, the Restated Certificate and the By-laws of the Company contain several other provisions that are commonly considered to discourage unsolicited takeover bids. The Restated Certificate includes provisions classifying the Board of Directors into three classes with staggered three-year terms and prohibiting stockholder action by written consent. Under the Restated Certificate and By-laws, the Board of Directors may enlarge the size of the Board and fill any vacancies on the Board. The By-laws provide that nominations for directors may not be made by stockholders at any annual or special meeting unless the stockholder intending to make a nomination notifies the Company of its intention a specified period in advance and furnishes certain information. The By-laws also provide that special meetings of the Company's stockholders may be called only by the President or the Board of Directors and require advance notice of business to be brought by a stockholder before the annual meeting.

In February 1988, a law regulating corporate takeovers (the "Anti-Takeover Law") took effect in Delaware. In certain circumstances, the Anti-Takeover Law prevents certain Delaware corporations, including those whose securities are listed on the Nasdaq National Market, from engaging in a "business combination" (which includes a merger or sale of more than 10% of the corporation's assets)

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with an "interested stockholder" (a stockholder who owns 15% or more of the corporation's outstanding voting stock) for three years following the date on which such stockholder became an "interested stockholder" subject to certain exceptions, unless the transaction is approved by the board of directors and the holders of at least 66 2/3% of the outstanding voting stock of the corporation (excluding shares held by the interested stockholder). The statutory ban does not apply if, upon consummation of the transaction in which any person becomes an interested stockholder, the interested stockholder owns at least 85% of the outstanding voting stock of the corporation (excluding shares held by persons who are both directors and officers or by certain employee stock plans). A Delaware corporation subject to the Anti-Takeover Law may "opt out" of the Anti-Takeover Law with an express provision either in its certificate of incorporation or by-laws resulting from a stockholders' amendment approved by at least a majority of the outstanding voting shares; such an amendment is effective following expiration of twelve months from adoption. The Company is a Delaware corporation that is subject to the Anti-Takeover Law and has not "opted out" of its provisions.

The foregoing provisions of Delaware law and the Restated Certificate and By-laws could have the effect of discouraging others from attempting a hostile takeover of the Company and, as a consequence, they may also inhibit temporary fluctuations in the market price of the Common Stock that might result from actual or rumored hostile takeover attempts. Such provisions may also have the effect of preventing changes in the management of the Company. It is possible that such provisions could make it more difficult to accomplish transactions which stockholders may otherwise deem to be in their best interests.

TRANSFER AGENT

The transfer agent and registrar for the Common Stock is American Stock

SHARES ELIGIBLE FOR FUTURE SALE

Upon completion of this offering, the Company will have 8,976,487 shares of Common Stock outstanding, assuming no exercise of the Underwriters' over-allotment option or of any other outstanding options. Of these shares, the 2,000,000 shares sold in this offering will be freely tradable, without restriction or further registration under the Securities Act, except for shares purchased by "affiliates" of the Company as that term is defined in Rule 144 under the Securities Act.

The remaining 6,976,487 outstanding shares of Common Stock are owned by existing stockholders and are deemed "Restricted Shares" under Rule 144. These may not be resold, except pursuant to an effective registration statement or an applicable exemption from registration. Of these remaining shares, approximately 151,972 shares of Common Stock will be eligible for sale under Rules 144 and 701 on the ninety-first day after the effectiveness of this offering. Stockholders of the Company, holding in the aggregate 6,824,515 shares of Common Stock, have agreed to enter into the 180-day lock-up agreements described below. At the end of such 180-day period, an additional 5,916,781 shares of Common Stock will be eligible for sale under Rules 144 and 701. The remaining Restricted Shares will become eligible from time to time thereafter upon the expiration of the minimum two-year holding period prescribed by Rule 144.

In general, under Rule 144, as currently in effect, a person (or persons whose shares are aggregated), including an affiliate, who has beneficially owned Restricted Shares for at least two years from the later of the date such Restricted Shares were acquired from the Company and (if applicable) the date they were acquired from an affiliate, is entitled to sell, within any three-month period, a number of shares that does not exceed the greater of 1% of the then outstanding shares of Common Stock or the average weekly trading volume in the public market during the four calendar weeks preceding such sale. Sales under Rule 144 are also subject to certain requirements as to the manner and notice of sale and the availability of public information concerning the Company. All sales of shares of the Company's Common Stock, including Restricted Shares, held by affiliates of the Company must be sold under Rule 144, subject to the foregoing volume limitations and other restrictions.

The Commission has proposed an amendment to Rule 144 which would reduce the holding period required for shares subject to Rule 144 from two years to one year. If this proposal is adopted as of the expected closing of this offering, an additional 907,734 shares of Common Stock would become eligible for sale by existing stockholders to the public after the expiration of the 180-day lock-up period.

The Company's directors and executive officers and certain of its stockholders have agreed that they will not, without the prior consent of the representatives of the Underwriters, offer to sell, sell, contract to sell, grant any option to sell or otherwise dispose of or require the Company to file with the Commission a registration statement under the Act to register any shares of Common Stock or securities convertible or exchangeable for shares of Common Stock or warrants or other rights to acquire shares of Common Stock during the 180-day period following the effective date of the Registration Statement.

The Company plans to file registration statements under the Securities Act to register 2,600,000, 125,000 and 120,000 shares of Common Stock issuable under the Equity Plan, the Director Plan and the Stock Purchase Plan, respectively, 180 days after the date of this Prospectus. Upon registration, such shares will be eligible for immediate resale upon exercise, subject, in the case of affiliates, to the volume, manner of sale and notice requirements of Rule 144.

No prediction can be made as to the effect, if any, that market sales of additional shares or the availability of such additional shares for sale will have on the market price of the Common Stock. Nevertheless, sales of substantial amounts of Common Stock in the public market may have an adverse impact on the market price for the Common Stock. See "Risk Factors-Dilution."

REGISTRATION RIGHTS

The holders of the 6,219,948 shares of Common Stock to be issued on conversion of the Series A Preferred Stock and Series B Preferred Stock (the "Registrable Shares") are entitled to certain rights with respect to registration under the Securities Act of the Registrable Shares. If the Company proposes to register any of its securities under the Securities Act, either for its own account or for the account of other security holders, such holders are entitled to notice of such registration and are entitled to include such Registrable Shares in the registration. The rights are subject to certain conditions and limitations, among them, the right of the underwriters of a registered offering to limit the number of shares included in such registration. Holders of Registrable Shares benefiting from these rights may also require the Company to file at its expense a registration statement under the Securities Act with respect to their shares of Common Stock and, subject to certain conditions and limitations, the Company is required to use its best efforts to effect such registration. Furthermore, such holders may, subject to certain conditions and limitations, require the Company to file additional registration statements on Form S-3 with respect to such Registrable Shares. In connection with this offering, such holders waived their right to have shares of Common Stock registered under the Securities Act as part of this offering.

UNDERWRITING

Subject to the terms and conditions of the Underwriting Agreement, the Underwriters named below, through their Representatives, Hambrecht & Quist LLC, Oppenheimer & Co., Inc. and Vector Securities International, Inc., have severally agreed to purchase from the Company the following respective numbers of shares of Common Stock:

NAME ----	NUMBER OF SHARES -----
Hambrecht & Quist LLC.....	
Oppenheimer & Co., Inc.	
Vector Securities International, Inc.	

Total.....	2,000,000 =====

The Underwriting Agreement provides that the obligations of the Underwriters are subject to certain conditions precedent, including the absence of any material adverse change in the Company's business and the receipt of certain certificates, opinions and letters from the Company, its counsel and its independent auditors. The nature of the Underwriters' obligation is such that they are committed to purchase all shares of Common Stock offered hereby if any such shares are purchased.

The Underwriters propose to offer the shares of Common Stock directly to the public at the initial public offering price set forth on the cover page of this Prospectus and to certain dealers at such price less a concession not in excess of \$ per share. The Underwriters may allow, and such dealers may reallocate, a concession not in excess of \$ per share to certain other dealers. The Representatives of the Underwriters have advised the Company that the Underwriters do not intend to confirm any shares to any accounts over which they exercise discretionary authority. After the initial public offering of the shares, the offering price and other selling terms may be changed by the Representatives of the Underwriters.

The Company has granted to the Underwriters an option, exercisable no later than 30 days after the date of this Prospectus, to purchase up to 300,000 additional shares of Common Stock at the initial public offering price, less the underwriting discount, set forth on the cover page of this Prospectus. To the extent that the Underwriters exercise this option, each of the Underwriters will have a firm commitment to purchase approximately the same proportion thereof

which the number of shares of Common Stock to be purchased by it shown in the above table bears to the total number of shares of Common Stock offered hereby. The Company will be obligated, pursuant to the option, to sell shares to the Underwriters to the extent the option is exercised. The Underwriters may exercise such option only to cover over-allotments made in connection with the sale of shares of Common Stock offered hereby.

The offering of the shares is made for delivery when, as and if accepted by the Underwriters and subject to prior sale and to withdrawal, cancellation or modification of the offering without notice. The Underwriters reserve the right to reject an order for the purchase of shares in whole or in part.

The Company has agreed to indemnify the Underwriters against certain liabilities, including liabilities under the Securities Act, and to contribute to payments the Underwriters may be required to make in respect thereof.

Certain existing stockholders of the Company, including the Company's executive officers and directors, who will own in the aggregate 6,824,515 shares of Common Stock after the offering, have agreed that they will not, without the prior written consent of Hambrecht & Quist LLC, offer, sell or otherwise dispose of any shares of Common Stock, options or warrants to acquire shares of Common Stock or securities exchangeable for or convertible into shares of Common Stock owned by them during the 180-day period following the date of this Prospectus. The Company has agreed that, subject to limited exceptions, it will not, without the prior written consent of Hambrecht & Quist LLC, offer, sell or otherwise dispose of any shares of Common Stock, options or warrants to acquire shares of

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Common Stock or securities exchangeable for or convertible into shares of Common Stock during the 180-day period following the date of this Prospectus.

Prior to this offering, there has been no public market for the Common Stock. The initial public offering price for the Common Stock will be determined by negotiation among the Company and the Representatives. Among the factors to be considered in determining the initial public offering price are prevailing market and economic conditions, revenues and earnings of the Company, market valuations of other companies engaged in activities similar to those of the Company, estimates of the business potential and prospects of the Company, the present state of the Company's business operations, the Company's management and other factors deemed relevant. The estimated initial public offering price range set forth on the cover of this preliminary prospectus is subject to change as a result of market conditions and other factors.

LEGAL MATTERS

The validity of the shares of Common Stock offered hereby will be passed upon for the Company by Palmer & Dodge LLP, Boston, Massachusetts. Michael Lytton, a partner of Palmer & Dodge LLP, is the Secretary of the Company and Lynnette C. Fallon, also a partner of Palmer & Dodge LLP, is the Assistant Secretary of the Company. Certain legal matters in connection with this offering will be passed upon for the Underwriters by Testa, Hurwitz & Thibeault, LLP, Boston, Massachusetts.

EXPERTS

The financial statements as of December 31, 1994 and 1995 and for each of the two years in the period ended December 31, 1995 and for the period from inception (May 6, 1993) through December 31, 1993 included in this Prospectus have been so included in reliance on the report of Price Waterhouse LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

ADDITIONAL INFORMATION

The Company has filed with the Securities and Exchange Commission (the "Commission") a Registration Statement on Form S-1 (the "Registration Statement") under the Securities Act, with respect to the shares of Common Stock offered hereby. This Prospectus does not contain all of the information set forth in the Registration Statement and the exhibits and schedules thereto. For further information with respect to the Company and the Common Stock offered hereby, reference is made to the Registration Statement and the exhibits and schedules thereto. All statements made in this Prospectus regarding the contents

of any contract, agreement or other document filed as an exhibit to the Registration Statement are qualified by reference to the copy of such document filed as an exhibit to the Registration Statement. A copy of the Registration Statement may be inspected without charge at the offices of the Commission, 450 Fifth Street, N.W., Washington, D.C. 20549, and copies of all or any part thereof may be obtained from the Commission upon the payment of certain fees prescribed by the Commission. Such reports and other information can also be reviewed through the Commission's Web site (<http://www.sec.gov>).

ARQULE, INC.

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REPORT OF INDEPENDENT ACCOUNTANTS

To the Board of Directors and
Stockholders of ArQule, Inc.

In our opinion, the accompanying balance sheet and the related statements of operations, of redeemable preferred stock and stockholders' equity (deficit) and of cash flows present fairly, in all material respects, the financial position of ArQule, Inc. at December 31, 1995 and 1994, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 1995 and for the period from inception (May 6, 1993) through December 31, 1993 in conformity with generally accepted accounting principles. These financial statements are the responsibility of the Company's management; our responsibility is to express an opinion on these financial statements based on our audits. We conducted our audits of these statements in accordance with generally accepted auditing standards which require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for the opinion expressed above.

PRICE WATERHOUSE LLP
Boston, Massachusetts

ARQULE, INC.

BALANCE SHEET

	DECEMBER 31,		JUNE 30,	PRO FORMA JUNE 30, 1996 (NOTE 10)
	1994	1995	1996	
	-----	-----	-----	-----
	(UNAUDITED)			
ASSETS				
Current assets:				
Cash and cash equivalents.....	\$ 425,000	\$ 2,989,000	\$ 2,567,000	\$ 2,567,000
Marketable securities.....	--	4,802,000	3,800,000	3,800,000
Restricted cash.....	--	50,000	50,000	50,000
Prepaid expenses and other current assets.....	29,000	73,000	30,000	30,000
Notes receivable from related party.....	--	93,000	93,000	93,000
	-----	-----	-----	-----
Total current assets.....	454,000	8,007,000	6,540,000	6,540,000
Restricted cash.....	288,000	50,000	50,000	50,000
Property and equipment, net.....	1,502,000	1,994,000	5,134,000	5,134,000
Other assets.....	14,000	49,000	49,000	49,000
Notes receivable from related party.....	63,000	90,000	75,000	75,000
	-----	-----	-----	-----
	\$ 2,321,000	\$10,190,000	\$11,848,000	\$11,848,000
	=====	=====	=====	=====
LIABILITIES, REDEEMABLE PREFERRED STOCK AND STOCKHOLDERS' EQUITY (DEFICIT)				
Current liabilities:				
Current portion of capital lease obligations...	\$ 341,000	\$ 514,000	\$ 836,000	\$ 836,000
Bridge financing -- related party.....	1,594,000	--	--	--
Accounts payable and accrued expenses.....	627,000	769,000	1,177,000	1,177,000
Deferred revenue.....	--	1,650,000	3,133,000	3,133,000
	-----	-----	-----	-----
Total current liabilities.....	2,562,000	2,933,000	5,146,000	5,146,000
	-----	-----	-----	-----
Capital lease obligations.....	962,000	911,000	1,426,000	1,426,000
	-----	-----	-----	-----
Deferred revenue.....	--	458,000	--	--
	-----	-----	-----	-----
Series B mandatorily redeemable convertible preferred stock, 1,800,000 and 1,815,468 shares issued and outstanding at December 31, 1995 and June 30, 1996, respectively, stated at net issuance price plus accretion; no shares outstanding pro forma.....	--	6,888,000	6,898,000	--
	-----	-----	-----	-----
Stockholders' equity (deficit):				
Convertible preferred stock, \$0.01 par value; 15,000,000 shares authorized Series A convertible preferred stock, 8,591,000, 10,511,000 and 10,624,429 shares issued and outstanding at December 31, 1994 and 1995 and June 30, 1996, respectively, stated at issuance price (liquidation preference \$9,354,790); no shares outstanding pro forma.....	86,000	2,486,000	2,628,000	--
Common stock, \$0.01 par value; 20,000,000 shares authorized; 554,597, 522,797 and 523,047 shares issued and outstanding at December 31, 1994 and 1995 and June 30, 1996, respectively; 6,977,987 shares outstanding pro forma.....	6,000	5,000	5,000	70,000
Additional paid-in capital.....	4,376,000	4,435,000	4,435,000	13,896,000

Accumulated deficit.....	(5,671,000)	(7,926,000)	(8,690,000)	(8,690,000)
Total stockholders' equity (deficit)....	(1,203,000)	(1,000,000)	(1,622,000)	5,276,000
Commitments and contingency (Note 13).....	--	--	--	--
	\$ 2,321,000	\$10,190,000	\$11,848,000	\$11,848,000
	=====	=====	=====	=====

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

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ARQULE, INC.

STATEMENT OF OPERATIONS

	PERIOD FROM INCEPTION (MAY 6, 1993) THROUGH DECEMBER 31, 1993		YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
	-----	-----	-----	-----	-----	-----
	1993	1994	1995	1995	1996	(UNAUDITED)
Revenue:						
Compound development revenue.....	\$ --	\$ 85,000	\$ 1,830,000	\$ 521,000	\$ 1,475,000	
Compound development revenue--related party.....	--	--	500,000	--	1,500,000	
License option fees.....	--	--	1,000,000	1,000,000	--	
	-----	-----	-----	-----	-----	
	--	85,000	3,330,000	1,521,000	2,975,000	
	-----	-----	-----	-----	-----	
Costs and expenses:						
Cost of revenue.....	--	--	1,367,000	392,000	962,000	
Cost of revenue--related party.....	--	--	277,000	--	973,000	
Research and development.....	769,000	2,806,000	2,095,000	1,213,000	1,119,000	
General and administrative....	687,000	1,346,000	1,557,000	806,000	828,000	
	-----	-----	-----	-----	-----	
	1,456,000	4,152,000	5,296,000	2,411,000	3,882,000	
	-----	-----	-----	-----	-----	
Loss from operations.....	(1,456,000)	(4,067,000)	(1,966,000)	(890,000)	(907,000)	
Interest income.....	--	--	133,000	11,000	172,000	
Interest expense.....	(9,000)	(139,000)	(419,000)	(190,000)	(19,000)	
	-----	-----	-----	-----	-----	
Net loss.....	\$ (1,465,000)	\$ (4,206,000)	\$ (2,252,000)	\$ (1,069,000)	\$ (754,000)	
	=====	=====	=====	=====	=====	
Unaudited pro forma net loss per share assuming conversion of convertible preferred stock (Note 10):						
Net loss per share.....			\$ (0.33)		\$ (0.10)	
			=====		=====	
Shares used in computing net loss per share.....			6,853,000		7,443,000	
			=====		=====	

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

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ARQULE, INC.

	STOCKHOLDERS' EQUITY (DEFICIT)				
	SERIES B MANDATORILY REDEEMABLE CONVERTIBLE PREFERRED STOCK		SERIES A CONVERTIBLE PREFERRED STOCK		COMMON STOCK
	SHARES	AMOUNT	SHARES	AMOUNT	SHARES
Capital contributions from ArQule Partners, L.P. (Note 1).....					
Net loss.....					1,500
Issuance of common stock on December 30, 1993 in exchange for partnership assets and liabilities.....					1,500
BALANCE AT DECEMBER 31, 1993.....					1,500
Capital contribution from ArQule Partners, L.P. (Note 1).....					
3,333.33 for 1 stock split effected in the form of a stock dividend.....					4,998,500
Cancellation of common stock.....					(140,528)
Issuance of Series A convertible preferred stock in exchange for common stock.....	8,591,000	\$ 86,000			(4,295,500)
Cancellation of unvested portion of restricted stock upon employee termination.....					(9,375)
Issuance of common stock purchase warrants under bridge financing.....					
Net loss.....					
BALANCE AT DECEMBER 31, 1994.....			8,591,000	86,000	554,597
Employee restricted stock purchases.....					68,200
Issuance of common stock purchase warrants under bridge financing.....					
Cancellation of unvested portion of restricted stock upon employee termination.....					(100,000)
Conversion of bridge notes into Series A convertible preferred stock.....			1,920,000	2,400,000	
Issuance of Series B mandatorily redeemable convertible preferred stock, net of issuance costs of \$115,000.....	1,800,000	\$6,885,000			
Accretion of Series B mandatorily redeemable preferred stock to redemption value.....		3,000			
Net loss.....					
BALANCE AT DECEMBER 31, 1995.....	1,800,000	6,888,000	10,511,000	2,486,000	522,797
Conversion of interest on bridge notes to Series A convertible preferred stock (unaudited).....			113,429	142,000	
Issuance of Series B mandatorily redeemable preferred stock to maintain ownership percentage (Note 10) (unaudited).....	15,468				
Cancellation of unvested portion of restricted stock upon employee termination (unaudited).....					(375)
Employee option exercise (unaudited).....					625
Accretion of Series B mandatorily redeemable preferred stock to redemption value (unaudited).....		10,000			
Net loss (unaudited).....					
BALANCE AT JUNE 30, 1996 (UNAUDITED).....	1,815,468	\$6,898,000	10,624,429	\$2,628,000	523,047

	STOCKHOLDERS' EQUITY (DEFICIT)			
	COMMON STOCK	ADDITIONAL PAID-IN CAPITAL	ACCUMULATED DEFICIT	TOTAL STOCKHOLDERS' EQUITY (DEFICIT)
	PAR VALUE			
Capital contributions from ArQule Partners, L.P. (Note 1).....		\$2,236,000		\$ 2,236,000
Net loss.....			\$(1,465,000)	(1,465,000)
Issuance of common stock on December 30, 1993 in exchange for partnership assets and liabilities.....	\$ --			--
BALANCE AT DECEMBER 31, 1993.....	--	2,236,000	(1,465,000)	771,000
Capital contribution from ArQule Partners, L.P. (Note 1).....		2,100,000		2,100,000
3,333.33 for 1 stock split effected in the form of a stock dividend.....	50,000	(50,000)		--
Cancellation of common stock.....	(1,000)	1,000		--
Issuance of Series A convertible preferred stock in exchange for common stock.....	(43,000)	(43,000)		--
Cancellation of unvested portion of restricted stock upon employee termination.....	--			--
Issuance of common stock purchase warrants under bridge financing.....		132,000		132,000
Net loss.....			(4,206,000)	(4,206,000)
BALANCE AT DECEMBER 31, 1994.....	6,000	4,376,000	(5,671,000)	(1,203,000)
Employee restricted stock purchases.....	--	1,000		1,000
Issuance of common stock purchase warrants under bridge financing.....		57,000		57,000
Cancellation of unvested portion of restricted stock upon employee termination.....	(1,000)	1,000		--
Conversion of bridge notes into Series A convertible preferred stock.....				2,400,000
Issuance of Series B mandatorily redeemable convertible preferred stock, net of issuance costs of \$115,000.....				
Accretion of Series B mandatorily redeemable preferred stock to redemption value.....			(3,000)	(3,000)
Net loss.....			(2,252,000)	(2,252,000)
BALANCE AT DECEMBER 31, 1995.....	5,000	4,435,000	(7,926,000)	(1,000,000)
Conversion of interest on bridge notes to Series A convertible preferred stock (unaudited).....				142,000
Issuance of Series B mandatorily redeemable preferred stock to maintain ownership percentage (Note 10) (unaudited).....				
Cancellation of unvested portion of restricted stock upon employee termination (unaudited).....	--			--
Employee option exercise (unaudited).....	--			--
Accretion of Series B mandatorily redeemable preferred stock to redemption value (unaudited).....			(10,000)	(10,000)

Net loss (unaudited).....			(754,000)	(754,000)
BALANCE AT JUNE 30, 1996 (UNAUDITED).....	\$ 5,000	\$4,435,000	\$ (8,690,000)	\$ (1,622,000)

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

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ARQULE, INC.

STATEMENT OF CASH FLOWS

Increase (Decrease) in Cash and Cash Equivalents

	PERIOD FROM INCEPTION (MAY 6, 1993) THROUGH DECEMBER 31, 1993	YEAR ENDED DECEMBER 31,		SIX MONTHS ENDED JUNE 30,	
		1994	1995	1995	1996
					(UNAUDITED)
Cash flows from operating activities:					
Net loss.....	\$ (1,465,000)	\$ (4,206,000)	\$ (2,252,000)	\$ (1,069,000)	\$ (754,000)
Adjustment to reconcile net loss to net cash (used in) provided by operating activities:					
Depreciation and amortization.....	19,000	189,000	506,000	224,000	434,000
Amortization of debt discount.....	--	25,000	164,000	137,000	--
(Increase) decrease in prepaid expenses and other current assets.....	(70,000)	41,000	(44,000)	6,000	43,000
Increase in other assets.....	(14,000)	--	(35,000)	--	--
Increase in notes receivable from related party.....	(63,000)	--	(120,000)	--	--
Increase in accounts payable and accrued expenses.....	287,000	340,000	141,000	49,000	550,000
Increase in deferred revenue.....	--	--	2,108,000	2,716,000	1,025,000
Net cash (used in) provided by operating activities.....	(1,306,000)	(3,611,000)	468,000	2,063,000	1,298,000
Cash flows from investing activities:					
Purchases of marketable securities.....	--	--	(9,052,000)	--	--
Proceeds from sale or maturity of marketable securities.....	--	--	4,250,000	--	1,002,000
Decrease (increase) in restricted cash.....	(100,000)	(188,000)	188,000	(14,000)	--
Additions to property and equipment.....	(201,000)	(168,000)	(495,000)	(228,000)	(2,437,000)
Net cash used in investing activities.....	(301,000)	(356,000)	(5,109,000)	(242,000)	(1,435,000)
Cash flows from financing activities:					
Proceeds from bridge financing -- related party.....	--	1,700,000	700,000	700,000	--
Principal payments of capital lease obligations.....	(34,000)	(110,000)	(381,000)	(161,000)	(285,000)
Proceeds from issuance of mandatorily redeemable convertible preferred stock, net.....	--	--	6,885,000	--	--
Proceeds from issuance of common stock.....	--	--	1,000	--	--
Capital contribution from ArQule Partners, L.P.....	2,236,000	2,100,000	--	--	--
Proceeds from sale-leaseback transactions.....	--	107,000	--	--	--
Net cash provided by (used in) financing activities.....	2,202,000	3,797,000	7,205,000	539,000	(285,000)
Net increase (decrease) in cash and cash equivalents.....	595,000	(170,000)	2,564,000	2,360,000	(422,000)
Cash and cash equivalents, beginning of period...	--	595,000	425,000	425,000	2,989,000
Cash and cash equivalents, end of period.....	\$ 595,000	\$ 425,000	\$ 2,989,000	\$ 2,785,000	\$ 2,567,000

SUPPLEMENTAL DISCLOSURE OF NON-CASH INVESTING AND FINANCING ACTIVITIES:

Capital lease obligations of \$1,122,000 and \$503,000, \$935,000 and \$512,000 were incurred in six months ended June 30, 1996 and in the years ended December 31, 1995, 1994 and 1993, respectively, when the Company entered into leases for various machinery and equipment, furniture and fixtures, and leasehold improvements.

During 1995, the Company converted \$2,400,000 of bridge loans into 1,920,000 shares of Series A convertible preferred stock (Note 8). In addition, during 1996, the Company converted \$142,000 of interest relating to the bridge loans into 113,429 shares of Series A convertible preferred stock.

In addition to cash of \$595,000, the Company received certain assets, liabilities and patented technology upon the issuance of its common stock in connection with the formation of the Company (Note 1).

SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:

During 1995 and 1994, the Company paid approximately \$254,000 and \$98,000, respectively, for interest.

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

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS

1. NATURE OF OPERATIONS AND ORGANIZATION

ArQule, Inc. (the "Company") is engaged in the discovery, development and production of novel chemical compounds for the pharmaceutical and biotechnology industries. Its operations are focused on the integration of combinatorial chemistry and structure-guided rational drug design technologies and their application for producing such compounds.

In May 1993 and in connection with the formation of ArQule Partners, L.P. (the "Partnership"), Legomer Technologies, Inc. ("LTI"), formerly Molecular Recognition Technologies, Inc., a company owned by the two founding limited partners in the Partnership, contributed to the Partnership all rights and interests in certain LTI patented technology (the "Technology") in exchange for a 0.5% general partner ownership position. The Company was legally incorporated on December 30, 1993 to carry on the operations of the Partnership. Immediately following the incorporation of the Company, the Partnership transferred substantially all of its assets, liabilities and patented technology (the "Operating Assets"), having an aggregate net book value of \$771,000, to the Company in exchange for 1,500 shares of the Company's \$0.01 par value common stock, representing all of the Company's then outstanding common stock. Because of the related party nature of these transactions, the Operating Assets and the Technology transfers have been accounted for as transfers of assets between entities under common control. Accordingly, the accompanying financial statements include the assets, liabilities and results of operations of the Company at historical amounts as if the transfers occurred at the inception of the Partnership. The Company is currently a majority-owned subsidiary of the Partnership.

Amounts which reflect the funding of the Partnership's operations prior to the conversion of certain shares of the Company's common stock into Series A preferred stock (Note 10) are reflected as paid-in capital in the accompanying balance sheet and as capital contributed by ArQule Partners L.P. in the statements of changes in redeemable preferred stock and stockholders' equity (deficit) and of cash flows. Such funding totaled \$2,236,000 and \$2,100,000 of cash for the years ended December 31, 1993 and 1994, respectively, and was comprised of aggregate investments in general partnership interests of \$43,000 and limited partnership interests of \$4,293,000.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Significant accounting policies followed in the preparation of these financial statements are as follows:

Cash Equivalents, Marketable Securities and Restricted Cash

The Company considers all highly liquid investments purchased with an original maturity of three months or less to be cash equivalents. The Company invests its available cash primarily in money market mutual funds and U.S. government debt securities which have strong credit ratings. These investments are subject to minimal credit and market risks. The Company specifically identifies securities for purposes of determining gains and losses on the sale of cash equivalents and short-term investments. At December 31, 1995 and 1994, the Company has classified its investments as available-for-sale as defined in Statement of Financial Accounting Standards ("SFAS") No. 115.

Restricted cash represents cash equivalents and time deposits held at financial institutions as collateral on certain lease agreements (Note 13).

Fair Value of Financial Instruments

In 1995, the Company adopted SFAS No. 107, "Disclosures about the Fair Value of Financial Instruments," which requires the disclosure of the fair value of financial instruments. At December 31, 1995 the Company's financial instruments consist of cash, cash equivalents, marketable securities,

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

restricted cash, notes receivable from related party, accounts payable and accrued expenses and mandatorily redeemable convertible preferred stock. The carrying amount of these instruments approximate their fair values.

Property and Equipment

Property and equipment are recorded at cost and depreciated using the straight-line method over their estimated useful lives. Assets under capital leases and leasehold improvements are amortized over the shorter of their estimated useful lives or the term of the respective leases by use of the straight-line method. Maintenance and repair costs are expensed as incurred.

Revenue Recognition

Compound development revenue relates to revenue from significant collaborative agreements (Note 3) and from licensing of compound arrays. Revenue from collaborative agreements relates to the delivery of compounds and to compound development work and is recognized using the percentage of completion method. The application of this revenue recognition method is dependent on the contractual arrangement of either compound delivery or development. Accordingly, revenue is recognized on the proportional achievement of deliveries against a compound delivery schedule or as development labor is expended against a total research and development labor plan. Payments received under these arrangements prior to the completion of the related work are recorded as deferred revenue. Revenue from licensing of compound arrays with no additional obligations is recognized upon delivery of the compound array. License option fees represent payments made to the Company for a right to evaluate and negotiate the terms of potential licensing arrangement. Payments received for license option fees are recognized as the options are granted as such fees are nonrefundable and the Company has no further obligations.

Cost of Revenue

Cost of revenue represents the actual costs incurred in connection with performance pursuant to collaborative agreements and the costs incurred to produce compound arrays. These costs consist primarily of payroll and payroll-related costs, supplies and overhead expenses.

Unaudited Pro Forma Net Loss Per Share

Pro forma net loss per share is determined by dividing the net loss by the weighted average number of shares of common stock and common stock equivalents outstanding during the period, assuming the conversion of all convertible preferred stock which will occur upon the closing of a qualified public offering of the Company's common stock as described in Note 10.

Common stock equivalents, although anti-dilutive, issued at prices below the offering price per share during the twelve month period preceding the initial filing of the Registration Statement have been included in the calculation of unaudited pro forma net loss per share using the treasury stock method and an assumed initial public offering price of \$12.00 per share as if outstanding since the beginning of each period presented.

Historical net loss per share has not been presented as the Series A

convertible preferred stock would have been omitted from the weighted average shares outstanding as it is anti-dilutive and was issued more than twelve months prior to the anticipated public offering.

Use of Estimates

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

Interim Financial Data (Unaudited)

The interim financial data as of June 30, 1996 and for the six months ended June 30, 1995 and 1996, included in the accompanying financial statements are unaudited; however, in the opinion of the Company, the interim financial data include all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the results for the interim periods. The interim financial data are not necessarily indicative of the results of operations for a full year.

New Accounting Pronouncements

In March 1995, the Financial Accounting Standards Board ("FASB") issued SFAS No. 121, "Accounting for the Impairment of Long-lived Assets and for Long-lived Assets to be Disposed Of". In October 1995, the FASB issued SFAS No. 123, "Accounting for Stock-Based Compensation." Both SFAS No. 121 and No. 123 are effective for the Company for the year ending December 31, 1996. The Company has adopted these standards as required, and has adopted SFAS No. 123 through disclosure only. The adoption of these statements is not expected to have a material effect on the Company's financial position, results of operations or cash flows.

3. SIGNIFICANT AGREEMENTS

In 1995, the Company entered into a Research, Development and License Agreement (the "Agreement") and a Stock Purchase Agreement (Note 10) with Solvay Duphar B.V. ("Solvay"). Under the terms of the Agreement, the Company will provide a certain number of compounds per year, and Solvay has been granted the right to screen these compounds to identify compounds which exhibit biological activity against targets (an "Active Compound"). Solvay has the right to enter into an exclusive, worldwide license for any Active Compound identified. In exchange, the Company receives milestone payments during drug development and royalty payments based on sales of the product. Solvay has a right which expires on December 31, 1997 to license certain of the Company's technologies on a nonexclusive basis for internal use only. The initial term of the Agreement is five years, and Solvay will make payments totaling \$3.5 million per contract year for access to the compounds and for the Company's research work of which \$600,000 was paid by December 31, 1995. At December 31, 1995, deferred revenue related to this agreement totaled \$100,000, and \$500,000 was included in compound development revenue--related party for the year ended December 31, 1995.

In 1995, the Company entered into a Research & Development and License Agreement with Abbott Laboratories ("Abbott"). Under this agreement, the Company will conduct research and development activities for Abbott for two years (the "Research Term") with an option to extend the agreement for up to an additional three years for additional payments. The Company will also provide a certain number of compounds per year, and Abbott has been granted the right to screen these compounds or to use them in research activities pursuant to the agreement. Abbott has the right to enter into an exclusive, worldwide license for a number of compounds or derivatives developed under the agreement. In exchange, the Company receives milestone payments during drug development and royalty payments based on sales of the product. Pursuant to the agreement, Abbott has made

payments totaling \$3.2 million for access to the compounds and for the Company's research work of which \$1,192,000 was included in compound development revenue in 1995 and \$2,008,000 was included in deferred revenue at December 31, 1995.

In 1995, the Company entered into an Option Agreement and a Research and Development Agreement with Pharmacia Biotech AB ("Pharmacia"), a subsidiary of Pharmacia & Upjohn, Inc. Under the Option Agreement, a nonrefundable fee of \$1,000,000 was paid by Pharmacia in exchange for a six month option to license certain technology rights. This amount was included in license option

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

fee revenue. Upon exercise of an option by Pharmacia, the two parties will enter into a license agreement which would include initial licensing fees based on the technology licensed and royalty and milestone payments based on Pharmacia's related net product sales. Under the Research and Development Agreement, Pharmacia paid \$500,000 for certain research and development activities, which was included in compound development revenue. Subsequent to December 31, 1995 and pursuant to the terms of the Option Agreement, Pharmacia elected to extend the option for certain technologies by funding an additional research project under the Research and Development Agreement.

On September 13, 1996, the Company entered into a Research and License Agreement with Roche Bioscience, a division of Syntex (U.S.A.) Inc. and an indirect subsidiary of Roche Holding Ltd., pursuant to which the Company will synthesize a certain number of Directed Array sets from compounds provided to the Company by Roche Bioscience or developed by the Company. Roche Bioscience has the right to enter into an exclusive, worldwide license for any Active Compounds identified. Pursuant to the agreement, the Company will receive research payments, milestone payments during drug development, and royalty payments based on sales of the product. The initial term of the agreement is three years. Roche Bioscience will make payments of approximately \$12.1 million over the initial term for development of and access to Directed Array sets, as determined jointly by the Company and Roche Bioscience. However, the agreement is subject to an early termination provision such that it may be terminated at the end of the second year, in which case the Company will receive payments of approximately \$8.4 million. Roche Bioscience is also obligated to make additional payments upon the achievement of certain milestones and to pay royalties on sales of drugs that may result from the relationship.

Under the terms of material transfer agreements with biotechnology companies (the "collaborators"), the Company has granted the collaborator the nonexclusive, royalty-free license to test certain compound arrays supplied by the Company. Upon identification of an active compound, the Company will negotiate a joint drug development program with the collaborator to develop the compound, provided the Company has not previously licensed the compound. Under the collaboration agreements executed in 1996 in connection with these joint drug development programs, the Company and the collaborator will each bear the costs and expenses of their respective activities. Proceeds received on sales of a third party license of the jointly developed compound will first reimburse development costs incurred by each party on a pro rata basis. After all such reimbursements have been made, the remaining proceeds will be split evenly between the parties.

4. CASH EQUIVALENTS AND MARKETABLE SECURITIES

Following is a summary of the fair market value of available-for-sale securities, by balance sheet classification, as of December 31, 1994 and 1995:

	DECEMBER 31,	
	-----	-----
	1994	1995
	----	----
Cash equivalents		
Money market funds.....	\$9,000	\$2,688,000
Marketable securities		

U.S. government obligations.....	--	4,802,000
	-----	-----
	\$9,000	\$7,490,000
	=====	=====

At December 31, 1994 and 1995, marketable securities are carried at fair market value, which approximates amortized cost. Available-for-sale securities classified as marketable securities with fair market values of \$1,016,000 and \$3,786,000 have contractual maturities of between one and five years and between five and ten years, respectively. All of the Company's marketable securities are classified as current at December 31, 1995 as these funds are highly liquid and are available to meet working capital needs and to fund current operations. Gross unrealized gains and losses at December 31, 1994 and 1995 and realized gains and losses on sales of securities for the year ended December 31, 1994 and 1995 were not significant.

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

5. PROPERTY AND EQUIPMENT

Property and equipment consist of the following:

	ESTIMATED USEFUL LIFE (YEARS)	DECEMBER 31,	
		1994	1995
	-----	----	----
Machinery and equipment.....	3-7	\$1,056,000	\$1,839,000
Leasehold improvements.....	5	585,000	656,000
Furniture and fixtures.....	7	52,000	72,000
Construction-in-progress.....	--	--	124,000
		-----	-----
		1,693,000	2,691,000
Less -- Accumulated depreciation and amortization...		191,000	697,000
		-----	-----
		\$1,502,000	\$1,994,000
		=====	=====

Assets held under capital leases consisted of \$935,000 and \$1,438,000 of machinery and equipment at December 31, 1994 and 1995, respectively, and \$485,000 of leasehold improvements at December 31, 1994 and 1995. Accumulated amortization of these assets totaled \$173,000 and \$366,000 at December 31, 1994 and 1995, respectively. For the years ended December 31, 1993, 1994 and 1995, amortization expense related to assets held under capital lease obligations was \$10,000, \$163,000 and \$193,000, respectively.

6. NOTES RECEIVABLE FROM RELATED PARTY

The Company has a note receivable in the amount of \$63,000 from an officer of the Company at December 31, 1994 and 1995. Under the terms of the note, interest accrues on the unpaid principal and interest at the lowest applicable federal rate of interest as published by the Internal Revenue Service (5.9% at December 31, 1995). Principal and accrued interest are due in full on November 3, 1996. At December 31, 1994 and 1995, interest due on the note was \$3,000 and \$5,000, respectively, and is included in prepaid expenses and other current assets.

The Company also has outstanding at December 31, 1995 a note receivable in the amount of \$120,000 from an officer of the Company which is secured by the officer's beneficial interest in 96,000 shares of Series A preferred stock of the Company. Under the terms of the note, interest accrues on the unpaid principal and interest at the lowest applicable federal rate of interest as published by the Internal Revenue Service (5.9% at December 31, 1995). Principal and accrued interest will be paid in four equal installments on November 2 of each year commencing on November 2, 1996. The amount of the principal due and

payable on any installment date will be forgiven so long as the officer is employed by the Company on the installment date. At December 31, 1995 interest receivable relating to this note was \$1,000 and is included in prepaid expenses and other current assets.

7. ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses include the following:

	DECEMBER 31,	
	----- 1994	1995 -----
Accounts payable.....	\$420,000	\$369,000
Accrued professional fees.....	123,000	176,000
Accrued interest expense.....	16,000	142,000
Other accrued expenses.....	68,000	82,000
	-----	-----
	\$627,000	\$769,000
	=====	=====

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ARQUE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

8. BRIDGE FINANCING -- RELATED PARTY

During 1994 and 1995, the Company received \$1,700,000 and \$700,000, respectively under bridge financing arrangements with certain stockholders. In connection with this financing, the Company issued eighteen unsecured promissory notes at interest rates ranging from 5.86% to 7.43% per annum. On November 2, 1995, the Company and the stockholders agreed to convert the principal of the notes into 1,920,000 shares of Series A convertible preferred stock. At December 31, 1994 and 1995, interest payable relating to these bridge financings is \$16,000 and \$142,000, respectively. In April 1996, the Company and the stockholders converted the interest payable into an additional 113,429 shares of Series A convertible preferred stock.

As partial consideration for the promissory notes, the Company issued warrants to purchase 240,000 shares of the Company's \$0.01 par value common stock. The warrants are exercisable at \$0.25 per share (including by means of a cashless exercise) which was equal to or exceeded the estimated fair value of the Company's common stock, as determined by the Board of Directors, throughout the period the warrants were issued. The warrants are currently exercisable and expire on the earlier of various dates through December 31, 1999 or the effective date of an initial public offering under the Securities Act of 1933.

The proceeds from the bridge financings were allocated to the notes and to the warrants based on management's estimate of their relative fair values and of the then-current market interest rate of 12%. This resulted in \$132,000 and \$57,000 being ascribed to the warrants in 1994 and 1995, respectively, which was recorded as additional paid-in-capital and as a discount to the face value of the notes. The discount was amortized over the period from issuance to conversion into Series A convertible preferred stock. The amortization of debt discount totaled \$25,000 and \$164,000 for the years ended December 31, 1994 and 1995, respectively, and is included in interest expense.

9. EQUITY INCENTIVE PLAN

During 1994, the Board of Directors approved the 1994 Amended and Restated Equity Incentive Plan (the "Equity Incentive Plan"). During 1995 and 1996, the Board of Directors approved amendments to increase the number of shares of common stock available for awards under the Equity Incentive Plan to 1,104,500 and 2,600,000, respectively. All shares will be awarded at the discretion of a Committee of the Board of Directors (the "Committee") in a variety of stock-based forms including stock options and restricted stock. Pursuant to the

Equity Incentive Plan, incentive stock options may not be granted at less than the fair market value of the Company's common stock at the date of the grant, and the option term may not exceed ten years. For holders of 10% or more of the Company's voting stock, options may not be granted at less than 110% of the fair market value of the common stock at the date of the grant, and the option term may not exceed five years. Stock appreciation rights granted in tandem with an option shall have an exercise price not less than the exercise price of the related option.

Subject to the restrictions above, the Committee is authorized to designate the options, awards, and purchases under the Equity Incentive Plan, the number of shares covered by each option, award and purchase, and the related terms, exercise dates, prices and methods of payment. In addition, for purposes of determining the recipients' compensation relating to these grants, the fair value for the awards is determined by the Board of Directors at the date at which they are granted.

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

Activity for the period from inception of the Equity Incentive Plan through June 30, 1996 was as follows:

INCENTIVE STOCK OPTIONS -----	NUMBER OF SHARES -----	OPTION PRICE PER SHARE -----
Granted.....	2,500	\$0.02
Outstanding at December 31, 1994.....	2,500	\$0.02
Granted.....	298,500	\$0.02 - \$0.80
Outstanding at December 31, 1995.....	301,000	\$0.02 - \$0.80
Granted.....	837,420	\$0.80 - \$6.00
Exercised.....	(625)	\$0.02
Cancelled.....	(1,875)	\$0.02
Outstanding at June 30, 1996.....	1,135,920	\$0.02 - \$6.00
Exercisable at December 31, 1995.....	625	

At December 31, 1995, restricted common stock purchased pursuant to the Equity Incentive Plan totaled 522,797 shares (Note 11), and there were 280,703 shares available for future grant under the Equity Incentive Plan.

On August 14, 1996, the Board of Directors approved, subject to stockholder approval, the 1996 Director Stock Option Plan (the "1996 Director Plan") for non-employee directors. Under this plan, eligible directors are automatically granted once a year, at the annual meeting of stockholders of the Company, options to purchase 3,500 shares of common stock which are exercisable on the date of grant. Upon adoption of the plan and upon election of an eligible director, options to purchase 7,500 shares of common stock will be granted which will become exercisable in three equal annual installments commencing on the date of the Company's next annual stockholders' meeting held after the date of grant. All options granted pursuant the 1996 Director Plan have terms of ten years with exercise prices equal to fair market value on the date of grant. A maximum of 125,000 shares of common stock of the Company is reserved for issuance in accordance with the terms of this plan.

Stock Purchase Plan

On August 14, 1996, the Board of Directors approved, subject to stockholder approval, the 1996 Employee Stock Purchase Plan (the "Purchase Plan"). This plan enables eligible employees to exercise rights to purchase the Company's common stock at 85% of the fair market value of the stock on the date the right was granted or the date the right is exercised, whichever is lower. Rights to purchase shares under the Purchase Plan are granted by the Board of Directors.

The rights are exercisable during a period determined by the Board of Directors; however, in no event will the period be longer than twenty-seven months. The Purchase Plan is available to substantially all employees, subject to certain limitations. The Company has reserved 120,000 shares of common stock for purchases under the Purchase Plan.

10. MANDATORILY REDEEMABLE CONVERTIBLE PREFERRED STOCK AND CONVERTIBLE PREFERRED STOCK

On November 18, 1994, the Partnership (the sole stockholder of the Company as of that date) exchanged 563,972 shares of common stock of the Company for Partnership interests held by certain employees and consultants. The Partnership also contributed 140,528 shares of common stock to the Company for future issuance pursuant to the Equity Incentive Plan (Note 9). The Company

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

immediately retired these contributed shares and reserved 140,528 shares of common stock for issuance pursuant to the Equity Incentive Plan. The stockholders of the Company approved the issuance of 8,591,000 shares of Series A convertible preferred stock to the Partnership in exchange for the remaining 4,295,500 shares of common stock held by the Partnership. Upon the exchange of preferred stock, the Company retired the related shares of common stock.

On November 1, 1995, the stockholders approved an amendment to the Company's Certificate of Incorporation to increase the number of designated Series A preferred shares from 10,000,000 to 10,511,000 and to approve the designation of 1,800,000 shares of Series B preferred stock. In February 1996, the stockholders approved a further increase in the number of designated Series A and Series B preferred shares to 10,624,429 and 1,815,468, respectively.

On November 5, 1995, as part of a collaborative agreement (Note 3), the Company sold to Solvay 1,800,000 shares of Series B preferred stock which resulted in net proceeds to the Company of \$6,885,000. In April 1996, the Company issued to Solvay an additional 15,468 shares of Series B preferred stock in connection with the conversion of the bridge financing interest into Series A preferred stock (Note 8) to maintain the original, agreed-upon ownership percentage.

Convertible preferred stock has the following characteristics:

Conversion Rights

The preferred stock is convertible, at the option of the holder, into common stock of the Company based upon a formula which currently would result in an exchange of one share of common stock for every two shares of preferred stock converted. The preferred stock will automatically convert into common stock upon the closing of an initial public offering, for which net proceeds equal or exceed \$10,000,000 at a price per share equal to or greater than the original purchase price per share of the related preferred stock.

Dividend Rights

When and if declared by the Board of Directors, and prior to any payment of dividends to common stockholders, the Company shall pay noncumulative, annual cash dividends of \$0.07 and \$0.27 per share to the holders of Series A preferred stock and Series B preferred stock, respectively. In the event of a declaration and payment of dividends on common stock, dividends on the preferred stock (determined by the number of common shares into which the preferred shares are convertible) are payable in an amount equal to or greater than the per share amount of the dividend to common stockholders.

Voting Rights

Holders of the preferred stock are entitled to vote upon any matter submitted to the stockholders for a vote. Each share of preferred stock shall have one vote for each full share of common stock into which the respective share of preferred stock would be convertible on the record date for the vote.

Liquidation Rights

In the event of any liquidation, dissolution or winding up of the affairs of the Company, the holders of the Series A preferred shares are entitled to receive, prior to and in preference to the holders of Series B preferred stock and the holders of common stock, an amount equal to \$0.89 per share, plus any declared but unpaid dividends. After all such payments have been made, the holders of the outstanding Series B preferred shares are entitled to receive, prior to and in preference to the holders of common stock, an amount equal to \$3.89 per share, plus any declared but unpaid dividend.

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

Redemption Rights

Each holder of shares of Series B preferred stock shall have the right to cause the Company, at any time on or after November 2, 2001, to redeem the Series B preferred stock at a price equal to \$3.89 per share. The difference between the net issuance price and the redemption price is being accreted by a charge to accumulated deficit. The Series A preferred stock is not redeemable.

Protection of Series B Preferred Stock

The Company is not allowed to authorize the increase or decrease of the total number of authorized shares of Series B preferred stock or issue additional shares of Series B preferred stock without first obtaining the approval of the majority of the Series B preferred stockholders. In addition, the Company must first obtain approval of the majority of Series B preferred stockholders to amend the Articles of Incorporation of the Company if such amendment would adversely affect any of the rights, preferences or privileges of shares of Series B preferred stock, or to redeem, purchase or otherwise acquire shares of Series A preferred stock or common stock, excluding the repurchase of shares of common stock from employees, officers, directors or consultants.

Unaudited Pro Forma Balance Sheet

Upon the closing date of the Company's initial public offering, all of the outstanding shares of Series A and Series B preferred stock will automatically convert into 5,312,214 and 907,734 shares of common stock, respectively. In addition, 234,992 shares of common stock will be issued upon the cashless exercise of the outstanding warrants (Note 8), based on an assumed initial public offering price of \$12.00 per share, which will occur immediately prior to the effectiveness of the initial public offering. Such conversion and exercise have been reflected in the unaudited pro forma balance sheet as of June 30, 1996.

11. COMMON STOCK

Pursuant to shareholder approval of a 1 for 2 reverse stock split on the common stock of the Company, an amendment to the Company's Certificate of Incorporation effecting such split was filed on October 4, 1996. Accordingly, all share and per share data have been restated to give retroactive effect to the stock split for all periods presented.

On October 17, 1994 and November 1, 1995, the stockholders approved amendments to the Company's Certificate of Incorporation to increase the number of authorized common shares to 15,000,000 and 20,000,000, respectively. On October 17, 1994, the Board of Directors also approved a 3,333.33 for 1 stock split of the Company's common stock.

At December 31, 1995, the Company has 6,977,203 shares of its common stock reserved for issuance upon conversion of the preferred stock and exercise of warrants and options.

Stock Restriction Agreements

At December 31, 1995, the Company had outstanding 522,797 shares of common stock issued pursuant to the Equity Incentive Plan (Note 9) which are subject to stock restriction agreements whereby the stockholder automatically forfeits to the Company the unvested portion of shares of common stock in the event of termination of their employment with the Company. All such forfeited shares shall immediately be retired by the Company. Shares subject to this agreement vest over a four year period, either monthly or annually. At December 31, 1995, the aggregate number of unvested common shares is 219,356.

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ARQUE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

Each stock restriction agreement terminates at the election of the Company on the earlier of (i) the date upon which an initial public offering of shares of common stock, with a price of at least \$5.00 per share and net proceeds to the Company of at least \$10,000,000, becomes effective or (ii) the closing of an acquisition, consolidation, or merger of the Company or a sale or transfer of all or substantially all of the Company's assets.

12. INCOME TAXES

The benefit (provision) for income taxes was as follows:

	YEAR ENDED DECEMBER 31,	
	1994	1995
	----	----
Deferred tax benefit:		
Federal.....	\$ 1,420,000	\$ 794,000
State.....	338,000	246,000
	-----	-----
	1,758,000	1,040,000
	-----	-----
Deferred tax asset valuation allowance.....	(1,758,000)	(1,040,000)
	-----	-----
	\$ --	\$ --
	=====	=====

The Company's deferred tax assets consist of the following:

	DECEMBER 31,	
	1994	1995
	----	----
Preoperating costs capitalized for tax purposes.....	\$ 496,000	\$ 416,000
Net operating loss carryforwards.....	1,667,000	2,590,000
Tax credit carryforwards.....	139,000	272,000
Book depreciation in excess of tax.....	42,000	106,000
	-----	-----
Gross deferred tax assets.....	2,344,000	3,384,000
Deferred tax asset valuation allowance.....	(2,344,000)	(3,384,000)
	-----	-----
	\$ --	\$ --
	=====	=====

The Company has provided a full valuation allowance for the deferred tax assets as the realization of these future benefits is not sufficiently assured as of the end of each related year. If the Company achieves profitability, the deferred tax assets will be available to offset future income tax liabilities and expense.

At December 31, 1995, the Company has federal net operating loss carryforwards and tax credit carryforwards available to reduce future taxable income and tax liabilities, respectively, which expire as follows:

YEAR OF EXPIRATION	NET OPERATING LOSS CARRYFORWARDS	RESEARCH AND DEVELOPMENT TAX CREDIT CARRYFORWARDS
2009.....	\$4,320,000	\$ 84,000
2010.....	2,181,000	52,000
	-----	-----
	\$6,501,000	\$136,000
	=====	=====

Under the Internal Revenue Code, certain substantial changes in the Company's ownership could result in an annual limitation on the amount of net operating loss and tax credit carryforwards which can be utilized in future years.

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

A reconciliation between the amounts of reported income tax benefit and the amount determined by applying the U.S. federal statutory rate of 35% for 1994 and 1995 to pre-tax loss is as follows:

	YEAR ENDED DECEMBER 31,	
	1994	1995
	----	----
Loss at statutory rate.....	\$ 1,472,000	\$ 788,000
State tax benefit, net of federal benefit.....	252,000	135,000
Research and investment tax credit.....	139,000	133,000
Other.....	(105,000)	(16,000)
	-----	-----
	1,758,000	1,040,000
Increase in valuation allowance.....	(1,758,000)	(1,040,000)
	-----	-----
	\$ --	\$ --
	=====	=====

13. COMMITMENTS AND CONTINGENCY

LEASES

The Company leases office space and equipment under noncancelable operating and capital leases. The future minimum lease commitments under these leases are as follows:

YEAR ENDING DECEMBER 31,	OPERATING LEASES	CAPITAL LEASES
1996.....	\$ 293,000	\$ 631,000
1997.....	288,000	620,000
1998.....	289,000	334,000
1999.....	288,000	37,000
2000.....	144,000	--
	-----	-----
Total minimum lease payments.....	\$1,302,000	1,622,000
	=====	
Less -- Amount representing interest.....		197,000

Present value of minimum lease payments..... \$1,425,000
=====

The Company has a lease line agreement with an unaffiliated third party (the "Lessor") for \$2,000,000 of which approximately \$787,000 was available for future leases at December 31, 1995. Subsequent to December 31, 1995, the Lessor approved an increase in the lease line limit to \$5,000,000. The term for each lease under the agreement is forty-two months, commencing on the purchase date of the asset, and the lease bears interest at a rate determined by the Lessor at each transaction date. The leasing arrangement was collateralized by cash equivalents totaling \$188,000 at December 31, 1994. This collateral was released in 1995 by the Lessor. During 1994, the Company sold and leased back approximately \$107,000 in machinery and equipment, furniture and fixtures and office equipment from the Lessor.

Rent expense under noncancelable operating leases was approximately \$91,000 and \$163,000 for the years ended December 31, 1994 and 1995, respectively.

LETTER OF CREDIT

In connection with a capital lease obligation for certain leasehold improvements, the Company is required to maintain a \$100,000 letter of credit with a bank. Under the terms of the lease obligation, the \$100,000 letter of credit is to be available until September 30, 1996, at which point the required amount will be reduced to \$50,000 through September 30, 1998. The letter of credit is collateralized by a \$100,000 certificate of deposit held by the bank (Note 2).

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ARQULE, INC.

NOTES TO FINANCIAL STATEMENTS -- (CONTINUED)

EMPLOYMENT AGREEMENTS

The Company entered into an employment agreement with an officer who is also a member of the board of directors. This agreement provides that if his employment is terminated without cause, the officer is entitled to receive up to six months' salary. The Company also entered into an employment agreement with an officer. This agreement provides that if his employment is terminated without cause during the first year of the agreement, the officer is entitled to receive up to six months' salary.

CONTINGENCY

In October 1996, the Company received a letter from two individuals who have asserted that they are entitled to compensation from certain of the Company's stockholders and/or the Company equal to approximately five percent of the equity interest in the Company. The Company believes that there are meritorious defenses against such claims and intends to contest them vigorously; however, they are currently unable to estimate the outcome of this matter, including the range of potential loss, if any.

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[GRAPH]

A three-dimensional structure of ArQule's HIV-1 Protease Inhibitor, bound in the enzyme active site, and developed utilizing ArQule's Combinatorial Drug Design and Development Platform.

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NO DEALER, SALESPERSON OR OTHER PERSON HAS BEEN AUTHORIZED TO GIVE ANY INFORMATION OR TO MAKE ANY REPRESENTATIONS OTHER THAN THOSE CONTAINED IN THIS PROSPECTUS AND, IF GIVEN OR MADE, SUCH INFORMATION OR REPRESENTATIONS MUST NOT BE RELIED UPON AS HAVING BEEN AUTHORIZED BY THE COMPANY OR THE UNDERWRITERS. THIS PROSPECTUS DOES NOT CONSTITUTE AN OFFER TO SELL OR A SOLICITATION OF AN OFFER TO BUY THE COMMON STOCK TO ANY PERSON IN ANY JURISDICTION IN WHICH SUCH OFFER OR SOLICITATION WOULD BE UNLAWFUL OR TO ANY PERSON TO WHOM IT IS UNLAWFUL. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR ANY OFFER OR SALE MADE HEREUNDER SHALL, UNDER ANY CIRCUMSTANCES, CREATE ANY IMPLICATION THAT THERE HAS BEEN NO CHANGE IN THE AFFAIRS OF THE COMPANY OR THAT THE INFORMATION CONTAINED HEREIN IS CORRECT AS OF ANY TIME SUBSEQUENT TO THE DATE HEREOF.

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UNTIL _____, 1996 (25 DAYS AFTER THE DATE OF THIS PROSPECTUS), ALL DEALERS EFFECTING TRANSACTIONS IN THE COMMON STOCK, WHETHER OR NOT PARTICIPATING IN THIS DISTRIBUTION, MAY BE REQUIRED TO DELIVER A PROSPECTUS. THIS IS IN ADDITION TO THE OBLIGATIONS OF DEALERS TO DELIVER A PROSPECTUS WHEN ACTING AS UNDERWRITERS AND WITH RESPECT TO THEIR UNSOLD ALLOTMENTS OR SUBSCRIPTIONS.

=====

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2,000,000 SHARES

ARQULE, INC.

[ARQULE LOGO]

COMMON STOCK

 PROSPECTUS

HAMBRECHT & QUIST

OPPENHEIMER & CO., INC.

VECTOR SECURITIES INTERNATIONAL,
INC.

OCTOBER , 1996

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PART II

INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 13. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The expenses to be borne by the Company in connection with this offering are as follows:

SEC registration fee.....	\$ 10,311
Nasdaq listing fee.....	39,942
NASD filing fee.....	3,490
Blue Sky fees and expenses.....	15,000
Printing and engraving expenses.....	100,000
Accounting fees and expenses.....	150,000
Legal fees and expenses.....	350,000
Transfer agent and registrar fees.....	100,000
Miscellaneous expenses.....	6,257

Total.....	\$775,000
	=====

All of the above figures, except the SEC registration fee and NASD filing fee, are estimates.

ITEM 14. INDEMNIFICATION OF DIRECTORS AND OFFICERS

Section 145 of the Delaware General Corporation Law grants the Company the power to indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative by reason of the fact that he is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgements, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit or proceeding if he acted in good faith and in a manner he reasonably believed to be in or not opposed to the best interests of the Company, and with respect to any criminal action or proceeding, had no reasonable cause to believe his conduct was unlawful, provided, however, no indemnification shall be made in connection with any proceeding brought by or in the right of the Company where the person involved is adjudged to be liable to the Company except to the extent approved by a court. Article V of the Company's Amended and Restated By-laws provides that the Company shall, to extent legally permitted, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of the fact that he is or was, or has agreed to become, a director or officer of the Company, or is or was serving, or has agreed to serve, at the request of the Company, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise. The indemnification provided for in Article V is expressly not exclusive of any other rights to which those seeking indemnification may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and shall inure to the benefit of the heirs, executors and administrators of such persons. Article V also provides that the Company shall have the power to purchase and maintain insurance on behalf of any person

who is or was a director, officer, employee or agent of the Company, or is or was serving at the request of the Company, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise, against any liability asserted against and incurred by such person in any such capacity.

Pursuant to Section 102(b)(7) of the Delaware General Corporation Laws, Section 7 of Article FIFTH of the Company's Restated Certificate eliminates a director's personal liability for monetary damages to the Company and its stockholders for breaches of fiduciary duty as a director, except in circumstances involving a breach of a director's duty of loyalty to the Company or its stockholders,

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acts or omissions not in good faith, intentional misconduct, knowing violations of the law, self-dealing or the unlawful payment of dividends or repurchase of stock.

ITEM 15. RECENT SALES OF UNREGISTERED SECURITIES

Since June 1, 1993, the Company has issued and sold the following securities, in each case in reliance on an exemption from required registration pursuant to Section 4(2) of the Securities Act:

In December 1993, in exchange for the transfer to the Company of substantially all of the assets and liabilities of the Partnership, the Company issued 1,500 shares of its Common Stock to the Partnership.

Commencing in March 1995, the Company has granted employees and consultants options under its Amended and Restated 1994 Equity Incentive Plan, which options have a ten-year term and are exercisable at a price equal to fair market value on the date of grant, as determined in good faith by the Board of Directors. As of June 30, 1996, options for 1,135,920 shares of the Company's Common Stock were outstanding. As of such date, an option for 625 shares of Common Stock had been exercised at \$0.02 per share.

In addition, from inception through June 1996, the Company made grants of an aggregate of 523,047 shares of Common Stock to certain employees and consultants of the Company. Such shares are subject to repurchase rights held by the Company and were sold at fair market value on the date of grant.

In November 1994, the Company declared and paid a stock dividend of 3,332.33 shares of its Common Stock on each outstanding share of Common Stock held as of October 17, 1994. Pursuant to a Plan of Recapitalization, the Partnership surrendered an aggregate of 4,295,500 outstanding shares of Common Stock (after giving effect to such stock dividend) for shares of Series A Convertible Preferred Stock of the Company which will convert into an equal number of shares of Common Stock concurrently with this offering.

During the period from August 1994 through February 1995, certain stockholders of the Company made a series of Bridge Loans to the Company for an aggregate of \$2,400,000 in exchange for promissory notes and warrants to purchase an aggregate of 240,000 shares of Common Stock, exercisable at \$0.25 per share until the earlier of the effective date of an initial public offering or various dates through December 31, 1999. In November 1995, the Bridge Loans were converted to shares of Series A Preferred Stock, which will convert into 960,000 shares of Common Stock concurrently with the closing of this offering.

In November 1995, the Company issued 1,800,000 shares of Series B Preferred Stock to Physica B.V., which will convert into 900,000 shares of Common Stock concurrently with the closing of this offering, for cash at the purchase price of \$3.89 per share.

In April 1996, all accrued interest outstanding on the Bridge Loans through November 1995 was converted into shares of Series A Preferred Stock, which will convert into 56,714 shares of Common Stock concurrently with the closing of this offering. In April 1996, the Company also issued shares of Series B Preferred Stock to Physica B.V., which will convert into 7,734 shares of Common Stock concurrently with the closing of this offering, in consideration of Physica B.V.'s waiver of its anti-dilution rights under the Company's Amended and Restated Certificate of Incorporation and its right of first refusal with respect to such shares of Series A Preferred Stock.

ITEM 16.
(A) EXHIBITS

EXHIBIT NO. -----	DESCRIPTION -----
1.1	Form of Underwriting Agreement. Filed herewith.
3.1	Amended and Restated Certificate of Incorporation of ArQule, as amended through the date hereof. Filed herewith.
3.2	Intentionally omitted.
3.3++	Form of Amended and Restated Certificate of Incorporation as proposed to be filed concurrently with the closing of this offering.
3.4++	By-laws of ArQule, Inc.
3.5++	Form of Amended and Restated By-laws as proposed to be adopted concurrently with the closing of this offering.
4.1++	Specimen Common Stock Certificate.
4.2++	Specimen Common Stock Purchase Warrant.
5.1++	Opinion of Palmer & Dodge LLP as to the legality of the shares being registered.
10.1*++	Amended and Restated 1994 Equity Incentive Plan, as amended through October 17, 1994.
10.2*++	1996 Employee Stock Purchase Plan.
10.3*++	1996 Director Stock Option Plan.
10.4++	Form of Indemnification Agreement between ArQule and its directors. Such agreements are materially different only as to the signing directors and the dates of execution.
10.5++	Investors' Rights Agreement among ArQule and certain stockholders of the Company dated November 2, 1995.
10.6++	Lease Agreement dated September 29, 1993 between ArQule and Beautyrest Property, Inc. and WRB, Inc.
10.7++	Lease Agreement, dated July 27, 1995, between ArQule and Cummings Properties Management, Inc., as amended.
10.8*++	Employment Agreement effective as of January 2, 1996, between ArQule and Eric B. Gordon.
10.9*	Employment Agreement effective as of July 9, 1996, between ArQule and James R. Fitzgerald, Jr. Filed herewith.
10.10*++	Promissory Note dated November 2, 1995 between Dr. Joseph C. Hogan, Jr. and ArQule.
10.11*	Pledge Agreement dated November 2, 1995 between Dr. Joseph C. Hogan, Jr. and ArQule. Filed herewith.
10.12*++	Promissory Note and Pledge Agreement dated July 9, 1996 between Eric B. Gordon and ArQule.
10.13*++	Promissory Note dated November 4, 1993 between Dr. Joseph C. Hogan, Jr. and ArQule.
10.14+	Research, Development and License Agreement between ArQule and Solvay Duphar B.V. dated November 2, 1995. Filed herewith.
10.15+	Research & Development and License Agreement between ArQule and Abbott Laboratories dated June 15, 1995, as amended. Filed herewith.
10.16+	Research & Development Agreement between ArQule and Pharmacia Biotech AB dated March 10, 1995, as amended. Filed herewith.
10.17+	Option Agreement between ArQule and Pharmacia Biotech AB dated March 10, 1995, as amended. Filed herewith.
10.18*++	Adoption Agreement for Fidelity Management and Research Company (ArQule's 401(k) plan).
10.19*++	Research and License Agreement between ArQule and Roche Bioscience dated September 13, 1996.

EXHIBIT NO. -----	DESCRIPTION -----
11.1++	Statement re computation of unaudited pro forma net loss per share.

- 23.1 Consent of Price Waterhouse LLP. Filed herewith.
- 23.2++ Consent of Palmer & Dodge LLP. Included in the opinion filed as Exhibit 5.1.
- 24.1++ Power of attorney.
- 27.1++ Financial Data Schedule.

- -----

- * Indicates a management contract or compensatory plan.
- + Certain confidential material contained in the document has been omitted and filed separately, with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.
- ++ Previously filed.

(B) FINANCIAL STATEMENT SCHEDULE

PAGE

II Valuation and Qualifying Accounts and Reserves..... S-1

ITEM 17. UNDERTAKINGS

(a) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described under "Item 14--Indemnification of Directors and Officers" above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(b) The undersigned Registrant hereby undertakes that:

- (1) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this Registration Statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this Registration Statement as of the time it was declared effective.
- (2) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) The undersigned Registrant hereby undertakes to provide to the Underwriters at the closing specified in the underwriting agreement, certificates in such denominations and registered in such names as required by the Underwriters to permit prompt delivery to each purchaser.

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Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has duly caused this Amendment to be signed on its behalf by the undersigned, thereunto duly authorized, in the Town of Medford, Commonwealth of Massachusetts, on October 11, 1996.

ARQULE, INC.

By: *

Eric B. Gordon
President and Chief Executive Officer

POWER OF ATTORNEY

Pursuant to the requirements of the Securities Act of 1933, this Amendment has been signed below by the following persons in the capacities and on the dates indicated.

SIGNATURE -----	TITLE -----	DATE ----
* ----- Eric B. Gordon	President, Chief Executive Officer and Director (Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)	October 11, 1996
* ----- Stephen M. Dow	Director	October 11, 1996
* ----- Joseph C. Hogan, Jr.	Director	October 11, 1996
* ----- Adrian de Jonge	Director	October 11, 1996
* ----- Allan R. Ferguson <FN>	Director	October 11, 1996
*By: /s/ LYNNETTE C. FALLON ----- Lynnette C. Fallon Attorney-in-Fact		

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SCHEDULE II

ARQULE, INC.

VALUATION AND QUALIFYING ACCOUNTS AND RESERVES

DESCRIPTION -----	BALANCE AT BEGINNING OF PERIOD -----	CHARGED TO COSTS AND EXPENSES -----	CHARGED TO OTHER ACCOUNTS -----	DEDUCTIONS AND WRITE-OFFS -----	BALANCE AT END OF PERIOD -----
Deferred tax asset valuation allowance					
Year ended December 31, 1994.....	\$ 586,000 (1)	1,758,000	--	--	2,344,000
Year ended December 31, 1995.....	2,344,000	1,040,000	--	--	3,384,000

<FN>

(1) Represents deferred tax asset valuation allowance recorded as of December 30, 1993 upon incorporation of the Company.

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EXHIBIT INDEX

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EXHIBIT NO.	DESCRIPTION	PAGE
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10.19++	Research and License Agreement between ArQule and Roche Bioscience dated September 13, 1996.	
11.1++	Statement re computation of unaudited pro forma net loss per share.	
23.1	Consent of Price Waterhouse LLP. Filed herewith.	
23.2++	Consent of Palmer & Dodge LLP. Included in the opinion filed as Exhibit 5.1.	
24.1++	Power of attorney. Included on the signature page hereto.	
27.1++	Financial Data Schedule.	

- -----

* Indicates a management contract or compensatory plan.

+ Certain confidential material contained in the document has been omitted and filed separately, with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended.

++ Previously filed.

ARQULE, INC.
2,000,000 SHARES(1)
COMMON STOCK
UNDERWRITING AGREEMENT

October __, 1996

HAMBRECHT & QUIST LLC
OPPENHEIMER & CO., INC.
VECTOR SECURITIES INTERNATIONAL, INC.
c/o Hambrecht & Quist LLC
One Bush Street
San Francisco, CA 94104

Ladies and Gentlemen:

ArQule, Inc., a Delaware corporation (herein called the Company), proposes to issue and sell 2,000,000 shares of its authorized but unissued Common Stock, \$.01 par value (herein called the Common Stock) (said shares of Common Stock being herein called the Underwritten Stock). The Company also proposes to grant to the Underwriters (as hereinafter defined) an option to purchase up to 300,000 additional shares of Common Stock (herein called the Option Stock and with the Underwritten Stock herein collectively called the Stock). The Common Stock is more fully described in the Registration Statement and the Prospectus hereinafter mentioned.

The Company hereby confirms its agreements made with respect to the purchase of the Stock by the several underwriters, for whom you are acting, named in SCHEDULE I hereto (herein collectively called the Underwriters, which term shall also include any underwriter purchasing Stock pursuant to Section 3(b) hereof). You represent and warrant that you have been authorized by each of the other Underwriters to enter into this Agreement on its behalf and to act for it in the manner herein provided.

1. REGISTRATION STATEMENT. The Company has filed with the Securities and Exchange Commission (herein called the Commission) a registration statement on Form S-1 (No. 333-11105), including the related preliminary prospectus, for the registration under the Securities Act of 1933, as amended (herein called the Securities Act) of the Stock. Copies of such registration statement and of each amendment thereto, if any, including the related preliminary prospectus (meeting the requirements of Rule 430A of the rules and regulations of the Commission) heretofore filed by the Company with the Commission have been delivered to you and are identical to the electronically transmitted copies thereof filed with the Commission

(1) Plus an option to purchase from the Company up to 300,000 additional shares to cover over-allotments.

pursuant to the Commission's Electronic Data Gathering, Analysis and Retrieval System (herein called EDGAR), except to the extent permitted by Regulation S-T.

The term Registration Statement as used in this Agreement shall mean such registration statement, including all exhibits and financial statements, all information omitted therefrom in reliance upon Rule 430A and contained in the Prospectus referred to below, in the form in which it became effective, and

any registration statement filed pursuant to Rule 462(b) of the rules and regulations of the Commission with respect to the Stock (herein called a Rule 462(b) registration statement), and, in the event of any amendment thereto after the effective date of such registration statement (herein called the Effective Date), shall also mean (from and after the effectiveness of such amendment) such registration statement as so amended (including any Rule 462(b) registration statement). The term Prospectus as used in this Agreement shall mean the prospectus relating to the Stock first filed with the Commission pursuant to Rule 424(b) and Rule 430A (or if no such filing is required, as included in the Registration Statement) and, in the event of any supplement or amendment to such prospectus after the Effective Date, shall also mean (from and after the filing with the Commission of such supplement or the effectiveness of such amendment) such prospectus as so supplemented or amended. The term Preliminary Prospectus as used in this Agreement shall mean each preliminary prospectus included in such registration statement prior to the time it becomes effective. For the purposes of this Agreement, all references to the Registration Statement, any Preliminary Prospectus, the Prospectus or any amendment or supplement to any of the foregoing shall be deemed to include the copy filed with the Commission pursuant to EDGAR.

The Registration Statement has been declared effective under the Securities Act, and no post-effective amendment to the Registration Statement has been filed as of the date of this Agreement. The Company has caused to be delivered to you copies of each Preliminary Prospectus and has consented to the use of such copies for the purposes permitted by the Securities Act.

2. REPRESENTATIONS AND WARRANTIES OF THE COMPANY.

The Company hereby represents and warrants as follows:

(a) The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the jurisdiction of its incorporation, has full corporate power and authority to own or lease its properties and conduct its business as described in the Registration Statement and the Prospectus and as being conducted, and is duly qualified as a foreign corporation and in good standing in all jurisdictions in which the character of the property owned or leased or the nature of the business transacted by it makes qualification necessary (except where the failure to be so qualified would not have a material adverse effect on the business, properties, financial condition or results of operations of the Company).

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(b) Since the respective dates as of which information is given in the Registration Statement and the Prospectus, there has not been any material adverse change, or any development for which the Company has a reasonable basis to believe may result in a prospective material adverse change, in the business, properties, financial condition or results of operations of the Company, whether or not arising from transactions in the ordinary course of business, other than as set forth in the Registration Statement and the Prospectus, and since such dates, except in the ordinary course of business, the Company has not entered into any material transaction not referred to in the Registration Statement and the Prospectus.

(c) The Registration Statement and the Prospectus comply, and on the Closing Date (as hereinafter defined) and any later date on which Option Stock is to be purchased, the Prospectus will comply as to form, in all material respects, with the provisions of the Securities Act and the rules and regulations of the Commission thereunder. On the Effective Date, the Registration Statement did not contain any untrue statement of a material fact and did not omit to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading; on the Effective Date, the Prospectus did not and, on the Closing Date and any later date on which Option Stock is to be purchased, will not, contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; and each of the Prospectus and any amendments or supplements thereto delivered to you for use in connection with the offering of the Stock is identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T; provided, however, that none of the representations and warranties in this subparagraph

(c) shall apply to statements in, or omissions from, the Registration Statement or the Prospectus made in reliance upon and in conformity with information herein or otherwise furnished in writing to the Company by or on behalf of the Underwriters expressly for use in the Registration Statement or the Prospectus.

(d) The Stock is duly and validly authorized, will be, when issued and sold to the Underwriters as provided herein, duly and validly issued, fully paid and nonassessable and conforms to the description thereof in the Prospectus. No further approval or authority of the stockholders or the Board of Directors of the Company will be required for the issuance and sale of the Stock as contemplated herein.

(e) The Stock has been accepted for listing on The Nasdaq National Market, subject to official notice of issuance.

(f) The Company owns, or possesses adequate rights to use and sublicense, all patents, patent rights, inventions, trade secrets, licenses, know-how, proprietary techniques, including processes, trademarks, service marks, trade names, copyrights and other intellectual property described or referred to in the Registration Statement and the Prospectus as owned or used by it or, except as set forth in the Prospectus, which are necessary for the conduct of its business as now conducted and as described in the Registration Statement and the Prospectus. All such patents, patent rights, licenses, trademarks, service marks and copyrights are (i) valid and enforceable and (ii) not being infringed by any third parties which infringement could, whether singly or in the aggregate, materially and adversely affect the business, properties,

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operations, condition (financial or otherwise), results of operations, income or business prospects of the Company, as presently being conducted or as proposed to be conducted in the Prospectus. Except as set forth in the Prospectus, the Company has no knowledge of, nor has it received any notice of, infringement of or conflict with asserted rights of others with respect to any patents, patent rights, inventions, trade secrets, licenses, know-how, proprietary techniques, including processes and substances, trademarks, service marks, trade names, copyrights or other intellectual property which, singly or in the aggregate, is, or is reasonably likely to be, the subject of an unfavorable decision, ruling or finding that could have a material adverse effect on the business, properties, financial condition or results of operations of the Company.

(g) Upon filing of the Amended and Restated Certificate of Incorporation of the Company (in the form of a copy thereof previously shown to your counsel) with the Secretary of State of Delaware and upon consummation of the transactions contemplated hereby, the authorized and outstanding shares of capital stock of the Company will be as set forth in the Prospectus under the caption "Description of Capital Stock" provided that the outstanding shares shall have increased by the number of shares as have been issued after June 30, 1996 and prior to the Closing Date pursuant to the exercise of options granted under the Company's Amended and Restated 1994 Equity Incentive Plan (herein called the Employee Options). The Company has no subsidiaries. On the Closing Date the capital stock of the Company will conform to the description thereof in the Registration Statement under the caption "Description of Capital Stock". There are no outstanding options, warrants or other rights granted to or by the Company to purchase shares of Common Stock or other securities of the Company, or any subsidiary, other than as described in the Prospectus. To the best knowledge of the Company, no such option, warrant or other right has been granted to any person, the exercise of which would cause such person to own more than five percent of the Common Stock outstanding immediately after the offering other than as described in the Prospectus. No person or entity holds a right to require or participate in a registration under the Securities Act of shares of Common Stock of the Company which right has not been waived by the holder thereof as of the date hereof with respect to the registration of shares pursuant to the Registration Statement. Except as set forth in the Prospectus, no person holds a right to require registration under the Securities Act of shares of Common Stock of the Company at any other time. Except for rights terminating upon the consummation of the offering of the Stock, no person or entity has a right of first refusal or participation with respect to the sale of shares of

the Stock by the Company.

(h) The financial statements of the Company, together with related notes and schedules as set forth in the Registration Statement, present fairly the financial position, results of operations and cash flows of the Company at the indicated dates and for the indicated periods. Such financial statements have been prepared in accordance with generally accepted accounting principles consistently applied throughout the periods involved, and all adjustments necessary for a fair presentation of results for such periods have been made. The summary financial and other data included in the Registration Statement present fairly the information shown therein and have been compiled on a basis consistent with the financial statements presented therein.

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(i) Price Waterhouse LLP, which has certified certain of the financial statements filed with the Commission as part of the Registration Statement, are independent public accountants as required by the Securities Act and the Rules and Regulations thereunder.

(j) The Company confirms as of the date hereof that it is in compliance with all provisions of Section 1 of laws of Florida, Chapter 92-198, An Act Relating to Disclosure of Doing Business with Cuba, and the Company further agrees that if it commences engaging in business with the government of Cuba or with any person or affiliate located in Cuba after the date the Registration Statement becomes or has become effective with the Commission or with the Florida Department of Banking and Finance (the "Department"), whichever date is later, or if the information reported or incorporated by reference in the Prospectus, if any, concerning the Company's business with Cuba or with any person or affiliate located in Cuba changes in any material way, the Company will provide the Department notice of such business or change, as appropriate, in a form acceptable to the Department.

(k) The Company is familiar with the Investment Company Act of 1940, as amended, and has in the past conducted its affairs in such a manner to ensure that the Company was not and is not an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations thereunder.

(l) Except as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company is a party or to which any property or assets of the Company is the subject which, if determined adversely to the Company, might have a material adverse effect on the business, properties, financial conditions or results of operations of the Company; and to the best of the Company's knowledge, except as set forth in the Prospectus, no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

3. PURCHASE OF THE STOCK BY THE UNDERWRITERS.

(a) On the basis of the representations and warranties and subject to the terms and conditions herein set forth, the Company agrees to issue and sell 2,000,000 shares of the Underwritten Stock to the several Underwriters and each of the Underwriters agrees to purchase from the Company the respective aggregate number of shares of Underwritten Stock set forth opposite its name in SCHEDULE I. The price at which such shares of Underwritten Stock shall be sold by the Company and purchased by the several Underwriters shall be \$_____ per share. In making this Agreement, each Underwriter is contracting severally and not jointly; except as provided in paragraphs (b) and (c) of this Section 3, the agreement of each Underwriter is to purchase only the respective number of shares of the Underwritten Stock specified in SCHEDULE I.

(b) If for any reason one or more of the Underwriters shall fail or refuse (otherwise than for a reason sufficient to justify the termination of this Agreement under the provisions of Section 8 or 9 hereof) to purchase and pay for the number of shares of the Stock agreed to be purchased by such Underwriter or Underwriters, the Company shall immediately give notice thereof to you, and the non-defaulting Underwriters shall have the right within 24 hours after the

receipt by you of such notice to purchase, or procure one or more other Underwriters to purchase, in such proportions as may be agreed upon between you and such purchasing Underwriter or Underwriters and upon the terms herein set forth, all or any part of the shares of the Stock which such defaulting Underwriter or Underwriters agreed to purchase. If the non-defaulting Underwriters fail so to make such arrangements with respect to all such shares and portion, the number of shares of the Stock which each non-defaulting Underwriter is otherwise obligated to purchase under this Agreement shall be automatically increased on a pro rata basis to absorb the remaining shares and portion which the defaulting Underwriter or Underwriters agreed to purchase; provided, however, that the non-defaulting Underwriters shall not be obligated to purchase the shares and portion which the defaulting Underwriter or Underwriters agreed to purchase if the aggregate number of such shares of the Stock exceeds 10% of the total number of shares of the Stock which all Underwriters agreed to purchase hereunder. If the total number of shares of the Stock which the defaulting Underwriter or Underwriters agreed to purchase shall not be purchased or absorbed in accordance with the two preceding sentences, the Company shall have the right, within 24 hours next succeeding the 24-hour period above referred to, to make arrangements with other underwriters or purchasers satisfactory to you for purchase of such shares and portion on the terms herein set forth. In any such case, either you or the Company shall have the right to postpone the Closing Date determined as provided in Section 5 hereof for not more than seven business days after the date originally fixed as the Closing Date pursuant to said Section 5 in order that any necessary changes in the Registration Statement, the Prospectus or any other documents or arrangements may be made. If neither the non-defaulting Underwriters nor the Company shall make arrangements within the 24-hour periods stated above for the purchase of all the shares of the Stock which the defaulting Underwriter or Underwriters agreed to purchase hereunder, this Agreement shall be terminated without further act or deed and without any liability on the part of the Company to any non-defaulting Underwriter and without any liability on the part of any non-defaulting Underwriter to the Company. Nothing in this paragraph (b), and no action taken hereunder, shall relieve any defaulting Underwriter from liability in respect of any default of such Underwriter under this Agreement.

(c) On the basis of the representations, warranties and covenants herein contained and subject to the terms and conditions herein set forth, the Company hereby grants an option to the several Underwriters to purchase the Option Stock at the same price per share as the Underwriters shall pay for the Underwritten Stock. The maximum aggregate number of shares of Option Stock to be sold by the Company is 300,000. Said option may be exercised only to cover over-allotments in the sale of the Underwritten Stock by the Underwriters and may be exercised in whole or in part at any time (but not more than once) on or before the thirtieth day after the date of this Agreement upon written or telegraphic notice by you to the Company setting forth the aggregate number of shares of the Option Stock as to which the several Underwriters are exercising the option. Delivery of certificates for the shares of Option Stock, and payment therefor, shall be made as provided in Section 5 hereof. The number of shares of the Option Stock to be purchased by each Underwriter shall be the same percentage of the total number of shares of the Option Stock to be purchased by the several Underwriters as such Underwriter is purchasing of the Underwritten Stock, as adjusted by you in such manner as you deem advisable to avoid fractional shares.

4. OFFERING BY UNDERWRITERS.

(a) The terms of the initial public offering by the Underwriters of the Stock to be purchased by them shall be as set forth in the Prospectus. The Underwriters may from time to time change the public offering price after the closing of the initial public offering and increase or decrease the concessions and discounts to dealers as they may determine.

(b) The information set forth in the last paragraph on the front cover page, the first paragraph on the inside front cover and under "Underwriting" in the Registration Statement, any Preliminary Prospectus and the Prospectus relating to the Stock filed by the Company (insofar as such information relates to the Underwriters) constitutes the only information

furnished by the Underwriters to the Company for inclusion in the Registration Statement, any Preliminary Prospectus, and the Prospectus, and you on behalf of the respective Underwriters represent and warrant to the Company that the statements made therein are correct.

5. DELIVERY OF AND PAYMENT FOR THE STOCK.

(a) Delivery of certificates for the shares of the Underwritten Stock and the Option Stock (if the option granted by Section 3(c) hereof shall have been exercised not later than 7:00 A.M., San Francisco time, on the date two business days preceding the Closing Date), and payment therefor, shall be made at the office of Palmer & Dodge LLP, One Beacon Street, Boston, MA 02108, at 7:00 a.m., San Francisco time, on the third business day after the date of this Agreement, or at such time on such other day, not later than seven full business days after such third business day, as shall be agreed upon in writing by the Company and you. The date and hour of such delivery and payment (which may be postponed as provided in Section 3(b) hereof) are herein called the Closing Date.

(b) If the option granted by Section 3(c) hereof shall be exercised after 7:00 a.m., San Francisco time, on the date two business days preceding the Closing Date, delivery of certificates for the shares of Option Stock, and payment therefor, shall be made at the office of Palmer & Dodge LLP, One Beacon Street, Boston, MA 02108, at 7:00 a.m., San Francisco time, on the third business day after the exercise of such option.

(c) Payment for the Stock purchased from the Company shall be made to the Company or its order by wire transfer or certified or official bank check or checks in same day funds. Such payment shall be made upon delivery of certificates for the Stock to you for the respective accounts of the several Underwriters against receipt therefor signed by you. Certificates for the Stock to be delivered to you shall be registered in such name or names and shall be in such denominations as you may request at least one business day before the Closing Date, in the case of Underwritten Stock, and at least one business day prior to the purchase thereof, in the case of the Option Stock. Such certificates will be made available to the Underwriters for inspection, checking and packaging at the offices of Lewco Securities Corporation, 2 Broadway, New York, New York 10004 on the business day prior to the Closing Date or, in the case of the Option Stock, by 3:00 p.m., New York time, on the business day preceding the date of purchase.

It is understood that you, individually and not on behalf of the Underwriters, may (but shall not be obligated to) make payment to the Company for shares to be purchased by any Underwriter whose check shall not have been received by you on the Closing Date or any later date on which Option Stock is purchased for the account of such Underwriter. Any such payment by you shall not relieve such Underwriter from any of its obligations hereunder.

6. FURTHER AGREEMENTS OF THE COMPANY. The Company covenants and agrees as follows:

(a) The Company will (i) to the extent necessary, prepare and timely file with the Commission under Rule 424(b) a Prospectus containing information previously omitted at the time of effectiveness of the Registration Statement in reliance on Rule 430A and (ii) not file any amendment to the Registration Statement or supplement to the Prospectus of which you shall not previously have been advised and furnished with a copy or to which you shall have reasonably objected in writing or which is not in compliance with the Securities Act or the rules and regulations of the Commission.

(b) The Company will promptly notify each Underwriter in the event of (i) the request by the Commission for amendment of the Registration Statement or for supplement to the Prospectus or for any additional information, (ii) the issuance by the Commission of any stop order suspending the effectiveness of the Registration Statement, (iii) the institution or notice of intended institution of any action or proceeding for that purpose, (iv) the receipt by the Company of any notification with respect to the suspension of the qualification of the Stock for sale in any jurisdiction, or (v) the receipt by it of notice of the initiation or threatening of any proceeding for such purpose. The Company will make every reasonable effort to prevent the issuance of such a stop order and,

if such an order shall at any time be issued, to obtain the withdrawal thereof at the earliest possible moment.

(c) The Company will (i) on or before the Closing Date, deliver to you a signed copy of the Registration Statement as originally filed and of each amendment thereto filed prior to the time the Registration Statement becomes effective and, promptly upon the filing thereof, a signed copy of each post-effective amendment, if any, to the Registration Statement (together with, in each case, all exhibits thereto unless previously furnished to you) and will also deliver to you, for distribution to the Underwriters, a sufficient number of additional conformed copies of each of the foregoing (but without exhibits) so that one copy of each may be distributed to each Underwriter, (ii) as promptly as possible deliver to you and send to the several Underwriters, at such office or offices as you may designate, as many copies of the Prospectus as you may reasonably request, and (iii) thereafter from time to time during the period in which a prospectus is required by law to be delivered by an Underwriter or dealer, likewise send to the Underwriters as many additional copies of the Prospectus and as many copies of any supplement to the Prospectus and of any amended prospectus, filed by the Company with the Commission, as you may reasonably request for the purposes contemplated by the Securities Act. The Registration Statement, the Prospectus and any amendments or supplements thereto furnished to you will be identical to the electronically transmitted copies thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

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(d) If at any time during the period in which a prospectus is required by law to be delivered by an Underwriter or dealer any event relating to or affecting the Company, or of which the Company shall be advised in writing by you, shall occur as a result of which it is necessary, in the opinion of counsel for the Company or of counsel for the Underwriters, to supplement or amend the Prospectus in order to make the Prospectus not misleading in the light of the circumstances existing at the time it is delivered to a purchaser of the Stock, the Company will forthwith prepare and file with the Commission a supplement to the Prospectus or an amended prospectus so that the Prospectus as so supplemented or amended will not contain any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing at the time such Prospectus is delivered to such purchaser, not misleading. If, after the initial public offering of the Stock by the Underwriters and during such period, the Underwriters shall propose to vary the terms of offering thereof by reason of changes in general market conditions or otherwise, you will advise the Company in writing of the proposed variation, and, if in the opinion either of counsel for the Company or of counsel for the Underwriters such proposed variation requires that the Prospectus be supplemented or amended, the Company will forthwith prepare and file with the Commission a supplement to the Prospectus or an amended prospectus setting forth such variation. The Company authorizes the Underwriters and all dealers to whom any of the Stock may be sold by the several Underwriters to use the Prospectus, as from time to time amended or supplemented, in connection with the sale of the Stock in accordance with the applicable provisions of the Securities Act and the applicable rules and regulations thereunder for such period.

(e) Prior to the filing thereof with the Commission, the Company will submit to you, for your information, a copy of any post-effective amendment to the Registration Statement and any supplement to the Prospectus or any amended prospectus proposed to be filed.

(f) The Company will cooperate, when and as requested by you, in the qualification of the Stock for offer and sale under the securities or blue sky laws of such jurisdictions as you may designate and, during the period in which a prospectus is required by law to be delivered by an Underwriter or dealer, in keeping such qualifications in good standing under said securities or blue sky laws; provided, however, that the Company shall not be obligated to file any general consent to service of process or to qualify as a foreign corporation in any jurisdiction in which it is not so qualified. The Company will, from time to time, prepare and file such statements, reports, and other documents as are or may be required to continue such qualifications in effect for so long a period as you may reasonably request for distribution of the Stock.

(g) During a period of five years commencing with the date hereof, the Company will furnish to you, and to each Underwriter who may so request in

writing, copies of all periodic and special reports, documents or statements furnished to stockholders of the Company or filed with the Commission (including the Report on Form SR required by Rule 463 of the Commission under the Securities Act). If applicable, any such document furnished to you will be identical to the electronically transmitted copy thereof filed with the Commission pursuant to EDGAR, except to the extent permitted by Regulation S-T.

(h) Not later than the 45th day following the end of the fiscal quarter first occurring after the first anniversary of the Effective Date, the Company will make generally available to its

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stockholders an earnings statement in accordance with Section 11(a) of the Securities Act and Rule 158 thereunder.

(i) The Company agrees to pay all costs and expenses incident to the performance of the obligations of the Company under this Agreement, including all costs and expenses incident to (i) the preparation, printing and filing with the Commission and the National Association of Securities Dealers, Inc. ("NASD") of the Registration Statement, any Preliminary Prospectus and the Prospectus, (ii) the furnishing to the Underwriters of copies of any Preliminary Prospectus and of the several documents required by paragraph (c) of this Section 6 to be so furnished, (iii) the photocopying of this Agreement and related documents delivered to the Underwriters, (iv) the preparation, printing and filing of all supplements and amendments to the Prospectus referred to in paragraph (d) of this Section 6, (v) the furnishing to you and the Underwriters of the reports and information referred to in paragraph (g) of this Section 6 and (vi) the printing and issuance of stock certificates, including the transfer agent's fees.

(j) The Company agrees to reimburse you, for the account of the several Underwriters, for fees and related disbursements (including counsel fees and disbursements and cost of printing memoranda for the Underwriters) paid by or for the account of the Underwriters or their counsel in qualifying the Stock under state securities or blue sky laws and in the review of the offering by the NASD.

(k) The Company hereby agrees that, without the prior written consent of Hambrecht & Quist LLC on behalf of the Underwriters, the Company will not, for a period of 180 days following the date of the Prospectus, (i) sell, offer, contract to sell, make any short sale, pledge, transfer or otherwise dispose of, directly or indirectly, any shares of Common Stock (including any stock appreciation right or similar right with an exercise or conversion privilege at a price related to, or derived from, the market price of the Common Stock) or any securities convertible into or exchangeable or exercisable for shares of Common Stock, (ii) engage in any hedging transaction with respect to any shares of Common Stock that may have an impact on the market price of the Common Stock, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise, or (iii) file a Registration Statement on Form S-8 with respect to shares issued pursuant to stock options. The prohibition in clause (i) of the foregoing sentence shall not apply to (A) the sale of Stock to be sold to the Underwriters pursuant to this Agreement, (B) the issuance of shares of Common Stock by the Company upon the exercise of Employee Options and any other options granted under the stock option plans of the Company and (C) the grant of options to purchase Common Stock under the Option Plans.

(l) If at any time during the 25-day period after the Registration Statement becomes effective any rumor, publication or event relating to or affecting the Company shall occur as a result of which in your reasonable opinion the market price for the Stock has been or is likely to be materially affected (regardless of whether such rumor, publication or event necessitates a supplement to or amendment of the Prospectus), the Company will, after written notice from you advising the Company to the effect set forth above, forthwith prepare, consult with you concerning the substance of, and disseminate a press release or other public statement, reasonably satisfactory to you, responding to or commenting on such rumor, publication or event.

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(m) The Company will in the future conduct its affairs in such a manner to ensure that the Company will not be an "investment company" or a company "controlled" by an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations thereunder.

7. INDEMNIFICATION AND CONTRIBUTION.

(a) The Company agrees to indemnify and hold harmless each Underwriter and each person (including each partner or officer thereof) who controls any Underwriter within the meaning of Section 15 of the Securities Act from and against any and all losses, claims, damages or liabilities, joint or several, to which such indemnified parties or any of them may become subject under the Securities Act, the Securities Exchange Act of 1934, as amended (herein called the Exchange Act), or the common law or otherwise, and the Company agrees to reimburse each such Underwriter and controlling person for any legal or other expenses (including, except as otherwise hereinafter provided, reasonable fees and disbursements of a single counsel for all indemnified parties) incurred by the respective indemnified parties in connection with defending against any such losses, claims, damages or liabilities or in connection with any investigation or inquiry of, or other proceeding which may be brought against, the respective indemnified parties, in each case arising out of or based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (including the Prospectus as part thereof and any Rule 462(b) registration statement) or any post-effective amendment thereto (including any Rule 462(b) registration statement) or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, or (ii) any untrue statement or alleged untrue statement of a material fact contained in any Preliminary Prospectus or the Prospectus (as amended or as supplemented if the Company shall have filed with the Commission any amendment thereof or supplement thereto) or the omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided, however, that (1) the indemnity agreements of the Company contained in this paragraph (a) shall not apply to any such losses, claims, damages, liabilities or expenses if such statement or omission was made in reliance upon and in conformity with information furnished as herein stated or otherwise furnished in writing to the Company by or on behalf of any Underwriter for use in any Preliminary Prospectus or the Registration Statement or the Prospectus or any such amendment thereof or supplement thereto and (2) the indemnity agreement contained in this paragraph (a) with respect to any Preliminary Prospectus shall not inure to the benefit of any Underwriter from whom the person asserting any such losses, claims, damages, liabilities or expenses purchased the Stock which is the subject thereof (or to the benefit of any person controlling such Underwriter) if at or prior to the written confirmation of the sale of such Stock a copy of the Prospectus (or the Prospectus as amended or supplemented) was not sent or delivered to such person and the untrue statement or omission of a material fact contained in such Preliminary Prospectus was corrected in the Prospectus (or the Prospectus as amended or supplemented) unless the failure is the result of noncompliance by the Company with paragraph (c) of Section 6 hereof. The indemnity agreements of the Company contained in this paragraph (a) and the representations and warranties of the Company contained in Section 2 hereof shall remain operative and in full force and effect regardless of any investigation made by

or on behalf of any indemnified party and shall survive the delivery of and payment for the Stock.

(b) Each Underwriter severally agrees to indemnify and hold harmless the Company, each of its officers who signs the Registration Statement on his own behalf or pursuant to a power of attorney, each of its directors, each other Underwriter and each person (including each partner or officer thereof) who controls the Company or any such other Underwriter within the meaning of Section 15 of the Securities Act from and against any and all losses, claims, damages or liabilities, joint or several, to which such indemnified parties or any of them may become subject under the Securities Act, the Exchange Act, or the common law or otherwise and to reimburse each of them for any legal or other expenses (including, except as otherwise hereinafter provided, reasonable fees and disbursements of a single counsel for all indemnified parties) incurred by the respective indemnified parties in connection with defending against any such

losses, claims, damages or liabilities or in connection with any investigation or inquiry of, or other proceeding which may be brought against, the respective indemnified parties, in each case arising out of or based upon (i) any untrue statement or alleged untrue statement of a material fact contained in the Registration Statement (including the Prospectus as part thereof and any Rule 462(b) registration statement) or any post-effective amendment thereto (including any Rule 462(b) registration statement) or the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading or (ii) any untrue statement or alleged untrue statement of a material fact contained in the Prospectus (as amended or as supplemented if the Company shall have filed with the Commission any amendment thereof or supplement thereto) or the omission or alleged omission to state therein a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading, if such statement or omission was made in reliance upon and in conformity with information furnished as herein stated or otherwise furnished in writing to the Company by or on behalf of such indemnifying Underwriter for use in the Registration Statement or the Prospectus or any such amendment thereof or supplement thereto. The indemnity agreement of each Underwriter contained in this paragraph (b) shall remain operative and in full force and effect regardless of any investigation made by or on behalf of any indemnified party and shall survive the delivery of and payment for the Stock.

(c) Each party indemnified under the provision of paragraphs (a) and (b) of this Section 7 agrees that, upon the service of a summons or other initial legal process upon it in any action or suit instituted against it or upon its receipt of written notification of the commencement of any investigation or inquiry of, or proceeding against, it in respect of which indemnity may be sought on account of any indemnity agreement contained in such paragraphs, it will promptly give written notice (herein called the Notice) of such service or notification to the party or parties from whom indemnification may be sought hereunder. No indemnification provided for in such paragraphs shall be available to any party who shall fail so to give the Notice if the party to whom such Notice was not given was unaware of the action, suit, investigation, inquiry or proceeding to which the Notice would have related and was prejudiced by the failure to give the Notice, but the omission so to notify such indemnifying party or parties of any such service or notification shall not relieve such indemnifying party or parties from any liability which it or they may have to the indemnified party for contribution or otherwise than on account of such

indemnity agreement. Any indemnifying party shall be entitled at its own expense to participate in the defense of any action, suit or proceeding against, or investigation or inquiry of, an indemnified party. Any indemnifying party shall be entitled, if it so elects within a reasonable time after receipt of the Notice by giving written notice (herein called the Notice of Defense) to the indemnified party, to assume (alone or in conjunction with any other indemnifying party or parties) the entire defense of such action, suit, investigation, inquiry or proceeding, in which event such defense shall be conducted, at the expense of the indemnifying party or parties, by counsel chosen by such indemnifying party or parties and reasonably satisfactory to the indemnified party or parties; provided, however, that (i) if the indemnified party or parties reasonably determine that there may be a conflict between the positions of the indemnifying party or parties and of the indemnified party or parties in conducting the defense of such action, suit, investigation, inquiry or proceeding or that there may be legal defenses available to such indemnified party or parties different from or in addition to those available to the indemnifying party or parties, then counsel for the indemnified party or parties shall be entitled to conduct the defense to the extent reasonably determined by such counsel to be necessary to protect the interests of the indemnified party or parties and (ii) in any event the indemnified party or parties shall be entitled to have counsel chosen by such indemnified party or parties participate in, but not conduct, the defense. If, within a reasonable time after receipt of the Notice, an indemnifying party gives a Notice of Defense and the counsel chosen by the indemnifying party or parties is reasonably satisfactory to the indemnified party or parties (it being agreed that Palmer & Dodge LLP is satisfactory), the indemnifying party or parties will not be liable under paragraphs (a) through (c) of this Section 7 for any legal or other expenses subsequently incurred by the indemnified party or parties in connection with the defense of the action, suit, investigation, inquiry or proceeding, except that

(A) the indemnifying party or parties shall bear the, legal and other expenses incurred in connection with the conduct of the defense as referred to in clause (i) of the proviso to the preceding sentence and (B) the indemnifying party or parties shall bear such other expenses as it or they have authorized to be incurred by the indemnified party or parties. If, within a reasonable time after receipt of the Notice, no Notice of Defense has been given, the indemnifying party or parties shall be responsible for any legal or other expenses incurred by the indemnified party or parties in connection with the defense of the action, suit, investigation, inquiry or proceeding.

(d) If the indemnification provided for in this Section 7 is unavailable or insufficient to hold harmless an indemnified party under paragraph (a) or (b) of this Section 7, then each 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 the losses, claims, damages or liabilities referred to in paragraph (a) or (b) of this Section 7 (i) in such proportion as is appropriate to reflect the relative benefits received by each indemnifying party from the offering of the Stock or (ii) if the allocation provided by clause (i) above is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to in clause (i) above but also the relative fault of each indemnifying party in connection with the statements or omissions that resulted in such losses, claims, damages or liabilities, or actions in respect thereof, as well as any other relevant equitable considerations. The relative benefits received by the Company on the one hand and the Underwriters on the other shall be deemed to be in the same respective proportions as the total net proceeds from the offering of the Stock received by the Company and the total underwriting discount received by the Underwriters, as

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set forth in the table on the cover page of the Prospectus, bear to the aggregate public offering price of the Stock. Relative fault 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 each indemnifying party and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such untrue statement or omission.

The parties agree that it would not be just and equitable if contributions pursuant to this paragraph (d) were to be determined by pro rata allocation (even if the Underwriters were treated as one entity for such purpose) or by any other method of allocation which does not take into account the equitable considerations referred to in the first sentence of this paragraph (d). The amount paid by an indemnified party as a result of the losses, claims, damages or liabilities, or actions in respect thereof, referred to in the first sentence of this paragraph (d) shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in connection with investigating, preparing to defend or defending against any action or claim which is the subject of this paragraph (d). Notwithstanding the provisions of this paragraph (d), no Underwriter shall be required to contribute any amount in excess of the underwriting discount applicable to the Stock purchased by such Underwriter. 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. The Underwriters' obligations in this paragraph (d) to contribute are several in proportion to their respective underwriting obligations and not joint.

Each party entitled to contribution agrees that upon the service of a summons or other initial legal process upon it in any action instituted against it in respect of which contribution may be sought, it will promptly give written notice of such service to the party or parties from whom contribution may be sought, but the omission so to notify such party or parties of any such service shall not relieve the party from whom contribution may be sought from any obligation it may have hereunder or otherwise (except as specifically provided in paragraph (c) of this Section 7).

(e) The Company will not, without the prior written consent of each Underwriter, settle or compromise or consent to the entry of any judgment in any pending or threatened claim, action, suit or proceeding in respect of which indemnification may be sought hereunder (whether or not such Underwriter or any

person who controls such Underwriter within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act is a party to such claim, action, suit or proceeding) unless such settlement compromise or consent includes an unconditional release of such Underwriter and each such controlling person from all liability arising out of such claim, action, suit or proceeding.

8. TERMINATION. This Agreement may be terminated by you at any time prior to the Closing Date by giving written notice to the Company if after the date of this Agreement trading in the Common Stock shall have been suspended, or if there shall have occurred (i) the engagement in hostilities or an escalation of major hostilities by the United States or the declaration of war or a national emergency by the United States on or after the date hereof, (ii) any outbreak of hostilities or other national or international calamity or crisis or change in

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economic or political conditions if the effect of such outbreak, calamity, crisis or change in economic or political conditions in the financial markets of the United States would, in the Underwriters' reasonable judgment, make the offering or delivery of the Stock impracticable, (III) suspension of trading in securities generally or a material adverse decline in value of securities generally on the New York Stock Exchange, the American Stock Exchange, or The Nasdaq Stock Market or limitations on prices (other than limitations on hours or numbers of days of trading) for securities on either such exchange or system, (iv) the enactment, publication, decree or other promulgation of any federal or state statute, regulation, rule or order of, or commencement of any proceeding or investigation by, any court, legislative body, agency or other governmental authority which in the Underwriters' reasonable opinion materially and adversely affects or will materially or adversely affect the business or operations of the Company, (v) declaration of a banking moratorium by either federal or New York State authorities or (vi) the taking of any action by any federal, state or local government or agency in respect of its monetary or fiscal affairs which in the Underwriters' reasonable opinion has a material adverse effect on the securities markets in the United States. If this Agreement shall be terminated pursuant to this Section 8, there shall be no liability of the Company to the Underwriters and no liability of the Underwriters to the Company; provided, however, that in the event of any such termination the Company agrees to indemnify and hold harmless the Underwriters from all actual, accountable, out-of-pocket costs and expenses incident to the performance of the obligations of the Company under this Agreement, including all actual, accountable, out-of-pocket costs and expenses referred to in paragraphs (i) and (j) of Section 6 hereof.

9. CONDITIONS OF UNDERWRITERS' OBLIGATIONS. The obligations of the several Underwriters to purchase and pay for the Stock shall be subject to the performance by the Company of all their respective obligations to be performed hereunder at or prior to the Closing Date or any later date on which Option Stock is to be purchased, as the case may be, and to the following further conditions:

(a) The Registration Statement shall have become effective; and no stop order suspending the effectiveness thereof shall have been issued and no proceedings therefor shall be pending or threatened by the Commission.

(b) The legality and sufficiency of the sale of the Stock hereunder and the validity and form of the certificates representing the Stock, all corporate proceedings and other legal matters incident to the foregoing, and the form of the Registration Statement and of the Prospectus (except as to the financial statements contained therein), shall have been approved at or prior to the Closing Date by Testa, Hurwitz & Thibeault, LLP, counsel for the Underwriters.

(c) You shall have received from Palmer & Dodge LLP, counsel for the Company, an opinion, addressed to the Underwriters and dated the Closing Date, covering the matters set forth in Annex A hereto, and if Option Stock is purchased at any date after the Closing Date, additional opinions from such counsel, addressed to the Underwriters and dated such later date, confirming that the statements expressed as of the Closing Date in such opinion remain valid as of such later date.

(d) You shall have received from Pennie & Edmonds, patent counsel for the Company, an opinion, addressed to the Underwriters and dated the Closing Date, to the effect that they serve a patent counsel to the Company with respect to the issued patents, pending and contemplated patent applications, trade secrets and the proprietary technology that the Company owns or has rights to, and covering the matters set forth in Annex B hereto, and if Option Stock is purchased at any date after the Closing Date, additional opinions from such counsel, addressed to the Underwriters and dated such later date, confirming that the statements expressed as of the Closing Date, in such opinion remain valid as of such later date.

(e) You shall be satisfied that (i) as of the Effective Date, the statements made in the Registration Statement and the Prospectus were true and correct in all material respects and neither the Registration Statement nor the Prospectus omitted to state any material fact required to be stated therein or necessary in order to make the statements therein, respectively, not misleading, (ii) since the Effective Date, no event has occurred which should have been set forth in a supplement or amendment to the Prospectus which has not been set forth in such a supplement or amendment, (iii) since the respective dates as of which information is given in the Registration Statement in the form in which it originally became effective and the Prospectus contained therein, there has not been any material adverse change or any development involving a prospective material adverse change in or affecting the business, properties, financial condition or results of operations of the Company, whether or not arising from transactions in the ordinary course of business, and, since such dates, except in the ordinary course of business, the Company has not entered into any material transaction not referred to in the Registration Statement in the form in which it originally became effective and the Prospectus contained therein, (iv) the Company has no material contingent obligations which are not disclosed in the Registration Statement and the Prospectus, (v) there are no pending or threatened legal proceedings to which the Company is a party or of which property of the Company is the subject which are material and which are not disclosed in the Registration Statement and the Prospectus, (vi) there are no franchises, contracts, leases or other documents which are required to be filed as exhibits to the Registration Statement which have not been filed as required, (vii) the representations and warranties of the Company herein are true and correct in all material respects as of the Closing Date or any later date on which Option Stock is to be purchased, as the case may be, and (viii) there has not been any material change in the market for securities in general or in political, financial or economic conditions from those reasonably foreseeable that would render it impracticable in your reasonable judgment to make a public offering of the Stock, or a material adverse change in market levels for securities in general (or those of companies such as the Company in particular) or financial or economic conditions which render it inadvisable to proceed.

(f) You shall have received on the Closing Date and on any later date on which Option Stock is purchased a certificate, dated the Closing Date or such later date, as the case may be, and signed by the Chief Executive Officer, President and the Chief Financial Officer of the Company, stating that the respective signers of said certificate have carefully examined the Registration Statement in the form in which it originally became effective and the Prospectus contained therein and any supplements or amendments thereto, and that the statements included in clauses (i) through (vii) of paragraph (e) of this Section 9 are true and correct.

(g) You shall have received from Price Waterhouse LLP a letter or letters, addressed to the Underwriters and dated the Closing Date and any later date on which Option Stock is purchased, confirming that they are independent public accountants with respect to the Company within the meaning of the Securities Act and the applicable published rules and regulations thereunder and based upon the procedures described in their letter delivered to you concurrently with the execution of this Agreement (herein called the Original Letter), but carried out to a date not more than five business days prior to the Closing Date or such later date on which Option Stock is purchased (i) confirming, to the extent true, that the statements and conclusions set forth in the Original Letter are accurate as of the Closing Date or such later date, as the case may be, and (ii) setting forth any revisions and additions to the

statements and conclusions set forth in the Original Letter which are necessary to reflect any changes in the facts described in the Original Letter since the date of the Original Letter or to reflect the availability of more recent financial statements, data or information. The letters shall not disclose any change, or any development involving a prospective change, in or affecting the business or properties of the Company or any of its subsidiaries which, in your sole judgment makes it impractical or inadvisable to proceed with the public offering of the Stock or the purchase of the Option Stock as contemplated by the Prospectus.

(h) You shall have received from Price Waterhouse LLP a letter stating that their review of the Company's system of internal accounting controls, to the extent they deemed necessary in establishing the scope of their examination of the Company's financial statements as at December 31, 1996, did not disclose any weakness in internal controls that they considered to be material weaknesses.

(i) You shall have been furnished evidence in usual written or telegraphic form from the appropriate authorities of the several jurisdictions, or other evidence satisfactory to you, of the qualification referred to in paragraph (f) of Section 6 hereof.

(j) Prior to the Closing Date, the Stock to be issued and sold by the Company shall have been accepted for listing by The Nasdaq National Market upon official notice of issuance.

(k) On or prior to the Closing Date, you shall have received from all directors, officers, and beneficial holders of the outstanding capital stock of the Company, agreements, in form reasonably satisfactory to Hambrecht & Quist LLC, stating that without the prior written consent of Hambrecht & Quist LLC on behalf of the Underwriters, such person or entity will not, for a period of 180 days after the date of the Prospectus, (i) sell, offer, contract to sell, make any short sale, pledge, transfer or otherwise dispose of, directly or indirectly, any shares of Common Stock (including any stock appreciation right or similar right with an exercise or conversion privilege at a price related to, or derived from, the market price of the Common Stock) or any securities convertible into or exchangeable or exercisable for shares of Common Stock owned directly by the undersigned or with respect to which the undersigned has the power of disposition (including, without limitation, shares of Common Stock which the undersigned may be deemed to beneficially own in accordance with the rules and regulations promulgated under the Securities and Exchange Act of 1934, as amended), or (ii) engage in any hedging transaction with respect to any shares of Common Stock that may have an impact on the market price of the

Common Stock, whether any such transaction is to be settled by delivery of Common Stock or such other securities, in cash or otherwise.

All the agreements, opinions, certificates and letters mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if Testa, Hurwitz & Thibault, LLP, counsel for the Underwriters, shall be reasonably satisfied that they comply in form and scope.

In case any of the conditions specified in this Section 9 shall not be fulfilled, this Agreement may be terminated by you by giving notice to the Company. Any such termination shall be without liability of the Company to the Underwriters and without liability of the Underwriters to the Company; provided, however, that (i) in the event of such termination, the Company agrees to indemnify and hold harmless the Underwriters from all actual, accountable, out-of-pocket costs and expenses incident to the performance of the obligations of the Company under this Agreement, including all actual, accountable, out-of-pocket costs and expenses referred to in paragraphs (i) and (j) of Section 6 hereof, and (ii) if this Agreement is terminated by you because of any refusal, inability or failure on the part of the Company to perform any agreement herein, to fulfill any of the conditions herein, or to comply with any provision hereof other than by reason of a default by any of the Underwriters, the Company will reimburse the Underwriters severally upon demand for all actual, accountable, out-of-pocket expenses (including reasonable fees and disbursements of counsel) that shall have been incurred by them in connection with the transactions contemplated hereby.

the Company to deliver the Stock shall be subject to the conditions that (a) the Registration Statement shall have become effective and (b) no stop order suspending the effectiveness thereof shall be in effect and no proceedings therefor shall be pending or threatened by the Commission.

In case either of the conditions specified in this Section 10 shall not be fulfilled, this Agreement may be terminated by the Company by giving notice to you. Any such termination shall be without liability of the Company to the Underwriters and without liability of the Underwriters to the Company; provided, however, that in the event of any such termination the Company agrees to indemnify and hold harmless the Underwriters from all actual, accountable, out-of-pocket costs and expenses incident to the performance of the obligations of the Company under this Agreement including all actual, accountable, out-of-pocket costs and expenses referred to in paragraphs (i) and (j) of Section 6 hereof.

11. REIMBURSEMENT OF CERTAIN EXPENSES. In addition to their other obligations under Section 7 of this Agreement, the Company hereby agrees to reimburse on a quarterly basis the Underwriters for all reasonable legal and other expenses incurred in connection with investigating or defending any claim, action, investigation, inquiry or other proceeding arising out of or based upon any statement or omission, or any alleged statement or omission, described in paragraph (a) of Section 7 of this Agreement, notwithstanding the absence of a judicial determination as to the propriety and enforceability of the obligations under this Section 11 and the possibility that such payments might later be held to be improper; provided, however, that (i) to the extent any such payment is ultimately held to be improper, the persons receiving such

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payments shall promptly refund them and (ii) such persons shall provide to the Company, upon request, reasonable assurances of their ability to effect any refund, when and if due.

12. PERSONS ENTITLED TO BENEFIT OF AGREEMENT. This Agreement shall inure to the benefit of the Company and the several Underwriters and, with respect to the provisions of Section 7 hereof, the several parties (in addition to the Company and the several Underwriters) indemnified under the provisions of said Section 7, and their respective personal representatives, successors and assigns. Nothing in this Agreement is intended or shall be construed to give to any other person, firm or corporation any legal or equitable remedy or claim under or in respect of this Agreement or any provision herein contained. The term "successors and assigns" as herein used shall not include any purchaser, as such, of any of the Stock from any of the several Underwriters.

13. NOTICES. Except as otherwise provided herein, all communications hereunder shall be in writing or by telegraph and, if to the Underwriters, shall be mailed, telecopied or delivered to Hambrecht & Quist LLC, One Bush Street, San Francisco, California 94104; and if to the Company, shall be mailed, telecopied or delivered to it at its office, 200 Boston Avenue, Medford, MA 02155, Attention: Chief Executive Officer. All notices given by telecopy shall be promptly confirmed by letter.

14. MISCELLANEOUS. The reimbursement indemnification and contribution agreements contained in this Agreement and the representations, warranties and covenants in this Agreement shall remain in full force and effect regardless of (a) any termination of this Agreement, (b) any investigation made by or on behalf of any Underwriter or controlling person thereof, or by or on behalf of the Company or their respective directors or officers, and (c) delivery and payment for the Stock under this Agreement; provided, however, that if this Agreement is terminated prior to the Closing Date, the provisions of paragraphs (k) and (l) of Section 6 hereof shall be of no further force or effect.

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

This Agreement shall be governed by, and construed in accordance with, the laws of the State of California.

Please sign and return to the Company the enclosed duplicates of this letter, whereupon this letter will become a binding agreement among the Company and the several Underwriters in accordance with its terms.

Very Truly Yours,

ARQULE, INC.

By:

Eric B. Gordon
President and Chief Executive Officer

The foregoing Agreement is hereby confirmed and accepted as of the date first above written.

HAMBRECHT & QUIST LLC
OPPENHEIMER & CO., INC.
VECTOR SECURITIES INTERNATIONAL, INC.

By: Hambrecht & Quist LLC

By: -----
Managing Director

Acting on behalf of the several Underwriters, including themselves, named in Schedule I hereto.

SCHEDULE I
UNDERWRITERS

UNDERWRITERS -----	NUMBER OF SHARES OF UNDERWRITTEN STOCK TO BE PURCHASED -----
Hambrecht & Quist LLC.....	
Oppenheimer & Co., Inc.....	
Vector Securities International, Inc.....	
Total.....	----- 2,000,000

Counsel for the Company

1. The Company has been duly incorporated and is validly existing as a corporation in good standing under the laws of the State of Delaware and is duly qualified to do business and is in good standing as a foreign corporation in the Commonwealth of Massachusetts. The Company has all corporate power and authority necessary to own or hold its properties and conduct the business in which it is presently engaged.

2. The Company's authorized capitalization consists of 30,000,000 shares of Common Stock, \$.01 par value per share, and 1,000,000 shares of Preferred Stock, \$.01 par value per share. All of the issued and outstanding shares of capital stock of the Company have been, and the shares of the Stock being delivered on the date hereof, upon issuance and delivery and payment therefor in the manner described in the Underwriting Agreement, will be, duly and validly authorized and issued, fully paid and non-assessable with no personal liability attaching to the ownership thereof. The statements made in the Prospectus under the caption "Description of Capital Stock," insofar as they purport to constitute summaries of the terms of the Company's capital stock (including the Stock), constitute accurate summaries of the terms of such capital stock in all material respects and fairly present in all material respects the information called for with respect thereto by Item 202 of Regulation S-K promulgated by the Commission.

3. Upon the consummation of the initial public offering, there will be no preemptive or other rights to subscribe for or to purchase or rights of first refusal or participation with respect to any shares of Common Stock pursuant to the Company's charter or by-laws or any agreement or other instrument known to us. Except as described in the Prospectus and as provided in the Company charter and by-laws, there are no restrictions upon the voting or transfer of any shares of Common Stock pursuant to any agreement or other instrument known to us.

4. To our knowledge, but without inquiry into the dockets of any court, commission, regulatory body, administrative agency or other government body, and except as set forth in the Prospectus, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or to which any property or assets of the Company or any of its subsidiaries is subject which, if determined adversely to the Company or any of its subsidiaries, are reasonably likely to have a material adverse effect on the business or prospects of the Company and its subsidiaries taken as a whole and, to our knowledge, except as set forth in the Prospectus, no such proceedings are threatened by governmental authorities or by others.

5. The Registration Statement has been declared effective under the Securities Act and, to our knowledge, no stop order suspending the effectiveness of the Registration Statement has been issued and no proceeding for that purpose is pending or threatened by the Commission.

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6. The Registration Statement and the Prospectus and any further amendments or supplements thereto made by the Company prior to the date hereof (other than the financial statements, financial and statistical information, pro forma financial information and related schedules and notes thereto, as to which we express no opinion) comply as to form in all material respects with the requirements of the Securities Act and the Rules and Regulations. In passing upon the form of such documents, we have not independently verified and are not passing upon, and have assumed the correctness and completeness of, the statements made therein.

7. To our knowledge, there are no contracts or other documents that are required to be described in the Prospectus or filed as exhibits to the Registration Statement by the Securities Act or by the Rules and Regulations that have not been described or filed as exhibits to the Registration Statement.

8. The Company has full right, power, and authority to execute and deliver the Underwriting Agreement and to perform its obligations thereunder; and all corporate action required to be taken for the due and proper authorization, issuance, sale and delivery of the Common Stock to be sold by the Company under the Underwriting Agreement and the consummation of the transactions contemplated thereby to be effected by the Company have been duly and validly taken by the Company.

9. The Underwriting Agreement has been duly authorized, executed, and delivered by the Company.

10. The issuance and sale of the shares of Stock being delivered on the date hereof by the Company, the compliance by the Company with all of the provisions of the Underwriting Agreement and the consummation of the transactions contemplated thereby will not conflict with or result in a breach or violation of any of the terms or provisions of, or constitute a default, an event of default, or an event which, with notice or lapse of time or both, would constitute a default or event of default under, any indenture, mortgage, deed of trust, loan agreement, or other agreement or instrument filed as an exhibit to the Registration Statement, nor will such actions result in any violation of the provisions of the charter or by-laws of the Company or any material statute, order, rule or regulation or, to our knowledge, any judgment, order or decree of any court or governmental agency or body having jurisdiction over the Company or any of its properties or assets, except for such conflicts, breaches, violations and defaults as are not reasonably likely, individually or in the aggregate, to have (a) a material adverse effect on the business or prospects of the Company; or (b) any adverse effect on the consummation of the transactions contemplated by the Underwriting Agreement. Except for the registration of the Stock under the Securities Act, and such consents, approvals, authorizations, registrations, or qualifications as may be required under the Exchange Act and applicable state or foreign securities laws in connection with the purchase and distribution of the Stock by the underwriters thereof, no consent, approval, authorization or order of, or filing or registration with, any such court or governmental agency or body is required for the issuance and sale of the shares of Stock being delivered on the date hereof by the Company, the compliance by the Company with all of the provisions of the Underwriting Agreement or the consummation of the transactions contemplated thereby.

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11. To our knowledge, except as described under the caption "Shares Eligible for Future Sale -- Registration Rights" in the Preliminary Prospectus there are no contracts, agreements or understandings in effect on the date hereof between the Company and any person granting such person the right to require the Company to file a registration statement under the Securities Act with respect to any securities of the Company owned or to be owned by such person or to require the Company to include such securities in the Registration Statement or in any other registration statement filed by the Company under the Securities Act.

12. The Stock issued and sold by the Company will be accepted for listing by The Nasdaq National Market upon official notice of issuance of the shares by the Company to The Nasdaq National Market.

In connection with the preparation of the Registration Statement and the Prospectus, we have participated in conferences with officers and representatives of the Company and the independent accountants of the Company, at which conferences we have made inquiries of such persons and others and discussed the contents of the Registration Statement and the Prospectus. While the limitations inherent in the independent verification of factual matters and the character of determinations involved in the registration process are such that we are not passing upon and do not assume any responsibility for the accuracy, completeness or fairness of the statements contained in the Registration Statement or the Prospectus (except as specifically stated elsewhere in this opinion), nothing has come to our attention that has caused us to believe that the Registration Statement, as of its effective date, contained any untrue statement of a material fact or omitted to state any material fact required to be stated therein or necessary in order to make the statements therein not misleading (except that we express no view or opinion with respect to the financial statements and schedules or other financial and statistical data included in the Registration Statement), and nothing has come to our attention that has caused us to believe that the Prospectus, as of its date and as of the Closing Date, contained any untrue statement of a material fact or omitted to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading (except that we express no view or opinion with respect to the financial statements and schedules or other financial and statistical data included in the Prospectus).

In rendering the foregoing opinion we may rely as to questions of law not involving the laws of the United States, the Commonwealth of Massachusetts and the State of Delaware upon opinions of local counsel satisfactory in form and scope to counsel for the Underwriters. We are not, however, rendering any opinion with respect to patents, trademarks or federal or state regulation of healthcare products. Copies of any opinions so relied upon shall be delivered to the Representatives and to counsel for the Underwriters and the foregoing opinion shall also state that counsel knows of no reason the Underwriters are not entitled to rely upon the opinions of such local counsel. In addition, we may state that as to various questions of fact material to our opinion, we have relied upon the representations made in or pursuant to the Underwriting Agreement and upon certificates of officers of the Company.

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ANNEX B

Matters to be Covered in the Opinion of Patent Counsel for the Company

1. With respect to the U.S. patent and each of the U.S. patent applications referred to in the Registration Statement which are listed in Schedules ____, nothing has come to our attention which would cause us to believe that the sections of the Registration Statement entitled "Risk Factors - Dependence on Patents and Proprietary Rights"; and "Business - Patents and Proprietary Rights", at the time the Registration Statement became effective, contained any untrue statement of a material fact or omitted to state a material fact required to be stated therein or necessary to make the statements therein, not misleading.

2. With respect to the US. patent and each of the U.S. patent applications referred to in the Prospectus which are listed in Schedules ____, nothing has come to our attention which would cause us to believe that the sections of the Prospectus entitled "Risk Factors - Dependence on Patents and Proprietary Rights"; and "Business - Patents and Proprietary Rights", as of its date and as of the Closing Date, contain any untrue statement of material fact or omit to state a material fact necessary to make the statements therein, in light of the circumstances in which they were made, not misleading.

3. To the best of our knowledge, except as described in the Prospectus, and with the exception of proceedings before the U.S. Patent and Trademark Office, there are no pending, or threatened, legal or governmental proceedings relating to the U.S. patent or any of the U.S. patent applications listed in Schedules ____.

4. To the best of our knowledge, except as described in the Prospectus, the Company owns [the U.S. patent and each of the U.S. patent applications referred to in the Prospectus that are listed in Schedules ____].

5. To the best of our knowledge, the Company has not received any notice challenging the validity or enforceability of the U.S. patent listed in Schedule ____.

6. While there can be no guarantee that any particular patent application will issue as a patent, each of the U.S. patent applications referred to in the Prospectus which is listed in Schedules ____ was properly filed, and is being properly and diligently prosecuted, in the U.S. Patent and Trademark Office.

7. To the best of our knowledge, for each U.S. patent application listed in Schedules ____, all information known to Pennie & Edmonds, to date, to be "material to patentability", as defined in 37 C.F.R. [section] 1.56(b), has been disclosed, or will be disclosed pursuant to 37 C.F.R. [section] 1.97, to the U.S. Patent and Trademark Office.

8. To the best of our knowledge, no claim, action, suit or proceeding is presently pending or threatened against the Company relating to the potential infringement of, or conflict

with, any patents of others. We have no knowledge of any facts which would form a basis for the belief that there is any infringement by others of the Company's U.S. patent.

AMENDED AND RESTATED
 CERTIFICATE OF INCORPORATION
 OF
 ARQULE, INC.

I, Allan R. Ferguson, Chairman of the Board of ArQule, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, do hereby certify as follows:

1. The original Certificate of Incorporation of ArQule, Inc. (the "Company") was filed in the Office of the Secretary of State of the State of Delaware on December 21, 1993 under the name "Arqule, Inc." (which Certificate was corrected by a Certificate of Correction filed on December 30, 1993 under the name "ArQule, Inc."), and was amended on October 27, 1994.

2. On November 1, 1995, in the manner prescribed by Sections 242 and 245 of the General Corporation Law of the State of Delaware, this Amended and Restated Certificate of Incorporation was duly adopted by written consent of the Board of Directors and stockholders, respectively, of the Company pursuant to Sections 141(f) and 228 of the General Corporation Law of the State of Delaware.

3. The text of the Certificate of Incorporation of the Company, as amended and restated herein, is as follows:

FIRST. The name of the corporation is ArQule, Inc. (the "Company").

SECOND. The address of the registered office of the Company in the State of Delaware is 1209 Orange Street, in the City of Wilmington, New Castle County, Delaware 19801. The name of its registered agent at such address is The Corporation Trust Company.

THIRD. The nature of the business or purposes to be conducted or promoted by the Company are to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

FOURTH. The total number of shares of stock that the Company shall have the authority to issue is (i) twenty million (20,000,000) shares of common stock, \$.01 par value

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per share (the "Common Stock"), and (ii) fifteen million (15,000,000) shares of preferred stock, \$.01 par value per share (the "Preferred Stock"), of which ten million five hundred eleven thousand (10,511,000) shares have been designated Series A Convertible Preferred Stock (the "Series A Preferred Stock") and one million eight hundred thousand (1,800,000) shares have been designated Series B Convertible Preferred Stock (the "Series B Preferred Stock").

A description of the respective classes of stock and a statement of the designations, preferences, voting powers, and relative, participating, optional or other special rights and privileges and the qualifications, limitations and restrictions of the Series A Preferred Stock, Series B Preferred Stock and Common Stock are as follows:

A. PREFERRED STOCK

The terms, designations, preferences and privileges of the Preferred Stock are as follows:

Section 1. Dividends.

1.1. Dividends on Preferred Stock. In each fiscal year of the Company, the holders of shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive on a parity basis if, when and as declared by the Board of Directors of the Company out of the funds legally available for that purpose and before any cash dividends shall be declared and paid upon or set aside for the Common Stock in such fiscal year, dividends payable in cash in an

amount per share for such fiscal year equal to \$.07 and \$.27 per share, respectively. The right to such dividends shall not be cumulative, and no right shall accrue to holders of Series A Preferred Stock or Series B Preferred Stock by reason of the fact that dividends on such shares are not declared or paid in any prior years. Unless full dividends on the Series A Preferred Stock and the Series B Preferred Stock for the then current dividend period shall have been paid or declared and a sum sufficient for the payment thereof set apart, no dividends (other than a dividend payable solely in shares of Common Stock) shall be paid or declared, and no distribution shall be made, on any Common Stock.

1.2. Additional Dividends. In addition to the dividends described in Section 1.1 above, the holders of shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive a dividend (determined on the basis of the number of shares of Common Stock into which a share of Series A Preferred Stock or Series B Preferred Stock is then convertible) equivalent to any dividend paid on Common Stock.

Section 2. Liquidation Preference.

2.1. Series A Preferred Stock. In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of Series A Preferred

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Stock shall be entitled to receive, prior and in preference to any distribution of the assets of the Company to the holders of Series B Preferred Stock and the holders of Common Stock by reason of their ownership thereof, an amount equal to the sum of (i) \$.89 for each outstanding share of Series A Preferred Stock (the "Original Series A Issue Price") and (ii) all declared but unpaid dividends on each such share to and including the date full payment as provided herein shall be tendered to such holders of Series A Preferred Stock. If upon the occurrence of any such event, the assets and funds available for distribution among the holders of the Series A Preferred Stock shall be insufficient to permit the payment to such holders of the full amount of the aforesaid preferential payment, then all of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Series A Preferred Stock in proportion to the amount of such stock owned by each such holder.

2.2. Series B Preferred Stock. In the event of any liquidation, dissolution or winding up of the Company, either voluntary or involuntary, the holders of Series B Preferred Stock shall be entitled to receive, after the distributions required by Section 2.1 have been completed, but prior and in preference to any distribution of any of the assets of the Company to the holders of Common Stock by reason of their ownership thereof, an amount equal to the sum of (i) \$3.888 for each outstanding share of Series B Preferred Stock (the "Original Series B Issue Price") and (ii) all declared but unpaid dividends on each such share to and including the date full payment as provided herein shall be tendered to such holders of Series B Preferred Stock. If upon the occurrence of any such event, the assets and funds available for distribution among the holders of the Series B Preferred Stock shall be insufficient to permit the payment to such holders of the full amount of aforesaid preferential payment, then all of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Series B Preferred Stock in proportion to the amount of such stock owned by each such holder.

2.3. Remaining Assets. After the distributions required by Sections 2.1 and 2.2 have been completed, the remaining assets of the Company available for distribution to stockholders shall be distributed among the holders of Common Stock pro rata based on the number of shares of Common Stock held by each.

2.4. Merger, Consolidation, Sale of Assets. For purposes of this Section 2, a liquidation, dissolution or winding up the Company shall be deemed to be occasioned by, or to include, (i) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any transfer of more than 50% of the voting power of the Company, and any reorganization, merger or consolidation but excluding any merger effected exclusively for the purpose of changing the domicile of the Company); or (ii) a sale of all or substantially all of the

assets of the Company; unless (i) the holders of at least a majority of the then outstanding shares of Preferred Stock elect to have such events not deemed to be a liquidation, dissolution or winding up of the Company by giving written notice thereof to the Company at least 15 days before the effective date of such event (in which case, the provisions of Subsection 3.9 below shall apply), or (ii) the

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Company's stockholders of record as constituted immediately prior to such acquisition or sale will, immediately after such acquisition or sale (by virtue of securities issued as consideration for the Company's acquisition or sale or otherwise) hold at least 50% of the voting power of the surviving or acquiring entity. In any of such events, if the consideration received by the Company is other than cash, its value will be deemed to be its fair market value, as determined in good faith by the Board of Directors of the Company.

Section 3. Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

3.1. Right to Convert. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date of issuance of such share, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Original Series Issue Price (as defined below) by the Conversion Price (as defined below) for such series of Preferred Stock, determined as hereinafter provided, in effect on the date the certificate is surrendered for conversion. The term "Original Series Issue Price" shall mean (i) in the case of the Series A Preferred Stock, the Original Series A Issue Price and (ii) in the case of the Series B Preferred Stock, the Original Series B Issue Price. The term "Conversion Price" shall mean, (i) in the case of the Series A Preferred Stock, \$.89 per share and (ii) in the case of the Series B Preferred Stock, \$3.888 per share; provided, however, that the Conversion Price for each such series shall be subject to adjustment as set forth below.

3.2. Automatic Conversion. Except as otherwise provided in Section 3.3, each share of Preferred Stock shall automatically be converted into shares of Common Stock at the Conversion Price immediately upon the consummation by the Company of a sale of its Common Stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended, the public offering price of which is not less than \$5.00 per share of Common Stock (as adjusted to reflect subsequent stock dividends, stock splits or recapitalizations) and which results in an aggregate price to the public of not less than \$10,000,000.

3.3. Mechanics of Conversion. Any holder of Preferred Stock shall exercise its right to convert shares of Preferred Stock into shares of Common Stock, by giving written notice that the holder elects to convert a stated number of shares of Preferred Stock into Common Stock and by surrender of a certificate or certificates for the shares so to be converted, at the office of the Company or of any transfer agent for the Preferred Stock, and shall give written notice to the Company of the name or names in which the certificate or certificates for shares of Common Stock are to be issued. The Company shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to

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have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock as of such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act of 1933, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which

event the person(s) entitled to receive the Common Stock upon conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities.

3.4. Adjustments to Conversion Price for Diluting Issues.

(a) Special Definitions. For purposes of this Subsection 3.4, the following definitions shall apply:

(i) "Option" shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities, excluding options to acquire shares described in Section 3.4(a)(iv)(C) below.

(ii) "Original Issue Date" shall mean the date on which a share of Series B Preferred Stock was first issued.

(iii) "Convertible Securities" shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Common Stock.

(iv) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued (or, pursuant to Subsection 3.4(c) below, deemed to be issued) by the Company after the Original Issue Date, other than shares of Common Stock issued or issuable:

- (A) upon conversion of shares of Series A Preferred Stock or Series B Preferred Stock;
- (B) as a dividend or distribution on Series A Preferred Stock and Series B Preferred Stock;
- (C) to employees, consultants or scientific advisors of the Company or of its subsidiaries;
- (D) in connection with any transaction with any other entity in which such shares are issued or issuable,

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in whole or in part, for (1) present or future rights to the Company's technology and/or (2) present or future research, development or exploitation of the Company's technology;

- (E) by reason of a dividend or distribution covered by Subsection 3.6 hereof, a stock split or subdivision of shares of Common Stock covered by Subsection 3.5 hereof, or by reason of a dividend, stock split, subdivision or other distribution on shares of Common Stock excluded from the definition of Additional Shares of Common Stock by the foregoing clauses (A), (B), (C) and (D) or this clause (E); or
- (F) upon the exercise of options excluded from the definition of "Option" in Subsection 3.4(a)(i).

(b) No Adjustment of Conversion Price. No adjustment in the number of shares of Common Stock into which the Series A Preferred Stock or Series B Preferred Stock is convertible shall be made, by adjustment in the Conversion Price thereof: (i) unless the consideration per share (determined pursuant to Subsection 3.4(e)) for an Additional Share of Common Stock issued or deemed to be issued by the Company is less than the Conversion Price in effect on the date of, and immediately prior to, the issue of such Additional Shares, or (ii) if prior to such issuance, the Company receives written notice from the

holders of at least a majority of the then outstanding shares of Series A Preferred Stock and Series B Preferred Stock, considered separately, as the case may be, agreeing that no such adjustment in the Conversion Price shall be made as the result of the issuance of Additional Shares of Common Stock.

(c) Issue of Options and Convertible Securities Deemed Issue of Additional Shares of Common Stock.

If the Company at any time or from time to time after the Original Issue Date shall issue any Options or Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Common Stock (as set forth in the instrument relating thereto without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or, in the case of Convertible Securities or Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that Additional Shares of Common Stock shall not be

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deemed to have been issued unless the consideration per share (determined pursuant to Subsection 3.4(e)) of such Additional Shares of Common Stock would be less than the Conversion Price in effect on the date of and immediately prior to such issue, or such record date, as the case may be, and provided further that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(i) No further adjustment in the Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities;

(ii) If such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any increase in the consideration payable to the Company, or decrease in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the Conversion Price computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such increase or decrease becoming effective, be recomputed to reflect such increase or decrease insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

(iii) No readjustment pursuant to clause (ii) above shall have the effect of increasing the Conversion Price to an amount which exceeds the lower of (A) the Conversion Price immediately prior to the adjustment effected upon the original issue of Options or Convertible Securities (or upon the occurrence of a record date with respect thereto) pursuant to the provisions hereof, or (B) the Conversion Price that would have resulted from any issuance of Additional Shares of Common Stock between the original adjustment date and such readjustment date;

(iv) Upon the expiration or termination of any unexercised Option, the Conversion Price shall be readjusted to the Conversion Price which would have been in effect at the time of such expiration or termination had such Option never been issued (but including the recalculation of any intervening adjustments), and the Additional Shares of Common Stock deemed issued as the result of the original issue of such Option shall not be deemed issued for the purposes of any subsequent adjustment of the Conversion Price; and

(v) In the event of any change in the number of shares of Common Stock issuable upon the exercise, conversion or exchange of any Option or Convertible Security, including, but not limited to, a change resulting from the antidilution provisions thereof, the Conversion Price then in effect shall forthwith be readjusted to such Conversion Price as would have obtained had the adjustment which was made upon the issuance of such Option or Convertible Security (prior to such change) been made upon the basis of such change, but no further adjustment shall be made for the actual issuance of Common Stock upon the exercise or conversion of any such Option or Convertible Security.

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(d) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common Stock.

In the event the Company shall at any time after the Original Issue Date issue Additional Shares of Common Stock (including Additional Shares of Common Stock deemed to be issued pursuant to Subsection 3.4(c), but excluding shares issued as a dividend or distribution as provided in Subsection 3.6 or upon a stock split or combination as provided in Subsection 3.5), without consideration or for a consideration per share less than the Conversion Price in effect on the date of and immediately prior to such issue, then and in such event, such Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) equal to a fraction, (A) the numerator of which shall be (1) the Conversion Price in effect immediately prior to such issue multiplied by the number of shares of Common Stock deemed to be outstanding immediately prior to such issue plus (2) the average price per share received by the Company upon such issue multiplied by the number of shares of Common Stock issued or deemed to have been issued in the subject transaction; and (B) the denominator of which shall be the number of shares of Common Stock deemed to be outstanding immediately prior to such issue plus the number of shares of Common Stock issued or deemed to have been issued in the subject transaction; provided that, for the purpose of this Subsection 3.4(d), all shares of Common Stock issuable upon conversion of shares of Series A Preferred Stock and Series B Preferred Stock outstanding immediately prior to such issue shall be deemed to be outstanding, and immediately after any Additional Shares of Common Stock are deemed issued pursuant to Subsection 3.4(c) (other than shares excluded from the definition of "Additional Shares of Common Stock" by virtue of clause (E) of Subsection 3.4(a)(iv)), such Additional Shares of Common Stock shall be deemed to be outstanding.

(e) Determination of Consideration. For purposes of this Subsection 3.4, the consideration received by the Company for the issue of any Additional Shares of Common Stock shall be computed as follows:

(i) Cash and Property: Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate of cash received by the Company, excluding amounts paid or payable for accrued interest or accrued dividends;

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Company for consideration which covers both, be the proportion of such consideration so received,

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computed as provided in clauses (A) and (B) above, as determined in good faith by the Board of Directors.

(ii) Options and Convertible Securities. The consideration per share received by the Company for Additional Shares of Common Stock deemed to have been issued pursuant to Subsection 3.4(c), relating to Options and Convertible Securities, shall be determined by dividing

(x) the total amount, if any, received or receivable by the Company as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Company upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the

exercise of such Options or the conversion or exchange of such Convertible Securities.

3.5. Adjustment for Stock Splits and Combinations. If the Company shall at any time or from time to time after the Original Issue Date effect a subdivision of the outstanding Common Stock, the Conversion Price then in effect immediately before that subdivision shall be proportionately decreased. If the Company shall at any time or from time to time after the Original Issue Date combine the outstanding shares of Common Stock, the Conversion Price then in effect immediately before any such combination shall be proportionately increased. Any adjustment under this paragraph shall become effective at the close of business on the date the subdivision or combination becomes effective.

3.6. Adjustment for Certain Dividends and Distributions. In the event the Company at any time, or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in Common Stock, then and in each such event the Conversion Price then in effect shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect by a fraction:

(a) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

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(b) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution;

provided, however, if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price shall be adjusted pursuant to this paragraph as of the time of actual payment of such dividends or distributions.

3.7. Adjustments for Other Dividends and Distributions. In the event the Company at any time or from time to time after the Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Company other than shares of Common Stock, then and in each such event provision shall be made so that the holders of Preferred Stock shall receive upon conversion thereof in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the Company that they would have received had the Preferred Stock been converted into Common Stock on the date of such event and had thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period giving application to all adjustments called for during such period, under this paragraph with respect to the rights of the holders of the Preferred Stock.

3.8. Adjustment for Reclassification, Exchange, or Substitution. If the Common Stock issuable upon the conversion of the Preferred Stock shall be changed into the same or a different number of shares of any class or classes of stock, whether by capital reorganization, reclassification, or otherwise (other than a subdivision or combination of shares or stock dividend provided for above, or a reorganization, merger, consolidation, or sale of assets provided for below), then and in each such event the holder of each such share of Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of stock and other securities and property receivable upon such reorganization, reclassification, or other change, by holders of the number of shares of Common Stock into which such shares of Preferred Stock might have been converted immediately prior to such reorganization, reclassification, or change, all subject to further adjustment as provided herein.

3.9. Adjustment for Merger or Reorganization, etc. Subject to Section 2.4, in case of any consolidation or merger of the Company with or into another corporation or the sale of all or substantially all of the assets of the Company

to another corporation, each share of Preferred Stock shall thereafter be convertible into the kind and amount of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of the Company deliverable upon conversion of such Preferred Stock would have been entitled upon such consolidation, merger or sale; and, in such case, appropriate adjustment (as determined in

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good faith by the Board of Directors) shall be made in the application of the provisions in this Section 3 set forth with respect to the rights and interest thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 3 (including provisions with respect to changes in and other adjustments of the Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the conversion of the Preferred Stock.

3.10. No Impairment. The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, transfer of assets, consolidation, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but will at all times in good faith assist in the carrying out of all the provisions of this Section 3 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of the Preferred Stock against impairment.

3.11. Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 3, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a similar certificate setting forth (a) such adjustments and readjustments, (b) the Conversion Price then in effect, and (c) the number of shares of Common Stock and the amount, if any, of other property which then would be received upon the conversion of Preferred Stock.

3.12. Notice of Record Date. In the event (a) that the Company declares a dividend (or any other distribution) on its Common Stock payable in Common Stock or other securities of the Company; (b) that the Company splits, subdivides or combines its outstanding shares of Common Stock; (c) of any reclassification of the Common Stock of the Company (other than a stock split, subdivision or combination of its outstanding shares of Common Stock or a stock dividend or stock distribution thereon), or of any consolidation or merger of the Company into or with another corporation, or of the sale of all or substantially all of the assets of the Company; or (d) of the involuntary or voluntary dissolution, liquidation or winding up of the Company, then the Company shall cause to be filed at its principal office or at the office of the transfer agent of the Preferred Stock, and shall cause to be mailed to the holders of the Preferred Stock at their last addresses as shown on the records of the Company or such transfer agent, at least ten days prior to the record date specified in (i) below or twenty days before the date specified in (ii) below, a notice stating (i) the record date of such dividend, distribution, stock split, subdivision or combination, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, stock split, subdivision or combination are to be determined, or (ii) the date on which such reclassification, consolidation, merger, sale, dissolution, liquidation or winding up

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is expected to become effective, and the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities or other property deliverable upon such reclassification, consolidation, merger, sale, dissolution or winding up.

3.13. Reservation of Common Stock. The Company shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock, solely for the purposes of effecting the conversion of shares of Preferred Stock, such number of shares of Common Stock as shall from time to

time be sufficient to effect the conversion of all outstanding shares of Preferred Stock.

Section 4. Voting Rights.

Each holder of shares of Preferred Stock shall have the right to the number of votes equal to the number of shares of the Common Stock into which such Preferred Stock could then be converted (as adjusted from time to time pursuant to Section 3 hereof), and with respect to such vote, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall, except as otherwise required by law, be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the By-Laws of the Company, and shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

Section 5. Protective Provisions.

5.1. General. So long as any shares of Preferred Stock are outstanding, the Company shall not, without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Preferred Stock, voting as a separate class:

(i) sell, convey, or otherwise dispose of or encumber all or substantially all of its property or business or merge into or consolidate with any other corporation (other than a wholly-owned subsidiary corporation) or effect any transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company is disposed of;

(ii) authorize, issue, increase or decrease (other than by redemption or conversion) the total number of authorized shares of Preferred Stock; or

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(iii) redeem, purchase or otherwise acquire (or pay into or set aside for a sinking fund for such purpose) any share or shares of Preferred Stock other than pursuant to the Certificate of Incorporation.

5.2. Rights of the Series B Preferred Stock as to Certain Matters. So long as any shares of Series B Preferred Stock are outstanding, the Company shall not, without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least a majority of the then outstanding shares of Series B Preferred Stock, voting as a separate class:

(i) authorize the increase or decrease (other than by redemption or conversion) of the total number of authorized shares of Series B Preferred Stock or issue additional shares of Series B Preferred Stock;

(ii) redeem, purchase or otherwise acquire (or pay into or set aside for a sinking fund for such purpose) any shares of Series A Preferred Stock or Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock from employees, officers, directors, consultants or other persons performing services for the Company pursuant to agreements under which the Company has the option to repurchase such shares at cost or at cost upon the occurrence of certain events, such as the termination of employment; or

(iii) amend the Certificate of Incorporation of the Company if such amendment would adversely affect any of the rights, preferences or privileges provided for herein for the benefit of shares of Series B Preferred Stock.

Section 6. Redemption.

6.1. Redemption. Each holder of shares of Series B Preferred Stock shall have the right to cause the Company, at any time on or after November 2, 2001 (such date being referred to hereinafter as the "Redemption Date"), to redeem from each holder of shares of Series B Preferred Stock, at a price equal to \$3.88 per share (the "Redemption Price"), one hundred percent

(100%) of the shares of Series B Preferred Stock held by such holder on the Redemption Date.

6.2. Insufficient Funds. If the funds of the Company legally available for redemption of shares of Series B Preferred Stock on the Redemption Date are insufficient to redeem the number of shares of Series B Preferred Stock required under this Section 6 to be redeemed on such date, those funds which are legally available will be used to redeem the maximum possible number of whole shares of Series B Preferred Stock ratably among the holders of such shares to be redeemed based upon their respective holdings of Series B Preferred Stock. At any time thereafter, when additional funds of the Company become legally available for the redemption of Series B Preferred Stock, such funds will be used, at

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the end of the next succeeding fiscal quarter, to redeem the balance of the shares which the Company was theretofore obligated to redeem, ratably on the basis set forth in the preceding sentence.

6.3. Redemption Request. On the Redemption Date, each holder of Series B Preferred Stock shall provide the Company with a written request setting forth its desire to redeem shares of Series B Preferred Stock. Upon receipt of any such redemption request, the Company will become obligated to redeem at the time of redemption specified therein all shares of Series B Preferred Stock specified therein (other than such shares of Series B Preferred Stock as are duly converted pursuant to Section 3 prior to the close of business on the fifth full day preceding the Redemption Date). In case less than all shares of Series B Preferred Stock represented by any certificate are redeemed in any redemption pursuant to this Section 6, a new certificate will be issued representing the unredeemed shares of Series B Preferred Stock without cost to the holder thereof.

6.4. Status of Redeemed Shares. Unless there shall have been a default in payment of the Redemption Price, no shares of redeemed Series B Preferred Stock shall be entitled to any dividends declared after the Redemption Date, and on such Redemption Date all rights of the holder of such redeemed shares as a stockholder of the Company by reason of the ownership of such shares will cease, except the right to receive the Redemption Price of such shares, without interest, upon presentation and surrender of the certificate representing such shares, and such redeemed shares will not from and after such Redemption Date be deemed to be outstanding.

Section 7. Increasing Common Stock.

Except as provided in Section 3.13, the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by the affirmative vote of the holders of a majority of the then outstanding shares of capital stock of the Company.

Section 8. Status of Redeemed or Converted Stock.

In the event any shares of Preferred Stock shall be converted pursuant to Section 3 hereof or redeemed, the shares so converted or redeemed shall be cancelled and shall not be issuable by the Company. The Certificate of Incorporation of the Company shall be appropriately amended to effect the corresponding reduction in the Company's authorized capital stock.

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B. COMMON STOCK

The powers and rights of the Common Stock are as follows:

Section 1. General.

The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights of the holders of any series of Preferred Stock.

Section 2. Voting.

The holders of Common Stock are entitled to one vote for each share held at all meetings of stockholders (and written action in lieu of meetings). There shall be no cumulative voting.

Section 3. Dividends.

Dividends may be declared and paid on the Common Stock from funds lawfully available therefor as and when determined by the Board of Directors and subject to any preferential dividend rights of any then outstanding Preferred Stock.

Section 4. Liquidation.

Upon the dissolution, liquidation or winding up of the Company, whether voluntary or involuntary, holders of Common Stock will be entitled to receive all assets of the Company available for distribution to its stockholders subject to any preferential rights of any then outstanding Preferred Stock.

FIFTH. The Company is to have perpetual existence.

SIXTH. In furtherance and not in limitation of the powers conferred by the laws of the State of Delaware:

A. The Board of Directors of the Company is expressly authorized to adopt, amend or repeal the By-Laws of the Company.

B. Elections of directors need not be by written ballot unless the By-Laws of the Company shall so provide.

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C. The books of the Company may be kept at such place within or without the State of Delaware as the By-Laws of the Company may provide or as may be designated from time to time by the Board of Directors of the Company.

SEVENTH. The Company eliminates the personal liability of each member of its Board of Directors to the Company or its stockholders for monetary damages for breach of fiduciary duty as a director, provided, however, that, to the extent provided by applicable law, the foregoing shall not eliminate the liability of a director (i) for any breach of such director's duty of loyalty to the Company or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of Title 8 of the Delaware General Corporation Law or (iv) for any transaction from which such director derived an improper personal benefit. No amendment to or repeal of this provision shall apply to or have any effect on the liability or alleged liability of any director for or with respect to any acts or omissions of such director occurring prior to such amendment or repeal.

EIGHTH. Whenever a compromise or arrangement is proposed between this Company and its creditors or any class of them and/or between this Company and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Company or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Company under the provisions of Section 291 of Title 8 of the Delaware General Corporation Law or on the application of trustees in dissolution or of any receiver or receivers appointed for this Company under the provisions of Section 279 of Title 8 of the Delaware General Corporation Law, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Company, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Company, as the case may be, agree to any compromise or arrangement and to any reorganization of this Company as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Company, as the case may be, and also on this Company.

NINTH. The Company shall, to the fullest extent permitted by Section 145 of the Delaware General Corporation Law, as amended from time to time, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was, or has agreed to become, a director or officer of the Company, or is or was serving, or has agreed to serve, at the request of the Company, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprise (including any employee benefit plan), or by reason of

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any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him or on his behalf in connection with such action, suit or proceeding and any appeal therefrom.

Indemnification may include payment by the Company of expenses in defending an action or proceeding in advance of the final disposition of such action or proceeding upon receipt of an undertaking by the person indemnified to repay such payment if it is ultimately determined that such person is not entitled to indemnification under this Article Ninth, which undertaking may be accepted without reference to the financial ability of such person to make such repayment.

The Company shall not indemnify any such person seeking indemnification in connection with a proceeding (or part thereof) initiated by such person unless the initiation thereof was approved by the Board of Directors of the Company.

The indemnification rights provided in this Article Ninth (i) shall not be deemed exclusive of any other rights to which those indemnified may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and (ii) shall inure to the benefit of the heirs, executors and administrators of such persons. The Company may, to the extent authorized from time to time by its Board of Directors, grant indemnification rights to other employees or agents of the Company or other persons serving the Company and such rights may be equivalent to, or greater or less than, those set forth in this Article Ninth.

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IN WITNESS WHEREOF, the undersigned have duly executed this Amended and Restated Certificate of Incorporation in the name and on behalf of ArQule, Inc. on the 1st day of November, 1995 and the statements contained herein are affirmed as true under penalties of perjury.

ARQULE, INC.

By: /s/ Allan R. Ferguson

Allan R. Ferguson
Chairman of the Board

ATTEST:

By: /s/ Michael E. Lytton

Name: Michael E. Lytton
Title: Secretary

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CERTIFICATE OF AMENDMENT

OF

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

ARQULE, INC.

ArQule, Inc., a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Corporation"), hereby certifies as follows:

1. That the Amended and Restated Certificate of Incorporation of the Corporation is hereby amended by deleting the first paragraph of the existing Article FOURTH and substituting in its place the following paragraph:

FOURTH. The total number of shares of stock that the Company shall have the authority to issue is (i) twenty million (20,000,000) shares of common stock, \$.01 par value per share (the "Common Stock"), and (ii) fifteen million (15,000,000) shares of preferred stock, \$.01 par value per share (the "Preferred Stock"), of which ten million six hundred twenty-four thousand four hundred twenty-nine (10,624,429) shares have been designated Series A Convertible Preferred Stock (the "Series A Preferred Stock") and one million eight hundred fifteen thousand four hundred sixty-eight (1,815,468) shares have been designated Series B Convertible Preferred Stock (the "Series B Preferred Stock").

2. The above amendment was duly adopted by the unanimous written consent of directors of the Corporation in accordance with the applicable provisions of Sections 141 and 242 of the General Corporation Law of the State of Delaware.

3. The above amendment was duly approved at the annual meeting of the stockholders of the Corporation in accordance with the applicable provisions of Sections 222 and 242 of the General Corporation Law of the State of Delaware.

IN WITNESS WHEREOF, ArQule, Inc. has caused this Certificate of Amendment to be signed by its duly authorized officer this 9th day of April, 1996.

ARQULE, INC.

By: /s/ Eric B. Gordon

Eric B. Gordon
President and Chief Executive Officer

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CERTIFICATE OF AMENDMENT
OF
RESTATED CERTIFICATE OF INCORPORATION
OF
ARQULE, INC.

ArQule, Inc., a company organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the "Company"), does hereby certify:

FIRST: That the Board of Directors of said Company, by unanimous vote, adopted the following amendment to the Restated Certificate of Incorporation:

That Article FOURTH of the Company's Restated Certificate of Incorporation be amended by adding the following new paragraph after the first paragraph of Article FOURTH:

"Upon the effectiveness of this Restated Certificate of Incorporation, each two (2) issued and outstanding shares of Common Stock of the Company shall thereby combined into one (1) validly issued, fully paid, and nonassessable shares of Common Stock of the Company. No scrip or fractional shares will be issued, and each fractional share resulting from such combination shall be

redeemed by the Company for cash at a price per share equal to the price to the public in the Company's initial public offering. There shall not be any change in the number of shares authorized by reason of such combination."

SECOND: That the stockholders of said Company duly voted in favor of said amendment by written consent, with the necessary number of shares as required by statute and the Restated Certificate of Incorporation of the Company being voted in favor of the adoption of said amendment.

THIRD: That said amendment was duly adopted in accordance with the provisions of Sections 228 and 242 of the General Corporation Law of the State of Delaware and written notice of the adoption of this Certificate of Amendment has been given as provided by Section 228 of the General Corporate Law of the State of Delaware to every stockholder entitled to such notice.

Signed this 4th day of October, 1996.

ArQule, Inc.

/s/ Eric B. Gordon

By: Eric B. Gordon

Title: President and Chief Executive Officer

EMPLOYMENT AGREEMENT

EMPLOYMENT AGREEMENT dated as of July 9, 1996 by and between ArQule, Inc., a Delaware corporation (the "Company"), and James R. Fitzgerald, Jr. ("Executive").

WHEREAS, the Company desires to employ Executive in a senior executive capacity and to enter into an Agreement embodying the terms of such employment (the "Agreement"); and

WHEREAS, Executive desires to accept such employment and enter into such an Agreement;

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

1. TERM OF EMPLOYMENT. The Company hereby agrees to employ Executive, and Executive hereby accepts employment with the Company, upon the terms and subject to the conditions set forth in this Agreement, for a period commencing as of July 9, 1996 (the "Effective Date") and continuing until terminated in accordance with the provisions of Section 5 (the "Employment Term").

2. TITLE; DUTIES. During the Employment Term, Executive shall serve as the Chief Financial Officer and Treasurer and a Vice President of Company. In such positions, Executive shall have such duties and authority as shall be designated from time to time by the Chief Executive Officer or the Board of Directors of the Company (the "Board"). Executive hereby agrees to undertake the duties and responsibilities inherent in such position and such other duties and responsibilities as the Chief Executive Officer or the Board shall from time to time reasonably assign to him.

3. NO CONFLICT. During the Employment Term, Executive shall devote substantially all of his business time and best efforts to the performance of his duties hereunder and shall not, directly or indirectly, engage in any other business, profession or occupation for compensation or otherwise which would conflict with the rendition of such duties without the prior written consent of the Board, which consent shall not unreasonably be withheld, delayed or conditioned.

4. COMPENSATION AND BENEFITS.

4.1. BASE SALARY. During the Employment Term, the Company shall pay Executive for his services hereunder a base salary (the "Base Salary") at the initial annual rate of \$150,000 payable in regular installments in accordance with the Company's usual payment practices and subject to annual review and adjustment by the Board in its sole discretion.

4.2. ADDITIONAL COMPENSATION.

4.2.1. INCENTIVE STOCK OPTIONS. As further compensation for his services hereunder, the Company shall, on the date hereof, grant to Executive an incentive stock option (the "Incentive Stock Option") to purchase 100,000 shares of the Company's Common Stock, \$0.01 par value per share (the "Common Stock"), pursuant to the Company's Amended and Restated 1994 Equity Incentive Plan (the "Equity Incentive Plan") and in accordance with the terms, and subject to the vesting schedule and other conditions, set forth in the form of Option Certificate attached hereto as EXHIBIT A. The Incentive Stock Options granted to Executive under this Section 4.2.1 will be treated as "incentive stock options" under Section 422 of the Internal Revenue Code of 1986, as amended.

4.2.2. OPTIONS UNDER SHORT-TERM STOCK INCENTIVE PLAN. In addition to the Incentive Stock Option granted under Section 4.2.1 above, the Company shall grant to Executive additional incentive stock options (the "Short-Term Plan Stock Options") to purchase shares of the Company's Common Stock, pursuant to the Company's Short-Term Stock Incentive Plan (the "Short-Term Plan"), upon the achievement by Executive of certain individual performance goals and/or the achievement by the Company of certain performance goals as set forth in the Short-Term Plan. In accordance with the terms and conditions set forth in the Short-Term Plan, the Compensation Committee of the Board will determine (i) the performance goals to be achieved by Executive and by the Company in connection with the granting of the Short-Term Plan Stock Options, (ii) the number of Short-Term Plan Stock Options granted to Executive and (iii) the number of shares to be purchased by Executive under the Short-Term Plan Stock Options granted. The Short-Term Plan Stock Options granted to Executive under this Section 4.2.2 will be treated as "incentive stock options" under Section 422 of the Internal Revenue Code of 1986, as amended and otherwise according to the terms of the form of Option Certificate attached hereto as EXHIBIT A.

4.3. EXECUTIVE BENEFITS. During the Employment Term and subject to any contributions therefor generally required of senior executives of the Company, Executive shall be entitled to receive such employee benefits (including fringe benefits and pension, profit sharing, and deferred compensation plan participation, and life, health, accident and disability insurance) which the Company may, in its sole and absolute discretion, make available generally to its senior executives, or for personnel similarly situated; PROVIDED, HOWEVER, that it is hereby acknowledged and agreed that any such employee benefit plans may be altered, modified or terminated by the Company at any time in its sole discretion with reasonable compensation made to the Executive as determined by the Board of Directors in good faith.

4.4. VACATION. Executive shall be entitled to three weeks (15 working days) of paid vacation per annum during the Employment Term, to be taken at such time or times as shall be mutually convenient for the Company and Executive. Unused vacation time will be allocated pursuant to the Company's existing policies and practices.

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4.5. BUSINESS EXPENSES AND PERQUISITES. Executive shall be entitled to reimbursement by the Company during the Employment Term for reasonable travel, entertainment and other business expenses incurred by Executive in the performance of his duties hereunder in accordance with such policies as the Company may from time to time have in effect.

5. TERMINATION.

5.1. FOR CAUSE BY THE COMPANY. Notwithstanding any other provision of this Agreement, Executive's employment hereunder may be terminated by the Company at any time for Cause. For purposes of this Agreement, "Cause" shall mean (i) Executive's willful failure to perform his duties hereunder (other than as a result of total or partial incapacity due to physical or mental illness) for thirty (30) days after a written demand for performance is delivered to Executive on behalf of the Company which specifically identifies the manner in which it is alleged that Executive has not substantially performed his duties, (ii) Executive's dishonesty in the performance of his duties hereunder, (iii) an act or acts on Executive's part involving moral turpitude or constituting a felony and resulting in a conviction under the laws of the United States or any state thereof, (iv) any other act or omission which is materially injurious to the financial condition or business reputation of the Company or any of its affiliates, or (v) Executive's material breach of his obligations under Section 6 and 7 hereof, which breach shall remain uncured by Executive for thirty (30) days following receipt of notice from the Company specifying such breach. If Executive's employment is terminated by the Company for Cause, the Company shall pay Executive a lump sum amount equal to the portion of the Base Salary accrued and payable through the last day of his actual employment by the Company. The payment to Executive of any other benefits following the termination of Executive's employment pursuant to this Section 5.1 shall be determined by the Board in its sole discretion in accordance with the policies and practices of the Company.

5.2. DISABILITY. Executive's employment hereunder may be terminated by

the Company at any time in the event of the Disability of the Executive. For purposes of this Agreement, "Disability" shall mean the inability of Executive to perform substantially his duties hereunder due to physical or mental disablement which continues for a period of six (6) consecutive months during the Employment Term, as determined by an independent qualified physician mutually acceptable to the Company and Executive (or his personal representative) or, if the Company and Executive (or such representative) are unable to agree on an independent qualified physician, as determined by a panel of three physicians, one designated by the Company, one designated by Executive (or his personal representative) and one designated by the two physicians so designated. If Executive's employment is terminated by the Company for Disability, the Company shall pay Executive an amount equal to the portion of the Base Salary accrued and payable plus any benefits to which Executive is entitled under Section 4.3 of this Agreement (to the extent permitted by the then-current terms of the applicable benefit plans and subject to any employee contribution applicable to Executive on the date of termination) through the date on which Executive is first entitled to receive payment of disability benefits in lieu of the portion of Base Salary accrued and payable under the Company's employee benefit plans as then

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in effect. The payment to Executive of any other benefits following the termination of Executive's employment pursuant to this Section 5.2 shall be determined by the Board in its sole discretion in accordance with the policies and practices of the Company.

5.3. DEATH. Executive's employment hereunder shall automatically terminate in the event of the Executive's death. If Executive's employment is terminated by the death of Executive, the Company shall pay to Executive's estate or legal representative an amount equal to the portion of the Base Salary accrued and payable at the rate in effect at the time of Executive's death through the last day of the month in which his death occurs. The payment to Executive of any other benefits following the termination of Executive's employment pursuant to this Section 5.3 shall be determined by the Board in its sole discretion in accordance with the policies and practices of the Company.

5.4. WITHOUT CAUSE BY THE COMPANY. The Executive's employment hereunder may be terminated by the Company at any time without Cause upon not less than sixty (60) days prior written notice from the Company to Executive. If Executive's employment is terminated by the Company without Cause at any time up through the first anniversary of the Effective Date, including without limitation by reason of Executive's failure to achieve stated goals or milestones, (a) the Company shall pay Executive a lump sum amount equal to the portion of the Base Salary accrued and payable plus any benefits to which Executive is entitled under Section 4.3 of this Agreement (to the extent permitted by the then-current terms of the applicable benefit plans and subject to any employee contribution applicable to Executive on the date of termination) through the earlier of (i) the conclusion of a period of six (6) months from the date of such termination or (ii) the date Executive commences other employment and (b) any Incentive Stock Options or Short-Term Plan Stock Options which have been granted to Executive under this Agreement and which would have otherwise vested within the six (6) month period from the date of such termination shall become immediately exercisable. If Executive's employment is terminated by the Company without Cause at any time after the first anniversary of the Effective Date, including without limitation by reason of Executive's failure to achieve stated goals or milestones, the Company shall pay Executive a lump sum amount equal to the portion of the Base Salary accrued and payable through the last day of his actual employment by the Company. The payment to Executive of any other benefits following the termination of Executive's employment pursuant to this Section 5.4 shall be determined by the Board in its sole discretion in accordance with the policies and practices of the Company.

5.5. TERMINATION BY EXECUTIVE. Executive's employment hereunder may be terminated by Executive at any time upon not less than sixty (60) days prior written notice from Executive to the Company. If Executive terminates his employment with the Company pursuant to this Section 5.5, the Company shall pay Executive an amount equal to the portion of the Base Salary accrued and payable through the last day of his actual employment by the Company.

5.6. NOTICE OF TERMINATION. Any purported termination of employment by

the Company or by Executive shall be communicated by written Notice of Termination to the other party hereto in accordance with Section 9 hereof. For purposes of this Agreement, a "Notice of

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Termination" shall mean a notice which shall indicate the specific termination provision in this Agreement relied upon and shall set forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of employment under the provision so indicated.

5.7. SURVIVAL. The provisions of Sections 6 and 7 shall survive the termination of this Agreement.

6. NON-COMPETITION.

6.1. RESTRICTIONS. Executive acknowledges and recognizes the highly competitive nature of the businesses of the Company and accordingly agrees that during the Employment Term and for a period of one (1) year after expiration or termination of Executive's employment hereunder:

6.1.1. Executive will not engage in any activity which is competitive with any business which is now, or is at any time during the Employment Term, conducted by the Company or its affiliates, including without limitation becoming an employee, investor (except for passive investments of not more than one percent (1%) of the outstanding shares of, or any other equity interest in, a company or entity listed or traded on a national securities exchange or in an over-the-counter securities market), officer, agent, partner or director of, or other participant in, any firm, person or other entity in any geographic area which is engaged in any activities in the field of combinatorial chemistry. Notwithstanding any provision of this Agreement to the contrary, upon the occurrence of any breach of this Section 6.1, if Executive is employed by the Company, the Company may immediately terminate the employment of Executive for Cause in accordance with the notice provisions contained in Sections 5.6 and 9, and, whether or not Executive is employed by the Company, the Company shall immediately cease to have any obligations to make payments to Executive under this Agreement.

6.1.2. Executive will not directly or indirectly assist others in engaging in any of the activities in which Executive is prohibited to engage by clause 6.1 above.

6.1.3. Executive will not directly or indirectly (a) induce any employee of the Company or its affiliates to engage in any activity in which Executive is prohibited from engaging by clause 6.1.1 above or to terminate his or her employment with the Company or its affiliates, or (b) employ or offer employment to any person who was employed by the Company or its affiliates in a directly competitive field unless such person shall have ceased to be employed by the Company or its affiliates for a period of at least one (1) year.

6.2. INTERPRETATION. It is expressly understood and agreed that (a) although Executive and the Company consider the restrictions contained in this Section 6 to be reasonable, if a final judicial determination is made by a court of competent jurisdiction that the time or territory or any other restriction contained in this Agreement is unenforceable, this Agreement shall not be rendered void but shall be deemed to be enforceable to such maximum extent as such court may judicially determine or indicate to be enforceable and (b) if any restriction contained in

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this Agreement is determined to be unenforceable and such restriction cannot be amended so as to make it enforceable, such finding shall not affect the enforceability of any of the other restrictions contained herein.

7. CONFIDENTIALITY AND OTHER AGREEMENTS.

7.1. CONFIDENTIALITY. Executive will not at any time (whether during or after his employment with the Company) disclose or use for his own benefit or purposes or the benefit or purposes of any other person, firm, partnership, joint venture, association, corporation or other organization, entity or

enterprise other than the Company and any of its affiliates, any Confidential Information. As used herein, the term "Confidential Information" shall mean, without limitation, all Proprietary Materials (as defined below), any and all information about inventions, improvements, modifications, discoveries, costs, profits, markets, sales, products, key personnel, pricing policies, operational methods, concepts, technical processes and applications, and other business affairs and methods of the Company and of its affiliates, collaborators, consultants, suppliers, and customers, as well as any other information not readily available to the public, including without limitation any information supplied by third parties to the Company under an obligation of confidence. As used in this Agreement "Proprietary Materials" shall include, without limitation, the following materials: any and all reagents, substances, chemical compounds, subcellular constituents, cells or cell lines, organisms and progeny, and mutants, as well as any and all derivatives or replications derived from or relating to such materials. Confidential Information may be contained in various media, including without limitation patent applications, computer programs in object and/or source code, flow charts and other program documentation, manuals, plans, drawings, designs, technical specifications, laboratory notebooks, supplier and customer lists, internal financial data, and other documents and records of the Company, whether or not in written form and whether or not labelled or identified as confidential or proprietary. Executive further agrees that (a) upon termination or expiration of his employment hereunder, Executive will return immediately to the Company any Proprietary Materials and any materials containing Confidential Information then in Executive's possession or under Executive's control and (b) he will not retain or use for his account at any time any trade name, trademark or other proprietary business designation used or owned in connection with the business of the Company or its affiliates.

7.2. OTHER AGREEMENTS. Executive hereby represents that he is not bound by the terms of any agreement with any previous employer or other party to refrain from using or disclosing any trade secret or confidential or proprietary information, which information would reasonably be anticipated to relate to the business of the Company, in the course of his employment with the Company or to refrain from competing, directly or indirectly, with the business of such previous employer or any other party. Executive further represents that his performance of all the terms of this Agreement and as an employee of the Company does not and will not breach any agreement to keep in confidence proprietary information, knowledge or data acquired by him in confidence or in trust prior to his employment with the Company.

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8. SPECIFIC PERFORMANCE. Executive acknowledges and agrees that the Company's remedies at law for a breach or threatened breach of any of the provisions of Section 6 or Section 7 would be inadequate and, in recognition of this fact, Executive agrees that, in the event of such a breach or threatened breach, in addition to any remedies at law, the Company, at its expense, without posting any bond, shall be entitled to seek equitable relief in the form of specific performance, temporary restraining orders, temporary or permanent injunctions or any other equitable remedy which may then be available.

9. NOTICES. Any notice hereunder by either party to the other shall be given in writing by personal delivery, telex, telecopy or registered mail, return receipt requested, addressed, if to the Company, to the attention of the President at the Company's executive offices or to such other address as the Company may designate in writing at any time or from time to time to Executive, and if to Executive, to his most recent address on file with the Company. Notice shall be deemed given, if by personal delivery, on the date of such delivery or, if by telex or telecopy, on the business day following receipt of answer back or telecopy information or, if by registered mail, on the date shown on the applicable return receipt.

10. ASSIGNMENT. This Agreement may not be assigned by either party without the prior written consent of the other party. The Company shall require any persons, firm or corporation succeeding to all or substantially all of the business or assets of the Company whether by purchase, merger or consolidation to expressly assume and agree to perform this Agreement.

11. ENTIRE AGREEMENT. This Agreement contains the entire agreement between the Company and Executive with respect to the subject matter thereof and there have been no oral or other agreements of any kind whatsoever as a condition

precedent or inducement to the signing of this Agreement or otherwise concerning this Agreement or the subject matter hereof.

12. EXPENSES. Each party shall pay its own expenses incident to the performance or enforcement of this Agreement, including all fees and expenses of its counsel for all activities of such counsel undertaken pursuant to this Agreement, except as otherwise herein specifically provided. If any action at law or equity is necessary to enforce or interpret the terms of this Agreement, the prevailing party shall be entitled to reimbursement of reasonable attorney's fees and other costs incurred by such party in connection with such action, in addition to any other relief to which such party is entitled.

13. ARBITRATION. In the event any dispute shall arise between the Company and the Executive with respect to any of the terms and conditions of this Agreement, then such dispute shall be submitted and finally settled by arbitration in Boston, Massachusetts under the rules of the American Arbitration Association. The award rendered by the arbitrator shall be final and binding upon the parties hereto, and judgment upon the award rendered may be entered by either party in any court that would ordinarily have jurisdiction over the parties or the subject matter of the controversy or claim. Each party shall pay its own expenses incident to such arbitration,

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including attorneys' fees. The parties agree not to institute any litigation or proceedings against each other in connection with this Agreement except as provided in this Section 13.

14. WAIVERS AND FURTHER AGREEMENTS. Any waiver of any terms or conditions of this Agreement shall not operate as a waiver of any other breach of such terms or conditions or any other term or condition, nor shall any failure to enforce any provision hereof operate as a waiver of such provision or of any other provision hereof; provided, however, that no such written waiver, unless it, by its own terms, explicitly provides to the contrary, shall be construed to effect a continuing waiver of the provision being waived and no such waiver in any instance shall constitute a waiver in any other instance or for any other purpose or impair the right of the party against whom such waiver is claimed in all other instances or for all other purposes to require full compliance with such provision. Each of the parties hereto agrees to execute all such further instruments and documents and to take all such further action as the other party may reasonably require in order to effectuate the terms and purposes of this Agreement.

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15. AMENDMENTS. This Agreement may not be amended, nor shall any waiver, change, modification, consent or discharge be effected except by an instrument in writing executed by or on behalf of the party against whom enforcement of any waiver, change, modification, consent or discharge is sought.

16. SEVERABILITY. If any provision of this Agreement shall be held or deemed to be, or shall in fact be, invalid, inoperative or unenforceable as applied to any particular case in any jurisdiction or jurisdictions, or in all jurisdictions or in all cases, because of the conflict of any provision with any constitution or statute or rule of public policy or for any other reason, such circumstance shall not have the effect of rendering the provision or provisions in question invalid, inoperative or unenforceable in any other jurisdiction or in any other case or circumstance or of rendering any other provision or provisions herein contained invalid, inoperative or unenforceable to the extent that such other provisions are not themselves actually in conflict with such constitution, statute or rule of public policy, but this Agreement shall be reformed and construed in any such jurisdiction or case as if such invalid, inoperative or unenforceable provision had never been contained herein and such provision reformed so that it would be valid, operative and enforceable to the

maximum extent permitted in such jurisdiction or in such case.

17. COUNTERPARTS. This Agreement may be executed in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and in pleading or proving any provision of this Agreement, it shall not be necessary to produce more than one of such counterparts.

18. SECTION HEADINGS. The headings contained in this Agreement are for reference purposes only and shall not in any way affect the meaning or interpretation of this Agreement.

19. GOVERNING LAW. This Agreement shall be governed by and construed and enforced in accordance with the law (other than the law governing conflict of law questions) of the Commonwealth of Massachusetts.

IN WITNESS WHEREOF, the parties have been executed or caused to be executed this Agreement as of the date first above written.

ARQULE, INC.

By: /s/ ERIC GORDON

Name: ERIC GORDON

Title: PRESIDENT

JAMES R. FITZGERALD, JR.

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/s/ James R. Fitzgerald

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EXHIBIT A

Form of Incentive Stock Option

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STOCK PLEDGE AGREEMENT

AGREEMENT, made as of the 2nd day of November, 1995, between by and between Joseph C. Hogan, Jr. (the "Pledgor") and ArQule, Inc., a Delaware corporation with a principal place of business at 200 Boston Avenue, Medford, Massachusetts 02166 (the "Pledgee").

WHEREAS, the Pledgor has requested that the Pledgee advance the Pledgor the principal sum of \$120,000 (the "Loan"), as evidenced by a promissory note of even date herewith by the Pledgor in favor of the Pledgee (the "Secured Note"); and

WHEREAS, the Pledgee is unwilling to advance the Loan and accept the Secured Note without the assurances herein provided.

NOW, THEREFORE, in order to induce the Pledgee to accept the Secured Note and in consideration therefor and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and in consideration of the mutual covenants set forth herein, the parties hereto agree as follows:

1. Certain Definitions.

(a) The term "Stock" as used herein means that number of shares of Common Stock, \$0.01 par value (the "Common Stock"), of the Pledgee that will be distributed to the Pledgor upon the dissolution of ArQule Partners, L.P. (the "Partnership"), whose "fair market value" is equal to the principal sum of the Loan on the Distribution Date (as defined in Section 3). For purposes of this definition, the "fair market value" shall equal the last reported closing price of the Common Stock quoted on the Nasdaq National Market, or any exchange on which the Common Stock is listed, as published in the Wall Street Journal, or such lesser number as shall be subject to this Agreement following any partial release as provided in Section 14 hereof.

(b) The term "Obligations" as used herein means all indebtedness, obligations and liabilities of the Pledgor to the Pledgee, now existing or hereafter arising, direct or indirect, absolute or contingent, due or to become due, matured or unmatured, liquidated or unliquidated, arising under Pledgor's Secured Note in the original principal amount of \$120,000 payable to the order of Pledgee, as from time to time amended, revised or assigned.

(c) The term "Collateral" as used herein means the Stock and any other property at any time, whether now or hereafter, pledged with the Pledgee hereunder (whether described herein or not) and all income therefrom, increases therein and proceeds thereof.

(d) The term "Event of Default" shall mean Pledgor's failure to pay any and all amounts due under the Secured Note, an event of default pursuant to the terms of any of the documents or instruments evidencing any of the Obligations or the breach of a covenant or agreement herein contained.

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(e) Terms used herein without definition which are defined in the Uniform Commercial Code of The Commonwealth of Massachusetts have such defined meanings herein, unless the context otherwise indicates or requires.

2. Security for Obligations. This Agreement and the pledge of the Collateral hereunder is made with the Pledgee as security for the Obligations.

3. Pledge of Collateral. For valuable consideration, receipt of which is hereby acknowledged by the Pledgor, the Pledgor hereby grants a security interest in and pledges the Collateral to the Pledgee, to be held by the Pledgee subject to the terms and conditions hereinafter set forth. The Pledgor hereby acknowledges and agrees that upon distribution to the Pledgor of the Stock by the Partnership (the "Distribution Date"), the Pledgor shall promptly deliver certificates representing such Stock to the Pledgee and such Stock shall be considered to be Collateral for purposes of this Agreement, subject to the limitation specified in Section 1(a).

4. Representations, Warranties and Covenants of the Pledgor.

(a) Warranty of Title, Etc. The Pledgor represents and warrants (other than as provided in that certain Co-Sale Agreement dated as of the date hereof by and among the Pledgor, the Pledgee and the stockholders of the Pledgee listed therein) that:

- (i) upon the distribution and receipt of the Stock, he will own and have good title to the Stock, free of all encumbrances and liens;
- (ii) upon delivery of the certificates representing the Stock in accordance with Section 3, the Pledgee shall have a valid, perfected and first priority security interest in the Collateral in accordance with the terms hereof;
- (iii) he has the full right and power to enter into this Agreement and to take any actions contemplated or permitted by this Agreement to be taken by him;
- (iv) neither this Agreement, nor the pledge of the Collateral hereunder, will violate any agreement or commitment to which the Pledgor is a party or by which Pledgor or any of Pledgor's property is bound or affected; and
- (v) this Agreement is binding upon the Pledgor, his successors and assigns.

(b) General Covenants. The Pledgor covenants that he will defend the Pledgee's rights and security interest hereunder in the Collateral against the claims and demands of all persons whomsoever, and that the Pledgor will have the like title to and right to

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pledge the Collateral and will likewise defend the Pledgee's rights and security interests therein.

5. Dividends, Liquidation, Recapitalization, Etc. In case any distribution of capital or stock dividend shall be made on or in respect of any of the Collateral or payment of any dividend in cash or other property shall be made in respect of the Collateral, or any money or property shall otherwise be distributed upon or with respect to any of the Collateral, including pursuant to a recapitalization or reclassification of the capital of the Pledgee or pursuant to a reorganization or liquidation or dissolution of the Pledgee, capital, dividend, principal, interest or other money or property so distributed shall be delivered to the Pledgee to be held by it as part of the Collateral and as security for the Obligations. All capital, dividends, principal, interest and other sums of money and property, if any, paid or distributed in respect of the Collateral, which are received by the Pledgor shall, until paid or delivered to the Pledgee, be held in trust for the Pledgee as part of the Collateral and as security for the Obligations.

6. Voting, Etc., Prior to Maturity. Unless and until an Event of Default shall have occurred and be continuing, and until notice of such Event of Default has been given by the Pledgee, the Pledgor shall be entitled to vote the Stock and to give consents, waivers and ratifications in respect of the Stock; provided, however, that no vote shall be cast, or consent, waiver or ratification given or action taken which would be inconsistent with or violate any provisions of any of the documents or instruments evidencing any of the Obligations or of this Agreement. Until the occurrence of an Event of Default, the Pledgee shall execute and deliver to the Pledgor such proxies or other documents in writing as may be necessary to enable the Pledgor to exercise the foregoing rights. All such rights of the Pledgor to vote and give consents, waivers and ratifications shall cease forthwith in case an Event of Default shall have occurred and be continuing, without any notice (except as provided in this section 6) or demand by the Pledgee to the Pledgor.

7. Remedies. If an Event of Default shall have occurred and be continuing, the Pledgee shall thereafter have the following rights and remedies (to the extent permitted by applicable law) in addition to the rights and remedies of a secured party under the Uniform Commercial Code of The Commonwealth of Massachusetts, all such rights and remedies being cumulative,

not exclusive, and enforceable alternatively, successively or concurrently, at such time or times as the Pledgee deems expedient:

(i) The Pledgee may vote any or all shares of the Stock (whether or not the same shall have been transferred into its name or the name of its nominee or nominees) and give all consents, waivers and ratifications in respect of the Stock and otherwise act with respect thereto as though it were the outright owner thereof (the Pledgor hereby irrevocably constituting and appointing the Pledgee the proxy and attorney in-fact of the Pledgor, with full power of substitution, to do so);

(ii) The Pledgee may demand, sue for, collect or make any compromise or settlement the Pledgee deems suitable in respect of any Collateral held by it hereunder;

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(iii) The Pledgee may sell, resell, assign and deliver, or otherwise dispose of any or all of the Collateral, for cash and/or credit and upon such terms, at such place or places and at such time or times and to such persons, firms, companies or corporations as the Pledgee deems expedient, all without demand for performance by the Pledgor or any notice or advertisement whatsoever except such as may be required by law; and

(iv) The Pledgee may cause all or any part of the Stock held by it to be transferred into its name or the name of its nominee or nominees.

If any of the Collateral is sold by the Pledgee upon credit or for future delivery, the Pledgee shall not be liable for the failure of the purchaser to pay for the same and in such event the Pledgee may resell such Collateral.

The Pledgee may buy any part or all of the Collateral at any public sale and if any part or all of the Collateral is of a type customarily sold in a recognized market or is of the type which is the subject of widely-distributed standard price quotations, the Pledgee may, in its sole discretion, buy at private sale and may make payments therefor by any means including, without limitation, cancellation of indebtedness secured thereby.

The Pledgee may, in its sole discretion, apply the cash proceeds actually received from any sale or other disposition to the reasonable expenses of retaking, holding, preparing for sale, selling and the like, to reasonable attorneys' fees, and all legal expenses, travel and other expenses which may be incurred by the Pledgee in attempting to collect the Obligations or to enforce this Agreement or any instrument evidencing the Obligations or in the prosecution or defense of any action or proceeding related to the subject matter of this Agreement or any instrument evidencing the Obligations, and then to the Obligations with respect to principal or interest, or both, or other fees and expenses, in such proportions as the Pledgee, in its sole discretion, shall determine, and any surplus shall be paid to the Pledgor.

The Pledgor recognizes that the Pledgee may be unable to effect a public sale of the Stock by reason of certain prohibitions contained in the United States Securities Act of 1933, as amended, or in other applicable laws, regulations or agreements to which such Stock may be subject but may be compelled to resort to one or more private sales thereof to a restricted group of purchasers. The Pledgor agrees that any such private sales may be at prices and other terms less favorable to the seller than if sold at public sales and that such private sales shall be deemed to have been made in a commercially reasonable manner. The Pledgee shall be under no obligation to delay a sale of any of the Stock for the period of time necessary to permit the issuer of such securities to register such securities for public sale under the said Securities Act or other applicable law, even if the issuer would agree to do so.

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8. Marshalling. The Pledgee shall not be required to marshal any present or future security for (including but not limited to this Agreement and the Collateral pledged hereunder), or guaranties of, the Obligations or any of them, or to resort to such security or guaranties in any particular order; and all of the rights hereunder and in respect of such securities and guaranties shall be cumulative and in addition to all other rights, however existing or arising. To the extent that it lawfully may, the Pledgor hereby agrees that it will not invoke any law relating to the marshalling of collateral which might cause delay in or impede the enforcement of the Pledgee's rights under this Agreement or under any other instrument evidencing any of the Obligations or under which any of the Obligations is outstanding or by which any of the Obligations is secured or guaranteed, and to the extent that it lawfully may the Pledgor hereby irrevocably waives the benefits of all such laws.

9. Pledgor's Obligations Not Affected. The obligations of the Pledgor hereunder shall remain in full force and effect without regard to, and shall not be impaired by (a) any bankruptcy, insolvency, arrangement, readjustment, composition or the like of the Pledgor; (b) any exercise or non-exercise, or any waiver, by the Pledgee of any right, remedy, power or privilege under or in respect of any of the Obligations or any security therefor (including this Agreement); (c) any amendment to or modification of any of the Obligations; (d) any amendment to or modification of any instrument (other than this Agreement) evidencing or securing or guaranteeing any of the Obligations; or (e) the taking of additional security for, or any guaranty of, any of the Obligations or the release or discharge or termination of any security or guaranty for any of the Obligations, whether or not the Pledgor shall have notice or knowledge of any of the foregoing.

10. Further Assurances. The Pledgor will do all such acts, and will furnish to the Pledgee all such financing statements, certificates, legal opinions and other documents and will obtain all such governmental consents and approvals and will do or cause to be done all such other things, including without limitation the execution and delivery of further agreements and instruments, as the Pledgee may reasonably request from time to time in order to give full effect to this Agreement and to secure the rights of the Pledgee hereunder.

11. Pledgee's Exoneration. Under no circumstances shall the Pledgee be deemed to assume any responsibility for or obligation or duty with respect to any part or all of the Collateral of any nature or kind, or any matter or proceedings arising out of or relating thereto, but the same shall be at the Pledgor's sole risk at all times. The Pledgee shall not be required to take any action of any kind to collect, preserve or protect its or the Pledgor's rights in the Collateral or against other parties thereto. The Pledgee's prior recourse to any part or all of the Collateral shall not constitute a condition of any demand, suit or proceeding for payment or collection of the Obligations.

12. No Waiver, Etc. No act, failure or delay by the Pledgee shall constitute a waiver of its rights and remedies hereunder or otherwise. No single or partial waiver by the Pledgee of any default or right or remedy which it may have shall operate a waiver of any other default,

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right or remedy or of the same default, right or remedy on a future occasion. The Pledgor hereby waives presentment, notice of dishonor and protest of all instruments, included in or evidencing any of the Obligations or the Collateral, and any and all other notices and demands whatsoever (except as expressly provided herein).

13. Notices, Etc. All notices, requests and other communications hereunder shall be in writing and shall be delivered in hand or by telex or telecopy or where telex or telecopy communication is not possible, by mail, return receipt requested, or by a nationally known overnight courier service addressed as follows:

If to the Pledgor:

To the address set forth at
the foot of this
agreement.

with a copy to:

Such person or persons
as Pledgor may designate
from time to time.

If to the Pledgee:

ArQule, Inc.
200 Boston Avenue
Medford, MA 02166
Attn: Eric B. Gordon

with a copy to:

Palmer & Dodge
One Beacon Street
Boston, Massachusetts 02108
Attn: Michael Lytton, Esq.

or to such other address as the party to receive any such communication or notice may have designated by written notice to the other party from time to time.

14. Termination; Partial Release. Upon payment and performance in full of the Obligations in accordance with their terms and the performance by the Pledgor of all of his covenants and agreements hereunder, this Agreement shall terminate and the Pledgor shall be entitled to the return, at the Pledgor's expense, of such of the Collateral in the possession or control of the Pledgee as has not theretofore been disposed of pursuant to the provisions hereof,

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together with any moneys and other property at the time held by the Pledgee hereunder. Notwithstanding the foregoing, if at any time during the term of this Agreement, the fair market value of the Stock exceeds the remaining aggregate principal amount of the Pledgor's Secured Note on any Stock Valuation Date (as defined below), the Pledgee shall release from this Pledge Agreement and deliver to the Pledgor that number of shares of Stock (rounded down to the nearest whole number) as shall equal the amount of such excess value divided by the fair market value of the Stock on such Stock Valuation Date. As used herein, the term "Stock Valuation Date" shall mean November 30 of each year during the term of this Pledge Agreement and the term "fair market value" shall mean the average of the last reported closing price of the Common Stock quoted on the Nasdaq National Market or on any exchange on which the Stock is listed, whichever is applicable, as published in The Wall Street Journal for the five (5) trading days prior to the Stock Valuation Date.

15. Miscellaneous Provisions.

(a) Waivers; Amendments. Neither this Agreement nor any term hereof may be amended, waived, discharged or terminated except by a written instrument expressly referring to this Agreement and to the provisions so modified or limited, and executed by the party to be charged therewith.

(b) Successors and Assigns. This Agreement and all obligations of the Pledgor hereunder shall be binding upon the successors and assigns of the Pledgor, and shall, together with the rights and remedies of the Pledgee hereunder, inure to the benefit of the Pledgee and the Pledgee's successors and assigns.

(c) Governing Law. This Agreement and the obligations of the Pledgor hereunder shall be governed by and construed in accordance with the laws of The Commonwealth of Massachusetts.

(d) Section Headings. The descriptive section headings herein have been inserted for convenience of reference only and do not define or limit the provisions hereof.

(e) Severability. If any terms of this Agreement shall be held to be invalid, illegal or unenforceable, the validity of all other terms hereof shall be in no way affected thereby, and this Agreement shall be construed and be enforceable as if such invalid, illegal or unenforceable term had not been

included herein.

(f) Counterparts. This Agreement may be executed in more than one counterpart, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, binding upon all the parties hereto, notwithstanding that all the parties are not signatories to the original or the same counterpart. In pleading or proving any provision of this Agreement, it shall not be necessary to produce more than one of such counterparts.

16. Receipt. The Pledgor acknowledges receipt of a copy of this Agreement.

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IN WITNESS WHEREOF, the Pledgor and the Pledgee have caused this Agreement to be duly executed, as an instrument under seal, as of the date first above written.

Pledgor:

/s/

Joseph C. Hogan, Jr.
Address:
50 Oak Avenue
Belmont, MA 02128

Pledgee:

ARQULE, INC.

By: /s/

Name: Eric B. Gordon
Title: President

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RESEARCH, DEVELOPMENT AND LICENSE AGREEMENT

between

ARQULE, INC.

and

SOLVAY DUPHAR B.V.

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RESEARCH, DEVELOPMENT AND LICENSE AGREEMENT

This Agreement, effective as of November 2, 1995 (the "Effective Date"), is between ArQule, Inc. ("ArQule"), a Delaware corporation, and Solvay Duphar B.V. ("Solvay Duphar"), a Dutch corporation.

R E C I T A L S

WHEREAS, ArQule has developed certain technology that has applications in the discovery and development of pharmaceutical compounds;

WHEREAS, ArQule intends to produce compound Arrays (as defined below) containing large numbers of diverse organic compounds, and is willing to provide such Arrays to outside parties;

WHEREAS, Solvay Duphar desires to obtain access to such Arrays for the purpose of screening for compounds with potential pharmaceutical activity;

WHEREAS, Solvay Duphar desires that ArQule apply its technologies to the research and development of pharmaceutical compounds for Solvay Duphar and that ArQule transfer to Solvay Duphar certain proprietary technology relating to the automated assembly and synthesis of Arrays; and

WHEREAS, in exchange for payment by Solvay Duphar of research funds, screening fees, milestone payments, and royalties, as well as a substantial equity investment, ArQule is willing to perform certain research and development activities for Solvay Duphar, and to provide Solvay Duphar and its Affiliates with Arrays and with technology relating to the automated assembly and synthesis of Arrays, subject to the terms and conditions of this Agreement;

NOW, THEREFORE, in consideration of the mutual covenants set forth in this Agreement, the parties hereby agree as follows:

1. Definitions.

1.1. "Active ArQule Compounds" shall mean those ArQule Compounds that have exhibited biological activity against a Target and as to which Solvay

Duphar has notified ArQule pursuant to Section 3.1.2.

1.2. "Affiliate" shall mean a corporation or other legal entity that controls, is controlled by, or is under common control with such party. For purposes of this definition, "control" means the ownership, directly or indirectly, of fifty percent (50%) or more of the

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outstanding equity securities of a corporation which are entitled to vote in the election of directors or a fifty percent (50%) or greater interest in the net assets or profits of an entity which is not a corporation.

1.3. "Agreement" shall mean this Research, Development and License Agreement, together with Exhibits A through C hereto.

1.4. "AMAP" shall mean the Automated Molecular Assembly Plant developed by ArQule, which is an integrated system of automated chemical processing substations, automation methods, and information management tools used for combinatorial synthesis, analysis, and purification of organic chemical compounds.

1.5. "AMAP Chemistry" shall mean the reaction conditions (e.g., temperature, type and concentration of reactants, solvents, and reaction times) or similar methods or processes for the synthesis of Arrays by ArQule in the AMAP.

1.6. "AMAP Technology" shall mean all Patent Rights, trade secrets, and know-how relating to the AMAP, excluding the AMAP Chemistry, that are owned or controlled by ArQule at the time of the AMAP Installation Date.

1.7. "AMAP Improvement" shall mean any modification or improvement to the AMAP Technology, excluding the AMAP Chemistry, whether or not patentable or copyrightable, that is owned or controlled by Solvay Duphar during the Research Period or by ArQule after the AMAP Installation Date but during the Research Period.

1.8. "AMAP Installation Date" shall have the meaning set forth in Section 8.2.

1.9. "ArQule Compounds" shall mean chemical compounds provided by ArQule to Solvay Duphar under the Screening Array Program.

1.10. "ArQule Patent Rights" shall mean Patent Rights owned or controlled by ArQule as of the Effective Date or during the Research Period, and for a period of one (1) year thereafter, except for any Patent Rights relating to AMAP Technology or AMAP Improvements. The ArQule Patent Rights as of the Effective Date are listed in Exhibit A.

1.11. "ArQule Technology" shall mean all trade secrets, know-how, Confidential Information, and Proprietary Materials that are owned or controlled by ArQule as of the Effective Date or acquired during the Research Period, except for any AMAP Technology or AMAP Improvements.

1.12. "Array" shall mean a set of samples of structurally related chemical compounds arranged in a format such as a microtiter screening plate.

1.13. "Base Rate of Interest" shall mean the base rate of interest declared from time to time by the Bank of Boston.

1.14. "Chemical Theme" shall mean the chemical or structural characteristics shared by a group of compounds as determined by the Research Committee pursuant to Section 2.2.

1.15. "Confidential Information" shall have the meaning set forth in Section 10.1.1.

1.16. "Contract Year" shall mean each calendar year of the Research Period, except that the first Contract Year will commence on the Effective Date and conclude on December 31, 1996.

1.17. "Derivative" shall mean a chemical compound structurally derived in one or more steps from another by a process of modification or partial substitution of at least one component wherein at least one structural feature is retained at each process step. The number of intermediate steps or compounds is not relevant to the classification of a compound as a Derivative. A compound need not have structural similarity to another compound in order to be classified as a Derivative.

1.18. "Directed Array" shall mean an Array comprised of Derivatives synthesized by ArQule pursuant to the Directed Array Program.

1.19. "Directed Array Program" or "DA Program" shall mean the Directed Array component of the Research Programs between ArQule and Solvay Duphar, as set forth in Article 4.

1.20. "Disclosing Party" shall mean that party disclosing Confidential Information to the other party under Section 10.1.

1.21. "Field" shall mean applications of a therapeutic drug in human or animal health.

1.22. "Full-Time Equivalent" or "FTE" shall mean one (1) or more employees of a party who, collectively, spend time and effort working on a specific project or task equivalent to the time and effort of one (1) full-time employee of a party working on such project or task (approx. 2,000 hours per year). The term "ArQule FTE" shall have the meaning specified in Section 4.2.

1.23. "Joint Patent Rights" shall mean any Patent Rights that are jointly owned by the parties, as set forth in Section 6.1(b).

1.24. "Lead Compound" shall mean a compound that fulfills Solvay Duphar's primary criteria (with respect to potency, selectivity and biological availability) in a project line.

1.25. "Net Sales" shall mean the aggregate Net Sales Price of Royalty-Bearing Products in any Royalty Period.

1.26. "Net Sales Price" shall mean *

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1.27. "Patent Rights" shall mean all Valid Claims of all issued patents and reissues, reexaminations, extensions and supplementary protection certificates thereof and all patent applications and any divisions, continuations, or continuations-in-part thereof or patents issuing thereon. For the purposes of this Section, "Valid Claim" shall mean either (a) a claim of an

issued patent that has not been held unenforceable or invalid by an agency or a court of competent jurisdiction in any unappealable or unappealed decision or (b) a claim of a pending patent application that has not been abandoned or finally rejected without the possibility of appeal or refiling.

1.28. "Phase II Clinical Trials" shall mean clinical trials in a small sample of the intended patient population to assess the efficacy for a specific indication of a compound proposed to be used as a therapeutic or diagnostic pharmaceutical product, to determine dose tolerance and the optimal dose range as well as to gather additional information relating to safety and potential adverse effects, and meeting the requirements established by the U. S. Food and Drug Administration for Phase II clinical trials.

1.29. "Phase III Clinical Trials" shall mean clinical trials designed to demonstrate safety and efficacy of a compound proposed to be used as a therapeutic or diagnostic pharmaceutical product in an expanded patient population at geographically dispersed study sites, meeting the requirements established by the U.S. Food and Drug Administration for Phase III clinical trials.

1.30. "Priority Substance" shall mean a compound selected by Solvay Duphar or an Affiliate of Solvay Duphar to enter into the preclinical research phase.

1.31. "Project Declaration" shall mean, with respect to a compound, the decision to commence human clinical trials.

1.32. "Proprietary Materials" shall have the meaning set forth in Section 10.2.1.

1.33. "Receiving Party" shall mean that party receiving Confidential Information under Section 10.1, or Proprietary Materials under Section 10.2, as the case may be.

1.34. "Research Committee" shall have the meaning set forth in Section 2.1.

1.35. "Research Period" shall mean the period during which the DA Program or the SA Program, or both, remain in effect. The maximum duration of the Research Period shall be five (5) years, unless extended by the mutual agreement of the parties.

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1.36. "Research Plan" shall mean a plan of research for the DA Program covering a six-month period, which shall be updated quarterly pursuant to Section 2.2 to reflect developments during the previous three (3) months and extended for the subsequent three (3) months. The initial Research Plan is attached as Exhibit B to this Agreement.

1.37. "Research Programs" shall mean, collectively, the Directed Array Program and the Screening Array Program.

1.38. "Royalty-Bearing Product" shall mean a product containing as one of its constituents (a) any Active ArQule Compound, (b) any Solvay Duphar Compound that ArQule synthesized in the DA Program, including Derivatives thereof developed by Solvay Duphar; or (c) any other compound discovered or designed by Solvay Duphar for a Target as a result of information provided by ArQule to Solvay Duphar under the Research Programs.

1.39. "Royalty Period" shall mean every calendar quarter, or partial calendar quarter, commencing with the first commercial sale of a Royalty-Bearing Product in any country. The last Royalty Period for any Royalty-Bearing Product

in any country shall be the quarter during which all Patent Rights covering such Royalty-Bearing Product expire in such country.

1.40. "Screening Array" shall mean an Array of ArQule Compounds.

1.41. "Screening Array Program" or "SA Program" shall mean the Screening Array component of the Research Programs between ArQule and Solvay Duphar, as set forth in Article 3.

1.42. "Solvay Duphar Compounds" shall mean all chemical compounds made by or for Solvay Duphar under this Agreement, including compounds provided by Solvay Duphar or its Affiliates to ArQule under the Directed Array Program and any Derivatives thereof, and Derivatives of Active ArQule Compounds, either developed by ArQule under the Directed Array Program or by Solvay Duphar alone.

1.43. "Solvay Duphar Patent Rights" shall mean Patent Rights owned or controlled by Solvay Duphar, except for any Patent Rights relating to AMAP Improvements.

1.44. "Target" shall mean the biological target against which activity of an Active ArQule Compound was revealed, together with any related biomolecules that (a) exhibit substantial structural homology with the identified biomolecule, as measured by the degree of similarity in the primary structure (i.e., amino acid sequence, nucleotide sequence, monosaccharide linkages) and secondary structure (i.e., three-dimensional structure), (b) perform a substantially similar function as the identified biomolecule, and (c) have therapeutic relevance. Biological targets shall not be considered as exhibiting substantial structural homology nor functional similarity if such biological targets are generally recognized by the scientific community as being different.

1.45. "Third Party Screening Array Partner" shall mean a third party to whom ArQule provides Screening Arrays.

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1.46. "Transferring Party" shall mean the party furnishing Proprietary Materials to the other party under Section 10.2.

1.47. The above definitions are intended to encompass the defined terms in both the singular and plural tenses.

2. Management of Research Programs.

2.1. Composition of Research Committee. The parties hereby establish a Research Committee comprised of six (6) members, with three (3) representatives appointed by each party. The initial members of the Research Committee shall be as follows:

ArQule Representatives

David Coffen

Joseph Hogan

Robert Zambias

Solvay Duphar Representatives

Ulf Preuschoff

Chris Kruse

Jan van Randen

A party may change one or more of its representatives to the Research Committee at any time upon notice to the other party. Each party will designate one of its representatives as its team leader.

2.2. Duties of the Research Committee. The Research Committee shall direct and administer the Research Programs. With respect to the Research Programs, the Solvay Duphar representatives on the Research Committee shall, in consultation with the ArQule representatives, determine the identity, scope and priority of each Chemical Theme. The identity and scope of such Chemical Theme will be determined on the basis of the following criteria: (i) the specific reaction or reaction sequence used to combine members of two or more discrete chemical units in which each chemical unit bears the functional group(s) required for the specific reaction(s) that result in the combination of the chemical units; and (ii) the extent to which a class of compounds is related by a recurring structural motif associated with a particular biological activity. With respect to the SA Program, the Research Committee shall specifically determine the following: (i) the appropriate number and type of Chemical Themes represented in the Arrays delivered to Solvay Duphar each Contract Year; (ii) the appropriate number of compounds for each Chemical Theme in the Arrays delivered to Solvay Duphar each Contract Year; and (iii) the appropriate amount of each compound to be provided for a particular Chemical Theme. With respect to the DA Program, the Research Committee shall specifically determine the following: (i) the appropriate number and type of Chemical Themes for submission to the DA Program, subject to ArQule's right to exclude certain compounds as set forth in Section 2.3 below; (ii) the appropriate number of compounds that ArQule should generate in a Directed Array for a particular Chemical Theme; and (iii) the appropriate amount of each compound in a Directed Array that ArQule should deliver to Solvay Duphar for further research and development. In

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addition, the Research Committee shall (i) determine the allocation of the funding and personnel resources to be contributed by the parties under this Agreement, (ii) revise and extend the Research Plan each calendar quarter for the subsequent six (6) months based on prior developments, (iii) resolve matters involving scientific questions, and (iv) resolve publication disputes that may arise under Section 10.4.

2.3. Compounds Excluded from the DA Program. ArQule shall have the right, at the time Solvay Duphar seeks to include any compound(s) in the DA Program, to exclude from the DA Program any compound(s) that is at that time either (i) included within a directed array program for a third party or (ii) included within an existing ArQule internal development program, provided that the circumstances upon which the exclusion is based have, at the time ArQule seeks to assert the exclusion, been disclosed to the ArQule Board of Directors.

2.4. Meetings of the Research Committee. The Research Committee shall conduct monthly telephone conferences and shall prepare and deliver a brief written report describing the significant issues and discussions that take place during such telephone conferences. A representative of the Research Committee jointly appointed by its members shall provide each member with five (5) business days notice of the time of telephone conferences, unless such notice is waived by all members. ArQule will prepare and deliver to the members of the Research Committee a brief progress report at least one week in advance of the telephone conference, which report will list the ArQule employees then working on the Research Programs. The Research Committee shall meet at least once each quarter at the facilities of ArQule, or at such other times and locations as the Research Committee determines. A representative of the Research Committee jointly appointed by its members shall provide each member with five (5) business days notice of the time and location of meetings, unless such notice is waived by all members. If a designated representative of a party cannot attend any meeting of the Research Committee, such party may designate a different representative for that meeting without notice to the other party, and the substitute member will have full power to vote on behalf of the permanent member. Except as otherwise provided in this Section 2, all actions and decisions of the Research Committee will require the unanimous consent of all of its members. If the Research Committee fails to reach agreement upon any matter, the dispute will be resolved in accordance with the procedures set forth in

Section 15.5 below. Subsequent to each quarterly meeting, the Research Committee shall prepare and deliver, to both parties, a written report describing the decisions made, conclusions and actions agreed upon.

2.5. Cooperation. Each party agrees to provide the Research Committee with information and documentation as reasonably required for the Research Committee to fulfill its duties under this Agreement. In addition, each party agrees to make available its employees and consultants as reasonably requested by the Research Committee. The parties anticipate that members of the Research Committee will communicate informally with each other and with employees and consultants of the parties on matters relating to the Research Programs.

2.6. Visits to Facilities. Members of the Research Committee shall have reasonable access to the facilities of each party where activities under this Agreement are in

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progress, but only during normal business hours and with reasonable prior notice. Each party shall bear its own expenses in connection with such site visits.

3. Screening Array Program.

3.1. Description of Program.

3.1.1. Supply of Screening Arrays. During each Contract Year, ArQule will supply Solvay Duphar with Screening Arrays containing approximately * each of * chemical compounds not included in any other Screening Array provided to Solvay Duphar by ArQule and based on approximately * Chemical Themes. The amounts of each compound in each Array and the number of Chemical Themes per year are non-binding objectives, however, ArQule shall have a binding obligation, subject to Section 3.2, to furnish Solvay Duphar with * different compounds, not included in any other Screening Array provided to Solvay Duphar by ArQule, per year.

3.1.2. Identification of Active ArQule Compounds. Initially, ArQule will identify the Chemical Theme of each Screening Array but not the structures of the individual compounds in the Screening Arrays. Solvay Duphar may screen the Screening Arrays against any biological targets during the SA Program and thereafter. Initially, Solvay Duphar will not disclose the targets screened. If Solvay Duphar detects any Active ArQule Compounds in a Screening Array, ArQule will disclose (i) the structure of each Active ArQule Compound and (ii) the structures, but not the locations in the Screening Array, of all other ArQule Compounds in the Screening Array and Solvay Duphar will disclose (a) the identity of the Target and (b) the level of activity. All such disclosed information shall be treated as Confidential Information by both parties. Solvay Duphar agrees to screen ArQule Compounds only against targets that, in its reasonable business judgement, are therapeutically relevant. Solvay Duphar agrees to notify ArQule of Active ArQule Compounds only if the level of activity detected is sufficient, in its reasonable business judgement, to warrant further development (including the making of Derivatives) of the Active ArQule Compound. Solvay Duphar may further develop (including the making of Derivatives) Active ArQule Compounds itself or it may submit Active ArQule Compounds to the Directed Array Program under Article 4.

3.2. Payment. In consideration of the performance by ArQule of the SA Program in accordance with this Agreement, during the first Contract Year, Solvay Duphar shall pay ArQule a screening fee in the amount of * Dollars * , payable as follows:

* On the Effective Date

* On January 2, 1996.

* On June 1, 1996.

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Thereafter, Solvay Duphar shall pay ArQule an annual screening fee in the amount of * Dollars * during each Contract Year, payable in advance in equal quarterly installments; provided, however, that Solvay Duphar may suspend payment of the screening fee for any Contract Year if ArQule fails to supply Solvay Duphar with * different compounds in the prior Contract Year, which suspension shall remain in effect until ArQule remedies the deficiency. The suspension of payments set forth in the preceding sentence shall be Solvay Duphar's sole remedy for any ArQule failure to deliver * different compounds in any Contract Year except that if, upon the expiration of the second quarter of the final Contract Year of the SA Program, the parties determine that, based on the number of compounds delivered to date and ArQule's forecast of the remaining compounds to be delivered during the balance of the final Contract Year, ArQule will be unable to deliver a total of * different compounds to Solvay Duphar during the remainder of the final Contract Year, the parties will appropriately adjust downward the quarterly payments to be made by Solvay Duphar during the balance of the Contract Year. Any disagreement concerning the forecast will be resolved pursuant to the dispute resolution procedures of Section 15.5. Upon completion of the final Contract Year of the SA Program a final financial reconciliation will be made, either by Solvay Duphar paying ArQule an additional amount, or by ArQule refunding to Solvay Duphar a portion of the amounts previously paid it, so that Solvay Duphar will have paid screening fees to ArQule in the amount of * per compound for all compounds delivered to Solvay Duphar under the SA Program. ArQule agrees to use its best efforts to provide Solvay Duphar with compounds as they become available throughout each Contract Year in order to avoid the delivery of large numbers of compounds in a short period of time, but in any case, no later than the date such compounds are provided to any Third Party Screening Array Partner.

3.3. Termination of SA Program. The SA Program shall commence on the Effective Date and continue for a period of five (5) Contract Years, unless earlier terminated as provided in this Section or in Article 14 below. Solvay Duphar may terminate the SA Program at its discretion upon twelve (12) months written notice to ArQule and payment of the following amounts as final settlement at the conclusion of the twelve-month notice period:

Notice During First Contract Year: *

Notice After First Contract Year: To be determined by the Research Committee based upon a downward sliding scale related to ArQule's commercial success of the Screening Array Program, not to exceed *

Termination of the SA Program shall have no effect on the continuation of the DA Program.

4. Directed Array Program.

4.1. Description of Program. Under the direction of the Research Committee and in accordance with the Research Plan, ArQule will synthesize Arrays of compounds derived from (i) Solvay Duphar Compounds provided to ArQule by Solvay Duphar and/or (ii) Active ArQule Compounds provided by ArQule to Solvay Duphar under the SA Program and then

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requested by Solvay Duphar to be included in the DA Program. The parties intend that, during the Research Period, ArQule will produce such Directed Arrays based on approximately * different Chemical Themes per year, which will result in the production of approximately * Derivatives per Chemical Theme per year; provided, however, that the number of Chemical Themes actually submitted to the DA Program and the number of Derivatives actually produced per Chemical Theme will be determined by the Research Committee; and further provided that the intentions of the parties set forth herein and in the Research Plan shall be appropriately adjusted in the event of early termination of the DA Program. The parties also intend that ArQule will produce approximately * of each Derivative in the Directed Arrays, subject to the availability of the original Solvay Duphar Compounds or Active ArQule Compounds; the amount of each Derivative that ArQule actually produces, however, will be determined by the Research Committee. ArQule agrees that any Derivatives of Active ArQule Compounds provided to Solvay Duphar under the DA Program (i) will not have been provided by ArQule to any third party and (ii) will not in the future be provided by ArQule to any third party.

4.2. Conduct of Program. The conduct of the DA Program shall be the primary responsibility of ArQule with participation by Solvay Duphar. ArQule shall commit * Full-Time Equivalent employees to the DA Program (the "ArQule FTEs"). The ArQule FTEs will be adequate and have the required skills for carrying out the DA Program. Solvay Duphar shall propose Chemical Themes to the Research Committee for inclusion in the DA Program. If the Research Committee approves the inclusion of the proposed Chemical Theme, Solvay Duphar shall provide ArQule with the requisite amount and purity of Solvay Duphar Compounds for that Chemical Theme or, in the case of Active ArQule Compounds, either ArQule or Solvay Duphar shall produce the requisite amount of the Active ArQule Compound, as directed by the Research Committee. ArQule shall thereupon synthesize Directed Arrays of Derivatives of Solvay Duphar Compounds or Active ArQule Compounds. ArQule shall diligently perform this synthesis work in accordance with the Research Plan. Solvay Duphar shall, in its discretion, test all compounds in the Directed Arrays. The DA Program shall be conducted in a good scientific manner and in compliance with all applicable legal requirements.

4.3. Payments. In consideration of the performance by ArQule of the DA Program, during the first Contract Year, Solvay Duphar shall pay ArQule research and development funding in the amount of * Dollars * , payable as follows:

- * On the Effective Date
- * On January 2, 1996.
- * On June 1, 1996.

Thereafter, Solvay Duphar shall make the following annual payment to ArQule during each Contract Year, payable in advance in equal quarterly installments:

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Annual Payment = * x (1 + CPI)

Where CPI is a fraction, the numerator of which is the difference between the Consumer Price Index (CPI-U; U.S. City Average for all items; 1982-84 = 100) as of the last month of the immediately preceding Contract Year and the Consumer Price Index as of the month immediately preceding the Effective Date and the denominator of which is the Consumer Price Index as of the month immediately preceding the Effective Date.

ArQule shall use such payments to conduct the DA Program in accordance with this Agreement.

4.4. Termination of DA Program. The DA Program shall commence on the Effective Date and continue for a period of five (5) Contract Years, unless earlier terminated as provided in this Section or in Article 14 below. Solvay Duphar may terminate the DA Program at its discretion upon six (6) months written notice to ArQule together with payment, as final settlement, in the amount of * percent * of the annual research payment for the Contract Year in which such notice was given, as described in Section 4.3. Termination of the DA Program shall have no effect on the continuation of the SA Program.

5. Ownership of Compounds.

5.1. Solvay Duphar Compounds. All Solvay Duphar Compounds are owned by Solvay Duphar or its Affiliates, except, and only to the extent that, with respect to the DA Program, ArQule can show that any such compound (i) was under development by ArQule (including programs with academic collaborators or corporate partners) before such Solvay Duphar Compound was proposed to be included in the Directed Array Program; (ii) was independently developed by ArQule employees who had no access to Solvay Duphar Confidential Information regarding the particular Solvay Duphar Compound; or (iii) was already within a screening array before such compound was proposed to be included in the Directed Array Program.

5.2. ArQule Compounds. All ArQule Compounds are owned by ArQule except, and only to the extent that, Solvay Duphar can show that any such compound was in the possession of Solvay Duphar before it was provided by ArQule to Solvay Duphar or its Affiliates.

6. Intellectual Property Rights.

6.1. Ownership of Patent Rights.

(a) ArQule Patent Rights. Any Patent Rights filed by either party covering only Active ArQule Compounds will be owned solely by ArQule except as provided in Section 6.1(b) (ii).

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(b) Joint Patent Rights. Any Patent Rights (i) filed by either party covering both Active ArQule Compounds and Solvay Duphar Compounds and/or (ii) claiming an Active ArQule Compound and uses thereof discovered by Solvay Duphar, shall be owned jointly by ArQule and Solvay Duphar.

(c) Solvay Duphar Patent Rights. Any Patent Rights filed by either party covering Solvay Duphar Compounds only will be owned solely by Solvay Duphar.

6.2. Prosecution of Patent Rights on Active ArQule Compounds. ArQule agrees to cooperate with Solvay Duphar in order to maximize the duration of patent protection on Active ArQule Compounds, and both parties agree to cause their patent counsel to consult with each other for such purpose. ArQule agrees

not to file patent applications on Screening Arrays that disclose the specific compounds in those Screening Arrays. Upon notification of activity and disclosure of a Target by Solvay Duphar, ArQule will agree to defer filing patent applications on the Active ArQule Compound(s) until a time reasonably acceptable to Solvay Duphar, provided that such deferral does not, in the opinion of patent counsel of both parties, jeopardize the ability to pursue patent protection on such Active ArQule Compounds. If both patent counsel cannot agree, the matter will be referred to the Research Committee for resolution. If, after the expiration of fifteen (15) days from such referral, the Research Committee has not agreed, the matter will be resolved pursuant to the dispute resolution procedures set forth in Section 15.5. A Joint Patent application covering both the use and composition of matter of the Active ArQule Compound will be filed shortly before any public disclosure necessitated by the development process (typically commencement of clinical trials).

6.3. Management of Joint Patent Rights. In the case of Joint Patent Rights, the parties shall agree on the allocation of responsibility for, and the expense of, the preparation, filing, prosecution, and maintenance of any Joint Patent Rights claiming such inventions. In the event of any disagreement concerning any Joint Patent Rights, the matter shall be resolved by the Research Committee or, in the absence thereof, by the CEO of ArQule and the Vice President-Research of Solvay Duphar. The party controlling a Joint Patent Right shall consult with the other party as to the preparation, filing, prosecution, and maintenance of such Joint Patent Right reasonably prior to any deadline or action with the U.S. Patent & Trademark Office or any foreign patent office, and shall furnish to the other party copies of all relevant documents reasonably in advance of such consultation. In the event that the party controlling a Joint Patent Right desires to abandon such Joint Patent Right, or if the party assuming control of a Joint Patent Right later declines responsibility for such Joint Patent Right, the controlling party shall provide reasonable prior written notice to the other party of such intention to abandon or decline responsibility, and such other party shall have the right, at its expense, to prepare, file, prosecute, and maintain such Joint Patent Rights.

6.4. Cooperation of the Parties. Each party agrees to cooperate fully in the preparation, filing, and prosecution of any Patent Rights under this Agreement. Such cooperation includes, but is not limited to:

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(a) executing all papers and instruments, or requiring its employees or agents, to execute such papers and instruments, so as to effectuate the ownership of Patent Rights set forth in Section 6.1 above and to enable the other party to apply for and to prosecute patent applications in any country;

(b) promptly informing the other party of any matters coming to a party's attention that may affect the preparation, filing, or prosecution of any such patent applications; and

(c) undertaking no actions that are potentially deleterious to the preparation, filing, or prosecution of such patent applications.

6.5. Infringement by Third Parties. ArQule and Solvay Duphar shall each promptly notify the other in writing of any alleged or threatened infringement by a third party of any ArQule Patent Right or Joint Patent Right exclusively licensed to Solvay Duphar within the Field of which they become aware. The parties shall consult concerning the action(s) to be taken.

6.5.1. Prosecution by Solvay Duphar. Solvay Duphar shall have the right, but not the obligation, to prosecute, at its own expense, any such third party infringement. Any such action shall be under Solvay Duphar's control, but ArQule shall have the right to join any such suit or action brought by Solvay Duphar and, in such event, shall pay one-half of the cost of such action.

Provided that ArQule has joined in the action and shared the costs thereof as stated in the preceding sentence, no settlement, consent judgment or other voluntary final disposition of the action may be entered into without the consent of ArQule, which consent shall not unreasonably be withheld. Any recovery or damages derived from such action shall first be used to reimburse Solvay Duphar (and ArQule, if it has joined in the action) for all legal expenses (including, in the case of any party utilizing in-house legal counsel, the direct costs of such in-house counsel) relating to the action. Any recovery or damages still remaining shall, if ArQule has not joined in the action, be retained by Solvay Duphar or, if ArQule has joined in the action, shall be shared equally by the parties.

6.5.2. Prosecution by ArQule. If Solvay Duphar notifies ArQule that it does not intend to prosecute the infringement or if, within three (3) months after Solvay Duphar first becomes aware of the infringement Solvay Duphar fails to cause any such infringement to terminate or to bring an action to compel termination ArQule shall have the right, but not the obligation to bring such action. ArQule shall retain any recovery or damages derived from such action.

6.6. Infringement of Third Party Patent Rights. Solvay Duphar shall promptly notify ArQule if any action is brought against Solvay Duphar alleging infringement of any third-party patent right as a result of the exercise of Solvay Duphar's rights under Section 7.2. Solvay Duphar shall have the right, but not the obligation, to defend, at its own expense, any such action.

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6.7. Claims Brought by Third Parties. In the event that any action or claim involving or relating to any ArQule Patent Right or Joint Patent Right shall be brought against Solvay Duphar, Solvay Duphar shall promptly notify ArQule in writing, and the parties shall consult concerning the action to be taken. Such third party actions or claims include, without limitation, actions or claims alleging invalidity, unenforceability or non-infringement of any ArQule Patent Right or Joint Patent Right and any defense to a claim of infringement thereof.

In the case of any action or claim involving or relating to ArQule Patent Rights, ArQule, at its sole option, shall have the right, within thirty (30) days of commencement of such action, to intervene, take over and duly prosecute the sole defense of the action at its own expense.

In the case of any action or claim involving or relating to Joint Patent Rights, Solvay Duphar shall have the right, but not the obligation, to defend, at its own expense, any such action or claim, but ArQule shall have the right to join any such defense brought by Solvay Duphar and, in such event, shall pay one-half of the cost thereof. Provided that ArQule has joined in such defense and shared the costs thereof as stated in the preceding sentence, no settlement, consent judgment or other voluntary final disposition of the action may be entered into without the consent of ArQule, which consent shall not unreasonably be withheld. If Solvay Duphar does not defend against the action or claim, ArQule shall have the right, but not the obligation to do so at its own expense.

6.8. Cooperation in Infringement Actions. In any action (i) prosecuted or defended against by either party involving or relating to the ArQule Patent Rights or the Joint Patent Rights or (ii) in which either party defends against any claim of infringement or contributory infringement of third-party patents due to activities performed under this Agreement, the other party hereto (the "Cooperating Party") shall, at the request of the party initiating or defending against such action or claim, cooperate in all reasonable respects and to the extent reasonably possible shall make available to such party all information relevant to such action or claim including, without limitation, records, material, and testimony. The Cooperating Party shall bear its own costs related to such cooperation under Subsection (i) above, but such cooperation shall be at the expense of the other party under Subsection (ii) above.

7. License Grants.

7.1. ArQule Screening License. ArQule hereby grants Solvay Duphar and its Affiliates: (i) a nonexclusive, worldwide, royalty-free, perpetual license (without the right to grant sublicenses) under ArQule Patent Rights and ArQule Technology to use the ArQule Compounds to screen against any biological targets in the Field.

7.2. ArQule Commercial License. Upon notice of Solvay Duphar's identification of Active ArQule Compounds and disclosure of information to ArQule, pursuant to Section 3.1.2, and provided that no Third Party Screening Array Partner has already licensed such Active ArQule Compounds in the Field, ArQule agrees to grant to Solvay Duphar and its Affiliates an exclusive, worldwide, royalty-bearing license (with a limited right to sublicense, as set forth in Section 7.3) in the Field under ArQule Patent Rights, under

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ArQule's interest in any Joint Patent Rights and under ArQule Technology, to develop, have developed, make, have made, use, have used, sell and have sold in the Field products incorporating such Active ArQule Compounds.

7.3. Limitations on Sublicenses. Solvay Duphar shall not have the right to grant to third parties the right to make Derivatives of Active ArQule Compounds or of their Derivatives, except for those Derivatives that are Solvay Duphar Compounds.

7.4. Solvay Duphar License Outside the Field. Solvay Duphar hereby grants to ArQule and its Affiliates a worldwide, royalty-free, exclusive license (with the right to sublicense) under Solvay Duphar's rights in any Joint Patent Rights covering Active ArQule Compounds to develop, have developed, make, have made, use, have used, sell and have sold outside the Field products incorporating such Active ArQule Compounds.

7.5. AMAP License. ArQule agrees to grant to Solvay Duphar the licenses to the AMAP Technology, AMAP Chemistry and ArQule Technology set forth in, and subject to the conditions of, Section 8.3.

7.6. Diligence. Solvay Duphar agrees to use reasonable commercial efforts to develop and market Royalty-Bearing Products based on or incorporating any Active ArQule Compound for which it has obtained a license under Section 7.2, or Derivatives thereof, using a level of effort consistent with that used for other Solvay Duphar products having similar commercial potential. The parties hereby acknowledge their understanding that Solvay Duphar's obligations under this Section do not apply to each Active ArQule Compound licensed under Section 7.2 in itself, but only to at least one compound out of each group of Active ArQule Compounds and Derivatives thereof that is active against the same Target. Subject to Sections 7.7 and 7.8, Solvay Duphar shall have the sole and absolute discretion to make all decisions relating to the research, development, marketing and other commercialization activities with respect to any Active ArQule Compound or its Derivatives or any Royalty-Bearing Product derived therefrom.

7.7. Reports of Development Progress. Solvay Duphar agrees to keep ArQule informed of its development progress with respect to each Active ArQule Compound or Derivative thereof for which it has obtained a license under Section 7.2 as follows:

(a) Initial Research Plan. Within 60 days after obtaining a license, Solvay Duphar will provide ArQule with a time line of its planned research activities for that Active ArQule Compound and will keep ArQule periodically informed of its progress under such schedule.

(b) Lead Compound. Solvay Duphar will notify ArQule

of the designation of any Active ArQule Compound or Derivatives thereof as a Lead Compound. Within 60 days of such designation, Solvay Duphar will provide ArQule with a copy of a revised time line of its research activities for that Lead Compound and will keep ArQule periodically informed of its progress under such schedule.

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(c) Priority Substance. Solvay Duphar will notify ArQule of the designation of any Active ArQule Compound or Derivatives thereof as a Priority Substance. Within 60 days of such designation, Solvay Duphar will provide ArQule with a copy of a revised time line of its research activities for that Priority Substance and will keep ArQule periodically informed of its progress under such schedule.

(d) Project Declaration. Solvay Duphar will promptly notify ArQule of a Project Declaration for any Active ArQule Compound or Derivatives thereof.

(e) Discontinuation of Development. Solvay Duphar agrees to notify ArQule if it decides to discontinue development or marketing of any Active ArQule Compound or Derivatives thereof.

In addition, throughout the term of this Agreement, Solvay Duphar will submit to ArQule quarterly reports of the activities of Solvay Duphar and its Affiliates with respect to all such compounds during the prior three-month period. These reports will include relevant chemical and biological data and other information sufficient to allow ArQule to determine whether Solvay Duphar and/or its Affiliates are engaging in significant activity with respect to each such compound prior to Project Declaration. The information in such reports shall be considered Confidential Information under Section 10.1. hereof. During the Research Period, Solvay Duphar shall provide such reports on a schedule such that they can be reviewed at the quarterly meetings of the Research Committee.

7.8. Reversion of Rights. In the event that (i) Solvay Duphar notifies ArQule pursuant to Section 7.7(e) above that it has determined to discontinue the development of any Active ArQule Compound or Derivatives thereof or (ii) Solvay Duphar and/or its Affiliates fail, prior to Project Declaration with respect thereto, to engage in significant activities for a continuous period of six (6) months with respect to any Active ArQule Compound, or Derivatives thereof and such failure is not cured within thirty (30) days of notice thereof, ArQule shall, subject to the provisions set forth below, have the right, immediately upon notice, to terminate the license granted to Solvay Duphar under Section 7.2 with respect to such Active ArQule Compound, and ArQule will thereafter be free to grant licenses to third parties under ArQule Patent Rights and ArQule Technology to make, use, sell and have sold in the Field products incorporating that Active ArQule Compound. Any dispute concerning whether Solvay Duphar or its Affiliates have engaged in significant activity within the meaning of Section 7.8(ii) above shall be resolved under the dispute resolution provisions of Section 15.5.

8. AMAP Technology.

8.1. Access to AMAP Technology. Except as set forth in Section 8.6 below, during the Research Period, but not before December 31, 1997, ArQule hereby agrees to provide the AMAP Technology to Solvay Duphar in accordance with this Section upon one

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hundred and twenty (120) days prior written notice to ArQule, provided that Solvay Duphar is not then in default of any of its material obligations under Sections 3.2 and 4.3.

(a) ArQule will make available to Solvay Duphar complete copies of any documentation then in its possession relating to the AMAP Technology, including copies of patents and patent applications and documentation of know-how and trade secrets.

(b) ArQule will make available to Solvay Duphar a certain limited AMAP Chemistry sufficient to enable Solvay Duphar to verify the functionality of the AMAP. In addition, during the term of the Research Program, ArQule will make available to Solvay Duphar all AMAP Chemistry and ArQule Technology used by ArQule in connection with the Directed Array Program.

(c) ArQule will provide Solvay Duphar employees with technical assistance at ArQule as reasonably necessary for Solvay Duphar to acquire the AMAP Technology. Such technical assistance will include (i) reasonable access to the ArQule AMAP equipment and software and (ii) reasonable instruction by ArQule employees regarding use of the AMAP equipment and software. Such technical assistance at ArQule will be provided by the ArQule FTEs, unless the Research Committee determines that the ArQule FTEs are unavailable for such purposes. The cost of any such ArQule personnel and resources beyond the ArQule FTEs shall be borne by Solvay Duphar, at ArQule's then-current standard rates and charges. At no time shall the number of Solvay Duphar employees on the premises of ArQule exceed five (5) persons. Solvay Duphar shall pay all expenses incurred by its employees, including travel, meals, and lodging.

(d) ArQule will provide Solvay Duphar with technical assistance at the premises of Solvay Duphar and/or of its Affiliates as reasonably necessary to enable Solvay Duphar to develop a functional AMAP. ArQule will provide Solvay Duphar, in addition to the ArQule FTEs, with one (1) qualified individual for up to four (4) weeks for such assistance, except that Solvay Duphar shall pay all reasonable expenses incurred by such employee, including travel, meals, and lodging.

(e) With the approval of the Research Committee, Solvay Duphar may redirect the efforts of ArQule FTEs dedicated to the DA Program in order to facilitate the transfer of AMAP Technology at ArQule.

(f) Solvay Duphar shall purchase all equipment and supplies that are required to assemble a functional AMAP at Solvay Duphar. Solvay Duphar shall have complete discretion regarding its purchases of equipment and supplies, including decisions as to the type of equipment, vendor, and price, but shall consult with ArQule prior to making any purchase. ArQule shall have no obligation to supply any such equipment or supplies.

(g) ArQule shall provide Solvay Duphar with two (2) copies of its proprietary AMAP software in source-code and object-code form, at no additional

charge, subject to the terms and conditions of a mutually acceptable software license agreement.

8.2. AMAP Installation Date. ArQule shall have fulfilled its obligations under Section 8.1 upon the successful installation, as provided for

in this Section 8.2, of a functional AMAP at Solvay Duphar, as determined by the criteria set forth in Exhibit C (the "Installation Criteria"). Solvay Duphar shall provide ArQule with written certification that ArQule has satisfied the Installation Criteria. If the parties disagree on whether ArQule has satisfied the Installation Criteria, the matter shall be resolved by the Research Committee. The date upon which ArQule has satisfied the Installation Criteria shall be referred to as the "AMAP Installation Date." ArQule shall have no further obligation to Solvay Duphar under Section 8.1 after the AMAP Installation Date except to the extent set forth in Sections 8.1(b) and 8.4 hereof.

8.3. License of AMAP Technology. In the event that Solvay Duphar elects to obtain the AMAP Technology as set forth in Section 8.1 above, ArQule agrees to grant Solvay Duphar and its Affiliates a perpetual, royalty-free, non-exclusive license (without the right to sublicense) to use the AMAP Technology, and the ArQule Technology and AMAP Chemistry transferred to Solvay Duphar pursuant to Section 8.1(b), for its own internal research and development efforts on products in the Field. Solvay Duphar has no right to provide the AMAP Technology or the AMAP Chemistry to third parties, nor may it use the AMAP Technology or the AMAP Chemistry to provide Arrays to third parties.

8.4. AMAP Improvements. In the event that Solvay Duphar elects to obtain the AMAP Technology as set forth in Section 8.1 above, the parties hereby agree as follows:

(a) During the Research Period, each party shall notify the other party promptly after the discovery or development of any AMAP Improvement. Such notice shall include a brief description of the invention together with the relevant invention disclosure form.

(b) ArQule will provide Solvay Duphar and its Affiliates with the AMAP Chemistry, AMAP Technology and any ArQule Technology used by ArQule in the Directed Array Program.

(c) During the Research Period, each party shall provide the other party with technical assistance as reasonably necessary to allow the other party to acquire any AMAP Improvement at the receiving party's expense.

(d) ArQule hereby grants Solvay Duphar and its Affiliates a perpetual, royalty-free, non-exclusive license (without the right to sublicense) to use any AMAP Improvements for its own internal research and development efforts on products in the Field.

(e) Solvay Duphar hereby grants ArQule and its Affiliates a perpetual, royalty-free, non-exclusive license (with the right to sublicense) to use any AMAP Improvements for any purpose.

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8.5. Protection of AMAP Technology. Solvay Duphar acknowledges and agrees that the AMAP Technology is Confidential Information of ArQule within the meaning of Section 10.1, and includes trade secrets of ArQule. Solvay Duphar shall not disclose or transfer any AMAP Technology to any third party, except to its Affiliates, without the prior written consent of ArQule. Solvay Duphar shall instruct its employees who have access to the AMAP Technology as to its confidential status, and shall contractually bind such employees to observe its obligations under this Section.

8.6. Acceleration of Transfer. During the second Contract Year, Solvay Duphar may elect to commence transfer of the AMAP Technology pursuant to Section 8.1. at any time, rather than after the second Contract Year, in the event of an acquisition of ArQule or that portion of its business pertaining to the subject matter of this Agreement.

9. Payments, Reports, and Records.

9.1. Milestone Payments. In partial consideration of the rights granted Solvay Duphar under this Agreement, Solvay Duphar shall pay ArQule the following amounts within thirty (30) days after each occurrence of the following milestones:

- * Commencement by Solvay Duphar, at its own discretion,
- *
- * *

Such milestone payments shall be non-refundable and shall not be credited against royalties payable to ArQule under this Agreement. Solvay Duphar shall promptly notify ArQule of each occurrence of either of the foregoing milestones.

9.2. Royalties. In partial consideration of the rights granted to Solvay Duphar under this Agreement, Solvay Duphar shall pay to ArQule a royalty of * percent * of Net Sales in countries where, and for as long as, the manufacture or sale of such Royalty- Bearing Products is covered by Patent Rights.

9.3. Reports and Payments. Within thirty (30) days after the conclusion of each Royalty Period, Solvay Duphar shall deliver to ArQule a report containing the following information:

(a) gross sales of Royalty-Bearing Products by Solvay Duphar and its Affiliates and sublicensees during the applicable Royalty Period in each country of sale;

* confidential treatment has been requested for marked portions

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(b) calculation of Net Sales for the applicable Royalty Period in each country of sale; and

(c) total Net Sales in U.S. dollars, together with the exchange rates used for conversion.

All such reports shall be maintained in confidence by ArQule. If no royalties are due to ArQule for any reporting period, the report shall so state. Concurrent with this report, Solvay Duphar shall remit to ArQule any payment due for the applicable Royalty Period. The method of payment shall be mutually agreed to. All amounts payable to ArQule under this Section will first be calculated in the currency of sale and then converted into U.S. dollars in accordance with Section 9.5, and such amounts shall be paid without deduction of any withholding taxes, value-added taxes, or other charges applicable to such payments.

9.4. Invoices; Payments in U.S. Dollars. With the exception of royalty payments due under Section 9.2, ArQule shall submit invoices to Solvay Duphar for each payment due ArQule hereunder, and Solvay Duphar shall pay such invoices within thirty (30) days of receipt thereof. All payments due under this Agreement shall, except as provided in Section 9.5 below, be payable in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the Wall Street Journal) on the last working day of the calendar quarter preceding the applicable calendar quarter. Such payments shall be without deduction of exchange, collection, or other charges.

9.5. Payments in Other Currencies. If by law, regulation, or fiscal policy of a particular country, conversion into United States dollars or

transfer of funds of a convertible currency to the United States is restricted or forbidden, Solvay Duphar shall give ArQule prompt written notice of such restriction, which notice shall satisfy the thirty-day payment deadline described in Section 9.4. Solvay Duphar shall pay any amounts due ArQule through whatever lawful methods ArQule reasonably designates; provided, however, that if ArQule fails to designate such payment method within thirty (30) days after ArQule is notified of the restriction, then Solvay Duphar may deposit such payment in local currency to the credit of ArQule in a recognized banking institution selected by Solvay Duphar and identified by written notice to ArQule, and such deposit shall fulfill all obligations of Solvay Duphar to ArQule with respect to such payment.

9.6. Records. Solvay Duphar and its Affiliates shall maintain complete and accurate records of Royalty-Bearing Products made, used or sold by them or their sublicensees under this Agreement, and any amounts payable to ArQule in relation to such Royalty-Bearing Products, which records shall contain sufficient information to permit ArQule to confirm the accuracy of any reports delivered to ArQule in accordance with Section 9.4. The relevant party shall retain such records relating to a given Royalty Period for at least three (3) years after the conclusion of that Royalty Period.

ArQule will maintain complete and accurate records of the activities engaged in by the ArQule FTEs, which records shall contain sufficient information to permit Solvay Duphar to confirm the compliance of ArQule with Section 4.2.

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Each party (acting as the "Auditing Party") shall have the right, at its own expense, to cause an independent, certified public accountant to inspect such records of the other party (the "Audited Party") during normal business hours for the sole purpose of verifying any reports and payments delivered under this Agreement. Such accountant shall not disclose to the Auditing Party any information other than information relating to accuracy of reports and payments delivered under this Agreement and shall provide the Audited Party with a copy of any report given to the Auditing Party. The parties shall reconcile any underpayment or overpayment within thirty (30) days after the accountant delivers the results of the audit. In the event that any audit performed under this Section reveals an underpayment in excess of five percent (5%) in any Royalty Period, the Audited Party shall bear the full cost of such audit. Each party may exercise its rights under this Section only once every year and only with reasonable prior notice to the other party.

9.7. Late Payments. Any payments by Solvay Duphar that are not paid on or before the date such payments are due under this Agreement shall bear interest, to the extent permitted by law, at two percentage points above the Base Rate of Interest calculated based on the number of days that payment is delinquent.

10. Confidential Information and Proprietary Materials.

10.1. Confidential Information.

10.1.1. Definition of Confidential Information. Confidential Information shall mean any technical or business information furnished by the Disclosing Party to the Receiving Party in connection with this Agreement and specifically designated as confidential. Such Confidential Information may include, without limitation, the identity of a chemical compound, the use of a chemical compound, trade secrets, know-how, inventions, technical data or specifications, testing methods, business or financial information, research and development activities, product and marketing plans, and customer and supplier information. The parties expressly agree that the structures of Active ArQule Compounds and the identity of the related Target shall be considered Confidential Information until such time as the parties have mutually agreed to

disclose such information in patent filings pursuant to Section 6.2.

10.1.2. Designation of Confidential Information. Confidential Information that is disclosed in writing shall be marked with a legend indicating its confidential status. Confidential Information that is disclosed orally or visually shall be documented in a written notice prepared by the Disclosing Party and delivered to the Receiving Party within thirty (30) days of the date of disclosure; such notice shall summarize the Confidential Information disclosed to the Receiving Party and reference the time and place of disclosure.

10.1.3. Obligations. The Receiving Party agrees that it shall:

(a) maintain all Confidential Information in strict confidence, except that the Receiving Party may disclose or permit the disclosure of any Confidential

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Information to its, and its Affiliates', directors, officers, employees, consultants, and advisors who are obligated to maintain the confidential nature of such Confidential Information and who need to know such Confidential Information for the purposes set forth in this Agreement;

(b) use all Confidential Information solely for the purposes set forth in, or as permitted by, this Agreement; and

(c) allow its directors, officers, employees, consultants, and advisors to reproduce the Confidential Information only to the extent necessary to effect the purposes set forth in this Agreement, with all such reproductions being considered Confidential Information.

10.1.4. Exceptions. The obligations of the Receiving Party under Section 10.1.3 above shall not apply to the extent that the Receiving Party can demonstrate that certain Confidential Information:

(a) was in the public domain prior to the time of its disclosure under this Agreement;

(b) entered the public domain after the time of its disclosure under this Agreement through means other than an unauthorized disclosure resulting from an act or omission by the Receiving Party;

(c) was independently developed or discovered by the Receiving Party without use of the Confidential Information;

(d) is or was disclosed to the Receiving Party at any time, whether prior to or after the time of its disclosure under this Agreement, by a third party having no fiduciary relationship with the Disclosing Party and having no obligation of confidentiality to the Disclosing Party with respect to such Confidential Information; or

(e) is required to be disclosed to comply with applicable laws or regulations (such as disclosure to the United States Food and Drug Administration or the United States Patent and Trademark Office or to their foreign equivalents), or to comply with a court or administrative order, provided that the Disclosing Party receives prior written notice of such disclosure and that the Receiving Party takes all reasonable and lawful actions to obtain confidential treatment for such disclosure and, if possible, to minimize the extent of such disclosure.

10.2. Proprietary Materials.

10.2.1. Definition of Proprietary Materials. "Proprietary Materials" shall mean any tangible chemical, biological, or physical research materials that are furnished by the Transferring Party to the Receiving Party in connection with this Agreement regardless of whether such materials are specifically designated as proprietary to the

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Transferring Party. Proprietary Materials shall include, without limitation, all ArQule Compounds and Solvay Duphar Compounds.

10.2.2. Limited Use. The Receiving Party shall use Proprietary Materials solely for the purposes set forth in this Agreement. The Receiving Party shall use the Proprietary Materials only in compliance with all applicable governmental laws and regulations.

10.2.3. Limited Disposition. The Receiving Party shall not transfer or distribute any Proprietary Materials to any third party, except to its Affiliates, without the prior written consent of the Transferring Party.

10.2.4. Reverse Engineering. Solvay Duphar shall not attempt to reverse engineer, or attempt to determine the structure of, any ArQule Compound in a Screening Array until the structure of such compound has been disclosed to Solvay Duphar by ArQule following notification by Solvay Duphar of the location of an Active ArQule Compound and the Target pursuant to Section 3.1.2.

10.3. Return of Confidential Information and Proprietary Materials. Upon the termination of this Agreement, at the request of the Disclosing Party, the Receiving Party shall destroy or return to the Disclosing Party all originals, copies, and summaries of documents, materials, and other tangible manifestations of Confidential Information in the possession or control of the Receiving Party, except that the Receiving Party may retain one copy of the Confidential Information in the possession of its legal counsel (for ArQule) and its Legal and Trademarks Department (for Solvay Duphar) solely for the purpose of monitoring its obligations under this Agreement. Upon the termination of this Agreement, the Receiving Party shall at the instruction of the Transferring Party either destroy or return any unused Proprietary Materials.

10.4. Publications. In the event that either party desires to publicly disclose (through journals, lectures, or otherwise) any results relating to the Research Programs, such party (the "Publishing Party") shall furnish the other party (the "Reviewing Party") with (i) a copy of any written publication at least sixty (60) days prior to submission or (ii) a summary or abstract of an oral disclosure at least thirty (30) days prior to the intended disclosure date. The Reviewing Party shall have the right to (i) consent to the disclosure with modifications to protect patentable inventions or prevent disclosure of Confidential Information, (ii) delay the disclosure for a period of ninety (90) days to enable the preparation and filing of a patent application, or (iii) refuse to allow the disclosure in order to maintain certain information as a trade secret, which refusal shall not be unreasonably exercised. Any disagreements arising under this Section shall be referred to the Research Committee.

10.5. Survival of Obligations. The obligations set forth in this Article shall remain in effect for a period of five (5) years after termination of this Agreement, except that the obligations of the Receiving Party to return or destroy Confidential Information to the Disclosing Party and to return or destroy Proprietary Materials received from the Transferring Party shall survive until fulfilled.

11. Other Rights and Obligations Between the Parties.

11.1. Manufacturing. In the event that Solvay Duphar or a Solvay Duphar Affiliate decides, in its sole discretion, to contract with an outside party for the manufacture of a Royalty-Bearing Product arising from the DA Program, Solvay Duphar shall not offer such manufacturing rights to such third party except as provided in this Section. Solvay Duphar hereby grants ArQule a right of first offer to obtain such manufacturing rights in the form of a nonexclusive manufacturing license under any applicable Solvay Duphar Patent Rights and technical information (the "Offer Right"). ArQule may exercise the Offer Right upon presentation of a written offer to Solvay Duphar within thirty (30) days after ArQule receives a written notice from Solvay Duphar which describes the substance, quantities, and requisite manufacturing specifications. Solvay Duphar shall respond to the ArQule offer within sixty (60) days. Solvay Duphar shall have the right to reject the ArQule offer on any grounds including but not limited to: high cost, lack of time-effectiveness, inability to meet quality standards, inability to meet government requirements, lack of necessary skills, or lack of necessary equipment or facilities. If Solvay Duphar rejects the ArQule offer, Solvay Duphar shall furnish ArQule with a brief explanation of the reason for its decision, and Solvay Duphar shall be free to offer such manufacturing rights to any third party; provided, however, that Solvay Duphar may only grant such rights to a third party on terms that are more favorable, in the aggregate, than the terms of the ArQule offer based upon the reasons that Solvay Duphar provided ArQule for rejection of the ArQule offer.

11.2. ArQule's Right to Acquire Solvay Duphar Products. In the event that Solvay Duphar or an Affiliate decides, in its sole discretion, to terminate development after completion of a Phase II Clinical Trial (or its foreign equivalent) of a Royalty-Bearing Product, Solvay Duphar shall promptly notify ArQule of its decision, and ArQule shall have a period of ninety (90) days to offer to purchase or license such product from Solvay Duphar. ArQule acknowledges and agrees that Solvay Duphar may solicit and receive offers from third parties during this ninety-day period, provided that Solvay Duphar shall not accept any offer unless and until it has received and reasonably considered the ArQule offer. Solvay Duphar may reject the ArQule offer for any reason, in its sole discretion.

11.3. Sale of ArQule Pharmaceutical Business. If ArQule elects to spin-off or otherwise sell or convey all or any portion of its pharmaceutical business to a third party, then ArQule shall provide Solvay Duphar with written notice of such intention. ArQule hereby grants to Solvay Duphar an exclusive right of first negotiation to purchase such business (the "Negotiation Right"). Solvay Duphar may exercise this Negotiation Right upon written notice to ArQule within thirty (30) days from the date upon which ArQule notified Solvay Duphar of its intention to sell. In the event that Solvay Duphar elects to exercise the Negotiation Right, the parties shall attempt to negotiate in good faith the terms and conditions of an asset purchase agreement. If the parties are unable to reach agreement within one hundred and twenty (120) days after the date upon which Solvay Duphar exercised the Negotiation Right, then ArQule will be free to sell such portion of its business to any third party, provided that, during the longer of the term of this Agreement or one (1) year from the expiration of said one hundred twenty (120)-day period, the terms of such sale are no more favorable, in the aggregate, to such third party than those last offered to Solvay Duphar.

12. Representations and Warranties.

12.1. Authorization. Each party represents and warrants to the other that it has the legal right and power to enter into this Agreement, to extend the rights and licenses granted to the other in this Agreement, and to fully perform its obligations hereunder, and that the performance of such obligations will not conflict with its charter documents or any agreements, contracts, or other arrangements to which it is a party.

12.2. Ownership. ArQule represents and warrants that, as of the Effective Date, it possesses the exclusive right, title, and interest in and to the ArQule Technology and the ArQule Patent Rights and that it has the full legal right and power to enter into the obligations and grant the rights and licenses set forth in this Agreement.

12.3. Intellectual Property Rights. This Agreement incorporates by reference, and ArQule hereby extends to Solvay Duphar, the representations and warranties made by ArQule in Section 2.10 of the Series B Convertible Preferred Stock Purchase Agreement entered into by ArQule and Solvay Physica B.V. concurrently with this Agreement.

12.4. AMAP. ArQule represents and warrants that, if Solvay Duphar elects to acquire the AMAP Technology pursuant to Section 8.1, the AMAP Technology transferred to Solvay Duphar will be adequate to operate the AMAP.

13. Indemnification and Insurance.

13.1. Indemnification. Each party (the "Indemnitor") shall indemnify, defend, and hold harmless the other party and its Affiliates and their directors, officers, employees, and agents and their respective successors, heirs and assigns (the "Indemnitees"), against any liability, damage, loss, or expense (including reasonable attorneys fees and expenses of litigation) incurred by or imposed upon the Indemnitees or any one of them in connection with any claims, suits, actions, demands, or judgments arising out of any theory of product liability (including, but not limited to, actions in the form of tort, warranty, or strict liability) concerning any product (or any process or service) that is made, used, or sold by such other party pursuant to any right or license granted under this Agreement; provided, however, that such indemnification right shall not apply to any liability, damage, loss, or expense to the extent directly attributable to the negligent activities, reckless misconduct, or intentional misconduct of the Indemnitees.

13.2. Procedures. Any Indemnitee that intends to claim indemnification under Section 13.1 shall promptly notify the appropriate Indemnitor of any claim in respect of which the Indemnitee intends to claim such indemnification, and the Indemnitor shall assume the defense thereof with counsel mutually satisfactory to the parties; provided, however, that an Indemnitee shall have the right to retain its own counsel, with the fees and expenses to be paid by the Indemnitor, if representation of such Indemnitee by the counsel retained by the Indemnitor would be inappropriate due to actual or potential differing interests between such Indemnitee and any other party represented by such counsel in such proceedings. The

indemnity agreement in Section 13.1. shall not apply to amounts paid in settlement of any loss, claim, liability or action if such settlement is effected without the consent of Solvay Duphar, which consent shall not be withheld unreasonably. The failure to deliver notice to the Indemnitor within a reasonable time after the commencement of any such action, if prejudicial to its ability to defend such action, shall relieve the Indemnitor of any liability to the Indemnitee under Section 13.1. Each party and its Affiliates and their employees and agents shall cooperate fully with the other party and its legal representatives in the investigation of any action, claim or liability covered by this indemnification.

13.3. Insurance. Each party shall maintain reasonably adequate insurance or self-insurance coverage for its own potential liabilities to the Indemnitees as set forth in this Article.

14. Term and Termination.

14.1. Term. This Agreement shall commence on the Effective Date and shall remain in effect until the expiration of the last to expire of the applicable ArQule, Solvay Duphar or Joint Patent Rights, unless earlier terminated as provided in this Article 14. Thereafter, Solvay Duphar shall have a non-exclusive, paid-up royalty-free license to ArQule Technology and the royalty-free non-exclusive licenses to AMAP Chemistry and AMAP Technology set forth in Section 8.3. and to AMAP Improvements set forth in Section 8.4(d) shall remain in effect.

14.2. Breach of Payment Obligations. In the event that Solvay Duphar fails to make timely payment of any amounts due to ArQule under this Agreement, ArQule may terminate this Agreement upon thirty (30) days written notice to Solvay Duphar, unless Solvay Duphar pays all past-due amounts within such thirty-day notice period.

14.3. Material Breach. In the event that either party commits a material breach of any of its obligations under this Agreement and such party fails (i) to remedy that breach within ninety (90) days after receiving written notice thereof from the other party or (ii) to commence dispute resolution pursuant to Section 15.5., within ninety (90) days after receiving written notice of that breach from the other party, the other party may immediately terminate this Agreement upon written notice to the breaching party. The failure of ArQule to deliver * compounds per year under the Screening Array Program shall not be considered a material breach of the Agreement.

14.4. Effect of Termination. The following provisions shall survive the expiration or termination of this Agreement: Articles 1, 5, 6, 9, 10, and 13; Sections 8.3, 8.4, 8.5, 14.1, 14.4, 15.2, 15.3, and 15.5.

15. Miscellaneous.

15.1. Relationship of Parties. Nothing in this Agreement is intended or shall be deemed to constitute a partnership, agency, employer-employee or joint venture relationship

* confidential treatment has been
requested for marked portions

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between the parties. No party shall incur any debts or make any commitments for the other, except to the extent, if at all, specifically provided therein.

15.2. Publicity. Neither party shall use the name of the other party or reveal the terms of this Agreement in any publicity or advertising without the prior written approval of the other party, except that (i) either party may use the text of a written statement approved in advance by both parties without further approval, (ii) either party shall have the right to identify the other party and to disclose the terms of this Agreement as required by applicable securities laws or other applicable law or regulation, and (iii) either party may use the name of the other party and reveal the existence of this Agreement.

15.3. Non-Solicitation. During the term of this Agreement and thereafter for a period of two (2) years, each party agrees not to seek to persuade or induce any employee of the other party to discontinue his or her employment with that party in order to become employed by or associated with any business, enterprise, or effort that is associated with its own business.

15.4. Governing Law. The License Agreement shall be governed by and construed in accordance with the laws of England.

15.5. Dispute Resolution Procedures.

(a) The parties hereby agree that they will attempt in good faith to resolve any controversy, claim or dispute ("Dispute") arising out of or relating to this Agreement promptly by negotiations. Any such Dispute which is not settled by the parties within fifteen (15) days after notice of such Dispute is given by one party to the other in writing shall be referred to a senior executive of ArQule and the Vice President-Research of Solvay Duphar who are authorized to settle such Disputes on behalf of their respective companies ("Senior Executives"). The Senior Executives will meet for negotiations within fifteen (15) days of the end of the 15 day negotiation period referred to above, at a time and place mutually acceptable to both Senior Executives. If the Dispute has not been resolved within thirty (30) days after the end of the 15 day negotiation period referred to above (which period may be extended by mutual agreement), subject to any rights to injunctive relief and unless otherwise specifically provided for herein, any Dispute will be settled first by non-binding mediation and thereafter by arbitration as described in subsections (b) and (c) below.

(b) Any Dispute which is not resolved by the parties within the time period described in subsection (a) shall be submitted to an alternative dispute resolution process ("ADR"). Within five (5) business days after the expiration of the thirty (30) day period set forth in subsection (a), each party shall select for itself a representative with the authority to bind such party and shall notify the other party in writing of the name and title of such representative. Within ten (10) business days after the date of delivery of such notice, the representatives shall schedule a date for engaging in non-binding ADR with a neutral mediator or dispute resolution firm mutually acceptable to both representatives. Any such mediation shall be held in London, England. Thereafter, the representatives of the parties shall engage in good

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faith in an ADR process under the auspices of such individual or firm. If the representatives of the parties have not been able to resolve the Dispute within thirty (30) business days after the conclusion of the ADR process, or if the representatives of the parties fail to schedule a date for engaging in non-binding ADR within the ten (10) day period set forth above, the Dispute shall be settled by binding arbitration as set forth in subsection (c) below. If the representatives of the parties resolve the dispute within the thirty (30) day period set forth above, then such resolution shall be binding upon the parties. If either party fails to abide by such resolution, the other party can immediately refer the matter to arbitration under Section 15.5(c).

(c) If the parties have not been able to resolve the Dispute as provided in subsections (a) and (b) above, the Dispute shall be finally settled by binding arbitration. Any arbitration hereunder shall be conducted under the "Rules of Conciliation and Arbitration" of the International Chamber of Commerce. The arbitration shall be conducted in the English language before three arbitrators chosen according to the following procedure: each of the parties shall appoint one arbitrator and the two so nominated shall choose the third. If the arbitrators chosen by the parties cannot agree on the choice of the third arbitrator within a period of thirty (30) days after their appointment, then the third arbitrator shall be appointed by the Court of Arbitration of the International Chamber of Commerce. Any such

arbitration shall be held in London, England. The arbitrators shall have the authority to grant specific performance, and to allocate between the parties the costs of arbitration in such equitable manner as they determine. The arbitral award (i) shall be final and binding upon the parties; and (ii) may be entered in any court of competent jurisdiction in accordance with the 1958 Convention on the Recognition and Enforcement of Arbitral Awards.

(d) Nothing contained in this Section or any other provisions of this Agreement shall be construed to limit or preclude a party from bringing any action in any court of competent jurisdiction for injunctive or other provisional relief to compel the other party to comply with its obligations hereunder before or during the pendency of mediation or arbitration proceedings. The parties hereby irrevocably consent to submit to the jurisdiction of the courts of England and/or any other court having jurisdiction for this purpose.

15.6. Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and all of which together shall be deemed to be one and the same instrument.

15.7. Headings. All headings in this Agreement are for convenience only and shall not affect the meaning of any provision hereof.

15.8. Binding Effect. This Agreement shall inure to the benefit of and be binding upon the parties, their Affiliates, and their respective lawful successors and assigns.

15.9. Assignment. This Agreement may not be assigned by either party without the prior written consent of the other party, except that either party may assign this Agreement

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to a successor in connection with the merger, consolidation, or sale of all or substantially all of its assets or that portion of its business pertaining to the subject matter of this Agreement. Notwithstanding the foregoing, during the first Contract Year, ArQule must obtain the written consent of Solvay Duphar prior to any acquisition of ArQule or that portion of its business pertaining to the subject matter of this Agreement.

15.10. Notices. All notices, requests, demands and other communications required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been duly given upon the date of receipt if delivered by hand, recognized international overnight courier, confirmed facsimile transmission, or registered or certified mail, return receipt requested, postage prepaid to the following addresses or facsimile numbers:

(a) With regard to notices under Sections 3.4, 4.4, 6.5-6.8, 7.8, 9.1, 11.1- 11.3, 14.2, 14.4, 15.5 and 15.9:

If to Solvay Duphar:

Solvay Duphar B.V.
C.J. van Houtenlaan 36
1381 CP Weesp
the Netherlands
Attention: Vice President-Research
Dr. A. de Jonge

Tel: (0)2940-79633
Fax: (0)2940-77109

and

Solvay Duphar B.V.
C.J. van Houtenlaan 36

If to ArQule:

ArQule, Inc.
200 Boston Avenue, Suite 3600
Medford, MA 02155
Attention: President

Tel: (617) 395-4100
Fax: (617) 395-1225

with a copy to:

Palmer & Dodge
One Beacon Street

1381 CP Weesp
the Netherlands
Attention: Director of Corporate
Technology Acquisition
Dr. J. van Randen

Boston, MA 02108
Attention: Michael Lytton, Esquire
Tel: (617) 573-0327
Fax: (617) 227-4420

with a copy to:

Legal and Trademarks Department

Tel: (0)2940-77479
Fax: (0)2940-77125

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and

(b) With regard to all other communications:

If to Solvay Duphar:

Solvay Duphar B.V.
C.J. van Houtenlaan 36
1381 CP Weesp
the Netherlands
Attention: Director of Corporate
Technology Acquisition
Dr. J. van Randen

Tel: (0)2940-79696
Fax: (0)2940-77126

If to ArQule:

ArQule, Inc.
200 Boston Avenue, Suite 3600
Medford, MA 02155
Attention: President
Tel: (617) 395-4100
Fax: (617) 395-1225

Either party may change its designated address and facsimile number by notice to the other party in the manner provided in this Section.

15.11. Amendment and Waiver. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by both parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

15.12. Severability. In the event that any provision of this Agreement shall, for any reason, be held to be invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect any other provision hereof, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent.

15.13. Entire Agreement. This Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements or understandings between the parties relating to the subject matter hereof.

15.14. Hardship. The underlying objective of this Agreement is to realize in an economical and reasonable way the mutual interests and requirements of the parties. If at any time this Agreement should no longer meet this objective because of technical developments, economic developments or political changes that could not reasonably be foreseen at the time of signing this Agreement thus causing undue and prolonged hardship, the parties shall meet in order to bring about a mutually agreeable solution according to the economic and reasonable objectives of this Agreement.

15.15. Force Majeure. Neither party shall be held liable or responsible to the other party, nor be deemed to be in breach of this Agreement, for failure

or delay in fulfilling or performing any provisions of this Agreement when such failure or delay is caused by or results from any cause whatsoever outside the reasonable control of the party

concerned including, but not limited to, fire, explosion, breakdown of plant, strike, lock-out, labor disputes, casualty or accident, lack or failure of transportation facilities, flood, lack or failure of sources of supply or of labor, raw materials or energy, civil commotion, blockage or embargo, any law, regulation, decision, demand or requirement of any national or local government or authority. The party claiming relief shall, without delay, notify the other party by registered airmail or by telefax of the interruption and cessation thereof and shall use its best efforts to remedy the effects of such hindrance with all reasonable dispatch. The onus of proving that any such Force Majeure event exists shall rest upon the party so asserting. During the period that one party is prevented from performing its obligations under this Agreement due to a Force Majeure event, the other party may, in its sole discretion, suspend any obligations that relate thereto. Upon cessation of such Force Majeure event the parties hereto shall use their best efforts to make up for any suspended obligations. If such Force Majeure event is anticipated to continue, or has existed for nine (9) consecutive months or more, this Agreement may be forthwith terminated by either party by registered airmail or by telefax. In case of such termination the terminating party will not be required to pay to the other party any indemnity whatsoever.

IN WITNESS WHEREOF, the undersigned have duly executed and delivered this Agreement as a sealed instrument effective as of the date first above written.

SOLVAY DUPHAR B.V.

ARQULE, INC.

By: /s/ Mr. Jan Van Houtenlaan

By: /s/ Allan Ferguson

Name: _____

Name: _____

Title: President

Title: Chairman

EXHIBIT A

ArQule Patent Rights*

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* Confidential treatment has been requested for marked portions

Research Plan Solvay - ArQule Collaboration

For the period October 1995 - June 30, 1996.

1. Main Aim

The collaboration is aimed at accelerating Solvay's search for new innovative therapeutics by increasing the number and diversity of compounds through the application of combinatorial parallel synthesis chemistry technology.

2. Research Committee / Meetings / Progress Reports

Composition of the Research Committee.

For ArQule:	D.L. Coffen, PhD
	J.C. Hogan Jr. PhD (ArQule teamleader)
	R.A. Zambias
For Solvay:	C.C. Kruse, PhD
	U. Prouchofe, PhD
	J. van Randen, PhD (Solvay teamleader)

The Research Committee will meet quarterly to adapt and further define the research plan for the next 6 months and to discuss progress over the past 3 months. Chemical themes to be included in the Directed Array program and priority within the Research program will be decided upon by Solvay in consultation with ArQule. ArQule will provide Solvay with all relevant information to ArQule's best knowledge to enable sound decision making. Performance objectives, with respect to timing and number of compounds/number of themes, will be mutually defined by the Research Committee. Progress will be discussed at least once per month (by video or telephone conference) on basis of a written monthly progress report. The monthly progress report will be prepared by ArQule and will be sent to each of the Solvay Research Committee members in time for receipt at least 7 days prior to the progress discussion. The monthly progress report will contain any (updated) listing of the ArQule employees fully or partly involved in the Solvay Research program. With the extent of involvement indicated, in addition to adequate information with respect to status and progress of the running activities.

The Research Committee aims for an open and highly interactive collaboration with the best scientific technical input from both sides. In addition to the Research Committee members, other ArQule or Solvay employees may be involved in part of the discussion upon agreement of the Research Committee team leaders.

3. Term

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The term for the research plan outlined below starts at the effective closure date of the Research Development and license agreement and ends at June 30, 1996. The first quarter ArQule will have provided the equivalence of 30 months FTE capacity.

The program outlined below for the first quarter is definitive and will be executed as agreed. Deviation will need the prior written approval of both the ArQule and the Solvay teamleaders.

4. Selected Solvay Directed Arrays

4.1 Description

The Solvay Directed Arrays selected for the first two quarters of the collaboration are listed below with corresponding code numbers (SAxxx),

identifying the array, which will be used for reference.

[Confidential information]*

Table 1 Solvay Directed Arrays

NOTE: Number of compounds resulting from chemistry 'try-out'. If chemistry proofs tangible, the final number of compounds for this array might significantly increased.

More detailed descriptions, including the chemical themes involved, are included in the annexes which are part of this research program.

4.2 Quality Control

Quality control will be performed by ArQule. ArQule guarantees that each Solvay Directed Array complies with the following specifications:

- (i) Mass Spectrometry data on MW are in accordance with the array design.
- (ii) Amount per compound delivered is no less than *.
- (iii) Purity of delivered compounds estimated by HPLC will be no less than *, unless it has been otherwise decided upon discussion in the Research Committee.

It is noted here that the purity specification of 80% in combination with the numbers of compounds to be delivered can only be guaranteed after installation of the AMPA chromatography substation at the ArQule which is expected to be operational in *.

4.3 Research Objectives

Depending on the array the following research objectives apply:

- (i) completed synthesis (and/or delivery by solvay) of core molecules.
- (ii) completed development of new chemical reactions, if needed.
- (iii) completed synthesis of building blocks.

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- (iv) completed delivery of the Solvay Directed Array including all necessary information and documentation of Solvay.

Necessary information/documentation at delivery includes all chemical structures of compounds, all data on impurities, the synthetic methodology applied and information necessary to incorporate the array in Solvay's screening and to enable adequate chemical data handling.

4.4 Estimated capacity need and time plan

*

Time and capacity plan

Within the first two quarters of the Directed Array program all work to be done on the arrays SASCI - SO507 can be completed. Furthermore some new arrays, to be defined at the next quarter. Table 2 shows the timeline of completing the research objectives defined for each of the arrays.

*

Table 2 Timeline of completion of research objectives

Indicated are the months of completion. Exact dates of completions depend on the start of the program and thus on closure date of the transaction.

NOTES: Research objectives (i) - (iv) refer to the research objectives defined above.

Delivery of library (* compounds) resulting from the chemistry 'try-outs' of SA504.

For reasons of efficiency Solvay Directed Arrays will be prepared and delivered in parts based on common chemical reaction types.

Delivery dates of (parts of) the arrays as well as the number of compounds to be delivered at those dates are indicated in the appended are descriptions.

Solvay-ArQule Cooperation

Directed Array Program: Definition
of Themes and Library Composition

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EXHIBIT C

Installation Criteria

An AMAP is a system containing the following components and capabilities.

1. Informatics Platform
 - (a) Reagent Inventory and Tracking System
 - (b) Array Software for Synthesis Design and Implementation
 - (c) Software for Acquisition, Analysis and Interpretation of Data
 - (d) Array and Compound Registration and Tracking

2. Robotics/Hardware/Capabilities
 - (a) Synthesis Apparatus
 - (b) Weighing/Dissolution/Solubility Testing
 - (c) Heating/Cooling/Agitation
 - (d) Concentration
 - (e) Isolation, Extraction, Purification and Chromatography

3. Analytical Hardware
 - (a) LAN/LIM System for Data Acquisition, Interpretation and Management
 - (b) Analytical Methodology/Techniques

A chemistry set, pre-tested at ArQule, will be provided by ArQule to Solvay to validate the installed system. The chemistry is to be run on the new system to completely test all components of the system. If the chemistry/system performs in a manner equivalent to the performance of the same chemistry set on ArQule's own AMAP, the system shall be considered successfully installed.

RESEARCH & DEVELOPMENT AND LICENSE AGREEMENT

THIS AGREEMENT ("Agreement") is made and entered into effective as of the 16th day of June, 1995 ("Effective Date"), by and between ABBOTT LABORATORIES, an Illinois corporation having a principal place of business at 100 Abbott Park Road, Abbott Park, Illinois 60064 ("Abbott") and ARQULE, INC., a Delaware corporation having a principal place of business at 200 Boston Avenue, Suite 3600, Medford, Massachusetts 02155 ("ArQule").

RECITALS

WHEREAS, ArQule has expertise relating to the modification of pharmaceutical compounds by use of combinatorial chemistry methods utilizing rapid parallel synthesis;

WHEREAS, Abbott has expertise in the discovery, development, marketing and sale of pharmaceuticals and other health care products;

WHEREAS, Abbott desires to have ArQule generate large numbers of ArQule's own compounds as well as compounds derived from specifically targeted parallel synthesis of Abbott provided compounds;

WHEREAS, Abbott desires to perform screening of ArQule's compounds and compounds derived by ArQule from Abbott provided compounds for possible further research and development by Abbott;

WHEREAS, as part of such research and development effort and contingent upon ArQule performing research and development activities under a mutually agreed upon research and development plan, Abbott shall provide certain funding to ArQule for its research and development activities; and

WHEREAS, if Abbott commercially develops any such compounds, Abbott shall pay ArQule milestone payments on such compounds which achieve certain commercial milestones as well as royalties on commercial sales of pharmaceutical products containing such compounds, all on the terms and conditions stated below;

NOW, THEREFORE, in consideration of the foregoing premises and mutual covenants contained herein, Abbott and ArQule hereby agree as follows:

ARTICLE 1

DEFINITIONS

For the purposes of this Agreement, the terms defined in this Article 1 shall have the respective meanings set forth below:

1.1 "Abbott Compound" shall mean an Abbott Core Compound (as defined below) or an Abbott Derivative Compound (as defined below).

1.2 "Abbott Core Compound" shall mean a core chemical compound supplied to ArQule by Abbott pursuant to Section 2.1.

1.3 "Abbott Derivative Compound" shall mean a chemical compound generated by ArQule for Abbott by use of chemical modification methods from an Abbott Core Compound pursuant to Section 2.1.

1.4 "Abbott Field" shall mean *

1.5 "Active ArQule Array" shall mean an ArQule Array (as defined below)

that contains at least one (1) Active ArQule Compound (as defined below).

1.6 "Active ArQule Compound" shall mean *

or such higher concentration level demonstrating significant biological activity as the parties may mutually agree upon.

1.7 "Affiliate" shall mean, with respect to a party, any other business entity which directly or indirectly controls, is controlled by, or is under common control with, such party. A business entity or party shall be regarded as in control of another business entity if it owns, or directly or indirectly controls, more than fifty percent (50%) of the voting stock or other ownership interest of the other business entity. For purposes of this Agreement, Abbott Affiliates shall also include the following entities: Abbott Laboratories (India) Ltd. and Abbott Laboratories Nigeria Limited.

1.8 "ArQule Array" shall mean a set of at least *
ArQule Core Compounds (as defined below) provided by ArQule to Abbott for screening pursuant to Section 5.1.

1.9 "ArQule Compound" shall mean an ArQule Core Compound or an ArQule Derivative Compound (as defined below).

1.10 "ArQule Core Compound" shall mean a core chemical compound from an ArQule Array supplied by ArQule to Abbott pursuant to Section 5.1.

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1.11 "ArQule Derivative Compound" shall mean a chemical compound generated by ArQule for Abbott or by Abbott, its Affiliates or contractors by use of chemical modification methods from an ArQule Core Compound.

1.12 "ArQule Field" shall mean *

1.13 "Array Screening Period" shall mean a period of three (3) Contract Years (as defined below) commencing on the Effective Date.

1.14 "Array Transfer Period" shall mean a period of two (2) Contract Years commencing on the Effective Date.

1.15 "Calendar Quarter" shall mean each of the three (3) month periods beginning on January 1, April 1, July 1 and October 1 of each year.

1.16 "Combination Product" shall mean a pharmaceutical product containing a Product (as defined below) and at least one (1) other therapeutically active ingredient.

1.17 "Composition of Matter Patent" shall mean any national or European Union patent(s) of either party or their Affiliates issued anywhere in the Territory (as defined below) which claims an Abbott Derivative Compound or an ArQule Compound, including any patent(s) issuing from any divisions, continuations, continuations-in-part, reexaminations, or reissues thereof, and any additions, renewals, and extensions of such patent(s).

1.18 "Contract Quarter" shall mean the three (3) month period beginning on the Effective Date and each subsequent three (3) month period during the Research Term.

1.19 "Contract Year" shall mean the twelve (12) month period beginning on the Effective Date and each subsequent twelve (12) month period during the term of this Agreement.

1.20 "FDA" shall mean the United States Food and Drug Administration or any successor entity thereto.

1.21 "FTE" shall mean one (1) or more employees of a party who, collectively, spend time and effort working on a specified project or task equivalent to the time and effort of one (1) full-time employee of a party

working on such project or task.

1.23 "Licensed Final Compound" shall mean a specific ArQule Compound from a Licensed Compound Set that Abbott commercially develops, markets and/or sells pursuant to Section 5.9.

1.24 "Licensed Compound Set" shall mean a list of specific ArQule Compounds licensed to Abbott by ArQule, in accordance with the procedures set forth in Section 5.6, as well as all prodrugs, esters and salt forms of such ArQule Compounds.

1.25 "Licensed Set Core" shall have the meaning set forth in Section 5.6(a).

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1.26 "License Option Period" shall mean a period of ten (10) Contract Years commencing on the Effective Date.

1.27 "NDA" shall mean a New Drug Application filed with the FDA with respect to a Product.

1.28 "Net Sales" shall mean:

(a) With respect to a Product sold alone, the gross invoiced sales of such Product by Abbott, its Affiliates and/or sublicensees to unrelated third parties, less the following deductions:

*

(b) With respect to a Combination Product, the gross invoiced sales of such Combination Product in a particular country by Abbott, its Affiliates and/or sublicensees to unrelated third parties less the deductions under (i) - (vi) above, multiplied by a fraction (i) the numerator of which shall be the per unit current wholesale selling price of the Product contained in the Combination Product, as sold alone in such country, and (ii) the denominator of which shall be the sum of the per unit current wholesale selling price in such country of each active

ingredient in such Combination Product (including the Product) as sold alone as a pharmaceutical product. If there is no established current wholesale selling price of the Product contained in such Combination Product or any other active ingredient of such Combination Product in a particular country, then the standard, fully-burdened manufacturing cost of the Product and other active

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ingredient(s) shall be used to determine the above fraction, with such costs being determined in accordance with United States generally accepted accounting principles.

- (c) With respect to a Product that is sold in a Premium Delivery System (as defined below), an amount calculated by multiplying (i) the total number of milligrams of the ArQule Compound or Abbott Derivative Compound, as applicable, in such Product sold in Premium Delivery Systems in a particular country by Abbott, its Affiliates and/or sublicensees to unrelated third parties, by (ii) the average selling price of one (1) milligram of the ArQule Compound or Abbott Derivative Compound, as applicable, in such Product sold in such country by Abbott, its Affiliates and/or sublicensees to unrelated third parties in the same reporting period, which Product is not sold in Premium Delivery Systems. For purposes of the foregoing sentence, "average selling price" is the total Net Sales of such Product not sold in Premium Delivery Systems calculated pursuant to subparagraph (a) above divided by the aggregate number of milligrams of the ArQule Compound or Abbott Derivative Compound, as applicable, contained in all such Products to which such Net Sales apply. If such Product is only sold in Premium Delivery Systems during the applicable reporting period, then the "Net Sales" of the Product sold in Premium Delivery Systems shall be determined by multiplying the "Net Sales" of the Premium Delivery System containing such Product calculated pursuant to subparagraph (a) above by a fraction (A) the numerator of which shall be the standard, fully-burdened manufacturing cost of the Product and (B) the denominator of which shall be the standard, fully-burdened manufacturing cost of all of the ingredients and components of the Premium Delivery System (including such Product). As used herein, "Premium Delivery System" means any drug delivery system product which comprises a drug or drugs along with a device(s), equipment, instrumentation, or other components (but not solely containers or packaging) designed to accomplish or assist in the non-oral administration of such drug(s) and thereby enhance the value of such drug(s), including but not limited to the Abbott ADD-Vantage(R) System.

1.29 "Patent Rights" shall mean (a) all patent applications filed anywhere in the Territory by either party or their Affiliates having claims relating to a Product, Abbott Derivative Compound or ArQule Compound, or the process of manufacture or use thereof, together with any patents issuing therefrom (including but not limited to Composition of Matter Patents), and (b) all divisions, continuations, continuations-in-part, reexaminations, reissues, additions, renewals and extensions of such patent applications and patents. Patent Rights owned by Abbott shall be referred to as "Abbott Patent Rights", Patent Rights owned by ArQule shall be referred to as "ArQule Patent Rights", and Patent Rights owned by ArQule and Abbott jointly shall be referred to as

"Joint Patent Rights", with ownership of Patent Rights to be determined in accordance with United States patent laws and practice.

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1.30 "Phase III Studies" shall mean a program of clinical studies approved by the FDA or other equivalent national or supranational regulatory agencies outside of the United States which, if successfully completed to the satisfaction of the FDA or equivalent agencies outside of the United States, is intended to enable the sponsor of the studies to file an NDA and/or other equivalent applications for Regulatory Approval (as defined below).

1.31 "Product" shall mean any product containing an Abbott Derivative Compound or an ArQule Compound.

1.32 "R & D Committee" shall mean the Research and Development Committee established by the parties pursuant to Article 3.

1.33 "R & D Plan" shall mean the twelve (12) month rolling plan of ArQule research and development activities to be developed by the R & D Committee pursuant to Article 3.

1.34 "R & D Program" shall mean the research and development program funded by Abbott at ArQule as described in Article 3.

1.35 "Regulatory Approval" shall mean all governmental approvals required to market and sell a Product in any given country or multinational region in the Territory (e.g., the European Union), including but not limited to, product registrations, medical approvals, and price/marketing approvals.

1.36 "Research Term" shall mean the two (2) year program of collaborative research by Abbott and ArQule hereunder, which may be extended by Abbott pursuant to Section 2.3 for up to three (3) additional successive one (1) year periods.

1.37 "Reserved Array(s)" shall mean one (1) or more Active ArQule Array(s) for which Abbott exercises a Target Reservation (as defined below) in accordance with the procedures set forth in Section 5.5.

1.38 "Royalty Term" shall mean, with respect to each Product in each country of the Territory where Abbott's obligation to pay royalties pursuant to Section 6.3 is in effect, the period of time commencing with the first commercial sale of such Product by Abbott, its Affiliates and/or sublicensees to an unrelated third party in such country and continuing until Abbott's obligation to pay royalties pursuant to Section 6.3 ceases in such country.

1.39 "Target" shall have the meaning set forth in Section 5.5.

1.40 "Target Reservation" shall mean an Abbott's designation of one (1) or more Active ArQule Arrays as Reserved Arrays for a specified Target pursuant to Section 5.5.

1.41 "Territory" shall mean the entire world.

1.42 "Valid Claim" shall mean a claim of an issued and unexpired Composition of Matter Patent which neither has been held unenforceable or invalid by a decision of a court or

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governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, nor has been admitted by the holder of the Composition of Matter Patent to be invalid or unenforceable through reissue, reexamination, disclaimer, abandonment or otherwise.

Additional terms used in specific sections of this Agreement shall be defined in such sections.

ARTICLE 2

R & D PROGRAM

2.1 ArQule Research and Development Activities. Under the direction of the R & D Committee, during the Research Term ArQule shall synthesize Abbott Derivative Compounds from Abbott Core Compounds and/or other Abbott Derivative Compounds supplied to ArQule by Abbott. ArQule shall deliver such Abbott Derivative Compounds to Abbott in a format suitable for use by Abbott in accordance with the R & D Plan, together with structure and purity information and such other information and documentation as Abbott may reasonably request concerning the structural changes ArQule has made to (a) Abbott Core Compounds to synthesize Abbott Derivative Compounds and/or (b) Abbott Derivative Compounds to synthesize further Abbott Derivative Compounds. Except as otherwise agreed by the parties or the R & D Committee, ArQule shall supply Abbott with all quantities of Abbott Derivative Compounds synthesized by ArQule. ArQule shall supply Abbott with mutually agreed upon quantities of each Abbott Derivative Compound in accordance with the R & D Plan, as determined by the R & D Committee, provided that Abbott has supplied ArQule with the necessary quantities of Abbott Core Compounds in accordance with the R & D Plan. ArQule shall conduct the research and development activities described in this Section in a good scientific manner and in compliance with all applicable federal, state and local laws and regulations.

2.2 ArQule FTE Requirements. Unless otherwise agreed in writing by the R & D Committee or the parties, within thirty (30) days after the Effective Date and thereafter for the remainder of the Research Term, ArQule shall maintain a minimum of * FTE scientists to perform research and development activities for Abbott Derivative Compounds and such other activities as the R & D Committee may designate in accordance with the R & D Plan. ArQule employees performing such activities shall be competent, reasonably qualified and adequately trained for their respective duties, and ArQule shall provide Abbott with such information and documentation as Abbott may reasonably request concerning the qualifications and job performance of such ArQule employees, as well as the time they spend performing such activities. The number of FTEs may be increased or decreased by mutual written agreement of the parties upon such terms as may be mutually agreed upon.

2.3 Research Term. The Research Term shall commence on the Effective Date and continue for a period of two (2) Contract Years thereafter. In accordance with Section 2.4, Abbott may, at its option, extend the Research Term for up to three (3) additional Contract Years, exercisable one (1) Contract Year at a time, upon written notice to ArQule at least six (6) months prior to the then scheduled expiration of the Research Term.

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2.4 Research Term Payments. In consideration of the research and development activities to be performed by ArQule pursuant to Section 2.1, Abbott shall make the following payments to ArQule:

- (a) A technology access fee of * Dollars * for the first two (2) Contract Years, payable within ten (10) business days of the Effective Date;
- (b) Additional technology access fees of * Dollars * per Contract Year for each extension of the Research Term by Abbott pursuant to Section 2.3, payable on the second, third and fourth anniversaries of the Effective Date, as applicable; and
- (c) Research and development funding of * Dollars * per Contract Year, payable in semi-annual installments of * Dollars * at the beginning

of the first and third Contract Quarters of each Contract Year, which funding is calculated at the rate of * Dollars * per ArQule FTE per Contract Year. ArQule shall use such funding to support its research and development activities hereunder.

ARTICLE 3

R & D COMMITTEE

3.1 Establishment. The parties hereby establish an R & D Committee to monitor the ArQule research and development activities conducted under this Agreement.

3.2 R & D Plan. The R & D Committee shall develop an initial R & D Plan covering the first twelve (12) months of the Research Term within thirty (30) days of the Effective Date and, thereafter for the remainder of the Research Term, shall update the R & D Plan to provide for a rolling twelve (12) month R & D Plan at least once per Contract Quarter. The R & D Plan shall contain performance goals for ArQule's research and development activities under Section 2.1, including but not limited to minimum numbers of Abbott Derivative Compounds to be developed from Abbott Core Compounds and supplied to Abbott, a timetable and budget for key research and development activities, and such other items as may be agreed upon by the R & D Committee. ArQule shall use commercially reasonable efforts to achieve the performance goals specified in the R & D Plan

3.3 Additional Responsibilities. In addition to developing and updating the R & D Plan pursuant to Section 3.2, the R & D Committee shall also have the following responsibilities during the Research Term: (a) monitoring ArQule's research and development activities in accordance with the R & D Plan, (b) recommending changes in the number of FTEs and Abbott's level of research and development funding, if necessary or appropriate to accomplish the objectives of the R & D Plan, provided that any such changes shall require the prior written

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approval of both parties, and (c) reporting the status of ArQule's research and development activities hereunder to both parties at least once per Calendar Quarter.

3.4 Membership. The R & D Committee shall consist of six (6) members, with three (3) members being appointed by each party. The initial R & D Committee members are:

Abbott Members	ArQule Members
-----	-----
1. Alan Rosenthal	1. Joseph Hogan, Jr.
2. Jake Plattner	2. David Coffen
3. Thomas Sowin	3. Robert Zambias

Each party may remove and replace its R & D Committee members at any time, without cause, upon written notice to the other party. An alternate member designated by a party in writing shall be entitled to vote only in the absence of a permanent member designated by such party. All references to "members" in this Agreement refer to the permanent members of the R & D Committee and any alternate member when acting in the place of a permanent member, unless the context requires otherwise.

3.5 Actions. Any action or decision by the R & D Committee must be approved by a majority of the members present at a duly convened meeting of the R & D Committee, including at least one (1) member appointed by each party, or, pursuant to Section 3.8, approved by written consent of a majority of the members, including at least one (1) member appointed by each party. If the R & D

Committee cannot agree on a particular matter within the scope of its responsibilities, the matter shall be submitted for dispute resolution in accordance with Article 12.

3.6 Meetings. The R & D Committee shall meet within thirty (30) days after the Effective Date and, thereafter for the remainder of the Research Term, according to a schedule of regular meetings established by the members of the R & D Committee. In no event, however, shall the R & D Committee meet less frequently than once every Contract Quarter during the Research Term. Additional meetings of the R & D Committee may be called by any two (2) members, one (1) of which shall have been appointed by each party. Notice of the date, time and place of each regular or additional meeting and a proposed agenda for the meeting shall be provided to the members, when practicable, at least fifteen (15) days prior to the scheduled date of the meeting (unless notice is waived in writing by a member or party).

3.7 Locations of Meetings. Except as otherwise provided in Section 3.8 or as otherwise mutually agreed by the parties, the regular and additional meetings of the R & D Committee shall alternate between the principal business locations of each party.

3.8 Conduct of Meetings. Any regular or additional meeting of the R & D Committee may be conducted in person or by telephone conference. The R & D Committee may act without a meeting if prior to such action a written consent to the action is signed by a majority of the members, including at least one (1) member appointed by each party. Minutes reflecting actions taken at meetings shall be maintained at a mutually agreed upon location, together with any other

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books and records of the R & D Committee, and such minutes shall be distributed to the parties upon request.

3.9 Cooperation of Parties. Each party shall furnish to the R & D Committee all information and documentation that are reasonably required for purposes of this Agreement, which disclosures shall be subject to the confidentiality obligations specified in Section 8.1. In addition, it is anticipated that the parties will engage in frequent informal communications regarding the research and development activities conducted under this Agreement.

3.10 Visits to ArQule Facilities. R & D Committee members shall have the right to visit the facilities where ArQule's research and development activities hereunder are being conducted at any time during ArQule regular business hours upon reasonable prior notice. Other Abbott representatives may also visit such facilities upon reasonable prior notice with ArQule's prior written consent, which consent shall not be unreasonably withheld. Abbott shall bear its own expenses relating to visits to such facilities by its representatives.

ARTICLE 4

ABBOTT COMPOUND OWNERSHIP AND FURTHER DEVELOPMENT

4.1 Ownership of Abbott Core Compounds. All Abbott Core Compounds supplied to ArQule hereunder shall be the sole and exclusive property of Abbott, except to the extent of any rights held by third parties who have licensed or supplied Abbott Core Compounds to Abbott. ArQule shall not acquire any licenses or intellectual property rights in or relating to Abbott Core Compounds hereunder, and ArQule, its Affiliates, employees and agents shall execute such documents and take such other actions as Abbott deems appropriate to establish or protect Abbott's proprietary rights in Abbott Core Compounds. With respect to any Abbott Core Compounds that are not proprietary to Abbott, ArQule's acceptance of such Abbott Core Compounds and synthesis of Abbott Derivative Compounds from such Abbott Core Compounds shall not preclude ArQule from: (a) entering into an agreement with a third party with respect to research, development and commercialization of such Abbott Core Compounds if they are lawfully in the possession of such third party or (b) having an internal ArQule program (including programs with academic collaborators) concerning the research, development and commercialization of such Abbott Core Compounds,

provided that ArQule does not use any Abbott Confidential Information (as defined in Section 8.1) in connection with such research, development and commercialization pursuant to (a) or (b) above.

4.2 Ownership of Abbott Derivative Compounds. All Abbott Derivative Compounds synthesized by ArQule, its Affiliates or contractors hereunder shall be the sole and exclusive property of Abbott, except to the extent of any rights held by third parties who have licensed or supplied Abbott Core Compounds to Abbott. Ownership of intellectual property rights in or relating to Abbott Derivative Compounds shall be determined in accordance with Article 10. ArQule hereby grants Abbott a worldwide, royalty-free, irrevocable, exclusive license (with the right to sublicense) under any ArQule Patent Rights and Joint Patent Rights in or relating to any Abbott Derivative Compounds to make, have made, use, import, offer to sell, and sell any product that contains an Abbott Derivative Compound.

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4.3 Further Research and Development Activities. Abbott may perform such further research and development activities on Abbott Compounds as Abbott deems appropriate in its sole discretion. Except for payments of royalties and milestone payments on Abbott Derivative Compounds pursuant to Article 6, Abbott shall have no obligations to ArQule with respect to Abbott Compounds hereunder.

ARTICLE 5

ARQULE COMPOUND RESEARCH AND DEVELOPMENT LICENSES

5.1 Delivery of ArQule Arrays. During the Array Transfer Period, ArQule shall deliver to Abbott * ArQule Arrays per Contract Year. ArQule may, at its option, also deliver to Abbott additional ArQule Arrays. ArQule shall select the ArQule Arrays to be delivered to Abbott hereunder and the ArQule Core Compounds within each such ArQule Array, provided that each ArQule Core Compound shall appear only once in any ArQule Array delivered to Abbott hereunder. Except as otherwise agreed by Abbott, ArQule shall supply Abbott with a minimum quantity of * of each ArQule Compound in such ArQule Arrays or * percent (*) of the material synthesized by ArQule of each ArQule Compound in such ArQule Arrays, whichever is less. ArQule acknowledges that it is its intention to synthesize approximately * of each ArQule Core Compound, whenever ArQule determines that synthesis of such quantities of ArQule Core Compounds is chemically feasible and commercially reasonable. ArQule shall conduct the research and development activities described in this Section in a good scientific manner and in compliance with all applicable federal, state and local laws and regulations.

5.2 Screening of ArQule Compounds. During the Array Screening Period, Abbott shall have the right, either directly or through Abbott's Affiliates or third party contractors selected by Abbott, to perform such testing and analytical work as Abbott deems appropriate on ArQule Core Compounds received hereunder, provided that Abbott shall have the right to perform composition and structural analysis only after Abbott's receipt of confirmed chemical composition and structure and purity information pursuant to Section 5.3, and further provided that Abbott shall not perform significant derivitization work on ArQule Core Compounds until Abbott makes a Target Reservation for the ArQule Array containing such ArQule Core Compounds pursuant to Section 5.5. The parties agree that "significant derivitization work" shall mean any derivitization work beyond that which is reasonably necessary to allow Abbott to determine whether an ArQule Core Compound is sufficiently amenable to chemical modification to warrant the exercise of a Target Reservation by Abbott.

5.3 Identification of ArQule Compounds. Upon Abbott's written request at any time during the Array Screening Period, ArQule shall provide Abbott with the confirmed chemical composition and structure and purity information for any Active ArQule Compound in an ArQule Array upon presentation by Abbott of reasonably sufficient documentation of the biological activity for which Abbott is testing. Prior to revealing such documentation to ArQule, Abbott shall remove any reference to the type of biological activity detected and the assay used, and Abbott shall not identify in any other manner such biological activity or assay except in accordance with Section 5.4. Upon Abbott's written request, ArQule shall also provide Abbott with the confirmed chemical composition and structure and purity information for additional

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ArQule Compounds in the ArQule Array that contains the Active ArQule Compound, but only if such ArQule Compounds exhibit biological activity less than or equal to the Active ArQule Compound.

5.4 Additional Quantities of ArQule Compounds.

- (a) ArQule Obligations. During the Array Transfer Period, ArQule shall provide Abbott with reasonable additional quantities of Active ArQule Compounds for which Abbott has received confirmed chemical composition and structure and purity information under Section 5.3. Such Active ArQule Compounds shall be synthesized by ArQule in the course of the R & D Program. Abbott may elect to obtain reasonable additional quantities of Active ArQule Compounds from ArQule for up to twelve (12) months after the expiration of the Array Transfer Period upon written notice to ArQule which is received at least ninety (90) days prior to such expiration. In this event, Abbott shall pay ArQule the amount of *

Dollars * per ArQule FTE per year, up to a maximum of * FTEs in four (4) equal quarterly installments, with the first installment due upon the expiration of the Array Transfer Period and each subsequent installment due every three (3) months thereafter. ArQule shall provide the Abbott-funded FTE scientists to supply Abbott with reasonable quantities of Active ArQule Compounds, as requested by Abbott. Abbott may discontinue this resupply program upon ninety (90) days prior written notice to ArQule; provided, however, that any payments previously received by ArQule under this Section shall be nonrefundable.

- (b) Suspension of ArQule Obligations. Notwithstanding anything to the contrary set forth herein, if ArQule believes Abbott has failed to pay ArQule all or any portion of research and development funding payments due under Section 2.4 or FTE funding payments due under Section 5.4(a), ArQule may, at its option, provide Abbott with ten (10) business days prior written notice stating the amount ArQule believes Abbott owes, which amount shall be calculated using the amounts and per FTE rates specified in Sections 2.4 or 5.4(a), as applicable ("Disputed Amount"), and (ii) ArQule's intention to suspend performance of its obligations pursuant to Section 5.4(a) pending receipt of the Disputed Amount. If Abbott pays ArQule the Disputed Amount within the ten (10) business day notice period, ArQule shall not suspend such performance, provided that such payment by Abbott shall not preclude Abbott from initiating dispute resolution proceedings pursuant to Article 12 to seek a refund of any portion of the Disputed Amount that Abbott believes was not owed to ArQule hereunder. If Abbott does not pay ArQule the Disputed Amount within the ten (10) business day notice period, ArQule may suspend such performance pending receipt of the Disputed Amount.

5.5 Target Reservations and Reserved Arrays.

- (a) Determination of a Target. In the event that Abbott desires to make a Target Reservation for one (1) or more Active Arrays, Abbott shall provide written

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notice to ArQule of the Active Array(s) of interest, the identity of the Active ArQule Compound(s) therein, the type of biological activity detected, and the assay in which the activity was detected.

(i) Specific Target. If the type of activity and the detection assay reveal a probable interaction of the Active ArQule Compound(s) with a specific, identified biomolecule (such as a protein, polynucleotide, carbohydrate, lipid, or any combination thereof), then the term "Target" shall mean that specific biomolecule and any related biomolecules that (A) exhibit substantial structural homology with the identified biomolecule, as measured by the degree of similarity in the primary structure (i.e., amino acid sequence, nucleotide sequence, monosaccharide linkages) and secondary structure (i.e., three-dimensional structure) and (B) perform a substantially similar function as the identified biomolecule.

(ii) General Target. In all other cases, the term "Target" shall mean the narrowest definable element of an observed biological activity in a non-specific assay (i.e., an in vitro assay based on use of membranes, whole cells, or specific animal tissues), as customarily used for lead screening purposes by Abbott, subject to further reduction in scope based on the extent to which ArQule would be unreasonably precluded from (A) granting rights to third parties to use the Active Array(s) with specific, identified biomolecules and (B) using the Active Array(s) in an internal ArQule program (including programs with academic collaborators) with specific, identified biomolecules. Based on the criteria set forth in (i) and (ii) above, the parties shall determine in good faith the exact scope of the Target by mutual written agreement, subject to modification from time to time during the License Option Period in the same manner. With respect to Specific Targets, the parties shall make such modifications as may be reasonably necessary to provide Abbott with substantially equivalent biological Target coverage. During the Research Term, the R & D Committee shall determine the scope of the Target. After the expiration or termination of the Research Term, the parties shall each designate one (1) or more authorized representatives to meet at least once per Contract Quarter to review and update the scope(s) of the Target(s) .

(b) Designation of Reserved Arrays. Subject to availability, as described below, Abbott may make Target Reservations by designating any Active Arrays as Reserved Arrays for specified Targets up to a maximum of six (6) Target Reservations at any time during the Array Screening Period. All such Target Reservations shall expire upon expiration of the License Option Period, unless earlier terminated as provided in this Agreement. An Active Array shall be available for designation as a Reserved Array for a Target unless ArQule can reasonably demonstrate to Abbott that ArQule has previously committed the Active Array to (i) a bona fide, documented external program on the same Target or (ii) a bona fide, documented internal ArQule program (including programs with academic collaborators) on the same Target. During the Array Screening Period, Abbott may, upon ten (10) days prior written notice to ArQule, relinquish its rights in Reserved Arrays for up to four (4) Target Reservations, in exchange

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for the right to designate Reserved Arrays with respect to one

(1) substituted Target Reservation for each relinquished Target Reservation. In such event, Abbott shall grant ArQule a royalty-free, world-wide, irrevocable, exclusive license (with the right to sublicense) under all then-existing and subsequently created Abbott Patent Rights claiming ArQule Compounds derived from ArQule Core Compounds in the relinquished Reserved Arrays to make, have made, use, import, sell and offer to sell such ArQule Compounds.

- (c) Effect of Target Reservation. For as long as each Target Reservation is in effect, Abbott shall have the exclusive right to derivatize ArQule Derivative Compounds from Active ArQule Compounds in Reserved Arrays and to conduct such synthesis, testing and analytical work as Abbott deems appropriate relating to such ArQule Derivative Compounds for use with the Target, including but not limited to composition and structural analysis. Such exclusive right shall be in effect from the date Abbott exercises each Target Reservation until the end of the License Option Period, but only so long as the Target Reservation remains in effect. Abbott may elect to conduct synthesis, testing and analytical work relating to ArQule Derivative Compounds itself or to have such work conducted by Abbott Affiliates or contractors or, during the Array Transfer Period, by ArQule pursuant to the R & D Program.
- (d) Maintenance of Target Reservations. For each Target Reservation, Abbott shall maintain an active development program for at least one (1) Active ArQule Compound in any Reserved Array for the relevant Target. Abbott shall have maintained such an active program if Abbott commits to the program at least Three Million Dollars (\$3,000,000) FTE synthetic chemists at either Abbott or ArQule.
- (e) Conflicting Target Reservations. If a third party or ArQule itself, under a bona fide, documented internal ArQule program (which may or may not involve an academic collaborator) originated without use of or reference to Abbott Confidential Information, desires to reserve a Reserved Array subject to an Abbott General Target Reservation for a third party or ArQule Specific Target Reservation or more narrowly defined General Target Reservation and the requested third party or ArQule Target Reservation, in ArQule's determination, actually or potentially conflicts with Abbott's General Target Reservation, then ArQule shall provide Abbott with written notice of such actual or potential conflict within thirty (30) days of ArQule's discovery thereof.

(i) ArQule shall include in such notice the proposed Specific Target or narrower General Target definition desired to be reserved by such third party (if ArQule is legally permitted to make such disclosure) or ArQule. Within ten (10) business days of Abbott's receipt of such notice containing the proposed Specific Target or narrower General Target definition, Abbott shall, at its option: (A) accept the proposed third party or ArQule Target Reservation as Abbott's new Target Reservation and release the remainder of Abbott's original General Target Reservation; (B) retain Abbott's original General Target Reservation excluding the proposed third party or ArQule Target Reservation; (C) retain Abbott's

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original General Target Reservation on a semi-exclusive basis with the third party or ArQule with respect to the portion of Abbott's original General Target Reservation that conflicts

with the proposed third party or ArQule Target Reservation and on an exclusive basis for the remainder of Abbott's original General Target Reservation; or (D) negotiate in good faith to redefine Abbott's General Target Reservation so as to resolve the area of conflict, provided that if the parties are unable to agree on a redefined Abbott General Target Reservation within thirty (30) days, the matter shall be resolved by Scientific Dispute Resolution ("SDR") proceedings as set forth in Exhibit B. In any SDR proceedings pursuant to this Section 5.5(e)(i), if the neutrals in such SDR proceedings determine that an actual conflict exists between Abbott's original General Target Reservation and the proposed third party or ArQule Target Reservation, then Abbott shall at a minimum be allowed to retain semi-exclusive rights to the portion of its original General Target Reservation that conflicts with the proposed third party or ArQule Target Reservation .

(ii) If ArQule is not legally permitted to disclose the proposed Target Reservation definition desired to be reserved by a third party, ArQule shall arrange for such dispute to be resolved by SDR proceedings as set forth in Exhibit B. In any SDR proceedings pursuant to this Section 5.5(e)(ii), if the neutrals in such SDR proceedings determine that an actual conflict exists between Abbott's original General Target Reservation and the proposed third party Target Reservation, then Abbott shall at a minimum be allowed to retain semi-exclusive rights to the portion of its original General Target Reservation that conflicts with the proposed third party Target Reservation.

5.6 License Rights.

(a) Exercise of Option. Subject to availability, as described below, Abbott shall have the option to license a total of * Licensed Compound Sets under the terms of this Agreement. Abbott may exercise such license options upon written notice to ArQule at any time within the License Option Period, whereupon the parties shall determine the compounds comprising the Licensed Compound Set, in accordance with the following procedures:

(i) Abbott shall identify to ArQule a single ArQule Compound that Abbott has designated a "PPCC posttoxicity" compound under Abbott's then standard internal procedures ("Licensed Set Core"). The Licensed Set Core shall be identical to or derived from an Active ArQule Compound in a Reserved Array. The Licensed Set Core shall be included in the Licensed Compound Set.

(ii) The other ArQule Compounds comprising the Licensed Compound Set shall satisfy both of the following criteria:

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(A) The ArQule Compound shall exhibit at least * percent * homology with the Licensed Set Core (as measured by a widely accepted and used software program, such as Daylight).

(B) The ArQule Compound shall exhibit biological activity against the Target when the ArQule Compound is present at a concentration of * or less in

the relevant assay, or such higher concentration level demonstrating significant biological activity against the Target as the parties may mutually agree upon.

(iii) The ArQule Compound shall be available for inclusion in the Licensed Compound Set unless ArQule can reasonably demonstrate to Abbott that ArQule has previously committed the ArQule Compound to (A) a bona fide, documented external program involving the same ArQule Compound or (B) a bona fide, documented, internal program (including programs with academic collaborators) involving the same ArQule Compound.

(b) License Grant. ArQule hereby grants Abbott a worldwide, royalty-bearing license (with the right to sublicense) under ArQule Patent Rights to make, have made, use, import, offer to sell, and sell in the Abbott Field any Products that incorporate any ArQule Compound in any of the Licensed Compound Sets. Such license grant shall be exclusive to the extent that ArQule may legally grant an exclusive license to Abbott; otherwise, ArQule shall grant Abbott a license with the greatest degree of exclusivity that ArQule may legally grant.

(c) Diligence Requirements. Abbott shall maintain an active clinical development program on at least one (1) ArQule Compound in each Licensed Compound Set. Abbott shall have maintained such an active program if Abbott expends at least * Dollars * per year in direct costs (including, but not limited to, costs attributable to external services or material contracts) relating to clinical development of one (1) or more ArQule Compounds within the Licensed Compound Set during the period commencing on the date upon which the Licensed Compound Set is determined and ending on the date upon which Abbott makes a milestone payment to ArQule pursuant to Section 6.1 (a) for the initiation of Phase III Studies for an ArQule Compound within the Licensed Compound Set; provided, however, that this obligation shall be suspended for a period not to exceed twelve (12) months during any period that clinical trials are delayed or suspended because of an unexpected negative result occurring for reasons beyond the control of Abbott. If clinical trials are delayed or suspended because of such unexpected negative result for a period in excess of twelve (12) months, the parties shall in good faith negotiate appropriate modifications to Abbott's due diligence obligations under this Section.

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5.7 License from Abbott. Abbott hereby grants ArQule:

(a) a worldwide, royalty-free, non-exclusive license (with the right to sublicense) under any Composition of Matter Patents relating to ArQule Compounds that are included within the Abbott Patent Rights to make, have made, use, import, offer to sell, and sell any ArQule Compounds in the ArQule Field, and
(b) a worldwide, royalty-free, exclusive license (with the of right to sublicense) under any Abbott Patent Rights relating to ArQule Compounds that are not Composition of Matter Patents to make, have made, use, import, offer to sell, and sell any ArQule Compounds in the ArQule Field, excluding in each case Abbott Patent Rights relating to ArQule Compounds in any Licensed Compound Set that are under active clinical development by Abbott.

5.8 Synthetic Support. During the Array Screening Period, at no cost to Abbott, ArQule shall provide Abbott with reasonable technical support relating

to the synthesis of ArQule Derivative Compounds. Such technical support shall be in the form of consultation and advice only, and shall not include any on-site instruction or the performance of any chemical synthesis.

5.9 Further Development and Regulatory Approvals. Abbott shall have the sole discretion to determine which Licensed Final Compounds and Products, if any, to develop or market, or to continue to develop or market, as well as those Licensed Final Compounds and Products for which Regulatory Approvals may be sought, and when, where, how and on what terms and conditions to market such Licensed Final Compounds and Products in the Territory. All Regulatory Approvals for Licensed Final Compounds and Products shall be owned solely by Abbott.

5.10 Agreements With Third Parties. The parties acknowledge and agree that ArQule may make ArQule Arrays available to third parties in addition to Abbott for screening and analytical work and possible further research and development work. If ArQule enters into an agreement with any third party and the general terms of such agreement relating to ArQule Arrays are substantially similar to the terms of this Agreement relating to ArQule Arrays, except that the financial terms of such third party agreement relating to ArQule Arrays, considered in the aggregate, are more favorable than the financial terms relating to ArQule Arrays under this Agreement, then Abbott may, at its option, elect to substitute the financial terms of such third party agreement relating to ArQule Arrays for the financial terms of this Agreement relating to ArQule Arrays in their entirety.

5.11 Other ArQule Compounds. ArQule acknowledges and agrees that Abbott shall have the right to commercially develop, market and sell ArQule Derivative Compounds synthesized by Abbott that are (a) not included in any Licensed Compound Set and (b) not covered by any ArQule Patent Rights, subject to Abbott's obligation to pay royalties and milestone payments to ArQule pursuant to Article 6. Abbott acknowledges and agrees that ArQule makes no warranties with respect to such ArQule Derivative Compounds.

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ARTICLE 6

MILESTONE AND ROYALTY PAYMENTS

6.1 Milestone Payments. In consideration of ArQule's entering into this Agreement and the rights and licenses granted by ArQule to Abbott hereunder, Abbott shall pay ArQule the following milestone payments with respect to each Abbott Derivative Compound and ArQule Compound commercially developed by Abbott hereunder:

(a) * Dollars * , payable within thirty (30) days after
* with respect to each
Abbott Derivative Compound and ArQule Compound anywhere in the
Territory;

(b) * Dollars * , payable within thirty (30) days after
FDA acceptance of the initial NDA for each Abbott Derivative Compound
and ArQule Compound filed by Abbott;

(c) * Dollars * , payable within thirty, (30) days
after

*

(d) * Dollars * , payable within thirty (30) days after

*

and

(e) * Dollars * , payable within thirty (30) days after

*

6.2 No Multiple Milestone Payments. If Abbott determines, in its business judgment, to commercially develop and/or seek Regulatory Approval of a different Abbott Derivative Compound or a different ArQule Compound in substitution of an Abbott Derivative Compound or ArQule Compound for which Abbott has paid one (1) or more milestone payments pursuant to Section 6.1, then Abbott shall not be required to pay the same milestone payment(s) for the substituted Abbott Derivative Compound or ArQule Compound, as applicable (e.g., if Abbott has paid the * milestone payment referenced in Section 6.1 (a) after * with respect to Compound A and then Abbott subsequently substitutes Compound B for Compound A, Abbott shall have no obligation to pay a second * milestone payment for * with respect to Compound B. However, Abbott would still be obligated to make the milestone payments referenced in Section 6.1 (b)-(e) for Compound B, if applicable).

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6.3 Royalty Rates and Payments. In further consideration of the rights and licenses granted to Abbott hereunder, Abbott shall pay ArQule royalties on Net Sales at the following royalty rates:

(a) For Products for which a Valid Claim is in effect, for as long as a Valid Claim is in effect on a country-by-country basis, Abbott shall pay royalties as follows:

- (i) For Products containing Abbott Derivative Z Compounds (but not containing ArQule Compounds), * percent * of Net Sales during each calendar year; and
- (ii) For Products containing ArQule Compounds (or both ArQule Compounds and Abbott Derivative Compounds), * percent * of Net Sales during each calendar year.

(b) For Products other than Products referenced in Section 6.3(a) which contain ArQule Compounds as a therapeutically active ingredient and for which no Valid Claim held by ArQule is in effect, Abbott shall pay ArQule royalties at the rate of * percent * of Net Sales during each calendar year for a period of ten (10) years from the date of the first commercial sale of each such Product in the United States, or any European Union member country, or Japan; provided, however, that Abbott shall have no obligation to pay royalties or milestone payments pursuant to this Article 6 if the ArQule Compound in question is an ArQule Derivative Compound that was first actually synthesized after the seventh anniversary of the Effective Date.

6.4 Lump Sum Royalty Payment. In addition to royalty payments pursuant to Section 6.3, with respect to any Products containing an ArQule Compound as a therapeutically active ingredient, Abbott shall pay ArQule a lump sum royalty payment of * Dollars * , payable within sixty (60) days after the end of the first calendar year during the Royalty Term in which Net Sales of any such Product are greater than * Dollars * . This lump sum royalty payment shall be payable only once per Product during the term of this Agreement (i.e., no such payments shall be due during any subsequent calendar years in which Net Sales of the same Product are greater than *).

6.5 Certain Compounds Previously in Abbott's Possession. Notwithstanding anything to the contrary set forth herein, Abbott shall have no obligation to pay ArQule royalties or milestone payments pursuant to this Article 6 with respect to any ArQule Core Compounds or Abbott Derivative Compounds that were in Abbott's possession (either by independent development or acquisition from a third party) prior to receipt thereof from ArQule, as evidenced by competent written records that Abbott presents to ArQule within

sixty (60) days after Abbott's receipt of the chemical composition and structure of such ArQule Core Compounds or Abbott Derivative Compounds from ArQule.

6.6 Royalty Reports and Payments. Commencing with the first Calendar Quarter in which Abbott, its Affiliates or sublicensees make the first commercial sale of any Product in the Territory, Abbott shall provide ArQule with a written report of Net Sales for each Product on a Product-by-Product, country-by-country basis within forty-five (45) days after the last day of

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March, June, September and December for royalties accruing on Net Sales in the United States during the three (3) preceding calendar months and within seventy-five (75) days after the last day of February, May, August and November for royalties accruing on Net Sales in the Territory outside of the United States during the three (3) preceding calendar months. Concurrently with the submission of each such written report, Abbott shall pay or cause to be paid to ArQule the total amount of royalties shown to the due thereon.

6.7 Currency. Abbott shall make all milestone and royalty payments to ArQule pursuant to this Article 6 in U.S. Dollars. Royalty payments earned shall be first determined by Abbott in the currency of the country where the Net Sales were made and then converted by Abbott directly to its equivalent in U.S. Dollars. The rates of exchange for converting the currencies involved to U.S. Dollars as quoted by the Statistical Market Letter published by International Reports, Inc. as Foreign Exchange Rates quoted in New York as market rate (bid) on the last business day of the quarterly period in which the royalty payments were earned shall be used by Abbott to determine such conversion rates.

6.8 No Royalties Payable Between Affiliates. No royalties shall be payable to ArQule on sales between Abbott, its Affiliates or sublicensees, or between Abbott Affiliates and sublicensees.

6.9 No Multiple Royalties. No multiple royalties shall be payable because any Product, its manufacture, import, use, offer for sale, or sale is or shall be covered by multiple patents.

6.10 Sole License Payments; Fully Paid-up License. The parties acknowledge and agree that the milestone payments under Section 6.1 and the royalty payments under Sections 6.3 and 6.4 are the sole payments which may become due and owing by Abbott to ArQule in consideration for the license rights and other rights granted to Abbott by ArQule under Sections 4.2, 5.5(c), 5.6, and 5.11. Except as otherwise expressly provided herein, upon expiration of the Royalty Term for each Product such license rights and other rights shall become fully paid-up and irrevocable.

ARTICLE 7

PAYMENTS, BOOKS AND RECORDS

7.1 Method of Payment. Payments by Abbott to ArQule under this Agreement shall be made, at Abbott's option, either by check or by bank wire transfer to the address or bank account designated by ArQule.

7.2 Books and Records. Each party shall maintain complete and accurate financial books and records in accordance with United States generally accepted accounting principles, consistently applied and in sufficient detail to allow verification of any amounts subject to payment or reimbursement hereunder, including without limitation the calculation of Net Sales. Each party shall retain such records at its principal place of business for three (3) years or such other period as the parties may agree in writing.

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7.3 Audit Rights. Upon the written request of either party (but not more frequently than once in any calendar year), the requesting party may retain an independent certified public accountant, subject to approval by the other party (which approval shall not be unreasonably withheld), to review such records of the other party to verify the accuracy of the payments made or payable hereunder. Such accountant shall be required to execute a confidentiality agreement in a form reasonably acceptable to the audited party and shall report to the auditing party (with a copy to the audited party) only the amount of any underpayment or overcharge. Within ten (10) business days after completion of such review, the parties shall reconcile any underpayment or overcharge. The auditing party shall pay the cost of any review of records conducted at its request under this Section, except that the audited party shall bear such cost if the audit reveals an underpayment of ten percent (10%) or greater. Such audit rights may be exercised by the parties only with respect to records of the other party for the current calendar year and the preceding two (2) calendar years.

ARTICLE 8

CONFIDENTIALITY, PUBLICITY AND PROPRIETARY MATERIALS

8.1 Confidentiality. During the term of this Agreement and for a period of seven (7) years thereafter, each party (as such, a "Receiving Party") shall keep in confidence any information and/or documentation received from or on behalf of the other party (as such, a "Furnishing Party") that is in written or tangible form and marked or otherwise identified as confidential or proprietary or, if originally disclosed orally or visually, that is reduced to a written document marked or otherwise identified as confidential or proprietary within sixty (60) days of oral or visual disclosure ("Confidential Information"), and the Receiving Party shall use the Confidential Information only for purposes of this Agreement. Abbott Confidential Information shall also include, but is not limited to, any information disclosed to ArQule concerning Abbott Compounds, Targets and ArQule Arrays that Abbott has reserved or requested to reserve, and targets for which Abbott is or may be screening Abbott Compounds. ArQule Confidential Information shall also include, but is not limited to, any information disclosed to Abbott concerning the identity of ArQule Compounds or the commitment of any ArQule Compounds or ArQule Arrays to a third party or an internal ArQule program. Except as expressly provided in this Agreement, the Receiving Party shall not at any time use or permit others to use any Confidential Information for any purposes, except as may be necessary for the Receiving Party to perform its obligations hereunder. The foregoing obligations shall not apply to, and the definition of "Confidential Information" does not include:

(a) information that was already in the public domain or subsequent to disclosure to the Receiving Party becomes part of the public domain other than through the fault of the Receiving Party;

(b) information that was rightfully known by the Receiving Party (as evidenced by its written records) prior to the date of disclosure by or on behalf of the Furnishing Party in connection with this Agreement;

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(c) information that was received by the Receiving Party without restriction of confidentiality from a third party having a lawful right to disclose the same to the Receiving Party;

(d) information that the Receiving Party believes in good faith is required to be disclosed to comply with any applicable law, regulation or order of a government authority or court of competent jurisdiction (including, but not limited to, any disclosures required by the FDA or any foreign equivalent thereof and any securities laws applicable to a Receiving Party), in which event the Receiving Party shall use commercially reasonable efforts to advise the Furnishing Party in advance of the need for such disclosure; or

(e) information that is independently developed by or for the Receiving Party (as evidenced by its written records) by employees, agents or contractors

of the Receiving Party who have not had access to Confidential Information.

Notwithstanding the foregoing, the Receiving Party may disclose Confidential Information to its employees, agents, and contractors to the extent reasonably necessary for the performance of this Agreement, provided that such recipients are subject in writing to obligations of confidentiality and non-use with respect to such information to substantially the same extent as the Receiving Party is obligated hereunder. Further, Abbott may disclose relevant ArQule Confidential Information to appropriate government authorities without the necessity of obtaining ArQule's approval to the extent Abbott deems it necessary or appropriate in connection with its applications for Regulatory Approvals anywhere in the Territory, provided that Abbott shall use commercially reasonable efforts to consult with ArQule at least thirty (30) days prior to such disclosure in order to provide ArQule with an opportunity to comment on (i) the content, form and necessity of such disclosures and (ii) any potential effect of such disclosures on ArQule Patent Rights and Joint Patent Rights, as well as to provide ArQule with an opportunity to seek confidential treatment, if available, of the ArQule Confidential Information to be disclosed.

8.2 Publicity. Neither party shall use the name of the other party or reveal the terms of this Agreement in any publicity or advertising without the prior written approval of the other party, except that (a) either party may use the text of a written statement approved in advance by both parties without further approval, and (b) either party shall have the right to identify the other party and to disclose the terms of this Agreement as required by applicable securities laws or other applicable federal, state or local laws or regulations, provided that the disclosing party uses commercially reasonable efforts to notify the other party of such disclosures and to consult with the other party concerning the form and content of such disclosures prior to such disclosures.

8.3 Proprietary Materials.

(a) Definition of Proprietary Materials. "Proprietary Materials" shall mean any tangible chemical, biological, or physical research materials that are furnished by or on behalf of one party (as such, a "Transferor") to the other party (as such, a "Recipient") in connection with this Agreement regardless of whether such materials are specifically designated as proprietary to the Transferor in the case of biological materials, Proprietary Materials shall also include other

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materials ordinarily engendered by the original materials, including, for example, any progeny derived from a cell line (including naturally occurring mutants), monoclonal antibodies produced by hybridoma cells, DNA or RNA replicated from isolated DNA or RNA, recombinant proteins produced by a recombinant cell line, recombinant proteins produced through use of isolated DNA or RNA, and substances routinely purified from any source material included in the original materials. Proprietary Materials shall also include, without limitation, ArQule Compounds and Abbott Compounds exchanged by the parties under this Agreement. The Transferor shall furnish such Proprietary Materials, to the Recipient in a mutually acceptable form, including appropriate labelling and packaging.

(b) Limited Use. The Recipient shall use Proprietary Materials solely for the purposes set forth in this Agreement. The Recipient shall use the Proprietary Materials only in compliance with all applicable national, federal, state and local laws and regulations. The Recipient assumes all liability for damages that may arise from the use, storage, or disposal of any Proprietary Materials, except for damages resulting from the Transferor's negligence, willful misconduct or breach of this Agreement.

(c) Limited Disposition. Except as expressly authorized herein, the Recipient shall not transfer or distribute any Proprietary Materials to any third party without the prior written consent of the Transferor.

(d) Survival. The obligations of this Section shall remain in effect during the term of this Agreement for a period of seven (7) years thereafter.

8.4 Return of Confidential information and Proprietary Materials. Upon

the termination of this Agreement, at the request of the Furnishing Party, the Receiving Party shall return to the Furnishing Party all originals, copies, and summaries of documents, materials, and other tangible manifestations of the Furnishing Party's Confidential Information in the possession or control of the Receiving Party, except that the Receiving Party may retain one (1) copy of the Furnishing Party's Confidential Information in the possession of its legal counsel solely for the purpose of monitoring its obligations under this Agreement. Upon the termination of this Agreement, the Recipient shall at the instruction of the Transferor either destroy or return any unused Proprietary Materials of the Transferor.

ARTICLE 9

REPRESENTATIONS AND WARRANTIES

Each party hereby represents and warrants to the other party as follows:

9.1 Corporate Existence and Power. Such party (a) is a corporation duly organized, validly existing and in good standing under the laws of the state in which it is incorporated, (b) has the corporate power and authority and the legal right to own and operate its property and assets, to lease the property and assets it operates under lease, and to carry on its business as it is now being conducted, and (c) is in compliance with all requirements of applicable laws and regulations, except to the extent that any noncompliance would not have a material adverse effect

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on the properties, business, financial or other condition of such party and would not materially adversely affect such party's ability to perform its obligations under this Agreement.

9.2 Authorization and Enforcement of Obligations. Such party (a) has the corporate power and authority and the legal right to enter into this Agreement and to perform its obligations hereunder, and (b) has taken all necessary corporate action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations hereunder. This Agreement has been duly executed and delivered on behalf of such party, and constitutes a legal, valid, binding obligation, enforceable against such party in accordance with its terms.

9.3 Consents. All necessary consents, approvals and authorizations of all governmental authorities and other persons required to be obtained by such party in connection with the execution, delivery and performance of this Agreement have been obtained.

9.4 No Conflict. The execution and delivery of this Agreement and the performance of such party's obligations hereunder (a) do not conflict with or violate any requirement of applicable laws or regulations and (b) do not conflict with, violate or breach or constitute a default or require any consent under, any contractual obligation of such party.

9.5 Compliance with Laws. Such party shall perform its activities under this Agreement in compliance with all applicable national, federal, state and local laws and regulations.

9.6 Patent Rights/Intellectual Property Infringement. To the best of its knowledge based upon reasonably diligent investigation, the issued patents included within its respective Patent Rights as of the Effective Date are and shall be valid and enforceable. Neither party represents or warrants to the other party that the exercise of the rights granted to the other party under this Agreement shall not infringe any patent rights of any third party (including, but not limited to, ArQule licensees).

ARTICLE 10

OWNERSHIP AND PROSECUTION OF PATENT RIGHTS

10.1 Abbott Core Compounds. Abbott may, at its own expense, take such

actions as it deems appropriate with respect to the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of all Patent Rights in or relating to Abbott Core Compounds (including but not limited to defending infringement suits and pursuing third party infringers). All Patent Rights in or relating to Abbott Core Compounds shall be in Abbott's name and shall be owned solely by Abbott.

10.2 Abbott Derivative Compounds. Abbott shall have sole control, at its expense, over the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of all Patent Rights in or relating to any Abbott Derivative Compounds. If any such Patent Rights constitute ArQule Patent Rights or Joint Patent Rights, Abbott shall use commercially reasonable efforts to consult with ArQule prior to any deadline or action with the

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United States Patent and Trademark Office ("PTO") or any foreign patent office, and to furnish ArQule with copies of all relevant documents in advance of such consultation.

10.3 ArQule Compounds. ArQule shall have sole control, at its expense, over the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of any ArQule Patent Rights in or relating to ArQule Compounds; provided that ArQule shall use commercially reasonable efforts to consult with Abbott prior to any deadline or action with the PTO or any foreign patent office, and to furnish Abbott with copies of all relevant documents in advance of such consultation. Abbott shall have sole control, at its expense, over the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of any Joint Patent Rights in or relating to ArQule Compounds; provided that Abbott shall use commercially reasonable efforts to consult with ArQule prior to any deadline or action with the PTO or any foreign patent office, and to furnish ArQule with copies of all relevant documents in advance of such consultation. Abbott shall have control, at its expense, over the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of any Abbott Patent Rights in or relating to ArQule Compounds.

10.4 Waiver and Abandonment. If a party decides not to seek or maintain patent protection in any country for an invention for which such party controls the preparation and filing of a patent application and/or patent, and if such patent application and/or patent would constitute an ArQule Patent Right or a Joint Patent Right, the other party, at its expense, may assume responsibility for and control over such Patent Right in the relevant country. If a party decides to terminate or abandon an ArQule Patent Right or a Joint Patent Right with respect to which such party has control, then such party shall notify the other party at least sixty (60) days prior to such event to enable the other party, at its expense, to assume responsibility for and control over such Patent Right in the relevant country.

10.5 Full Cooperation. Each party agrees to cooperate fully in the preparation, filing, prosecution, issuance, maintenance, extension, enforcement and/or defense of any Patent Rights in or relating to ArQule Compounds and Abbott Derivative Compounds. Such cooperation includes, but is not limited to:

- (a) executing all papers and instruments, or requiring its employees or agents, to execute such papers and instruments, so as to enable the other party to apply for, prosecute or defend patent applications or to oppose another party's patent applications or patents in any country;
- (b) promptly informing the other party of any matters coming to a party's attention that may affect the validity, enforceability, preparation, filing, prosecution, or issuance of any such patent applications or maintenance of issued patents; and
- (c) undertaking no actions that are potentially deleterious to the validity, enforceability, preparation, filing, prosecution or issuance of such patent applications or patents.

10.6 Notification of Infringement. The parties shall promptly inform each other of any information that comes to their attention involving actual or possible infringement of Patent

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Rights by any third party anywhere in the Territory or claims of alleged infringement made by any third party in the Territory against either party or its Affiliates resulting from the manufacture, import, offer for sale, sale or use of any Product.

10.7 Prosecution of Infringement Actions. Abbott shall have the right, under its own control and at its own expense, to pursue any third party infringer of ArQule Patent Rights or Joint Patent Rights in or relating to Abbott Derivative Compounds or ArQule Compounds that are in any Licensed Compound Set. Abbott may prosecute any infringement action in the name of ArQule, if so required by applicable law. If Abbott fails to initiate an infringement action within six (6) months after notification or knowledge of the basis for such action relating to a material infringement, ArQule shall have the right to prosecute such infringement, under its sole control and at its sole expense. Neither party shall enter into any settlement, consent judgment, or other voluntary final disposition of any infringement action without the prior written consent of the other party, which consent shall not be unreasonably withheld. Any recovery resulting from an infringement action brought under this Section shall be distributed in the following manner:

- (a) First, the parties shall be reimbursed for any costs and expenses incurred in prosecuting the action.
- (b) Second, ArQule shall receive an amount equal to the royalty payments lost due to sales of Products by the infringer.
- (c) Third, Abbott shall receive an amount equal to the profits lost due to sale of Products by the infringer.
- (d) Fourth, any remaining recovery will be retained by the party controlling the action at its conclusion.

10.8 Third Party Claims. In the event that any third party initiates a declaratory judgment action alleging the invalidity or unenforceability of ArQule Patent Rights or Joint Patent Rights in or relating to Abbott Derivative Compounds or ArQule Compounds that are in any Licensed Compound Set, or if any third party brings an infringement action against Abbott or its Affiliates or sublicensees because of the exercise of the rights granted Abbott under this Agreement, then Abbott shall have the right to defend such action under its own control and at its own expense; provided, however, that in the case of a declaratory judgment action involving ArQule Patent Rights, ArQule shall have the right to intervene and assume sole control of such defense, at its own expense. Neither party shall enter into any settlement, consent judgment, or other voluntary final disposition of any action under this Section without the consent of the other party, which consent shall not be unreasonably withheld. Any recovery shall be retained entirely by the party controlling the action at its conclusion.

10.9 Mutual Cooperation. In the event of any patent infringement litigation in the Territory involving any Patent Rights and/or any Products, the non-prosecuting or non-defending party, as applicable, shall render such reasonable assistance as may be requested by the prosecuting or defending party in connection with such infringement actions.

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INDEMNIFICATION AND INSURANCE

11.1 General Indemnification. Each party shall defend, indemnify and hold the other party, its Affiliates, contractors and sublicensees, and the officers, directors, employees and agents of each, harmless from and against any and all liabilities, damages, claims, demands, costs, or expenses (including reasonable attorneys' fees) claimed by any third party for any harm suffered by such third party to the extent such harm is determined to have been caused by the negligence or willful misconduct of the indemnifying party or the indemnifying party's manufacture or sale of any products, except to the extent caused by the negligence or willful misconduct of the indemnified party or the indemnified party's breach of this Agreement, and subject to the conditions of indemnification set forth in Section 11.2.

11.2 Conditions of Indemnification. With respect to any indemnification obligations of either party to the other party under this Agreement, the following conditions must be met for such indemnification obligations to become applicable:

- (a) the indemnified party shall notify the indemnifying party promptly in writing of any claim which may give rise to an obligation on the part of the indemnifying party hereunder;
- (b) the indemnifying party shall be allowed to undertake the sole control of the defense of any such action and claim, including all negotiations for the settlement, or compromise of such claim or action at its sole expense; and
- (c) the indemnified party shall render reasonable assistance, information, co-operation and authority to permit the indemnifying party to defend such action, provided that any out-of-pocket expenses or other expenses incurred by the indemnified party in rendering the same shall be borne or reimbursed promptly by the indemnifying party.

11.3 Insurance. Each party shall maintain reasonably adequate insurance or self-insurance coverage for its potential liabilities to the other party in connection with the performance of this Agreement.

ARTICLE 12

DISPUTE RESOLUTION

Except for actions commenced by or involving third parties and disputes to be resolved by Scientific Dispute Resolution pursuant to Exhibit B, all disputes arising out of or in connection with this Agreement shall be resolved as follows:

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12.1 Attempted Amicable Resolution. The parties shall promptly give each other written notice of any disputes requiring resolution hereunder, which written notice shall specify the Section(s) of this Agreement that the other party is alleged to have breached or that are in dispute, and shall briefly state the initiating party's claims. Thereafter, the parties shall use reasonable efforts to resolve any such disputes in an amicable manner.

12.2 Reference to Designated Officers. Any disputes arising in connection with this Agreement which cannot be resolved pursuant to Section 12.1 shall be referred, not later than thirty (30) days after initiation of dispute resolution proceedings pursuant to Section 12.1, to the following corporate officers of the parties for resolution:

For Abbott:

Vice President, Pharmaceutical Products Research and

Development (or his or her designee)

For ArQule:

Chief Executive Officer (or his or her designee)

Such officers (or their designees) shall attempt to resolve the dispute and shall communicate with each other by facsimile or telephone or in personal meetings in an effort to resolve the dispute.

12.3 Alternate Dispute Resolution. Any disputes arising in connection with this Agreement which cannot be resolved pursuant to Sections 12.1 or 12.2 within sixty (60) days after initiation of dispute resolution proceedings under Section 12.1 shall be finally settled by binding Alternate Dispute Resolution ("ADR") in accordance with the attached Exhibit A. Judgment upon any award rendered in such ADR proceedings may be issued and enforced by any court having competent jurisdiction.

12.4 ADR Ruling. The neutral in any ADR proceeding under Section 12.3 shall determine and notify the parties in writing:

- (a) Whether either party has committed a breach of any of its obligations under this Agreement; and
- (b) if either party has committed a breach, the appropriate remedy for any such breach pursuant to Section 12.5.

12.5 ADR Remedies. The neutral in any ADR proceeding under Section 12.3 shall have the authority to award the non-breaching party the following relief:

- (a) For any breach other than those specified in Section 12.5(b) and (c), an award of damages and/or equitable relief;

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- (b) For the second material breach and any subsequent material breach of Abbott's obligations pursuant to Section 5.6(c), an award of damages and/or equitable relief and/or termination of Abbott's license rights related to the specific Licensed Compound Set(s) to which such breach relates (but not any other license rights of Abbott hereunder); and
- (c) For the second material breach and any subsequent material breach of Abbott's obligations pursuant to Section 5.5(d), an award of damages and/or equitable relief and/or termination of Abbott's Target Reservation(s) to which such breach relates (but not any other Target Reservations by Abbott hereunder).

ARTICLE 13

TERM AND TERMINATION

13.1 Expiration. Unless terminated earlier by mutual written agreement of the parties or pursuant to Section 13.2, this Agreement shall expire on the later of: (a) the end of the License Option Period and (b) the date of expiration of the last Royalty Term for any Product to expire in any country in the Territory.

13.2 Early Termination. Either party shall have the right, without prejudice to any other rights or remedies available to it, to terminate this Agreement for cause by written notice to the other party in any of the following events: (a) if the other party is adjudged bankrupt, applies for judicial or extra-judicial settlement with its creditors, makes an assignment for the benefit of its creditors, voluntarily files for bankruptcy or has a receiver or trustee (or the like) in bankruptcy appointed by reason of its insolvency, or in the event an involuntary bankruptcy action is filed against the other party and

not dismissed within sixty (60) days of filing, or if the other party becomes the subject of liquidation or dissolution proceedings or otherwise discontinues business, (b) if the other party commits a material breach of this Agreement and the party alleged to be in breach fails to (i) cure such breach or (ii) commence dispute resolution proceedings under Article 12 contesting whether a breach has occurred and/or whether such breach is a material breach within sixty (60) days after receipt of written notice from the party asserting the breach.

13.3 Escrow Payments. In the event that the alleged breaching party commences dispute resolution proceedings pursuant to Article 12, and if the dispute involves non-payment of funds under this Agreement, all payments that would be due and payable under this Agreement in the absence of any dispute shall be paid into an interest-bearing escrow account until the matter is resolved and such escrow funds (plus interest) shall be distributed in accordance with the decision reached in such dispute resolution proceedings.

13.4 Effect of Termination. Except as otherwise expressly provided herein, termination or expiration of this Agreement through any means and for any reason shall not result in the termination of any license rights hereunder, shall not relieve the parties of any obligations accruing prior thereto, and shall be without prejudice to the rights and remedies of either party with respect to any prior breach of any of the provisions of this Agreement. Except to the extent

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otherwise specified therein, the rights and obligations of the parties under the following provisions shall survive expiration or termination of this Agreement: Articles 7, 8 and 11.

ARTICLE 14

MISCELLANEOUS

14.1 Entire Agreement; Amendment. This Agreement contains the entire understanding of the parties with respect to the subject matter thereof and supersedes all previous verbal and written agreements, representations and warranties with respect to such subject matter. This Agreement may be amended only by a written agreement signed by authorized representatives of both parties.

14.2 Force Majeure. Failure of either party to perform its obligations under this Agreement (except the obligation to make payments) shall not subject such party to any liability or constitute a breach of this Agreement if such failure is caused by any event or circumstances beyond the reasonable control of such nonperforming party, including without limitation acts of God, fire, explosion, flood, drought, war, riot, sabotage, embargo, strikes or other labor trouble, failure in whole or in part of suppliers to deliver on schedule materials, equipment or machinery, interruption of or delay in transportation, a national health emergency or compliance with any order or regulation of any government entity. A party whose performance is affected by a force majeure shall take reasonably prompt action to remedy the effects of the force majeure. If the non-performing party fails to substantially remedy the effects of the force majeure event within twelve (12) months after the date upon which the force majeure event first occurred, the parties shall in good faith negotiate such modifications to this Agreement as the parties deem appropriate to continue performance of this Agreement notwithstanding such force majeure event. If the parties are unable to agree upon such modifications within sixty (60) days after the end of such twelve (12) month period and the non-performing party has still failed to substantially remedy the effects of the force majeure event, the party not affected by the force majeure event may terminate this Agreement upon thirty (30) days prior written notice to the non-performing party, in which case neither party shall have any liability to the other party with respect to any failure to perform to the extent caused by the force majeure event.

14.3 Waiver. A failure by either party to enforce any rights under this Agreement shall not be construed as a waiver of such rights nor shall a waiver

by either party in one or more instances by construed as constituting a continuing waiver or as a waiver in other instances. Any waiver of breach executed by either party shall affect only the specific breach and shall not operate as a waiver of any subsequent or preceding breach.

14.4 No Assignment. Except as otherwise expressly provided herein, neither party may sell, assign, pledge, delegate, subcontract or otherwise dispose of all or any portion of its rights or obligations under this Agreement except to an Affiliate or to a successor to all or substantially all of the party's business to which this Agreement relates. Subject to the foregoing, this Agreement shall inure to the benefit of and be binding upon the parties and their respective successors and permitted assigns. In the event ownership or control of ArQule changes after the

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Effective Date as a result of a merger, an acquisition or otherwise, this Agreement (including, but not limited to, Abbott's licenses and other rights pursuant to Sections 4.2, 5.5(c), 5.6, and 5.11) shall continue in effect notwithstanding such change of ownership or control.

14.5 Severability. If any clause or provision of this Agreement is declared invalid or unenforceable by a court of competent jurisdiction, such provision shall be severed and the remaining provisions of the Agreement shall continue in full force and effect. The parties shall use all commercially reasonable efforts to agree upon a valid and enforceable provision as a substitute for the severed provision, taking into account the intent of this Agreement.

14.6 Relationship of Parties. The parties shall have the status of independent contractors under this Agreement and nothing in this Agreement shall be construed as authorization for either of the parties to act as a joint venturer with, agent for, or partner of, the other party.

14.7 Notices. Any notice, request or other communication required to be given pursuant to the provisions of this Agreement shall be in writing and shall be deemed to be given (a) when delivered in person or by overnight courier, (b) five (5) days after being deposited in the United States mail, postage prepaid, certified, return receipt requested, or (c) when received after being sent by confirmed facsimile transmission to the parties, addressed as follows:

If to Abbott to:

President
Pharmaceutical Products Division

Abbott Laboratories
200 Abbott Park Road
D-309, AP30
Abbott Park, Illinois 60064-3500
Tel: (708) 937-4367
Fax: (708) 938-5383

With a copy to:

General Counsel
Abbott Laboratories
100 Abbott Park Road
D-364, AP6D
Abbott Park, Illinois 60064-3500
Tel: (708) 937-8905
Fax: (708) 938-5277

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If to ArQule to:

President
ArQule, Inc.
200 Boston Avenue
Suite 3600
Medford, Massachusetts 02155
Tel: (617) 395-4100
Fax: (617) 395-1225

Either party may change its address or its fax number by giving the other party written notice, delivered in accordance with this Section 14.7.

14.8 Further Instruments. Each party shall execute and deliver such further instruments and do such further reasonable acts and things as reasonably may be required to carry out the intent and purpose of this Agreement.

14.9 Governing Law. The validity, performance, construction, and effect of this Agreement shall be governed by the laws of the State of Illinois, without giving effect to conflict of law rules. The parties expressly disclaim the applicability of the United Nations Convention on the International Sale of Goods to this Agreement.

14.10 Counterparts. This Agreement shall become binding when any, one or more counterparts hereof, individually or taken together, bears the signature of each of the parties. This Agreement may be executed in any number of counterparts, each of which shall be an original as against the party whose signature appears thereon, but all of which taken together shall constitute one and the same instrument.

IN WITNESS WHEREOF, each party has caused this Agreement to be signed by its duly authorized representative as of the Effective Date.

ABBOTT LABORATORIES

ARQULE,.INC.

By: /s/ Paul N. Clark

By: /s/ Eric Gordon

Name:
Title: Senior Vice President,
Pharmaceuticals Operations
and President Product
Pharmaceuticals Products
Division

Name:
Title:

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EXHIBIT A

Alternative Dispute Resolution

The parties recognize that a bona fide dispute as to certain matters may arise from time to time during the term of this Agreement which relates to either party's rights and/or obligations. To have such a dispute resolved by this Alternative Dispute Resolution ("ADR") provision, a party first must send written notice of the dispute to the other party for attempted resolution by good faith negotiations between the parties pursuant to Sections 12.1 and 12.2.

Any negotiations regarding a dispute shall be treated as settlement negotiations for purposes of the Federal Rules of Evidence and any similar state rules of evidence. Such negotiations shall not be admissible in any subsequent ADR hearing.

If the matter has not been resolved within sixty (60) days after initiation of dispute resolution proceedings pursuant to Section 12.1, either party may initiate an ADR proceeding as provided herein (all references to "today" in this ADR provision are to calendar days). The parties shall have the right to be represented by counsel in such a proceeding.

1. To begin an ADR proceeding, a party shall provide written notice to the other party of the issues to be resolved by ADR. Within fourteen (14) days after its receipt of such notice, the other party may, by written notice to the party initiating the ADR, add additional issues to be resolved within the same ADR.
2. Within twenty-one (21) days following receipt of the original ADR notice, the parties shall select a mutually acceptable neutral to preside in the resolution of any disputes in this ADR proceeding. If the parties are unable to agree on a mutually acceptable neutral within such period, the parties shall request the President of the Center for Public Resources ("CPR"), 366 Madison Avenue, New York, New York 10017 to select a neutral pursuant to the following procedures:

(a) The CPR shall submit to the parties a list of not less than five (5) candidates within fourteen (14) days after receipt of the request from the parties, along with a Curriculum Vitae for each candidate. No candidate shall be an employee, director, or shareholder of either party or any of their subsidiaries or affiliates.

(b) Such list shall include a statement of disclosure by each candidate of any circumstances likely to affect his or her impartiality.

(c) Each party shall number the Candidates in order of preference (with the number one (1) signifying the greatest preference) and shall deliver the list to the CPR within seven (7) days following receipt of the list of candidates. If a party believes a conflict of interest exists regarding any of the candidates, that party shall provide a written explanation of the conflict to the CPR along with its list showing its order of preference for the candidates. Any party failing to return a

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list of preferences on time shall be deemed to have no order of preference.

(d) if the parties collectively have identified fewer than three (3) candidates deemed to have conflicts, the CPR immediately shall designate as the neutral the candidate for whom the parties collectively have indicated the greatest preference. If a tie should result between two candidates, the CPR may designate either candidate. If the parties collectively have identified three (3) or more candidates deemed to have conflicts, the CPR shall review the explanations regarding conflicts and, in its sole discretion, may either (i) immediately designate as the neutral the candidate for whom the parties collectively have indicated the greatest preference, or (ii) issue a new list of not less than five (5) candidates, in which case the procedures set for in subparagraphs 2(a) - 2(d) shall be repeated.

3. No earlier than twenty-eight (28) days or later than fifty-six (56) days after selection, the neutral shall hold a hearing to resolve each of the issues identified by the parties. The ADR proceeding shall take place at a location agreed upon by the parties. If the parties cannot agree, the neutral shall designate a location other than the principal place of business of either party or any of their subsidiaries or affiliates.

4. At least seven (7) days prior to the hearing, each party shall submit the following to the other party and the neutral:
- (a) a copy of all exhibits on which such party intends to rely in any oral or written presentation to the neutral;
 - (b) a list of any witnesses such party intends to call at the hearing, and a short summary of the anticipated testimony of each witness;
 - (c) a proposed ruling on each issue to be resolved, together with a request for a specific damage award or other remedy for each issue. The proposed rulings and remedies shall not contain any recitation of the facts or any legal arguments and shall not exceed one (1) page per issue.
 - (d) a brief in support of such party's proposed rulings and remedies, provided that the brief shall not exceed twenty (20) pages. This page limitation shall apply regardless of the number of issues raised in the ADR proceeding.

Except as expressly set forth in subparagraphs 4(a) - 4(d), no discovery shall be required or permitted by any means, including depositions, interrogatories, requests for admissions, or production of documents.

5. The hearing shall be conducted on two (2) consecutive days and shall be governed by the following rules:
- (a) Each party shall be entitled to five (5) hours of hearing time to present its case. The neutral shall determine whether each party has had the five (5) hours

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to which it is entitled.

- (b) Each party shall be entitled, but not required, to make an opening statement, to present regular and rebuttal testimony, documents or other evidence, to cross-examine witnesses, and to make a closing argument. Cross-examination of witnesses shall occur immediately after their direct testimony, and cross-examination time shall be charged against the party conducting the cross-examination.
- (c) The party initiating the ADR shall begin the hearing and, if it chooses to make an opening statement, shall address not only issues it raised but also any issues raised by the responding party. The responding party, if it chooses to make an opening statement, also shall address all issues raised in the ADR. Thereafter, the presentation of regular and rebuttal testimony and documents, other evidence, and closing arguments shall proceed in the same sequence.
- (d) Except when testifying, witnesses shall be excluded from the hearing until closing arguments.
- (e) Settlement negotiations shall not be admissible under any circumstances. Affidavits prepared for purposes of the ADR, hearing also shall not be admissible. As to all other matters, the neutral shall have sole discretion regarding the admissibility of any evidence.

6. Within seven (7) days following completion of the hearing, each party may submit to the other party and the neutral a post-hearing brief in support of its proposed rulings and remedies (subject to the provisions of Sections 12.4 and 12.5 with respect to remedies), provided that such brief shall not contain or discuss any new evidence and shall not exceed ten (10) pages. This page limitation shall apply regardless of the number of issues raised in the ADR proceeding.

7. The neutral shall rule on each disputed issue within fourteen (14) days following completion of the hearing. Such ruling shall adopt in its entirety the proposed ruling and remedy (subject to the provisions of Sections 12.4 and 12.5 with respect to remedies) of one of the parties on each disputed issue but may adopt one party's proposed rulings and remedies on some issues and the other party's proposed rulings and remedies on other issues. The neutral shall issue a brief written opinion, not to exceed ten (10) pages, which sets forth the ruling of the neutrals, the basis of ruling, and the remedy or remedies awarded. Neither party shall use such written opinion as the basis for any legal action that attempts to challenge or appeal such ruling or the remedy or remedies awarded.

8. The neutral shall be paid a reasonable fee plus expenses. These fees and expenses, along with the reasonable legal fees and expenses of the prevailing party (including all expert witness fees and expenses), the fees and expenses of a court reporter, and any expenses for a hearing room, shall be paid as follows:

(a) if the neutral rules in favor of one party on all disputed issues in the ADR,

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the losing party shall pay 100% of such fees and expenses.

(b) if the neutral rules in favor of one party on some issues and the other party on other issues, the neutral shall issue with the rulings a written determination as to how such fees and expenses shall be allocated between the parties. The neutral shall allocate fees and expenses in a way that bears a reasonable relationship to the outcome of the ADR, with the party prevailing on more issues, or on issues of greater value or gravity, recovering a relatively larger share of its legal fees and expenses.

9. The rulings of the neutral and the allocation of fees and expenses shall be binding, non-reviewable, and non-appealable, and may be entered as a final judgment in any court having jurisdiction.

10. Except as provided in paragraph 9 or as required by law, the existence of the dispute, any settlement negotiations, the ADR hearing, any submissions (including exhibits, testimony, proposed rulings, and briefs), and the rulings shall be deemed Confidential Information. The neutral shall have the authority to impose sanctions for unauthorized disclosure of Confidential Information.

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EXHIBIT B

Scientific Dispute Resolution

If the parties are unable to agree on a redefined, non-conflicting Target pursuant to Section 5.5(e) within thirty (30) days of initiating negotiations, the parties shall resolve such dispute through a Scientific Dispute Resolution ("SDR") proceeding as provided herein. (all references to "days" in this SDR proceeding are to calendar days).

1. Within fourteen (14) days after the end of the above-referenced thirty (30) day negotiation period each party shall designate one (1) neutral having the following minimum scientific qualifications: a Ph.D. degree in chemistry or life sciences and/or an M.D. degree plus at least ten (10) years of relevant business or scientific research experience. These two (2) neutrals shall select a third neutral having the same minimum scientific qualifications within fourteen (14) days of the appointment of the first two (2) neutrals. None of the neutrals shall be an employee, director or shareholder of either party or any of their

subsidiaries or affiliates, or otherwise have a materially conflicting interest in the outcome of the SDR proceeding.

2. No earlier than fourteen (14) days or later than twenty-eight (28) days after selection of the third neutral, the neutrals shall hold a hearing to determine a redefined, non-conflicting Target. The SDR proceeding shall take place at a location agreed upon by the parties. If the parties cannot agree, the neutrals shall designate a location other than the principal place of business of either party or any of their subsidiaries or affiliates.

3. At least seven (7) days prior to the hearing, each party shall submit the following to the other party and the neutrals:

(a) a proposed redefined, non-conflicting Target; and

(b) a brief in support of such party's proposed redefined, non-conflicting Target, provided that the brief shall not exceed ten (10) pages (excluding references to published scientific literature, not to exceed two (2) pages). No discovery shall be required or permitted by any means, including depositions, interrogatories, requests for admissions, or production of documents.

4. The hearing shall be conducted on one (1) day and shall be governed by the following rules:

(a) Each party shall be entitled to three (3) hours of hearing time to present its case. The neutrals shall determine whether each party has had the three (3) hours to which it is entitled.

(b) ArQule shall make its presentation first, followed by Abbott.

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5. The neutrals, by majority vote, shall rule on each disputed issue within seven (7) days following completion of the hearing. Such ruling shall adopt in its entirety the redefined, non-conflicting Target proposed by one of the parties. The neutrals shall issue a brief written opinion, not to exceed ten (10) pages, which sets forth the ruling of the neutrals, the basis of ruling, and the remedy or remedies awarded. Neither party shall use such written opinion as the basis for any legal action that attempts to challenge or appeal such ruling or the remedy or remedies awarded.

6. The neutrals shall be paid reasonable fees plus expenses. These fees and expenses, the fees and expenses of a court reporter, and any expenses for a hearing room, shall be shared equally by the parties.

7. The rulings of the neutrals shall be binding, non-reviewable, and nonappealable.

8. Except as required by law, the existence of the dispute, any settlement negotiations, the SDR hearing, any submissions of the parties therein, and the rulings shall be deemed Confidential Information.

9. The parties may, by mutual written agreement, submit additional issues for dispute resolution under SDR procedures.

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AMENDMENT NO. 1 TO RESEARCH, DEVELOPMENT AND LICENSE AGREEMENT

This Amendment No. 1 to Research, Development and License Agreement is

dated as of August 13, 1996 by and between Abbott Laboratories, an Illinois corporation having a principal place of business at 100 Abbott Park Road, Abbott Park, Illinois ("Abbott") and ArQule, Inc., a Delaware corporation having a principal place of business at 200 Boston Avenue, Suite 3600, Medford, Massachusetts ("ArQule").

RECITALS

WHEREAS, Abbott and ArQule have entered into that certain Research, Development and License Agreement, dated as of June 16, 1995 (the "License Agreement"), pursuant to which ArQule agreed, INTER ALIA, to provide Abbott with certain ArQule Compounds and Abbott Derivative Compounds (these and other capitalized terms used herein without definition shall have the respective meanings provided in the License Agreement) for screening in consideration of the payment by Abbott to ArQule of certain license fees, milestone payments and research funding payments on the terms and subject to the conditions set forth in the License Agreement; and

WHEREAS, ArQule and Abbott desire to amend the License Agreement to enable ArQule to supply Abbott with additional ArQule Compounds and to delete certain aspects of the License Agreement having to do with reservation of Targets and the Array Screening Period.

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

1. The License Agreement is hereby amended as follows:

1.1. Definitions.

(a) The following definitions are hereby deleted from Article 1 of the License Agreement (and the remaining definitions in Article 1 are renumbered accordingly):

- (1) "1.26 License Option Period"

- (2) "1.37 Reserved Arrays"

- (3) "1.39 Target"

- (4) "1.40 Target Reservation"

- (5) "1.14 Array Screening Period".

(b) The definition of "ArQule Array" originally set forth in Section 1.8 of the License Agreement (now renumbered as Section 1.10) is hereby deleted in its entirety and replaced with the following:

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"1.10 `ARQULE ARRAY' shall mean a set of structurally related small organic chemical molecules that are synthesized by ArQule using its proprietary technology arranged in a format such as a microtiter screening plate."

(c) The definition of "Licensed Final Compound" originally set forth in Section 1.23 of the License Agreement (now renumbered as Section 1.25) is hereby deleted in its entirety and replaced with the following:

"1.25 `LICENSED FINAL COMPOUND' shall mean a specific ArQule Compound from a Licensed Compound Set that Abbott commercially develops, markets and/or sells pursuant to Section 5.4."

(d) The definition of "Licensed Compound Set" originally set forth in Section 1.24 of the License Agreement (now renumbered as Section 1.26)

is hereby deleted in its entirety and replaced with the following:

"1.26 `LICENSED COMPOUND SET' shall mean, with respect to an Active ArQule Compound, such Active ArQule Compound and any Active ArQule Homolog thereto which have been licensed to Abbott by ArQule pursuant to Section 5.4."

(e) The following definitions are hereby added to Article 1 of the License Agreement (and the remaining definitions in Article 1 are renumbered accordingly):

"1.7 `ACTIVE ARQULE HOMOLOG' shall mean

*

"1.9 `AMENDMENT DATE' shall mean August 13, 1996."

"1.17 `CHEMICAL THEME' shall mean the chemical or structural characteristics shared by a group of ArQule Compounds in an ArQule Array."

"1.22 `EXCLUSIVE DEVELOPMENT PERIOD' shall have the meaning provided in Section 5.5(a)."

"1.27 `MINIMUM FTE REQUIREMENT' shall have the meaning provided in Section 5.5(a)."

"1.28 `MUTUAL DISCLOSURE DATE' shall mean the date on which the information described in Section 5.2 of this Agreement is first disclosed by

* confidential treatment has been
requested for marked portions

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each party to the other with respect to any Active ArQule Compound and any Active ArQule Homolog thereto."

"1.41 `THIRD PARTY MAPPING ARRAY PARTNER' shall mean any third party to whom ArQule provides ArQule Arrays."

1.2. The first two sentences of Section 5.1 are hereby deleted in their entirety and replaced with the following:

"During the Array Transfer Period, ArQule shall deliver to Abbott ArQule Core Compounds within ArQule Arrays as follows: (i) during the initial Contract Year, ArQule shall deliver to Abbott at least * ArQule Core Compounds within ArQule Arrays having not less than * different Chemical Themes and (ii) during the second Contract Year, ArQule shall deliver to Abbott at least * ArQule Core Compounds within ArQule Arrays having not less than * different Chemical Themes (with a minimum of * ArQule Core Compounds and a maximum of * ArQule Core Compounds for each Chemical Theme). Abbott hereby acknowledges that ArQule has delivered to Abbott, as of the Amendment Date, * ArQule Core Compounds and hereby agrees that such ArQule Core Compounds shall be, in all respects, subject to this Agreement, as amended from time to time. ArQule may, at its option, also deliver to Abbott additional ArQule Arrays. ArQule shall select the ArQule Arrays to be delivered to Abbott hereunder and the ArQule Core Compounds within each such ArQule Array; PROVIDED, HOWEVER, that

(i) each ArQule Core Compound shall appear only once in any ArQule Array shipped to Abbott hereunder and (ii) no more than * percent * of any shipment of ArQule Core Compounds delivered to Abbott under this Agreement shall have been previously committed to a Third Party Mapping Array Partner or a bona fide, documented internal ArQule program as of the date of such shipment."

1.3. Section 5.2 of the License Agreement is hereby deleted in its entirety and replaced with the following:

"5.2 SCREENING OF ARQULE COMPOUNDS. ArQule hereby grants to Abbott and its Affiliates a nonexclusive, worldwide, royalty-free license (without the right to sublicense or subcontract) during the term of this Agreement and thereafter to perform such testing and analytical work as Abbott deems appropriate on ArQule Core Compounds delivered by ArQule hereunder. Notwithstanding the foregoing, Abbott may, during the term of this Agreement and thereafter, deliver ArQule Core Compounds to one or more third parties so as to allow such third parties to perform testing and analytical work on such ArQule Core Compounds provided that, prior to delivering any ArQule Core Compounds to any such third party, Abbott, ArQule and each such third party enter into a materials transfer agreement substantially in the form of the attached EXHIBIT B or such other form as may be acceptable to ArQule. At the time of delivery, ArQule will identify the Chemical Theme of each ArQule Array delivered to Abbott but not the structures of the

* confidential treatment has been requested for marked portions

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individual ArQule Core Compounds in such ArQule Arrays. Initially, Abbott will not disclose the targets against which such ArQule Arrays are screened. If Abbott detects any Active ArQule Compound in an ArQule Array, it will promptly notify ArQule. ArQule shall then determine if such Active ArQule Compound and any Active ArQule Homolog thereto have been previously committed to a Third Party Mapping Array Partner or to a bona fide, documented internal ArQule program (including programs with academic collaborators). ArQule will disclose to Abbott (a) the structure of such Active ArQule Compound if it has not been so committed and all Active ArQule Homologs thereto (if any) that have not been so committed and (b) the structures, but not the locations in the ArQule Array, of all other ArQule Compounds in such ArQule Array and Abbott will disclose to ArQule (a) the identity of the biological target as to which activity was detected and (b) the level of activity exhibited by such Active ArQule Compound and such Active ArQule Homolog (the date of such mutual disclosure being referred to herein as the "Mutual Disclosure Date"). All such disclosed information shall be treated as Confidential Information by the receiving party in accordance with Article 8."

1.4. Sections 5.3 and 5.5 of the License Agreement are hereby deleted in their entirety (and the remaining sections in Article 5 are renumbered accordingly).

1.5. All references in Section 5.3(a) (as renumbered) of the License Agreement to "Active ArQule Compounds" are hereby changed to "Active ArQule Compounds and Active ArQule Homologs"; all references in Section 5.3(a) (as renumbered) of the License Agreement to "Section 5.3" are hereby changed to "Section 5.2."; and all references in Section 5.3(b) (as renumbered) of the License Agreement to "Section 5.4(a)" are hereby changed to "Section 5.3(a)".

1.6. Sections 5.6(a) and (b) (as originally numbered) of the License Agreement are hereby deleted in their entirety and replaced with the following:

"5.4 LICENSE RIGHTS. On the Mutual Disclosure Date for any Active ArQule Compound and any Active ArQule Homolog thereto comprising the

Licensed Compound Set, ArQule shall grant to Abbott and its Affiliates an exclusive, worldwide, royalty-bearing license (with the right to sublicense), in the Abbott Field under ArQule Patent Rights and under ArQule's interest in any Joint Patent Rights to develop, have developed, make, have made, use, import, offer to sell, sell and have sold in the Abbott Field Products incorporating any ArQule Compounds within the Licensed Compound Set."

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1.7. Section 5.6(c) (as originally numbered) of the License Agreement is hereby deleted in its entirety and replaced with the following:

"5.5 Diligence Requirements.

(a) DILIGENCE REQUIREMENTS DURING EXCLUSIVE DEVELOPMENT PERIOD. During the one (1) year period commencing on the Mutual Disclosure Date for any Licensed Compound Set and continuing until the first anniversary thereof (such period being referred to herein as the "Exclusive Development Period"), Abbott shall maintain a minimum of * FTE scientist to perform research and development activities on * or more ArQule Compounds within such Licensed Compound Set (the "Minimum FTE Requirement"). Abbott shall have the option to extend the Exclusive Development Period for such Licensed Compound Set, subject to the Minimum FTE Requirement, for up to four (4) additional one year periods. The Exclusive Development Period shall be deemed to be automatically extended by Abbott each year through the end of the fourth additional one year period unless Abbott gives ArQule written notice of termination no later than thirty (30) days prior to any anniversary of the Mutual Disclosure Date for such Licensed Compound Set; PROVIDED, that Abbott must have complied with the Minimum FTE Requirement for the immediately preceding year for any such extension to be effective. Notwithstanding the foregoing, upon Abbott's request and with ArQule's consent, which consent shall not be unreasonably withheld, an extension to the Exclusive Development Period may be made beyond five (5) years if Abbott reasonably demonstrates to ArQule that Abbott has devoted appropriate resources toward commercialization of at least * within the Licensed Compound Set and is reasonably likely to enter into an active clinical development program with respect thereto. Upon expiration of the Exclusive Development Period for any Licensed Compound Set, the license granted to Abbott under Section 5.4 of this Agreement shall terminate unless, within thirty (30) days of such date, Abbott commences the clinical development program described in Section 5.5(b) for * or more ArQule Compounds within such Licensed Compound Set.

(b) DILIGENCE REQUIREMENTS AFTER EXCLUSIVE DEVELOPMENT PERIOD. After the Exclusive Development Period, Abbott shall maintain an active clinical development program on at least one (1) ArQule Compound in each Licensed Compound Set. Abbott shall have maintained such an active program if Abbott expends at least Three Million Dollars (\$3,000,000) per year in direct costs (including, but not limited to, costs attributable to external services or material contracts) relating to clinical development of * or more ArQule Compounds within the Licensed Compound Set during the period commencing at the end of the Exclusive Development Period and ending on the date upon which Abbott makes a milestone

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payment to ArQule pursuant to Section 6.1 (a) for the initiation of Phase III Studies for an ArQule Compound within the Licensed Compound Set; provided, however, that this obligation shall be suspended for a period not to exceed twelve (12) months during any period that clinical trials are delayed or suspended because of an unexpected negative result occurring for reasons beyond the control of Abbott. If clinical trials are delayed or suspended because of such unexpected negative result for a period in excess of twelve (12) months, the parties shall in good faith negotiate appropriate modifications to Abbott's due diligence obligations under this Section."

1.8. All references to "Section 5.5(c)" and "Section 5.6" in Sections 6.10 and 14.4 of the License Agreement are hereby replaced by "Section 5.2" and "Section 5.4", respectively, and all references to "Section 5.6(c)" in Section 12.5 of the License Agreement are hereby replaced by "Section 5.5".

1.9. Section 12.5(c) of the License Agreement is hereby deleted in its entirety and "and (c)" is hereby deleted from Section 12.5(a) of the License Agreement.

1.10. Section 13.1 of the License Agreement is hereby deleted in its entirety and replaced with the following:

"13.1 EXPIRATION. Unless terminated earlier by mutual written agreement of the parties or pursuant to Section 13.2, this Agreement shall expire on the date of expiration of the last Royalty Term for any Product to expire in any country in the Territory, subject to the provisions of Section 5.2."

1.11. Section 14.7 of the License Agreement is hereby amended by replacing the telephone and facsimile numbers for Abbott for purposes of notice with the following:

Tel: (847) 937-4367
Fax: (847) 938-5383

1.12. EXHIBIT B to the License Agreement is hereby deleted in its entirety and replaced with EXHIBIT B attached hereto.

2. Miscellaneous -----

2.1 GOVERNING LAW. This Amendment shall be governed in all respects by the laws of the State of Illinois without giving effect to principles of conflicts of law thereunder.

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

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2.3 LICENSE AGREEMENT. Except as specifically provided herein, the License Agreement as previously executed shall remain in full force and effect.

2.4 COUNTERPARTS. This Amendment may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.

2.5 RESTATED AGREEMENT. Attached hereto as Exhibit C is a copy of the Agreement, as amended by this Amendment, reflecting the terms of the Agreement, as amended hereby, in effect as of the Amendment Date.

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

ABBOTT LABORATORIES

By: /s/ Paul N. Clark

Name:

Title: Senior Vice President,
Pharmaceuticals Operations
and President Product
Pharmaceuticals Products
Division

ARQULE, INC.

By: /s/

Eric B. Gordon
President

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EXHIBIT B

FORM OF MATERIALS TRANSFER AGREEMENT

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EXHIBIT B

FORM OF MATERIALS TRANSFER AGREEMENT

This Agreement, effective as of the date last written below, is by and among ArQule, Inc. ("ArQule"), Abbott Laboratories ("Abbott") and _____ ("Recipient").

[Set on left column of page]

WHEREAS, Abbott and ArQule have entered into that certain Research, Development and License Agreement, dated as of June 16, 1995, as amended by Amendment No. 1

to Research, Development and License Agreement, dated as of August __, 1996 (as so amended, the "License Agreement"), pursuant to which ArQule has agreed, INTER ALIA, to provide Abbott with certain compounds for screening on the terms and subject to the conditions set forth in the License Agreement; and

WHEREAS, pursuant to Section 5.2 of the License Agreement, Abbott is permitted to deliver such compounds to third parties such as Recipient, provided such parties execute and deliver this Agreement to ArQule.

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

1. SUPPLY OF MATERIALS: Within _____ days after receiving an original of this Agreement executed by all parties, Abbott will supply Recipient with the compounds set forth on EXHIBIT A (the "Materials"). Upon written request, Abbott may provide the Recipient with additional quantities of such Materials or with additional compounds, which compounds shall also be considered Materials for the purposes of this Agreement.

2. USE AND TRANSFER RESTRICTIONS: Recipient acknowledges and agrees that the Materials are proprietary to and owned by ArQule and are or may be covered by claims of U.S. and international patents or patent applications of ArQule. Recipient agrees to use the Materials solely to screen them for potential pharmacological activity for Abbott using the assay procedure [previously disclosed to Abbott/set forth on EXHIBIT B]. Recipient agrees (i) not to transfer such Materials to any third party without the prior written consent of ArQule and Abbott, (ii) to permit access to the Materials only to its employees and consultants requiring such access, (iii) to inform such employees and consultants of the proprietary nature of the Materials, (iv) to take reasonable precautions, at least as stringent as those observed by Recipient to protect its own proprietary materials, to ensure that such employees and consultants observe the obligations of Recipient pursuant to this Section and (v) to execute and deliver any documents of assignment or conveyance that may be necessary to effectuate the ownership rights of ArQule in the Materials. Upon the expiration of this Agreement, Recipient shall, at the instruction of ArQule or Abbott, either destroy or return any unused Materials.

3. COMPLIANCE WITH LAW: Recipient agrees to comply with all federal, state, and local laws and regulations applicable to the use, testing, storage, disposal, and transfer of the Materials, including without limitation the Toxic Substances Control Act (15 USC 2601 ET SEQ.) and implementing regulations (in particular, 40 CFR 720.36 [Research and Development Exemption]), the Food, Drug, and Cosmetic Act (21 USC 301 ET SEQ.) and implementing regulations, and all Export Administration Regulations of the Department of Commerce. Recipient assumes sole responsibility for any violation of such laws or regulations by Recipient or any of its affiliates or sublicensees.

4. TERMINATION: This Agreement shall commence on the date last written below and continue for a period of _____ months. Sections 3, 6 and 7 shall survive termination of this Agreement.

5. NO WARRANTIES: Any Materials delivered pursuant to this Agreement are understood to be experimental in nature and may have hazardous properties. Recipient should assume that the Materials are dangerous and should use appropriate precautions. NEITHER ABBOTT NOR ARQULE MAKES ANY REPRESENTATIONS, OR EXTENDS ANY WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THE COMPOUNDS. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR THAT THE USE OF THE MATERIALS WILL NOT INFRINGE ANY PATENT RIGHTS OF OTHERS.

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6. ASSIGNMENT OF INVENTIONS: Recipient agrees promptly to disclose to Abbott any and all ideas, concepts, discoveries, inventions, developments, improvements, trade secrets, technical data, know-how or biological materials that are conceived, devised, invented, developed or reduced to practice or tangible medium by Recipient, or any of its agents or employees, or under its direction, during the term of this Agreement and which arise out of its screening or evaluation of the Materials (hereinafter "Inventions"). Recipient hereby assigns to Abbott all of its right, title and interest in and to the Inventions and any and all related patent rights, copyrights and applications and registrations therefor. During and after the expiration of this Agreement,

Recipient shall cooperate with Abbott, at Abbott's expense, in obtaining proprietary protection for the Inventions and shall execute all documents which Abbott shall reasonably request in order to perfect Abbott's rights in the Inventions.

7. INDEMNIFICATION: Recipient assumes all liability for, and agrees to indemnify, defend, and hold harmless ArQule and Abbott and their respective directors, officers, representatives, employees, and agents against, all losses, expenses (including without limitation any legal expenses), claims, demands, damages, judgments, suits, or other actions arising from the use, testing, storage, or disposal of the Materials by Recipient and its agents or employees, or from any breach of its obligations under Section 2 of this Agreement.

8. MISCELLANEOUS: This Agreement shall not be assigned or otherwise transferred by Recipient without the prior written consent of ArQule and Abbott. This Agreement shall be governed by the laws of the Commonwealth of Massachusetts. This Agreement constitutes the entire understanding of the parties and supersedes all prior agreements, written or oral, with respect to the subject matter hereof.

Recipient _____
Signature: _____
Name: _____
Title: _____
Date: _____

Shipping Address:
- _____
- _____
- _____
Tel: _____
Fax: _____

ACCEPTED AND AGREED:
ArQule, Inc.
Signature: _____
Name: _____
Title: _____
Date: _____

Address:
ArQule, Inc.
200 Boston Avenue, Suite 3600
Medford, MA 02155
Tel: (800) 644-5000
Fax: (617) 395-1225

ACCEPTED AND AGREED:
Abbott Laboratories
Signature: _____
Name: _____
Title: _____
Date: _____

Address:
Abbott Laboratories
100 Abbott Park Road

Abbott Park, IL 60064
Tel: (847) 937-4367
Fax: (847) 938-5383

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EXHIBIT C

See Exhibit 10.15 of the Registrant's Registration Statement.

RESEARCH & DEVELOPMENT AGREEMENT

This Agreement is entered into effective as of March 10, 1995 (the "Effective Date") between PHARMACIA BIOTECH AB ("Pharmacia"), a Swedish corporation having its principal offices at Bjorkgatan 30, S-751 82 Uppsala, Sweden and ARQULE, INC. ("ArQule"), a Delaware corporation having its principal offices at 200 Boston Avenue, Suite 3600, Medford, MA 02155, USA.

 BACKGROUND

- A. ArQule has developed certain technologies that Pharmacia believes may be useful in the development of products in the areas of bioseparations, synthesis of certain biomolecules, and cell culture.
- B. Pharmacia and ArQule have entered into an Option Agreement, dated as of the Effective Date, which grants to Pharmacia the right to acquire certain exclusive rights to use the ArQule technologies and improvements to make, use, and sell products in these business areas.
- C. Pharmacia desires to evaluate whether the ArQule technology would contribute to the development of products in these business areas, and ArQule desires to give Pharmacia the opportunity to conduct such an evaluation.
- D. ArQule is willing to perform this technology evaluation, with the assistance and funding of Pharmacia, subject to the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the foregoing and the covenants and promises contained herein, Pharmacia and ArQule agree as follows:

SECTION 1. DEFINITIONS

The following definitions shall control the construction of this Agreement wherever they appear:

1.1 "AFFILIATE" shall mean any company or other legal entity which controls, is controlled by, or is under common control with either party. A company or other legal entity shall be presumed to control another if it owns fifty percent (50%) or more of the outstanding voting equity or assets of the other company or entity.

1.2 "ARQULE TECHNOLOGY" shall mean all of the patents and patent applications listed in Enclosure 1 hereto and all corresponding foreign patents and patent applications and all

continuations, continuations-in-part, and divisions thereof, as well as all of the Proprietary Materials and unpatented know-how and trade secrets relating thereto.

1.3 "BIOMOLECULES" shall mean amino acids, peptides, proteins, nucleic acids (nucleotides, oligonucleotides, polynucleotides), carbohydrates (monosaccharides, oligosaccharides, polysaccharides), lipids, phospholipids, or any combination of such molecules, whether produced by natural means or by organic synthesis in solution or using solid phase technologies.

1.4 "COMMENCEMENT DATE" shall mean April 1, 1995.

1.5 "CONFIDENTIAL INFORMATION" shall have the meaning set forth in Section 7.1.

1.6 "CONTRIBUTED TECHNOLOGY" shall mean all patents, patent applications, Proprietary Materials, know-how, and trade secrets that Pharmacia may legally provide to ArQule and which relate to or are useful for the development of the ArQule Technology for applications in the Field of Applications.

1.7 "DERIVATIVES" shall mean any molecules that are chemical derivatives or analogues of Biomolecules or Natural Products.

1.8 "FIELD OF APPLICATIONS" shall mean

*

1.9 "IMPROVEMENT" shall mean any improvement, change, addition, upgrade, or modification to the ArQule Technology or Contributed Technology that either party discovers or develops in the course of any Research Project.

1.10 "NATURAL PRODUCTS" shall mean all molecules (other than Biomolecules) that are the naturally occurring products of biosynthesis in living cells or are produced by isolated cellular components outside of living cells, whether by natural means or by organic synthesis in solution or using solid phase technologies. This definition is intended to include subcellular components and viral particles. Examples of Natural Products are vitamins, steroid hormones, and various cofactors.

1.11 "OPTION AGREEMENT" shall mean a certain Option Agreement between the parties, dated as of the Effective Date, which is attached to this Agreement as Enclosure 2.

1.12 "PROJECT LEADER" shall have the meaning set forth in Section 2.3.

1.13 "PROJECT PLAN" shall mean a comprehensive plan of research that the parties intend to conduct under this Agreement, as amended from time to time by the Research Committee. The Project Plan will contain a description of current Research Projects, payments for each

* confidential treatment has been
requested for marked portions

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Research Project, and personnel for each Research Project. The initial Project Plan is attached as Enclosure 3 to this Agreement.

1.14 "PROPRIETARY MATERIALS" shall have the meaning set forth in Section 7.2.

1.15 "RESEARCH COMMITTEE" shall have the meaning set forth in Section 4.1.

1.16 "RESEARCH PERIOD" shall mean the six-month period during which the parties conduct each Research Project.

1.17 "RESEARCH PROJECT" shall mean the research planned for a particular Subfield during a Research Period. The initial Research Project, for Subfield I, is described in the initial Project Plan. Subsequent Research Projects for Subfield I or any other Subfield will be established by the Research Committee in accordance with the procedures set forth below.

1.18 "SUBFIELD I" shall mean

*

1.19 "SUBFIELD II" shall mean

*

1.20 "SUBFIELD III" shall mean

*

1.21 "SUBFIELD IV" shall mean

*

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*

SECTION 2. RESEARCH ACTIVITIES

2.1 Initial Research Project. The initial Research Project relating to Subfield I shall be described in the Project Plan attached to this Agreement on the Effective Date. As further described below, the initial Project Plan shall also provide for a description of the resources that each party will commit to the initial Research Project, specifically including personnel.

2.2 Establishment of Subsequent Research Projects. After the completion of the initial Research Project, Pharmacia may elect to fund subsequent Research Projects in one or more Subfields during subsequent Research Periods in accordance with the procedures set forth in the Option Agreement. If Pharmacia elects to fund one or more additional Research Projects, the Research Committee shall amend the Research Plan to provide for (i) a description of each Research Project, including without limitation overall goals, specific goals, priorities, and time schedules, (ii) payments to ArQule for each Research Project, and (iii) a description of the resources that each party will commit to each Research Project. Each amended Research Plan shall be adopted by the Research Committee during the time periods specified in the Option Agreement, and then attached to this Agreement as an addition to Enclosure 3.

2.3 Conduct of Research Projects. During the term of this Agreement, ArQule agrees to use commercially reasonable efforts to conduct all Research Projects in accordance with the Project Plan and as directed by the Research Committee. Pharmacia agrees to provide reasonable assistance to ArQule in the conduct of the Research Projects in accordance with the Project Plan and as directed by the

Research Committee. ArQule and Pharmacia each agree that the ArQule Technology and the Contributed Technology may be used as reasonably required to perform any Research Project, and each party further agrees to effect the transfer of such required technology upon request. ArQule agrees to use the Contributed Technology only for the purposes set forth in this Agreement. Each party shall designate a project leader (the "Project Leaders") who shall have primary responsibility over (i) the performance of the Research Project by such party and (ii) coordination of efforts with the other party. The Project Leaders shall report directly to the Research Committee. The Project Leaders for each Research Project shall be identified in the Project Plan; provided, however, that each party shall have the right to change its Project Leaders upon thirty (30) days written notice to the other party. All Project Leaders designated by a party must be approved by the other party, provided that such approval may not be unreasonably withheld.

2.4 Personnel. In addition to the Project Leaders, each party agrees to assign to each Research Project such qualified and competent members of its staff as may be required to achieve the aims and goals set forth for such Research Project. All such commitments of personnel shall be listed in the Project Plan, as amended from time to time. ArQule agrees to commit a total of * full-time equivalents to the initial Research Project and

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Pharmacia agrees to commit a total of * full-time equivalents to such Research Project, as further described in the Project Plan. Upon the completion of each Research Project, ArQule agrees to provide Pharmacia with a written summary of time committed by ArQule personnel to such Research Project.

2.5 Compliance. In conducting each Research Project, each party shall use reasonable efforts (i) to ensure that each Research Project will comply with all technical and other requirements set out in the Project Plan, as adjusted by the Research Committee, (ii) to generate and maintain adequate documentation describing in sufficient detail the results of each Research Project, and (iii) to conduct each Research Project in accordance with all applicable laws and regulations.

SECTION 3. PAYMENTS

Pharmacia agrees to pay ArQule a total of * Dollars * on the Effective Date in accordance with the Project Plan for performance of the initial Research Project. Thereafter, in consideration of the performance of each Research Project, Pharmacia agrees to pay ArQule the amount set forth in the Project Plan prior to the commencement of the Research Period for that Research Project. All such payments shall be nonrefundable.

SECTION 4. MANAGEMENT AND REPORTING

4.1 Composition and Duties of Research Committee. Prior to the Commencement Date, each party shall designate two (2) of its employees or consultants to serve as members of a committee that will supervise and direct all Research Projects, report on results of all Research Projects, and adopt amendments to the Project Plan (the "Research Committee"). If any Project Leader is not a member of the Research Committee, such Project Leader shall attend all meetings of the Research Committee as an observer. Other personnel of either party may attend meetings of the Research Committee as observers with the consent or invitation of the Research Committee. The initial members of the Research Committee from both Pharmacia and ArQule are named in Enclosure 4 hereto. Either party may change the individuals so named upon thirty (30) days written notice to the other party.

4.2 Meetings of Research Committee. The Research Committee will meet at least once each calendar month. Members of the Research Committee may participate either in person or by telephone. If a designated representative of a party cannot attend any meeting of the Research Committee, such party may designate a different representative for that meeting without notice to the other party, and the substitute member will have full power to vote on behalf of the permanent member. All decisions of the Research Committee will require the vote of a majority of its members. If the Research Committee cannot reach agreement on any

matter, the matter will be resolved in accordance with the procedures set forth in Section 9.9 below.

4.3 Reports. The Research Committee and/or the applicable Project Leaders shall prepare and submit the following reports to the management of each of the parties:

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(a) within ten (10) days of the end of every calendar month, a management report that describes the progress of each of the current Research Projects, the significant results obtained for such Research Projects, deviations of the Research Project from the description provided in the Project Plan, and recommended modifications to the Research Project for the subsequent one-month period; and

(b) within ten (10) days of the completion, cessation, or termination of any Research Project, a final report that describes in full detail (i) the work completed in the course of the Research Project and (ii) the significant results obtained for the Research Project.

4.4 Meetings. The Research Committee shall organize bi-monthly meetings for the purpose of reporting on the progress of each Research Project and planning for the future conduct of each Research Project. Such meetings shall be held at alternating locations suitable to both parties or by teleconferences, and shall be attended by appropriate management individuals from both Pharmacia and ArQule.

SECTION 5. TERM AND TERMINATION

5.1 Term. This Agreement shall commence on the Effective Date and shall terminate upon the expiration or termination of the Option Agreement, unless earlier terminated in accordance with this Section 5.

5.2 Termination for Breach. If either Pharmacia or ArQule breaches any representation made herein or fails to abide by any of the material terms of this Agreement, the other party shall have the right to terminate this Agreement upon sixty (60) days' prior written notice to the defaulting party specifying the default; provided, however, that if said defaulting party cures the default within the said sixty (60) day period, this Agreement shall continue in full force and effect as if no default had occurred.

5.3 Personal Services. In addition to, and independent of, the right of Pharmacia to terminate this Agreement under Section 5.2, if (i) proceedings in bankruptcy or insolvency are instituted by or against ArQule, or a receiver is appointed for ArQule, or if any substantial part of the assets of ArQule is the object of attachment, sequestration, or other type of comparable proceeding, and such proceeding is not vacated or terminated within sixty (60) days after its commencement or institution, and (ii) ArQule defaults under any of the material terms of this Agreement and fails to cure such default within sixty (60) days after receiving written of such default from Pharmacia, then Pharmacia shall also have the right to negotiate with Dr. Joseph C. Hogan, Jr. (the "Consultant"), an employee and officer of ArQule, for the purpose of entering into a consulting agreement between the Consultant and Pharmacia (the "Consulting Agreement"), in order to enable Pharmacia to continue to receive the services that are provided by the Consultant under this Agreement. ArQule acknowledges and agrees that the rights provided to Pharmacia under this Section 5.3 (i.e., the right to conduct negotiations with the Consultant and the right to enter into the Consulting Agreement) do not (a) violate any state laws or the common law, including without limitation any notions of public policy, or (b) violate any federal laws, including without limitation the protections afforded to a debtor in bankruptcy pursuant to the

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provisions of section 362 of title 11 of the United States Code, and are in the nature of security for and/or guaranty of the performance of ArQule under the terms of this Agreement. By this acknowledgement and agreement, ArQule further agrees that it shall be estopped to make any argument, pursuant to any of the laws described in the foregoing sentence, to prevent the exercise by Pharmacia of any of the rights provided to Pharmacia under this Section 5.3.

5.4 Survival. The termination of this Agreement shall not release either party from fulfilling any obligations which it may have incurred prior to any such termination. The following provisions shall survive termination of this Agreement: Sections 1, 4.3(b), 5.3, 5.4, 6, 7, 9.8, and 9.9.

SECTION 6. INTELLECTUAL PROPERTY

6.1 Ownership. ArQule shall have sole ownership of all Improvements to the ArQule Technology that are made, developed, or discovered in the course of the Research Project by employees or consultants of either party. Pharmacia shall have sole ownership of all Improvements to the Contributed Technology that are made, developed, or discovered in the course of the Research Project by employees or consultants of either party. Ownership of all other intellectual property that is made, developed, or discovered in the course of the Research Project shall be determined in accordance with (i) the rules of inventorship under the applicable patent law (in the case of patentable inventions), (ii) the rules of authorship under the applicable copyright law (in the case of copyrightable works), or (iii) the mutual agreement of the parties (in all other cases).

6.2 Legal Protection. Each party shall have sole control, at its expense, over obtaining any form of legal protection for the intellectual property owed solely by such party. In the case of intellectual property for which the parties have joint ownership, the parties shall mutually agree on the division of responsibility for, and expense of, obtaining appropriate legal protection for such intellectual property, and any disputes shall be resolved in accordance with the procedures set forth in Section 9.9.

6.3 Full Cooperation. ArQule and Pharmacia agree to cooperate fully in the preparation, filing, and prosecution of any patent applications covering Improvements. Such cooperation includes, but is not limited to,

- (a) executing any documents of assignment, or requiring employees or consultants of each party to execute such documents of assignment, so as to effect the appropriate ownership of Improvements as set forth above;
- (b) executing all papers and instruments, or requiring employees or consultants of each party to execute such papers and instruments, so as to enable the other party to apply for and to prosecute patent applications in any country; and
- (c) undertaking no actions that are potentially deleterious to the preparation, filing, or prosecution of such patent applications.

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6.4 License Agreement. The parties intend that in the event of any conflict between the provisions of this Article 6 and the terms and conditions of any License Agreement entered into by the parties as contemplated by the Option Agreement, the terms of the License Agreement shall prevail.

SECTION 7. CONFIDENTIAL INFORMATION AND PROPRIETARY MATERIALS

7.1 Confidential Information.

7.1.1 Definition of Confidential Information. Confidential Information shall mean any technical or business information furnished by one party (the "Disclosing Party") to the other party (the "Receiving Party") in connection with this Agreement and specifically designated as confidential. Such Confidential Information may include, without limitation, the ArQule Technology and the Contributed Technology, as well as trade secrets, know-how, inventions, technical data or specifications, testing methods, business or financial information, research and development activities, product and marketing plans,

and customer and supplier information.

7.1.2 Designation of Confidential Information. Confidential Information that is disclosed in writing shall be marked with a legend indicating its confidential status. Confidential Information that is disclosed orally or visually shall be documented in a written notice prepared by the Disclosing Party and delivered to the Receiving Party within thirty (30) days of the date of disclosure; such notice shall summarize the Confidential Information disclosed to the Receiving Party and reference the time and place of disclosure.

7.1.3 Obligations. The Receiving Party agrees that it shall:

(a) maintain all Confidential Information in strict confidence, except that the Receiving Party may disclose or permit the disclosure of any Confidential Information to its directors, officers, employees, consultants, and advisors who are obligated to maintain the confidential nature of such Confidential Information and who need to know such Confidential Information for the purposes set forth in this Agreement;

(b) use all Confidential Information solely for the purposes set forth in this Agreement; and

(c) allow its directors, officers, employees, consultants, and advisors to reproduce the Confidential Information only to the extent necessary to effect the purposes set forth in this Agreement, with all such reproductions being considered Confidential Information.

7.1.4 Exceptions. The obligations of the Receiving Party under Section 7.1.3 above shall not apply to the extent that the Receiving Party can demonstrate that certain Confidential Information:

(a) was in the public domain prior to the time of its disclosure under this Agreement;

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(b) entered the public domain after the time of its disclosure under this Agreement through means other than an unauthorized disclosure resulting from an act or omission by the Receiving Party;

(c) was independently developed or discovered by the Receiving Party without use of the Confidential Information;

(d) is or was disclosed to the Receiving Party at any time, whether prior to or after the time of its disclosure under this Agreement, by a third party having no fiduciary relationship with the Disclosing Party and having no obligation of confidentiality with respect to such Confidential Information; or

(e) is required to be disclosed to comply with applicable laws or regulations, or with a court or administrative order, provided that the Disclosing Party receives prior written notice of such disclosure and that the Receiving Party takes all reasonable and lawful actions to obtain confidential treatment for such disclosure and, if possible, to minimize the extent of such disclosure.

7.2 Proprietary Materials.

7.2.1 Definition of Proprietary Materials. "Proprietary Materials" shall mean any tangible chemical, biological, or physical research materials that are furnished by one party (the "Transferring Party") to the other party (the "Receiving Party") in connection with this Agreement regardless of whether such materials are specifically designated as proprietary to the Transferring Party. The Transferring Party shall furnish such Proprietary Materials to the Receiving Party in a mutually acceptable form, including appropriate labelling and packaging.

7.2.2 Limited Use. The Receiving Party shall use Proprietary Materials solely for the purposes set forth in this Agreement. The Receiving Party shall use the Proprietary Materials only in compliance with all applicable governmental laws and regulations, and not for any in vivo experiments on human

subjects. The Receiving Party assumes all liability for damages that may arise from the use, storage, or disposal of any Proprietary Materials. The Transferring Party will not be liable to the Receiving Party for any loss, claim, or demand made by Receiving Party, or made against the Receiving Party by any other party, due to or arising from the use, storage, or disposal of any Proprietary Materials by the Receiving Party, and the Receiving Party agrees, to the extent allowed under applicable law, to defend, indemnify, and hold the Transferring Party harmless from and against any such losses, claims, or demands, except to the extent caused by the gross negligence or willful misconduct of the Transferring Party.

7.2.3 Limited Disposition. The Receiving Party shall not transfer or distribute any Proprietary Materials to any third party without the prior written consent of the Transferring Party.

7.3 Return of Confidential Information and Proprietary Materials. Upon the termination of this Agreement, at the request of the Disclosing Party, the Receiving Party shall return to

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the Disclosing Party all originals, copies, and summaries of documents, materials, and other tangible manifestations of Confidential Information in the possession or control of the Receiving Party, except that the Receiving Party may retain one copy of the Confidential Information in the possession of its legal counsel solely for the purpose of monitoring its obligations under this Agreement. Upon the termination of this Agreement, the Receiving Party shall at the instruction of the Transferring Party either destroy or return any unused Proprietary Materials.

7.4 Survival of Obligations. The obligations set forth in this Section 7 shall remain in effect for a period of five (5) years after termination of this Agreement, except that the obligations of the Receiving Party to return Confidential Information to the Disclosing Party and to return or destroy Proprietary Materials received from the Transferring Party shall survive until fulfilled.

SECTION 8. REPRESENTATIONS, WARRANTIES, AND DISCLAIMERS

8.1 Entire Agreement. The parties hereto each acknowledge and agree:

- (a) that no representation or promise not expressly contained in this Agreement or the Option Agreement has been made by the other party hereto or by any of its agents, employees, representatives or attorney; and
- (b) that this Agreement is not being entered into on the basis of, or in reliance on, any promise or representation, expressed or implied, covering the subject matter hereof, other than those which are set forth expressly in this Agreement and the Option Agreement.

8.2 Authority; No Conflict. The parties hereto each represent and warrant that they have the authority and legal right to enter into this Agreement, and that the terms of this Agreement are not inconsistent with any other contractual arrangements they may have, express or implied.

8.3 Ownership of Technology. ArQule warrants and represents that it is the owner by assignment of the entire right, title, and interest in and to all the ArQule Technology. Pharmacia warrants and represents that it owns or is free to license or sublicense all of the Contributed Technology.

8.4 Disclaimer. NEITHER PARTY MAKES ANY WARRANTIES, EXPRESS OR IMPLIED, REGARDING THE QUALITY OF ANY RESULTS OR THE ACHIEVEMENT OF ANY GOALS FOR ANY RESEARCH PROJECT. THERE ARE NO EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE FOR ANY PROPRIETARY MATERIALS OF EITHER PARTY. EXCEPT AS EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTIES THAT THE USE OF ARQULE TECHNOLOGY, CONTRIBUTED TECHNOLOGY, OR ANY PROPRIETARY MATERIALS WILL NOT INFRINGE ANY PATENT OR OTHER INTELLECTUAL PROPERTY RIGHTS OF A THIRD PARTY.

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SECTION 9. MISCELLANEOUS

9.1 Publicity. Neither party shall use the name of the other party or reveal the terms of this Agreement in any publicity or advertising without the prior written approval of the other party, except that (i) either party may use the text of a written statement approved in advance by both parties without further approval, (ii) either party shall have the right to identify the other party and to disclose the terms of this Agreement as required by applicable securities laws or other applicable law or regulation, and (iii) either party may use the name of the other party and reveal the existence of this Agreement and the Option Agreement.

9.2 Assignment. Neither party hereto shall have the right to assign their rights or obligations under this Agreement without the prior written consent of the other party, which consent shall not be unreasonably withheld; provided, however, that either party hereto may assign, upon prior written notice to the other, its rights and obligations to an Affiliate or to a legal entity acquiring all or substantially all of such party's assets or business to which this Agreement relates. Subject to the preceding sentence, this Agreement shall be binding upon and inure to the benefit of the permitted successors and assigns of each party.

9.3 Relationship. The status of the parties hereto is that of independent contractors, and as such the parties shall not be deemed to be partners, joint venturers, or each other's agents, and neither shall have the right to act for or on behalf of the other except as expressly provided hereunder or otherwise expressly agreed to in writing.

9.4 Force Majeure. The parties hereto shall not be liable for failure to perform as required by any provision of this Agreement where such failure results from a force majeure beyond such party's control. In the event of any delay attributable to a force majeure, the time for performance affected thereby shall be extended for a period equal to the time lost by reason of the delay; provided, however, that if the delay extends for a period exceeding one hundred and eighty (180) days, the party capable of performance shall have the right to terminate this Agreement immediately upon written notice to the affected party.

9.5 Entire Agreement. Except for the Option Agreement, this Agreement constitutes the entire understanding of the parties with respect to the subject matter contained herein and may be modified only by a written agreement signed by both parties.

9.6 Notices. Service of all notices hereunder shall be in writing and shall be deemed duly given if sent by courier, certified or registered mail, postage prepaid, or confirmed telecopier transmission to the addresses or telecopier numbers below.

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If to Pharmacia:

Pharmacia Biotech AB
S-751 82 Uppsala
Sweden
Attention: Johan von Heijne

If to ArQule:

ArQule, Inc.
200 Boston Avenue
Suite 3600
Medford, Massachusetts 02155
Attention: President

Tel: 46 1816 5700
Fax: 46 1816 6409

Tel: (617) 395-4100
Fax: (617) 395-1225

With a copy to:

With a copy to:

Ulf Lundberg
General Counsel

Palmer & Dodge
One Beacon Street

Pharmacia Biotech AB
S-751 82 Uppsala
Sweden

Boston, Massachusetts 02108
USA
Attention: Michael Lytton, Esq.

Tel: 46 1816 3000
Fax: 46 1816 6301

Tel: (617) 573-0327
Fax: (617) 227-4420

Either party may change its designated address and facsimile number by notice to the other party in the manner provided in this Section.

9.7 Severability. In the event that any provision of this Agreement shall, for any reason, be held to be invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect any other provision hereof, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent.

9.8 Governing Law. This Agreement shall be governed by and construed in accordance with the laws of the State of New York irrespective of any conflicts of law principles.

9.9 Dispute Resolution. Any disputes between the parties that arise under or relate to this Agreement shall be resolved in accordance with the following procedures. The parties shall first attempt in good faith to resolve the matter among themselves. If the matter remains unresolved after a period of thirty (30) days, the dispute shall be referred to a member of senior management from each party. If the matter remains unresolved after an additional thirty-day period, the dispute shall be finally settled by binding arbitration in London, England under the Rules of Conciliation and Arbitration of the International Chamber of Commerce. In case of a dispute which cannot be resolved by good faith negotiations, ArQule shall also have the right to apply with a court of competent jurisdiction to enjoin Pharmacia from further use of the ArQule Technology and Improvements. Notwithstanding any of the foregoing, Pharmacia does not waive any right to contest such application and to argue that the requisite criteria that would allow the court to issue an injunction do not exist.

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IN WITNESS HEREOF, the parties have caused this instrument to be executed by their duly authorized officers effective as of the day and year first set forth above.

PHARMACIA BIOTECH AB

By: /s/

Arne Forsell
President

By: /s/

Bengt Belfrage
Executive Vice President

ARQULE, INC.

By: /s/

Seth L. Harrison
President and Chief Executive Officer

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ENCLOSURE 1

ARQULE TECHNOLOGY*

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ENCLOSURE 2

OPTION AGREEMENT

See Exhibit 10.17 to the Registrant's Registration Statement.

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ENCLOSURE 3

PROJECT PLAN

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ENCLOSURE 3 (Project Plan) TO PHARMACIA RESEARCH

RESEARCH PLAN FOR "LIGAND DESIGN" PROJECT
AN ARQULE/PHARMACIA BIOTECH COOPERATION

CONTENTS

- 1 DESCRIPTION OF THE CURRENT PROJECT
 - 1.1 Objective of the project
 - 1.2 Organization
 - 1.2.1 Project Leaders and Reference Groups
 - 1.2.2 Project Resources
 - 1.3 Project Presentation
 - 1.3.1 Pre-Initiation Phase
 - 1.3.2 Project Phase
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- 3 PROJECT WORK PLAN
- 4 PRIORITIES
- 5 PROJECT TIME LINES
 - 5.1 Pre-Initiation Phase
 - 5.2 Project Phase

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1 DESCRIPTION OF THE CURRENT PROJECT

1.1 Objective of the project

The objective of the project is *

1. *
2. *
3. *

These objective were decided upon at the meeting at Pharmacia in January, 1995

1.2 Organisation

1.2.1 Project Leaders and Reference Groups

At ArQule Joe Hogan (JH) is assigned as Project Leader and contact person. At Pharmacia Ake Pilotti (AP) is assigned as Project Leader and contact person.

1.2.2 Project Resources

The following persons from ArQule are assigned to the project:

Joe Hogan, Steve Gallion, David Boulton, Alan Kaplan, Milan Pluhar, and a PhD with ten years experience from the field who is presently being employed.

From Pharmacia two person will work at ArQule during the project phase. One of these will stay for the whole 6 month period, and two others will spend 3 months each at ArQule. Two PhD's are presently being employed for this purpose, and the third, Geir Fonnum, who presently works at Pharmacia Norway is one of the resources that will stay for 3 months.

In addition, AP or someone else from the Swedish Reference Group will be spending at least one week/month at ArQule during the project phase.

1.3 Project Presentation

The project will be divided into pre-initiation and a project phase.

1.3.1 Pre-Initiation Phase

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The purpose of the pre-initiation phase is to generate sufficient amount of structure lead information and to develop the appropriate screening methods.

During the pre-initiation phase two important activities are planned:

A. Literature search

All possible structural leads are being collected from the literature to make the initial choice of chemical structures to be synthesized as easy as possible. The results from the literature searches will be exchanged between the two sites and the extracted publications scrutinized for lead structures. All progress will be shared via fax or tele-conference.

At the end of the pre-initiation phase a meeting will be held to decide which molecules we will start to synthesize libraries around.

Chemical syntheses of these structures will be performed mainly at ArQule.

B. Screening methods

Rolf Hjort and Lars Fagerstam will initiate the design of screening methods. The basic idea is to develop systems that mimick * conditions.

The development of the screening methods will be performed primarily at Pharmacia.

1.3.2 Project Phase

The Project Phase is described in Sections 3-5 below.

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3 Project Work Plan:

1. At the end of * one of the selected targets will be prioritized. The decision will be based on the results achieved during the first third of the project phase. All resources will then be used to focus on the synthesis and screening for ligands suitable for the prioritized target molecule.
2. After *
3. After * we need to know which ligands should be synthesized in large scale. The large scale sythesis will then be performed.

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4. After *
5. Report writing will start after *

4 PRIORITIES

The targets chosen are *

All decisions will be taken by the Research Committee. If everything works perfect we will of course continue with the next target molecule in the following order of priority:

1. *
2. *
3. *

5 TIME PLAN

- 5.1 Pre-Initiation Phase (See Appendix 1)
- 5.2 Project Phase (See Appendix 1)

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ENCLOSURE 4

MEMBERS OF RESEARCH COMMITTEE

ArQule

Joseph Hogan, Jr.
David Boulton

Pharmacia

Ingvar Vib Berger
Ake Pilotti

February 13, 1996

BY FACSIMILE - 011-46 18 166301

Mr. Ulf Lundberg
 General Counsel
 Pharmacia Biotech AB
 Bjorkgatan 30

D-751 82 Uppsala, Sweden

Re: Amendment to Option Agreement and Research Agreement

Dear Mr. Lundberg:

Reference is hereby made to the Option Agreement (the "Option Agreement") and the Research and Development Agreement (the "Research Agreement"), both effective as of March 10, 1995, by and between ArQule, Inc. ("ArQule") and Pharmacia Biotech AB ("Pharmacia"). In consideration of the mutual covenants and agreements hereinafter set forth and other valuable consideration, the receipt and adequacy of which are hereby acknowledged, the undersigned hereby acknowledge and agree as follows:

I. In accordance with Section 2.2.1 of the Option Agreement, Pharmacia hereby confirms to ArQule (i) that it has elected not to extend the Option Period for its Option Right for Subfields II, III and IV (as such capitalized terms are defined in the Option Agreement) in accordance with Section 2.2.1(b) of the Option Agreement and (ii) that it has elected to extend the Option Period for its Option Rights for Subfield I through August 15, 1996 in accordance with Section 2.2.1(a) of the Option Agreement.

1. The Project Plan is hereby amended by replacing the initial Research Project (as such capitalized terms are defined in the Research Agreement) entitled "Research Plan for Ligand Design Project" attached as Enclosure 3 to the Research Agreement with the Research Project entitled "Research Plan for the Second Ligand Design Project", a copy of which is attached hereto (as so amended, the "Amended Research Project"), for the period commencing on February 15, 1996 and continuing until August 15, 1996. The parties agree that the Amended Research Project has been approved by the Research Committee, as required under Section 2.2 of the Research Agreement.

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Pharmacia biotech
 February 13, 1996
 Page 2

2. In consideration of the research to be conducted by ArQule as provided in the Amended Research Project, Pharmacia hereby agrees to pay ArQule
 * payable on or before March 12, 1996.

Except as otherwise expressly amended by this letter agreement, each of the terms, conditions and provisions of the Option Agreement and the Research Agreement shall remain in full force and effect. This letter agreement may be signed in one or more counterparts, each of which when taken together shall constitute one and the same instrument.

Very truly yours,

ARQULE, INC.

By: /s/

Eric B. Gordon

President and
Chief Executive Officer

Agreed to and Accepted
this 19th day of February, 1996

PHARMACIA BIOTECH AB

By: /s/ Ulf Lundberg

* Confidential treatment has been
requested for marked portions

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Dr. Joseph C. Hogan, PhD
CEO, Senior VP Research and Development
ArQule Inc.
200 Boston Avenue
Suite 3600
Medford, MA 02155
USA

August 15, 1996

Dear Dr. Hogan,

This letter confirms that Pharmacia Biotech AB elects to extend its option Period for Subfield I by entering into a Subsequent Research Period for 6 months, in accordance with the Option Agreement and the Research & Development Agreement between ArQule Inc. and Pharmacia Biotech AB, dated March 10, 1995, respectively.

With reference to our discussion in Boston, August 26 in Uppsala, we suggest that we amend the Research Plan, to provide for a description of the new research project including overall goals, priorities, time schedules, a description of the necessary resources that each party will commit to the new project. Furthermore, we feel that the initial Research Plan could serve as a good frame work for the new plan.

Best Regards.

PHARMACIA BIOTECH AB
Research & Development

Ingvar Wiberger
Executive Vice President

Copy to: Arne Forsell
Pharmacia Biotech AB

Johan von Heijne
Pharmacia Biotech AB

Michael Lytton
Palmer & Dodge
One Beacon Street
Boston Massachusetts
USA
Fax: (617) 227-4420

OPTION AGREEMENT

This Agreement, effective as of March 10, 1995 (the "Effective Date"), is between ArQule, Inc. ("ArQule"), a Delaware corporation, and Pharmacia Biotech AB ("Pharmacia"), a Swedish corporation.

RECITALS

WHEREAS, ArQule has developed certain technology that has applications in the areas of bioseparations, synthesis of certain biomolecules, and cell culture;

WHEREAS, Pharmacia has established itself as a leading manufacturer of products in the areas of bioseparations, synthesis of certain biomolecules, and cell culture;

WHEREAS, Pharmacia desires to evaluate whether the ArQule technology would contribute to the development of products in these business areas and, if so, to license the ArQule technology;

WHEREAS, ArQule desires to give Pharmacia the opportunity to evaluate the ArQule technology and to license such technology;

NOW, THEREFORE, in consideration of the mutual covenants set forth in this Agreement, the parties hereby agree as follows:

1. Definitions.

1.1. "ARQULE TECHNOLOGY" shall mean certain technology that is owned or controlled by ArQule as of the Effective Date, as set forth on EXHIBIT A.

1.2. "BIOMOLECULES" shall mean amino acids, peptides, proteins, nucleic acids, (nucleotides, oligonucleotides, polynucleotides), carbohydrates (monosaccharides, oligosaccharides, polysaccharides), lipids, phospholipids, or any combination of such molecules, whether produced by natural means or by organic synthesis in solution or using solid phase technologies.

1.3. "CHIRAL APPLICATIONS" shall mean

*

1.4. "CONFIDENTIAL INFORMATION" shall have the meaning set forth in Section 5.1.1.

1.5. "DERIVATIVES" shall mean any molecules that are chemical derivatives or analogues of Biomolecules or Natural Products.

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1.6. "FIELD OF APPLICATIONS" shall mean

*

1.7. "FIRST DECISION PERIOD" shall have the meaning set forth in Section 2.2.1.(a).

1.8. "IMPROVEMENT" shall mean any improvement, change, addition, upgrade, or modification to the ArQule Technology that ArQule discovers or develops in the course of research funded by Pharmacia.

1.9. "LIBRARY APPLICATIONS" shall mean

*

1.10. "NATURAL PRODUCTS" shall mean all molecules (other than Biomolecules) that are the naturally occurring products of biosynthesis in living cells or are produced by isolated cellular components outside of living cells, whether by natural means or by organic synthesis in solution or using solid phase technologies. This definition is intended to include sub-cellular components and viral particles. Examples of Natural Products are vitamins, steroid hormones, and various cofactors.

1.11. "NEGOTIATION PERIOD" shall mean each thirty-day period in which Pharmacia may (i) negotiate revisions to the Research and Development Agreement, (ii) pay the appropriate option maintenance fee to retain the right to acquire a license for a Subfield, or (iii) negotiate and execute a license agreement for a Subfield.

1.12. "OPTION PERIOD" shall have the meaning set forth in Section 2.1.

1.13. "OPTION RIGHT" shall have the meaning set forth in Section 2.1.

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1.14. "PRODUCTS" shall mean products that incorporate or are made through the use of any ArQule Technology or Improvements.

1.15. "PROPRIETARY MATERIALS" shall have the meaning set forth in Section 5.2.1.

1.16. "RESEARCH AND DEVELOPMENT AGREEMENT" shall mean a certain Research and Development Agreement between the parties, dated as of the Effective Date, which is attached to this Agreement as EXHIBIT C.

1.17. "RESERVED FIELD" shall mean certain applications in each Subfield for which ArQule has reserved rights. The following applications are within the Reserved Field: Chiral Applications, Library Applications, and Synthesis Applications. The Reserved Field also includes all applications within the Field

of Applications for internal research at ArQule for the development of products outside the Field of Applications.

1.18. "SECOND DECISION PERIOD" shall have the meaning set forth in Section 2.2.1(b).

1.19. "SUBFIELD I" shall mean

*

1.20. "SUBFIELD II" shall mean

*

1.21. "SUBFIELD III" shall mean

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1.22. "SUBFIELD IV" shall mean

*

1.23. "SYNTHESIS APPLICATIONS" shall mean

*

The parties understand that from time to time during their collaboration, ArQule may elect, in its sole discretion, to grant to Pharmacia a license for certain mutually agreed Synthetic Applications under the terms of the License Agreement.

2. Grant of Option Rights.

2.1. OPTION RIGHTS. Subject to payment of the option fee set forth in Section 3.1., ArQule hereby grants Pharmacia a first option to acquire the following rights in respect of each Subfield (the "Option Rights"):

- (i) an exclusive, worldwide, royalty-bearing license (with the right to sublicense) under the ArQule Technology and Improvements to make, have made, use, and sell Products in each of Subfields 1 through 4 (as applicable), excluding the Reserved Field; and
- (ii) a worldwide license (without the right to sublicense) to use the ArQule Technology in the Reserved Field for its own internal research for the development of Products in each of Subfields 1 through 4 (as applicable).

At the time Pharmacia exercises its Option Right for Subfield 1, Pharmacia shall have the right to include under such license for Subfield 1 the right to make, have made, use, and sell Products not in the Reserved Field that are

*

At the time Pharmacia exercises its Option Right for Subfield 3, Pharmacia shall have the right to include under such license for Subfield 3 the right to make, have made, use, and sell Products not in the Reserved Field that are

*

These Option Rights shall become effective on April 1, 1995 and shall remain in effect for a period of six (6) months (the "Option Period"), subject to extension in accordance with Section 2.2 below.

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2.2. Extension of Option Period.

2.2.1. PHARMACIA ELECTION TO EXTEND. Subject to payment or waiver of the relevant option maintenance fee in accordance with Section 3.2, Pharmacia shall have the right to extend the Option Period for the Option Right applicable to a Subfield for up to three (3) successive six-month periods, as follows:

(a) Upon the expiration of the initial six-month Option Period, Pharmacia shall have a thirty-day period ("First Decision Period") to determine whether to extend the Option Period for Subfield I. Prior to the expiration of the First Decision Period, Pharmacia may elect to extend the Option Period for Subfield I upon written notice to ArQule. If Pharmacia elects to extend the Option Period for Subfield I, ArQule and Pharmacia may negotiate and implement appropriate revisions to the Research and Development Agreement during the thirty-day period immediately following the First Decision Period (a "Negotiation Period"), and the first six-month extension to the Option Period shall commence immediately upon the expiration of this Negotiation Period.

(b) Upon the expiration of the First Decision Period, Pharmacia shall have a thirty-day period ("Second Decision Period") to determine whether to extend the Option Period for each of Subfields 2 through 4. Prior to the expiration of the Second Decision Period, Pharmacia may elect to extend the Option Period for each of Subfields 2 through 4 upon written notice to ArQule. If Pharmacia elects to extend the Option Period for any of Subfields 2 through 4, then Pharmacia shall have a period of thirty (30) days immediately following the Second Decision Period (a "Negotiation Period") in which to pay the appropriate option maintenance fee or to negotiate and implement appropriate revisions to the Research and Development Agreement, and the first six-month

extension to the Option Period for those Subfields shall commence immediately upon the expiration of this Negotiation Period.

(c) Prior to the expiration of any six-month extension for each of Subfields 1 through 4, Pharmacia may extend the Option Period for the relevant Subfield upon written notice to ArQule. If Pharmacia elects to extend the Option Period for any such Subfield, then Pharmacia shall have a period of thirty (30) days immediately following the expiration of such six-month extension (a "Negotiation Period") in which to pay the appropriate option maintenance fee or to negotiate and implement appropriate revisions to the Research and Development Agreement, and the next six-month extension to the Option Period for that Subfield or Subfields shall commence immediately upon the expiration of this Negotiation Period.

(d) If Pharmacia has not exercised its Option Right for a Subfield (as described in Section 2.3), and if Pharmacia (i) fails to notify ArQule within the prescribed time periods that Pharmacia intends to extend the Option Period for that Subfield or (ii) fails to make any required payments within the prescribed time period, then the Option Right for such Subfield shall lapse upon the expiration of the applicable Option Period and the provisions of Section 2.4 shall apply.

2.2.2. AUTOMATIC EXTENSION. The Option Period for every Subfield shall be automatically extended during the First Decision Period. The Option Period for Subfields 2

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through 4 shall be automatically extended during the Second Decision Period. In addition, the Option Period for each Subfield shall be automatically extended during any Negotiation Period applicable to that Subfield.

2.3. EXERCISE OF OPTION. Pharmacia may exercise its Option Rights upon written notice to ArQule received at any time during the First Decision Period (for Subfield 1), Second Decision Period (for any of Subfields 2 through 4), or any six-month extension to an Option Period (for the relevant Subfield). If Pharmacia elects to exercise its Option Right with respect to a Subfield, the parties agree to negotiate in good faith a license agreement during the thirty-day period immediately following the date of notification (a "Negotiation Period"). The license agreement shall contain commercially reasonable terms, including the terms set forth on EXHIBIT B. If the parties fail to negotiate and execute the license agreement within the Negotiation Period, then after a period of sixty (60) days ArQule shall be free to license the ArQule Technology in the relevant Subfield to any third party on any terms.

2.4. EFFECT OF LAPSE.

2.4.1. LOSS OF RIGHTS. Upon the lapse of an Option Right for any Subfield (as set forth in Section 2.2.1.(d)), Pharmacia shall have no further right to acquire or maintain any license rights under the ArQule Technology or Improvements to make, have made, use, or sell Products in such Subfield.

2.4.2. NON-COMPETITION. If the Option Right for a particular Subfield lapses for any reason, then ArQule shall be bound by a covenant not to manufacture, sell, or license a competitive product in such Subfield for a period of six (6) months from the date upon which such Option Right lapsed.

2.4.3. OWNERSHIP OF INTELLECTUAL PROPERTY. Pharmacia acknowledges and agrees that ArQule retains ownership of the ArQule Technology and that ArQule shall own all rights in any Improvements. Pharmacia further acknowledges and agrees that no license or conveyance of the ArQule Technology or Improvements is granted or implied under this Agreement. Any license of ArQule Technology or Improvements shall be expressly granted in a written agreement in accordance with the procedures set forth in Section 2.3.

2.5. FLOW CHART. Set forth on EXHIBIT D is a graphical presentation of the time periods and events described in this Article 2. In the event of any conflict or ambiguity between EXHIBIT D and the text of this Article 2, the textual provisions shall govern.

3. PAYMENTS FOR OPTION RIGHTS.

3.1. OPTION FEE. In consideration of the Option Rights granted under Section 2.1, Pharmacia shall pay to ArQule an option fee in the amount of * in immediately available funds within thirty (30) days after the Effective Date.

3.2. MAINTENANCE FEES. In consideration of each six-month extension to the Option Period for a particular Option Right, Pharmacia shall pay to ArQule option maintenance fees in the

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following amounts in immediately available funds on or before the expiration date of the relevant Negotiation Period: Subfield 1 - * ; Subfield 2 - * ; Subfield 3 - * ; Subfield 4 - * . ArQule agrees to waive such maintenance fee for a particular Subfield if Pharmacia agrees to pay ArQule at least * to conduct research for that Subfield under the Research and Development Agreement.

4. RESEARCH AND DEVELOPMENT.

ArQule and Pharmacia have entered into a separate Research and Development Agreement, attached on EXHIBIT C, under which ArQule agrees to conduct certain research into applications of the ArQule Technology and Improvements in Subfield I in exchange for payment of research and development fees by Pharmacia. The parties intend to amend the Project Plan attached to the Research and Development Agreement from time to time in order to add other Subfields to the research program or to revise an ongoing research program.

5. CONFIDENTIAL INFORMATION AND PROPRIETARY MATERIALS.

5.1. CONFIDENTIAL INFORMATION.

5.1.1. DEFINITION OF CONFIDENTIAL INFORMATION. Confidential Information shall mean any technical or business information furnished by one party (the "Disclosing Party") to the other party (the "Receiving Party") in connection with this Agreement or the Research and Development Agreement and specifically designated as confidential. Such Confidential Information may include, without limitation, trade secrets, know-how, inventions, technical data or specifications, testing methods, business or financial information, research and development activities, product and marketing plans, and customer and supplier information.

5.1.2. DESIGNATION OF CONFIDENTIAL INFORMATION. Confidential Information that is disclosed in writing shall be marked with a legend indicating its confidential status. Confidential Information that is disclosed orally or visually shall be documented in a written notice prepared by the Disclosing Party and delivered to the Receiving Party within thirty (30) days of the date of disclosure; such notice shall summarize the Confidential Information disclosed to the Receiving Party and reference the time and place of disclosure.

5.1.3. OBLIGATIONS. The Receiving Party agrees that it shall:

(a) maintain all Confidential Information in strict confidence, except that the Receiving Party may disclose or permit the disclosure of any Confidential Information to its directors, officers, employees, consultants, and advisors who are obligated to maintain the confidential nature of such Confidential Information and who need to know such Confidential Information for the purposes set forth in this Agreement;

(b) use all Confidential Information solely for the purposes set forth in this Agreement; and

* Confidential treatment has been requested for marked portions

(c) allow its directors, officers, employees, consultants, and advisors to reproduce the Confidential Information only to the extent necessary to effect the purposes set forth in this Agreement, with all such reproductions being considered Confidential Information.

5.1.4. EXCEPTIONS. The obligations of the Receiving Party under Section 5.1.2. above shall not apply to the extent that the Receiving Party can demonstrate that certain Confidential Information:

(a) was in the public domain prior to the time of its disclosure under this Agreement;

(b) entered the public domain after the time of its disclosure under this Agreement through means other than an unauthorized disclosure resulting from an act or omission by the Receiving Party;

(c) was independently developed or discovered by the Receiving Party without use of the Confidential Information;

(d) is or was disclosed to the Receiving Party at any time, whether prior to or after the time of its disclosure under this Agreement, by a third party having no fiduciary relationship with the Disclosing Party and having no obligation of confidentiality with respect to such Confidential Information; or

(e) is required to be disclosed to comply with applicable laws or regulations, or with a court or administrative order, provided that the Disclosing Party receives prior written notice of such disclosure and that the Receiving Party takes all reasonable and lawful actions to obtain confidential treatment for such disclosure and, if possible, to minimize the extent of such disclosure.

5.2. PROPRIETARY MATERIALS.

5.2.1. DEFINITION OF PROPRIETARY MATERIALS. "Proprietary Materials" shall mean any tangible chemical, biological, or physical research materials that are furnished by one party (the "Transferring Party") to the other party (the "Receiving Party") in connection with this Agreement or the Research and Development Agreement regardless of whether such materials are specifically designated as proprietary to the Transferring Party. The Transferring Party shall furnish such Proprietary Materials to the Receiving Party in a mutually acceptable form, including appropriate labelling and packaging.

5.2.2. LIMITED USE. The Receiving Party shall use Proprietary Materials solely for the purposes set forth in this Agreement and the Research and Development Agreement. The Receiving Party shall use the Proprietary Materials only in compliance with all applicable governmental laws and regulations, and not for any IN VIVO experiments on human subjects.

5.2.3. LIMITED DISPOSITION. The Receiving Party shall not transfer or distribute any Proprietary Materials to any third party without the prior written consent of the Transferring Party.

5.3. RETURN OF CONFIDENTIAL INFORMATION AND PROPRIETARY MATERIALS. Upon the termination of this Agreement, at the request of the Disclosing Party the Receiving Party shall return to the Disclosing Party all originals, copies, and summaries of documents, materials, and other tangible manifestations of Confidential Information in the possession or control of the Receiving Party, except that the Receiving Party may retain one copy of the Confidential Information in the possession of its legal counsel solely for the purpose of monitoring its obligations under this Agreement. Upon the termination of this Agreement, the Receiving Party shall at the instruction of the Transferring Party either destroy or return any unused Proprietary Materials.

5.4. SURVIVAL OF OBLIGATIONS. The obligations set forth in this Article 5 shall remain in effect for a period of five (5) years after termination of this Agreement, except that the obligations of the Receiving Party to return Confidential Information to the Disclosing Party and to return or destroy Proprietary Materials received from the Transferring Party shall survive until fulfilled.

6. TERMINATION.

This Agreement shall commence on the Effective Date and shall terminate on the date upon which the all Option Rights have either lapsed or been exercised as provided in this Agreement. The following provisions shall survive termination of this Agreement: Articles 1 and 5; Sections 2.3, 7.1, and 7.2.

7. MISCELLANEOUS.

7.1. GOVERNING LAW. The License Agreement shall be governed by and construed in accordance with the laws of the State of New York irrespective of any conflicts of law principles.

7.2. DISPUTE RESOLUTION. Any disputes between the parties that arise under or relate to this Agreement shall be resolved in accordance with the following procedures. The parties shall first attempt in good faith to resolve the matter among themselves. If the matter remains unresolved after a period of thirty (30) days, the dispute shall be referred to a member of senior management from each party. If the matter remains unresolved after an additional thirty-day period, the dispute shall be finally settled by binding arbitration in London, England under the Rules of Conciliation and Arbitration of the International Chamber of Commerce. In case of a dispute which cannot be resolved by good faith negotiations, ArQule shall also have the right to apply with a court of competent jurisdiction to enjoin Pharmacia from further use of the ArQule Technology and Improvements. Notwithstanding any of the foregoing, Pharmacia does not waive any right to contest such application and to argue that the requisite criteria that would allow the court to issue an injunction do not exist.

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

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7.4. HEADINGS. All headings in this Agreement are for convenience only and shall not affect the meaning of any provision hereof.

7.5. BINDING EFFECT. This Agreement shall inure to the benefit of and be binding upon the parties and their respective lawful successors and assigns.

7.6. ASSIGNMENT. This Agreement may not be assigned by either party without the prior written consent of the other party, except that ArQule may assign this Agreement to a successor in connection with the merger, consolidation, or sale of all or substantially all of its assets or that portion of its business pertaining to the subject matter of this Agreement.

7.7. NOTICES. All notices, requests, demands and other communications required or permitted to be given pursuant to this Agreement shall be in writing and shall be deemed to have been duly given upon the date of receipt if delivered by hand, recognized international overnight courier, confirmed facsimile transmission, or registered or certified mail, return receipt requested, postage prepaid to the following addresses or facsimile numbers:

If to Pharmacia:

Pharmacia Biotech AB
S-751 82 Uppsala
Sweden
Attention: Johan von Heijne

Tel: 46 1816 5700
Fax: 46 1816 6409

If to ArQule:

ArQule, Inc.
200 Boston Avenue, Suite 3600
Medford, Massachusetts 02155
Attention: President

Tel: (617) 395-4100
Fax: (617) 395-1225

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With a copy to:

Ulf Lundberg
General Counsel
Pharmacia Biotech AB
S-751 82 Uppsala
Sweden

Tel: 46 1816 3000
Fax: 46 1816 6301

With a copy to:

Palmer & Dodge
One Beacon Street
Boston, Massachusetts 02108
USA
Attention: Michael Lytton, Esq.

Tel: (617) 573-0327
Fax: (617) 227-4420

Either party may change its designated address and facsimile number by notice to the other party in the manner provided in this Section.

7.8. AMENDMENT AND WAIVER. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by both parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

7.9. SEVERABILITY. In the event that any provision of this Agreement shall, for any reason, be held to be invalid or unenforceable in any respect, such invalidity or unenforceability shall not affect any other provision hereof, and the parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent.

7.10. ENTIRE AGREEMENT. Except for the Research and Development Agreement, this Agreement constitutes the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements or understandings between the parties relating to the subject matter hereof.

IN WITNESS WHEREOF, the undersigned have duly executed and delivered this Agreement as a sealed instrument effective as of the date first above written.

ARQULE, INC.

PHARMACIA BIOTECH AB

By: /s/

By: /s/

Seth L. Harrison
President and Chief Executive Officer

Arne Forsell
President

By: /s/

Bengt Belfrage

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Executive Vice President

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EXHIBIT A

ARQULE TECHNOLOGY*

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requested for marked portions

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EXHIBIT B

CERTAIN TERMS OF LICENSE AGREEMENT

1. Payments.

Under the License Agreement, Pharmacia shall pay to ArQule,

- (a) License fee payments for each Subfield in the following amounts:
Subfield 1 - * Subfield 2 - * ; Subfield 3 - *
and Subfield 4 - * with such payments due and payable within
immediately available funds.
- (b) Running royalties of * percent * payable on a quarterly basis
and based on Pharmacia's net sales in arm's length transactions (to be
defined in the License Agreement) of Products. If a Product is sold in
combination with, or as a component of, other products not
incorporating the ArQule Technology or Improvements, net sales for
purposes of determining royalties shall be calculated by multiplying
the net sales from the combined product by the fractions A/B, where A
is the most recently available average sales price of the product
incorporating such ArQule Technology or Improvements sold separately,
and B is the most recently available average sales price of the
combined product. If a Product is not sold separately, the net sales
for purposes of calculating royalties shall be reasonably determined
by agreement of ArQule and Pharmacia prior to the sale of such
combined product. The parties further agree that the royalty on

*

Further, the parties agree that from time
to time during the course of the collaboration, applications may be
developed with a truly unusual level of benefit in the Field of
Applications ("Innovative Result(s)"). A collaboration steering
committee formed by the two parties must in good faith determine
unanimously that the result is an Innovative Result. In these cases,
both parties will enter into good faith negotiations to determine the
appropriate royalty level prior to a Product launch incorporating the
Innovative Result. During such negotiations, both parties shall take
into account all factors associated with the development of the
Innovative Result, provided that in no case shall the royalty
negotiated for such Innovative Result be less than * percent *
As a guideline, the following example is offered of a result of the
collaboration which would not likely be an Innovative Result:
* Also, the following example is offered of a result of
the collaboration which could be an Innovative Result:
*

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(c) Minimum royalties payable in equal quarterly increments based upon the annual amounts set forth below for Subfields 1 through 4. For a Subfield, the first quarterly minimum royalty payment shall be due on or before March 31 of the third calendar year commencing after the end of the calendar year in which the License Agreement applicable to such Subfield has been executed and the "R&D Fee" is no longer being paid by Pharmacia for such Subfield.

	Year			

	1	2	3	4+
	---	---	---	---
Subfield 1		*		
Subfield 2		*		
Subfield 3		*		
Subfield 4		*		

(d) Milestone payments related to the level of Pharmacia's sales of Products shall be payable upon reaching a sales level of

- (i) *
- (ii) *
- (iii) *

2. Accounting and Payment.

Pharmacia shall account for and pay all of the royalties having accrued within thirty (30) days of each calendar quarter during the term of the License Agreement; milestone payments shall be paid within thirty (30) days of the end of each calendar year.

3. Transfer of Know-How.

The License Agreement shall provide for a mechanism for the transfer of know-how between the parties.

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4. Improvements.

ArQule shall own all improvements made by either party to the ArQule Technology and Pharmacia shall own all improvements made by either party to Pharmacia's background technology. Pharmacia shall have the exclusive right to exploit such improvements within the Subfields for which it has acquired a License. ArQule shall be permitted to exploit on a non-exclusive basis improvements to Pharmacia's background technology, including for the development of and incorporation into systems and other assets which ArQule may use for the development of internal programs and service businesses outside the Subfields for which Pharmacia has acquired a License. In the event that improvements to Pharmacia's background technology are physically incorporated into a product by ArQule, then ArQule and Pharmacia shall negotiate in good faith a royalty to be paid to Pharmacia on ArQule's net

sales of such product. Further, Pharmacia shall, subject to reciprocity, grant to ArQule the right to grant non-exclusive rights to ArQule's other licensees to use improvements to Pharmacia's background technology.

5. Term and Termination.

The term of the License Agreement shall be until the later of (i) ten years after the first commercial sale of a product incorporating or produced through use of a patented ArQule Technology or Improvements or (ii) for the life of the patents on ArQule Technology or Improvements which may issue from the patent applications now filed or hereafter to be filed, subject to earlier termination in the event of breach and other customary events.

6. Law and Disputes

The License Agreement shall be governed and construed in accordance with the laws of the State of New York and disputes, if any, shall be first attempted to be settled by members of management of each party and in the event that such approach is not successful, shall be finally settled by arbitration in London, England under the Rules of Conciliation and Arbitration of the International Chamber of Commerce. In case of a dispute which cannot be resolved by good faith negotiations, ArQule shall also have the right to apply with a court of competent jurisdiction to enjoin Pharmacia from further use of the ArQule Technology and Improvements. Notwithstanding any of the foregoing, Pharmacia does not waive any right to contest such application and to argue that the requisite criteria that would allow the court to issue an injunction do not exist.

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EXHIBIT C

RESEARCH AND DEVELOPMENT AGREEMENT

See Exhibit 10.16 of the Registrant's Registration Statement.

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EXHIBIT D

FLOW CHART

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February 13, 1996

BY FACSIMILE - 011-46 18 166301

Mr. Ulf Lundberg
General Counsel
Pharmacia Biotech AB
Bjorkgatan 30

D-751 82 Uppsala, Sweden

Re: Amendment to Option Agreement and Research Agreement

Dear Mr. Lundberg:

Reference is hereby made to the Option Agreement (the "Option Agreement") and the Research and Development Agreement (the "Research Agreement"), both effective as of March 10, 1995, by and between ArQule, Inc. ("ArQule") and

Pharmacia Biotech AB ("Pharmacia"). In consideration of the mutual covenants and agreements hereinafter set forth and other valuable consideration, the receipt and adequacy of which are hereby acknowledged, the undersigned hereby acknowledge and agree as follows:

I. In accordance with Section 2.2.1 of the Option Agreement, Pharmacia hereby confirms to ArQule (i) that it has elected not to extend the Option Period for its Option Right for Subfields II, III and IV (as such capitalized terms are defined in the Option Agreement) in accordance with Section 2.2.1(b) of the Option Agreement and (ii) that it has elected to extend the Option Period for its Option Rights for Subfield I through August 15, 1996 in accordance with Section 2.2.1(a) of the Option Agreement.

1. The Project Plan is hereby amended by replacing the initial Research Project (as such capitalized terms are defined in the Research Agreement) entitled "Research Plan for Ligand Design Project" attached as Enclosure 3 to the Research Agreement with the Research Project entitled "Research Plan for the Second Ligand Design Project", a copy of which is attached hereto (as so amended, the "Amended Research Project"), for the period commencing on February 15, 1996 and continuing until August 15, 1996. The parties agree that the Amended Research Project has been approved by the Research Committee, as required under Section 2.2 of the Research Agreement.

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Pharmacia biotech
February 13, 1996
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2. In consideration of the research to be conducted by ArQule as provided in the Amended Research Project, Pharmacia hereby agrees to pay ArQule * payable on or before March 12, 1996.

Except as otherwise expressly amended by this letter agreement, each of the terms, conditions and provisions of the Option Agreement and the Research Agreement shall remain in full force and effect. This letter agreement may be signed in one or more counterparts, each of which when taken together shall constitute one and the same instrument.

Very truly yours,

ARQULE, INC.

By: /s/

Eric B. Gordon
President and
Chief Executive Officer

Agreed to and Accepted
this 19th day of February, 1996

PHARMACIA BIOTECH AB

By: /s/ Ulf Lundberg

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requested for marked portions

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Dr. Joseph C. Hogan, PhD
CEO, Senior VP Research and Development
ArQule Inc.

200 Boston Avenue
Suite 3600
Medford, MA 02155
USA

August 15, 1996

Dear Dr. Hogan,

This letter confirms that Pharmacia Biotech AB elects to extend its option Period for Subfield I by entering into a Subsequent Research Period for 6 months, in accordance with the Option Agreement and the Research & Development Agreement between ArQule Inc. and Pharmacia Biotech AB, dated March 10, 1995, respectively.

With reference to our discussion in Boston, August 26 in Uppsala, we suggest that we amend the Research Plan, to provide for a description of the new research project including overall goals, priorities, time schedules, a description of the necessary resources that each party will commit to the new project. Furthermore, we feel that the initial Research Plan could serve as a good frame work for the new plan.

Best Regards.

PHARMACIA BIOTECH AB
Research & Development

Ingvar Wiberg
Executive Vice President

Copy to:

Arne Forsell
Pharmacia Biotech AB

Johan von Heijne
Pharmacia Biotech AB

Michael Lytton
Palmer & Dodge
One Beacon Street
Boston Massachusetts
USA
Fax: (617) 227-4420

CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in the Prospectus constituting part of this Registration Statement on Form S-1 of our report dated October 4, 1996 relating to the financial statements of ArQule, Inc., which appears in such Prospectus. We also consent to the application of such report to the Financial Statement Schedule for the two years ended December 31, 1995 listed under item 16(b) of this Registration Statement when such schedule is read in conjunction with the financial statements referred to in our report. The audits referred to in such report also included this schedule. We also consent to the reference to us under the heading "Experts" in such Prospectus.

PRICE WATERHOUSE LLP

Boston, Massachusetts

October 11, 1996