TRIANGLE PHARMACEUTICALS INC

Form S-3 June 11, 2001

> AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 11, 2001 REGISTRATION NO. 333-_

SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

TRIANGLE PHARMACEUTICALS, INC. (Exact name of Registrant as Specified in Its Charter)

Delaware

(State or Other Jurisdiction of Incorporation or Organization)

56-1930728 (I.R.S. Employer Identification No.)

4 University Place, 4611 University Drive, Durham, North Carolina, 27707 (919) 493-5980

(Address, Including Zip Code, And Telephone Number, Including Area Code, Of Registrant's Principal Executive Offices)

David W. Barry, M.D. Chairman and Chief Executive Officer TRIANGLE PHARMACEUTICALS, INC. 4 University Place, 4611 University Drive, Durham, North Carolina 27707 (919) 493-5980

(Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service)

COPIES TO:

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Senior Corporate Counsel
TRIANGLE PHARMACEUTICALS, INC.
4 University Place, 4611 University Drive, Durham, North Carolina 27707 (919) 493-5980

Approximate date of commencement of proposed sale to the public: As soon as practicable after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered

pursuant to dividend or interest reinvestment plans, please check the following box: $|_|$

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, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box: |X|

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: $|_|$

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering: $\mid _ \mid$

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box: $|_|$

CALCULATION OF REGISTRATION FEE

TITLE OF EACH CLASS OF SECURITIES TO BE REGISTERED	AMOUNT TO BE REGISTERED	PROPOSED MAXIMUM OFFERING PRICE PER SHARE (1)	PROPOSED MAXIMUM AGGREGATE OFFERING PRICE	AMOUNT OF REGISTRATION FEE
Common Stock, \$0.001 par value per share	2,000,000	\$4.75	\$9,500,00	0 \$ 2,375

- (1) The price of \$4.75, the average of the high and low prices of Triangle's common stock on the Nasdaq Stock Market's National Market on June 7, 2001, is set forth solely for the purpose of computing the registration fee in accordance with Rule 457(c) under the Securities Act of 1933, as amended.
- (2) This Registration Statement shall also cover any additional shares of common stock which become issuable in connection with the shares of common stock which become issuable in connection with the shares registered for sale hereby as a result of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of the Registrant's outstanding shares of common stock.

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

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THE SECURITIES ACT OF 1933, AS AMENDED, OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE SEC, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

SUBJECT TO COMPLETION, DATED JUNE 11, 2001

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell the common stock covered by this prospectus until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell the common stock and it is not soliciting an offer to buy the common stock in any state where the offer or sale is not permitted.

PRELIMINARY PROSPECTUS

2,000,000 SHARES

TRIANGLE PHARMACEUTICALS, INC. COMMON STOCK

This prospectus relates to the resales of common stock held by the selling stockholders identified in this prospectus. We will not receive any of the proceeds from the sale of the shares by the selling stockholders. All of the shares were acquired by the selling stockholders on May 18, 2001 on conversion of the Series B preferred stock of Triangle. We issued and sold all of the shares of Series B preferred stock to the selling stockholders in a private placement completed on March 9, 2001. We have agreed to pay the expenses in connection with the registration of the shares covered by this prospectus and to indemnify the selling stockholders against certain liabilities. The selling stockholders will pay all underwriting discounts and selling commissions, if any, in connection with the sale of these shares.

Our common stock is traded on the Nasdaq National Market under the symbol "VIRS." On June 7, 2001, the average of the high and low prices for the common stock was \$4.75 per share.

THE COMMON STOCK OFFERED INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" COMMENCING ON PAGE 4 FOR A DISCUSSION OF SOME IMPORTANT RISKS YOU SHOULD CONSIDER BEFORE BUYING ANY SHARES OF COMMON STOCK.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED THESE SECURITIES, OR PASSED UPON THE ACCURACY OR ADEQUACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is June , 2001

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You should rely only on the information contained in this document or to which we have referred you. We have not authorized anyone to provide you with information that is different. This document may only be used where it is legal to sell these securities. The information contained in this document may only be accurate on the date of this document. This prospectus does not constitute an offer to sell, or a solicitation of an offer to buy, in any state where the offer or sale is prohibited. Neither the delivery of this prospectus, nor any sale made under this prospectus shall, under any circumstances, imply that the information in this prospectus is correct as of any date after the date of this prospectus.

I. WHERE YOU CAN FIND MORE INFORMATION

We file reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference rooms in Washington, D.C., New York, New York and Chicago, Illinois. Please call the SEC at 1-800-SEC-0330 for further information on the public reference rooms. Our SEC filings are also available to the public on the SEC's website at http://www.sec.gov.

II. INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents. The information incorporated by reference is considered to be part of this prospectus, and later information filed with the SEC will update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Section 13(a), 13(c), 14, or 15(d) of the Securities Exchange Act of 1934 until our offering is completed.

- Our Quarterly Report on Form 10-Q for the quarterly period ended March 31, 2001 (file no. 000-21589);
- 2. Our Annual Report on Form 10-K for the fiscal year ended December 31, 2000 (file no. 000-21589), including certain information in our Definitive Proxy Statement in connection with our 2001 Annual Meeting of Stockholders; and
- 3. The description of our common stock contained in our Registration Statements on Form 8-A filed October 18, 1996, February 10, 1999, and June 18, 1999 (file no. 000-21589).

The reports and other documents that we file after the date of this prospectus will update and supersede the information in this prospectus.

We will provide a copy of these filings, at no cost, if you so request by writing or telephoning us at:

Triangle Pharmaceuticals, Inc. 4611 University Drive P.O. Box 50530 Durham, North Carolina, 27717 (919) 493-5980 Attn: General Counsel.

We have received U.S. trademark registrations for our corporate name and logo, Coactinon(R) and Coviracil(R). This prospectus also includes names and trademarks of other companies.

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III. OUR BUSINESS

We develop new drug candidates primarily in the antiviral area, with a particular focus on therapies for HIV, including AIDS, and the hepatitis B virus. We have an existing portfolio of six licensed drug candidates in clinical trials and several drug candidates that are in a pre-clinical stage or for which we have an option to acquire a license. Members of our senior management team, prior to joining Triangle, played instrumental roles in developing and commercializing several leading antiviral therapies. Our goal is to capitalize on our management team's expertise, as well as on advances in virology and immunology, to identify, develop and commercialize new drug candidates that can be used alone or in combination to treat serious diseases.

Triangle was incorporated in Delaware in July 1995. Our principal executive offices are located at 4 University Place, 4611 University Drive, Durham, North Carolina 27707, and our telephone number is (919) 493-5980.

IV. RISK FACTORS

IN ADDITION TO THE OTHER INFORMATION IN THIS PROSPECTUS, YOU SHOULD CAREFULLY CONSIDER THE FOLLOWING RISKS AND UNCERTAINTIES BEFORE MAKING AN INVESTMENT DECISION. THE RISKS DESCRIBED BELOW ARE NOT THE ONLY RISKS WE FACE. ADDITIONAL RISKS THAT WE DO NOT YET KNOW OF OR THAT WE CURRENTLY THINK ARE IMMATERIAL MAY ALSO IMPAIR OUR BUSINESS OPERATIONS. IF ANY OF THE EVENTS OR CIRCUMSTANCES DESCRIBED IN THE FOLLOWING RISKS ACTUALLY OCCURS, OUR BUSINESS, FINANCIAL CONDITION, OR RESULTS OF OPERATIONS COULD BE MATERIALLY ADVERSELY AFFECTED. IN SUCH CASE, THE TRADING PRICE OF OUR COMMON STOCK COULD DECLINE, AND YOU MAY LOSE ALL OR PART OF YOUR INVESTMENT.

ALL OF OUR PRODUCT CANDIDATES ARE IN DEVELOPMENT AND MAY NEVER BE SUCCESSFULLY COMMERCIALIZED WHICH WOULD HAVE AN ADVERSE IMPACT ON YOUR INVESTMENT AND OUR BUSINESS.

Some of our drug candidates are at an early stage of development and all of our drug candidates will require expensive and lengthy testing and regulatory clearances. None of our drug candidates has been approved by regulatory authorities. We do not expect any of our drug candidates to be commercially available until at least the year 2002. There are many reasons that we may fail in our efforts to develop our drug candidates, including that:

- our drug candidates may be ineffective, toxic or may not receive regulatory clearances,
- our drug candidates may be too expensive to manufacture or market or may not achieve broad market acceptance,
- third parties may hold proprietary rights that preclude us from developing or marketing our drug candidates, or
- third parties may market equivalent or superior products.

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The success of our business depends upon our ability to successfully develop and market our drug candidates.

WE HAVE INCURRED LOSSES SINCE INCEPTION AND MAY NEVER ACHIEVE PROFITABILITY.

We formed Triangle in July 1995 and we have only a limited operating history for you to review in evaluating our business. We have incurred losses since our inception. At March 31, 2001, our accumulated deficit was \$353.8 million. Our historical costs relate primarily to the acquisition and development of our drug candidates and selling, general and administrative costs. We have not generated any revenue from the sale of our drug candidates to date, and do not expect to do so until at least the year 2002. In addition, we expect annual losses to continue over the next several years as a result of our drug development and commercialization efforts. To become profitable, we must successfully develop and obtain regulatory approval for our drug candidates and effectively manufacture, market and sell any products we develop. We may never generate significant revenue or achieve profitable operations.

IF WE NEED ADDITIONAL FUNDS AND ARE UNABLE TO RAISE THEM, WE WILL HAVE TO CURTAIL OR CEASE OPERATIONS.

Our drug development programs and potential commercialization of our drug candidates require substantial working capital, including expenses for preclinical testing, chemical synthetic scale-up, manufacture of drug substance for clinical trials, toxicology studies, clinical trials of drug candidates,

sales and marketing expenses, payments to our licensors and potential commercial launch of our drug candidates. Our future working capital needs will depend on many factors, including:

- the progress and magnitude of our drug development programs,
- the scope and results of preclinical testing and clinical trials,
- the cost, timing and outcome of regulatory reviews,
- the costs under current and future license and option agreements for our drug candidates, including the costs of obtaining patent protection for our drug candidates,
- the costs of acquiring any additional drug candidates,
- the rate of technological advances,
- the commercial potential of our drug candidates,
- the magnitude of our administrative and legal expenses,
- the costs of establishing sales and marketing functions, and
- the costs of establishing third party arrangements for manufacturing.

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We have incurred negative cash flow from operations since we incorporated Triangle and do not expect to generate positive cash flow from our operations for at least the next several years. We will need additional future financings to fund our operations. We cannot assure you that available sources of funds will be sufficient to meet our future needs. In addition, we cannot assure you that we will receive the contingent development milestone payments under our strategic alliance with Abbott Laboratories, the Abbott Alliance. We may not be able to obtain adequate financing to fund our operations, and any additional financing we obtain may be on terms that are not favorable to us. In addition, any future financings could substantially dilute our stockholders. If adequate funds are not available, we will be required to delay, reduce or eliminate one or more of our drug development programs, to enter into new collaborative arrangements or to modify the Abbott Alliance on terms that are not favorable to us. These collaborative arrangements or modifications could result in the transfer to third parties of rights that we consider valuable. In addition, we may acquire technologies and drug candidates that would increase our working capital requirements.

To facilitate our ability to raise additional equity capital, on November 1, 2000, we entered into a firm underwritten equity facility, the Facility, with Ramius Securities, LLC, Ramius, and Ramius Capital Group, LLC, Ramius Capital, under which we may be able to issue and sell up to \$100.0 million of our common stock over a three-year period. We have filed a registration statement with the Securities and Exchange Commission for the sale of up to \$24.0 million of our common stock under this Facility. There are conditions and limitations on Ramius' obligation to sell shares under the underwriting agreement and Ramius Capital's obligation to purchase shares under the purchase agreement. In particular, Ramius' and Ramius Capital's obligations are subject to share price and trading volume limitations which could reduce the number of shares of common stock they are obligated to sell or purchase, as the case may be, regardless of the number of shares of common stock we request to be sold. In some

circumstances, such as an average trading price of less than \$4.00 per share, they will have no obligation to sell or purchase our common stock, even if we request them to do so. In addition, we may elect not to sell shares of common stock if we believe that market conditions are unfavorable.

BECAUSE OUR PRODUCT CANDIDATES MAY NOT SUCCESSFULLY COMPLETE CLINICAL TRIALS REQUIRED FOR COMMERCIALIZATION, OUR BUSINESS MAY NEVER ACHIEVE PROFITABILITY.

To obtain regulatory approvals needed for the sale of our drug candidates, we must demonstrate through preclinical testing and clinical trials that each drug candidate is safe and effective. The clinical trial process is complex and uncertain and the regulatory environment varies widely from country to country. Positive results from preclinical testing and early clinical trials do not ensure positive results in pivotal clinical trials. Many companies in our industry have suffered significant setbacks in pivotal clinical trials, even after promising results in earlier trials. Any of our drug candidates may produce undesirable side effects in humans. These side effects could cause us or regulatory authorities to interrupt, delay or halt clinical trials of a drug candidate, as occurred with mozenavir dimesylate, or could result in regulatory authorities refusing to approve the drug candidate for any and all targeted indications. In April 2000, the South African Medicines Control Council, MCC, terminated the enrollment in one of our phase

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III clinical studies for our drug candidate Coviracil, FTC-302, and the Food and Drug Administration, FDA, issued a clinical hold on the study. Study FTC-302 was being conducted under a U.S. Investigational New Drug Application at sites in South Africa. The FDA indicated that study FTC-302 may not be adequate to provide pivotal data in support of a New Drug Application, an NDA. In February 2001, the FDA notified us that the study would remain on clinical hold even though the study had been completed. Discussions with the MCC and FDA are continuing; however, the planned submission of an U.S. NDA for Coviracil may be significantly delayed. We, the FDA, or foreign regulatory authorities may suspend or terminate clinical trials at any time if we or they believe the trial participants face unacceptable health risks. Clinical trials may not demonstrate that our drug candidates are safe or effective.

Clinical trials are lengthy and expensive. They require adequate supplies of drug substance and sufficient patient enrollment. Patient enrollment is a function of many factors, including:

- the size of the patient population,
- the nature of the protocol,
- the proximity of patients to clinical sites, and
- the eligibility criteria for the clinical trial.

Delays in patient enrollment can result in increased costs and longer development times. Even if we successfully complete clinical trials, we may not be able to file any required regulatory submissions in a timely manner and we may not receive regulatory approval for the drug candidate. In addition, if the FDA or foreign regulatory authorities require additional clinical trials we could face increased costs and significant development delays, as occurred with Coactinon and which may occur with Coviracil. In December 1999, we were advised by the FDA that additional phase III studies would be required to support an NDA submission for Coactinon. In July 2000, we presented data to the FDA from a completed phase II study, MKC-202, showing that a lower dose of 500 mg

twice-a-day, compared to the previous dose of 750 mg twice-a-day, provided similar antiviral activity and an enhanced tolerability profile in patients taking Coactinon. Based on the new data, in July 2000, the FDA advised that enrolling an additional 280 patients into an ongoing phase III study, MKC-401, at the lower dose of 500 mg twice-a-day would generate sufficient data for filing of an NDA should the results be positive. In August 2000, we announced our decision to continue the development of Coactinon. The enrollment of the additional 280 patients into study MKC-401 was completed in April 2001.

Changes in regulatory policy or additional regulations adopted during product development and regulatory review of information we submit could also result in delays or rejections. The FDA has notified us that three of our drug candidates for the treatment of HIV, Coviracil, Coactinon and amdoxovir, qualify for designation as "fast track" products under provisions of the Food and Drug Administration Modernization Act of 1997. The fast track provisions are designed to expedite the review of new drugs intended to treat serious or life-threatening conditions and essentially codified the criteria previously established by the FDA for

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accelerated approval. These drug candidates may not, however, continue to qualify for expedited review and our other drug candidates may fail to qualify for fast track development or expedited review. Even though some of our drug candidates have qualified for expedited review, the FDA may not approve them at all or any sooner than other drug candidates that do not qualify for expedited review.

IF WE OR OUR LICENSORS ARE NOT ABLE TO OBTAIN AND MAINTAIN ADEQUATE PATENT PROTECTION FOR OUR PRODUCT CANDIDATES, WE MAY BE UNABLE TO COMMERCIALIZE OUR PRODUCT CANDIDATES OR TO PREVENT OTHER COMPANIES FROM USING OUR TECHNOLOGY IN COMPETITIVE PRODUCTS.

Our success will depend on our ability and the ability of our licensors to obtain and maintain patents and proprietary rights for our drug candidates and to avoid infringing the proprietary rights of others, both in the United States and in foreign countries. We have no patents in our own name and we have a small number of patent applications of our own pending. One of our patent applications is a joint application with co-inventors from another institution. We have, however, licensed or we have an option to license patents, patent applications and other proprietary rights from third parties for each of our drug candidates. If we breach our licenses, we may lose rights to important technology and drug candidates.

Our patent position on some of our drug candidates, like that of many pharmaceutical companies, is uncertain and involves complex legal and factual questions for which important legal principles are unresolved. We may not develop or obtain rights to products or processes that are patentable. Even if we do obtain patents, they may not adequately protect the technology we own or have in-licensed. In addition, others may challenge, seek to invalidate, infringe or circumvent any patents we own or in-license, and rights we receive under those patents may not provide competitive advantages to us. Further, the manufacture, use or sale of our products or processes may infringe the patent rights of others.

Several pharmaceutical and biotechnology companies, universities and research institutions have filed patent applications or received patents that cover our technologies or technologies similar to ours. Others have filed patent applications and received patents that conflict with patents or patent applications we own or have in-licensed, either by claiming the same methods or

compounds or by claiming methods or compounds that could dominate those owned by or licensed to us. In addition, we may not be aware of all patents or patent applications that may impact our ability to make, use or sell any of our drug candidates. For example, United States patent applications are confidential while pending in the Patent and Trademark Office, PTO, and patent applications filed in foreign countries are often first published six months or more after filing. Any conflicts resulting from third party patent applications and patents could significantly reduce the coverage of our patents and limit our ability to obtain meaningful patent protection. If other companies obtain patents with conflicting claims, we may be required to obtain licenses to these patents or to develop or obtain alternative technology. We may not be able to obtain any such license on acceptable terms or at all. Any failure to obtain such licenses could delay or prevent us from pursuing the development or commercialization of our drug candidates, which would adversely affect our business.

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There are significant risks regarding the patent rights of two of our in-licensed drug candidates. We may not be able to commercialize Coviracil or amdoxovir due to patent rights held by third parties other than our licensors. Third parties have filed numerous patent applications and have received numerous issued patents in the United States and many foreign countries that relate to these drug candidates and their use alone or in combination to treat HIV and hepatitis B. As a result, our patent position regarding the use of Coviracil and amdoxovir to treat HIV and/or hepatitis B is highly uncertain and involves numerous complex legal and factual questions that are unknown or unresolved. If any of these questions is resolved in a manner that is not favorable to us, we would not have the right to commercialize Coviracil and/or amdoxovir in the absence of a license from one or more third parties, which may not be available on acceptable terms or at all. In addition, even if any of these questions is favorably resolved, we may still attempt to obtain licenses from one or more third parties to reduce or eliminate the risks relating to some or all of these matters. Such licenses may not be available on acceptable terms or at all. Our inability to commercialize either of these drug candidates could adversely affect our business.

COVIRACIL (EMTRICITABINE)

Coviracil, a purified form of FTC, belongs to the same general class of nucleosides as lamivudine. In the United States, the FDA has approved lamivudine for the treatment of hepatitis B and for use in combination with zidovudine, also known as AZT, for the treatment of HIV. Regulatory authorities have approved lamivudine for the treatment of hepatitis B and for use in combination with other nucleoside analogues for the treatment of HIV in a number of other countries. GlaxoSmithKline plc, Glaxo, currently sells lamivudine for the treatment of HIV and hepatitis B under a license agreement with BioChem Pharma Inc., BioChem Pharma. We obtained rights to Coviracil under a license from Emory University, Emory. In 1990 and 1991, Emory filed in the United States and thereafter in numerous foreign countries patent applications with claims to compositions of matter and methods to treat HIV and hepatitis B with Coviracil. In 1991, Yale University, Yale, filed in the United States patent applications on FTC, including emtricitabine and its use to treat hepatitis B, and subsequently licensed its rights under those patent applications to Emory. Our license arrangement with Emory includes all rights to Coviracil and its uses claimed in the Yale patent applications.

HIV. Emory received a United States patent in 1993 covering a method to treat HIV with Coviracil. Emory has also received United States and European patents containing composition of matter claims that cover Coviracil. BioChem Pharma filed a patent application in the United States in 1989 and received a

patent in 1991 covering a group of nucleosides in the same general class as Coviracil, but which did not include Coviracil. BioChem Pharma filed foreign patent applications in 1990, which expanded upon its 1989 United States patent application to include FTC among a large class of nucleosides. The foreign patent applications are pending in many countries and have issued in a number of countries with claims directed to FTC that may cover Coviracil and its use to treat HIV. In addition, BioChem Pharma filed a United States patent application in 1991 specifically directed to Coviracil. BioChem Pharma has received two patents in the United States based on this patent application, one directed to Coviracil and the other directed to a method for treating viral diseases with Coviracil. The PTO has determined that there are conflicts between both BioChem Pharma patents and patent applications filed by

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Emory because they have overlapping claims to the same technology. The PTO is conducting two adversarial proceedings, interferences, to determine whether BioChem Pharma or Emory is entitled to the patent claims in dispute regarding BioChem Pharma's two issued patents. Emory may not prevail in the adversarial proceedings, and the proceedings may also delay the decision of the PTO regarding Emory's patent application. BioChem Pharma also filed patent applications in many foreign countries based upon its 1991 United States patent application and has received patents in certain countries. BioChem Pharma may have additional patent applications pending in the United States.

In the United States, the first to invent a technology is entitled to patent protection on that technology. For patent applications filed prior to January 1, 1996, United States patent law provides that a party who invented a technology outside the United States is deemed to have invented the technology on the earlier of the date it introduced the invention in the United States or the date it filed its patent application. In a filing with the Securities and Exchange Commission, BioChem Pharma stated that prior to January 1, 1996, it conducted substantially all of its research activities outside the United States. BioChem Pharma also stated that it considered this to be a disadvantage in obtaining United States patents based on patent applications filed before January 1, 1996 as compared to companies that mainly conducted research in the United States. We do not know whether Emory or BioChem Pharma was the first to invent the technology claimed in their respective United States patent applications or patents. We also do not know whether BioChem Pharma invented the technology disclosed in its patent applications in the United States or introduced that technology in the United States before the date of its patent applications.

In foreign countries, the first party to file a patent application on a technology, not the first to invent the technology, is entitled to patent protection on that technology. We believe that Emory filed patent applications disclosing Coviracil as a useful anti-HIV agent in many foreign countries before BioChem Pharma filed its foreign patent applications on that technology. However, BioChem Pharma has received patents in several foreign countries. In addition, BioChem Pharma has filed patent applications on Coviracil and its uses in certain countries in which Emory did not file patent applications. Emory has opposed or otherwise challenged patent claims on Coviracil granted to BioChem Pharma in Australia and Europe. Emory may not initiate patent opposition proceedings in any other countries or be successful in any foreign proceeding attempting to prevent the issuance of, revoke or limit the scope of patents issued to BioChem Pharma. BioChem Pharma has opposed patent claims on Coviracil granted to Emory in Europe, Japan, Australia and South Korea. BioChem Pharma may make additional challenges to Emory patents or patent applications, which Emory may not succeed in defending. Our sales, if any, of Coviracil for the treatment of HIV may be held to infringe United States and foreign patent rights of

BioChem Pharma. Under the patent laws of most countries, a product can be found to infringe a third party patent either if the third party patent expressly covers the product or method of treatment using the product, or if the third party patent covers subject matter that is substantially equivalent in nature to the product or method, even if the patent does not expressly cover the product or method. If it is determined that the sale of Coviracil for the treatment of HIV infringes a BioChem Pharma patent, we would not have the right to make, use or sell Coviracil for the treatment of HIV in one or more countries in the absence of a license from

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BioChem Pharma. We may be unable to obtain such a license from BioChem Pharma on acceptable terms or at all.

HEPATITIS B. Burroughs Wellcome Co., Burroughs Wellcome, filed patent applications in March 1991 and May 1991 in Great Britain on a method to treat hepatitis B with FTC and purified forms of FTC, that include emtricitabine. Burroughs Wellcome filed similar patent applications in other countries, including the United States. Glaxo subsequently acquired Burroughs Wellcome's rights under those patent applications. Those patent applications were filed in foreign countries prior to the date Emory filed its patent application on the use of emtricitabine to treat hepatitis B. Burroughs Wellcome's foreign patent applications, therefore, have priority over those filed by Emory. In July 1996, Emory instituted litigation against Glaxo in the United States District Court to obtain ownership of the patent applications filed by Burroughs Wellcome, alleging that Burroughs Wellcome converted and misappropriated Emory's invention and property and that an Emory employee is the inventor or a co-inventor of the subject matter covered by the Burroughs Wellcome patent applications. In May 1999, Emory and Glaxo settled the litigation, and we became the exclusive licensee of the United States and all foreign patent applications and patents filed by Burroughs Wellcome on the use of emtricitabine to treat hepatitis B. Under the license and settlement agreements, Emory and we were also given access to development and clinical data and drug substance held by Glaxo relating to emtricitabine.

BioChem Pharma filed a patent application in May 1991 in Great Britain also directed to a method to treat hepatitis B with FTC. BioChem Pharma filed similar patent applications in other countries. In January 1996, BioChem Pharma received a patent in the United States, which included a claim to treat hepatitis B with emtricitabine. The PTO has determined that there is a conflict between the BioChem Pharma patent and patent applications filed by Yale and Emory. The PTO is conducting an adversarial proceeding, an interference, to determine which party is entitled to the patent claims in dispute. Yale licensed all of its rights relating to FTC, including emtricitabine, and its uses claimed in this patent application to Emory, which subsequently licensed these rights to us. Neither Emory nor Yale may prevail in the adversarial proceeding, and the proceeding may delay the decision of the PTO regarding Yale's and Emory's patent applications. In addition, the PTO has recently added the U.S. patent application filed by Burroughs Wellcome to this interference. Emory may not pursue or succeed in any such proceedings. We will not be able to sell emtricitabine for the treatment of hepatitis B in the United States unless a United States court or administrative body determines that the BioChem Pharma patent is invalid or unless we obtain a license from BioChem Pharma. We may be unable to obtain such a license on acceptable terms or at all. In July 1991, BioChem Pharma received a United States patent on the use of lamivudine to treat hepatitis B and has corresponding patent applications pending or issued in foreign countries. If it is determined that the use of emtricitabine to treat hepatitis B is not substantially different from the use of lamivudine to treat hepatitis B, a court could hold that the use of emtricitabine to treat hepatitis

B infringes these BioChem Pharma lamivudine patents.

In addition, BioChem Pharma has filed in the United States and foreign countries several patent applications on manufacturing methods relating to a class of nucleosides that includes emtricitabine, from which BioChem Pharma has received several patents in the United States and many foreign countries. If we use a manufacturing method that is covered by patents issued on

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any of these applications, we will not be able to manufacture emtricitabine without a license from BioChem Pharma. We may not be able to obtain a license on acceptable terms or at all.

AMDOXOVIR (FORMERLY KNOWN AS DAPD)

We obtained our rights to amdoxovir under a license from Emory and the University of Georgia Research Foundation, Inc., University of Georgia. Our rights to amdoxovir include a number of issued United States patents that cover composition of matter, a method for the synthesis of amdoxovir, methods for the use of amdoxovir alone or in combination with certain other agents for the treatment of hepatitis B, and a method to treat HIV with amdoxovir. We also have rights to several foreign patents and patent applications that cover methods for the use of amdoxovir alone or in combination with certain other anti-hepatitis B agents for the treatment of hepatitis B. Additional foreign patent applications are pending which contain claims for the use of amdoxovir to treat HIV. Emory and the University of Georgia filed patent applications claiming these inventions in the United States in 1990 and 1992. BioChem Pharma filed a patent application in the United States in 1988 on a group of nucleosides in the same general class as amdoxovir and their use to treat HIV, and has filed corresponding patent applications in foreign countries. The PTO issued a patent to BioChem Pharma in 1993 covering a class of nucleosides that includes amdoxovir and its use to treat HIV. Corresponding patents have been issued to BioChem Pharma in many foreign countries. Emory has filed an opposition to patent claims granted to BioChem Pharma by the European Patent Office based, in part, upon Emory's assertion that BioChem Pharma's patent does not disclose how to make amdoxovir. In a patent opposition hearing held at the European Patent Office on March 4, 1999, the Opposition Division ruled that the BioChem Pharma European patent covering amdoxovir is valid. Emory has appealed this decision to the European Patent Office Technical Board of Appeal. If the Technical Board of Appeal affirms the decision of the Opposition Division, or if Emory or Triangle does not pursue the appeal, we would not be able to sell amdoxovir in Europe without a license from BioChem Pharma, which may not be available on acceptable terms or at all. Patent claims granted to Emory on both amdoxovir (the administered drug) and DXG (the parent drug into which amdoxovir is converted in the body) have also been opposed by BioChem Pharma in the Australian Patent Office.

In a decision dated November 8, 2000, the Australian Patent Office held that Emory's patent claims directed to amdoxovir are not patentable over an earlier BioChem Pharma patent. Emory has appealed this decision of the Australian Patent Office to the Australian Federal Court. If Emory, the University of Georgia or Triangle is unsuccessful in the appeal, then we will not be able to sell amdoxovir in Australia without a license from BioChem Pharma, which may not be available on reasonable terms or at all. BioChem Pharma's opposition to Emory's patent claims on DXG in Australia is ongoing. If Emory, the University of Georgia and we do not challenge, or are not successful in any challenge to, BioChem Pharma's issued patents, pending patent applications, or patents that may issue from such applications, we will not be able to manufacture, use or sell amdoxovir in the United States and any foreign

countries in which BioChem Pharma receives a patent without a license from BioChem Pharma. We may not be able to obtain such a license from BioChem Pharma on acceptable terms or at all.

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IMMUNOSTIMULATORY SEQUENCE PRODUCT CANDIDATES

In March 2000, we entered into a licensing and collaborative agreement with Dynavax Technologies Corporation, Dynavax, to develop immunostimulatory polynucleotide sequence product candidates for the prevention and/or treatment of serious viral diseases, which became effective in April 2000. Immunostimulatory sequences are polynucleotides which stimulate the immune system, and could potentially be used in combination with our small molecule product candidates to increase the body's ability to defend against viral infection. Immunostimulatory sequences can be stabilized for use through internal linkages that do not occur in nature, including phosphorothioate linkages.

There are a number of companies which have patent applications and issued patents, both in the United States and in other countries, that cover immunostimulatory sequences and their uses. Coley Pharmaceuticals, Inc. has filed several patent applications in this area and has in addition exclusively licensed a number of patent applications on this subject from the University of Iowa and Isis Pharmaceuticals, Inc. A number of these patent applications have been issued. A number of companies have also filed patent applications and have or are expected to receive patents on certain polynucleotides and methods for their use and manufacture. We could be prevented from making, using or selling any immunostimulatory sequence that is covered by a patent issued to a third party company, unless we obtain a license from that company, which may not be available on reasonable terms or at all.

With respect to any of our drug candidates, litigation, patent opposition and adversarial proceedings, including the currently pending proceedings, could result in substantial costs to us. The costs of the currently pending proceedings may increase significantly during the next several years. We anticipate that additional litigation and/or proceedings will be necessary or may be initiated to enforce any patents we own or in-license, or to determine the scope, validity and enforceability of other parties' proprietary rights and the priority of an invention. Any of these activities could result in substantial costs and/or delays to us. The outcome of any of these proceedings may significantly affect our rights to develop and commercialize drug candidates and technology. United States patents carry a presumption of validity and generally can be invalidated only through clear and convincing evidence. As indicated above, the PTO is conducting three adversarial proceedings in connection with the emtricitabine technology. We cannot assure you that a court or administrative body would hold our in-licensed patents valid or would find an alleged infringer to be infringing. Further, the license and option agreements with Emory, the University of Georgia, The Regents of the University of California, The DuPont Pharmaceuticals Company, Mitsubishi Tokyo Pharmaceuticals, Inc. (formerly, Mitsubishi Chemical Corporation) and Dynavax provide that each of these licensors is primarily responsible for any patent prosecution activities, such as litigation, patent conflict proceeding, patent opposition or other actions, for the technology licensed to us. These agreements also provide that in general we are required to reimburse these licensors for the costs they incur in performing these activities. Similarly, Yale and the University of Georgia, the licensors of clevudine to Bukwang Pharm. Ind. Co., Ltd., are primarily responsible for patent prosecution activities with respect to clevudine at our expense. As a result, we generally do not have the ability to institute or determine the conduct of any patent proceedings unless our

licensors elect not to institute or to abandon the proceedings. If our licensors elect to institute and prosecute patent proceedings, our

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rights will depend in part upon the manner in which these licensors conduct the proceedings. In any proceedings they elect to initiate and maintain, these licensors may not vigorously pursue or defend or may decide to settle such proceedings on terms that are unfavorable to us. An adverse outcome of these proceedings could subject us to significant liabilities to third parties, require disputed rights to be licensed from third parties or require us to cease using such technology, any of which could adversely affect our business.

Moreover, the mere uncertainty resulting from the initiation and continuation of any technology related litigation or adversarial proceeding could adversely affect our business pending resolution of the disputed matters.

We also rely on unpatented trade secrets and know-how to maintain our competitive position, which we seek to protect, in part, by confidentiality agreements with employees, consultants and others. These parties may breach or terminate these agreements, and we may not have adequate remedies for any breach. Our trade secrets may also be independently discovered by competitors. We rely on technologies to which we do not have exclusive rights or which may not be patentable or proprietary and thus may be available to competitors. We have filed applications for, but have not obtained, trademark registrations for various marks in the United States and other jurisdictions. We have received U.S. trademark registrations for our corporate name and logo, Coactinon(R) and Coviracil (R). We have received a Canadian trademark registration for the mark Coviracil (R). We have also received registrations in the European Union for the mark Coactinon(R) and our corporate logo. Our pending application in the European Union for the mark Coviracil(TM) has been opposed by Orsem, based upon registrations for the mark Coversyl in various countries, and Les Laboratories Serveir, based on a French registration for the mark Coversyl. We do not believe that the marks Coviracil and Coversyl are confusingly similar, but, in the event they are found to be confusingly similar, we may need to adopt a different product name for emtricitabine in the applicable jurisdictions. Several other companies use trade names that are similar to our name for their businesses. If we are unable to obtain any licenses that may be necessary for the use of our corporate name, we may be required to change our name. Our management personnel were previously employed by other pharmaceutical companies. The prior employers of these individuals may allege violations of trade secrets and other similar claims relating to their drug development activities for us.

WE ARE SUBJECT TO EXTENSIVE GOVERNMENT REGULATION AND MAY FAIL TO RECEIVE REGULATORY APPROVAL WHICH COULD PREVENT OR DELAY THE COMMERCIALIZATION OF OUR PRODUCTS.

In addition to preclinical testing, clinical trials and other approval procedures for human pharmaceutical products, we are subject to numerous other regulations covering the development of pharmaceutical products. These regulations include, for example, domestic and international regulations relating to the manufacturing, safety, labeling, storage, record keeping, reporting, marketing and promotion of pharmaceutical products. We are also regulated with respect to non-clinical and clinical laboratory practices, safe working conditions, and the use and disposal of hazardous substances, including radioactive compounds and infectious disease agents used in connection with our development work. The requirements vary widely from country to country and some requirements may vary from state to state in the United States. We expect the process of obtaining these approvals and complying with appropriate government regulations to be time consuming and expensive. Even if our drug candidates

receive regulatory approval, we may still face difficulties in marketing and manufacturing those drug candidates. Further, any approval may be contingent on postmarketing studies or other conditions. The approval of any of our

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drug candidates may limit the indicated uses of the drug candidate. A marketed product, its manufacturer and the manufacturer's facilities are subject to continual review and periodic inspections. The discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including withdrawal of the product from the market. The failure to comply with applicable regulatory requirements can, among other things, result in:

- fines,
- suspended regulatory approvals,
- refusal to approve pending applications,
- refusal to permit exports from the United States,
- product recalls,
- seizure of products,
- injunctions,
- operating restrictions, and
- criminal prosecutions.

In addition, adverse clinical results by others could negatively impact the development and approval of our drug candidates. Some of our drug candidates are intended for use as combination therapy with one or more other drugs, and adverse safety, effectiveness or regulatory developments in connection with such other drugs will also have an adverse effect on our business.

INTENSE COMPETITION MAY RENDER OUR DRUG CANDIDATES NONCOMPETITIVE OR OBSOLETE.

We are engaged in segments of the drug industry that are highly competitive and rapidly changing. Any of our current drug candidates that we successfully develop will compete with numerous existing therapies. In addition, many companies are pursuing novel drugs that target the same diseases we are targeting. We believe that a significant number of drugs are currently under development and will become available in the future for the treatment of HIV and hepatitis B. We anticipate that we will face intense and increasing competition as new products enter the market and advanced technologies become available. Our competitors' products may be more effective, or more effectively marketed and sold, than any of our products. Competitive products may render our products obsolete or noncompetitive before we can recover the expenses of developing and commercializing our drug candidates. Furthermore, the development of a cure or new treatment methods for the diseases we are targeting could render our drug candidates noncompetitive, obsolete or uneconomical. Many of our competitors:

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- have significantly greater financial, technical and human resources

than we have and may be better equipped to develop, manufacture and market products, $% \left(1\right) =\left(1\right) +\left(1\right$

- have extensive experience in preclinical testing and clinical trials, obtaining regulatory approvals and manufacturing and marketing pharmaceutical products, and
- have products that have been approved or are in late stage development and operate large, well-funded research and development programs.

Smaller companies may also prove to be significant competitors, particularly through collaborative arrangements with large pharmaceutical and biotechnology companies. Academic institutions, governmental agencies and other public and private research organizations are also becoming increasingly aware of the commercial value of their inventions and are more actively seeking to commercialize the technology they have developed.

If we successfully develop and obtain approval for our drug candidates, we will face competition based on the safety and effectiveness of our products, the timing and scope of regulatory approvals, the availability of supply, marketing and sales capability, reimbursement coverage, price, patent position and other factors. Our competitors may develop or commercialize more effective or more affordable products, or obtain more effective patent protection, than we do. Accordingly, our competitors may commercialize products more rapidly or effectively than we do, which could hurt our competitive position.

BECAUSE WE FACE RISKS RELATED TO OUR LICENSE AND OPTION AGREEMENTS, WE COULD LOSE OUR RIGHTS TO OUR DRUG CANDIDATES.

We have in-licensed or obtained an option to in-license our drug candidates under agreements with our licensors. These agreements permit our licensors to terminate the agreements under certain circumstances, such as our failure to achieve certain development milestones or the occurrence of an uncured material breach by us. The termination of any of these agreements could result in the loss of our rights to a drug candidate. On the termination of most of our license agreements, we are required to return the licensed technology to our licensors. In addition, most of these agreements provide that our licensors are primarily responsible for any patent prosecution activities, such as litigation, patent conflict, patent opposition or other actions, for the technology licensed to us. These agreements also provide that in general we are required to reimburse our licensors for the costs they incur in performing these activities. We believe that these costs as well as other costs under our license and option agreements will be substantial and may increase significantly during the next several years. Our inability or failure to pay any of these costs with respect to any drug candidate could result in the termination of the license or option agreement for the drug candidate.

BECAUSE WE MAY BE UNABLE TO SUCCESSFULLY MANUFACTURE OUR DRUG CANDIDATES, OUR BUSINESS MAY NEVER ACHIEVE PROFITABILITY.

We do not have any internal manufacturing capacity and we rely on third party manufacturers for the manufacture of all of our clinical trial material. We plan to expand our

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existing relationships or to establish relationships with additional third party manufacturers for products that we successfully develop. The terms of the Abbott Alliance provide that Abbott Laboratories, Abbott, will manufacture all or a

portion of our product requirements for those products that are or become covered by the Abbott Alliance. We may be unable to maintain our relationship with Abbott or to establish or maintain relationships with other third party manufacturers on acceptable terms, and third party manufacturers may be unable to manufacture products in commercial quantities on a cost effective basis. Our dependence upon third parties for the manufacture of our products may adversely affect our profit margins and our ability to develop and commercialize products on a timely and competitive basis. Further, third party manufacturers may encounter manufacturing or quality control problems in connection with the manufacture of our products and may be unable to maintain the necessary governmental licenses and approvals to continue manufacturing our products.

WE MAY BE UNABLE TO SUCCESSFULLY MARKET, SELL OR DISTRIBUTE OUR DRUG CANDIDATES.

In the United States, we currently intend to market the drug candidates covered by the Abbott Alliance in collaboration with Abbott and to market other drug candidates that we successfully develop, that do not become part of the Abbott Alliance, through a direct sales force. Outside of the United States, we expect Abbott to market drug candidates covered by the Abbott Alliance and, for any other drug candidates that we successfully develop that do not become part of the Abbott Alliance, we intend to market and sell through arrangements or collaborations with third parties. In addition, we expect Abbott to handle the distribution and sale of drug candidates covered by the Abbott Alliance both inside and outside the United States. With respect to the United States, our ability to market the drug candidates that we successfully develop may be contingent upon recruitment, training and deployment of a sales and marketing force as well as the performance of Abbott under the Abbott Alliance. We may be unable to establish marketing or sales capabilities or to maintain arrangements or enter into new arrangements with third parties to perform those activities on favorable terms. In addition, third parties may have significant control or influence over important aspects of the commercialization of our drug candidates, including market identification, marketing methods, pricing, composition of sales force and promotional activities. We may have limited control over the amount and timing of resources that a third party devotes to our drug candidates. Our business may never achieve profitability if we fail to establish or maintain a sales force and marketing, sales and distribution capabilities.

BECAUSE WE DEPEND ON THIRD PARTIES FOR THE DEVELOPMENT AND ACQUISITION OF DRUG CANDIDATES, WE MAY NOT SUCCESSFULLY ACQUIRE ADDITIONAL DRUG CANDIDATES OR COMMERCIALIZE OR DEVELOP OUR CURRENT DRUG CANDIDATES.

We have engaged and intend to continue to engage third party contract research organizations and other third parties to help us develop our drug candidates. Although we have designed the clinical trials for our drug candidates, the contract research organizations have conducted many of the clinical trials. As a result, many important aspects of our drug development programs have been and will continue to be outside of our direct control. In addition, the contract research organizations may not perform all of their obligations under arrangements with us. If the contract research organizations do not perform clinical trials in a

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satisfactory manner or breach their obligations to us, the development and commercialization of any drug candidate may be delayed or precluded. We do not currently intend to engage in drug discovery. Our strategy for obtaining additional drug candidates is to utilize the relationships of our management team and scientific consultants to identify drug candidates for in-licensing from companies, universities, research institutions and other organizations. We

may not succeed in acquiring additional drug candidates on acceptable terms or at all.

BECAUSE WE MAY NOT BE ABLE TO ATTRACT AND RETAIN KEY PERSONNEL AND ADVISORS, WE MAY NOT SUCCESSFULLY DEVELOP OUR PRODUCTS OR ACHIEVE OUR OTHER BUSINESS OBJECTIVES

We are highly dependent on our senior management and scientific staff, including Dr. David Barry, our Chairman and Chief Executive Officer. We have entered into employment agreements with each officer of Triangle. Dr. Barrv's employment agreement contains non-competition provisions. In addition, the employment agreements for each officer provide for severance payments that are contingent upon each officer's refraining from competition with Triangle. The loss of the services of any member of our senior management or scientific staff may significantly delay or prevent the achievement of product development and other business objectives. Our ability to attract and retain qualified personnel, consultants and advisors is critical to our success. In order to pursue our drug development programs and marketing plans, we will need to hire additional qualified scientific and management personnel. Competition for qualified individuals is intense and we face competition from numerous pharmaceutical and biotechnology companies, universities and other research institutions. We may be unable to attract and retain these individuals, and our failure to do so would have an adverse effect on our business.

HEALTH CARE REFORM MEASURES AND THIRD PARTY REIMBURSEMENT PRACTICES ARE UNCERTAIN AND MAY ADVERSELY IMPACT THE COMMERCIALIZATION OF OUR PRODUCTS.

The efforts of governments and third party payors to contain or reduce the cost of health care will continue to affect the business and financial condition of drug companies. A number of legislative and regulatory proposals to change the health care system have been proposed in recent years. In addition, an increasing emphasis on managed care in the United States has and will continue to increase pressure on drug pricing. While we cannot predict whether legislative or regulatory proposals will be adopted or what effect those proposals or managed care efforts may have on our business, the announcement and/or adoption of proposals could have an adverse effect on our profit margins and financial condition. Sales of prescription drugs depend significantly on the availability of reimbursement to the consumer from third party payors, such as government and private insurance plans. These third party payors frequently require that drug companies give them predetermined discounts from list prices, and they are increasingly challenging the prices charged for medical products and services. Present combination treatment regimens for the treatment of HIV are expensive and may increase as new combinations are developed. These costs have resulted in limitations in the reimbursement available from third party payors for the treatment of HIV infection, and we expect that reimbursement pressures will continue in the future. If we succeed in bringing one or more products to the market, these products may not be considered cost effective and reimbursement to the consumer may not be available or sufficient to allow us to sell our products on a competitive basis.

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IF OUR DRUG CANDIDATES DO NOT ACHIEVE MARKET ACCEPTANCE, OUR BUSINESS MAY NEVER ACHIEVE PROFITABILITY.

Our success will depend on the market acceptance of any products we develop. The degree of market acceptance will depend upon a number of factors, including the receipt and scope of regulatory approvals, the establishment and demonstration in the medical community of the safety and effectiveness of our products and their potential advantages over existing treatment methods, and

reimbursement policies of government and third party payors. Physicians, patients, payors or the medical community in general may not accept or utilize any product that we may develop.

WE MAY NOT HAVE ADEQUATE INSURANCE PROTECTION AGAINST PRODUCT LIABILITY.

Our business exposes us to potential product liability risks that are inherent in the testing of drug candidates and the manufacturing and marketing of drug products and we may face product liability claims in the future. We currently have only limited product liability insurance. We may be unable to maintain our existing insurance and/or obtain additional insurance in the future at a reasonable cost or in sufficient amounts to protect against potential losses. A successful product liability claim or series of claims brought against us could require us to pay substantial amounts that would decrease our profitability, if any.

WE MAY INCUR SUBSTANTIAL COSTS RELATED TO OUR USE OF HAZARDOUS MATERIALS.

We use hazardous materials, chemicals, viruses and various radioactive compounds in our drug development programs. Although we believe that our handling and disposing of these materials comply with state and federal regulations, the risk of accidental contamination or injury still exists. In the event of such an accident, we could be held liable for any damages or fines that result and any such liability could exceed our resources.

OUR CONTROLLING STOCKHOLDERS MAY MAKE DECISIONS YOU DO NOT CONSIDER TO BE IN YOUR BEST INTEREST.

As of May 31, 2001, our directors, executive officers and their affiliates, excluding Abbott, owned approximately 15.6% of our outstanding common stock and Abbott owned approximately 16.4% of our outstanding common stock. Pursuant to the terms of the Abbott Alliance, Abbott has the right to purchase additional amounts of our common stock up to a maximum aggregate percentage of 21% of our outstanding common stock and has rights to purchase shares directly from us in order to maintain its existing level of ownership, also known as antidilution protection. Abbott has the right to designate one person to serve as a member of our Board of Directors. As a result, our controlling stockholders are able to significantly influence all matters requiring stockholder approval, including the election of directors and the approval of significant corporate transactions. This concentration of ownership could also delay or prevent a change in control of Triangle that may be favored by other stockholders.

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THE MARKET PRICE OF OUR STOCK MAY BE ADVERSELY AFFECTED BY MARKET VOLATILITY AND OTHER FACTORS.

The market price of our common stock is likely to be volatile and could fluctuate widely in response to many factors, including:

- announcements of the results of clinical trials by us or our competitors,
- developments with respect to patents or proprietary rights,
- announcements of technological innovations by us or our competitors,
- announcements of new products or new contracts by us or our competitors,

- actual or anticipated variations in our operating results due to the level of development expenses and other factors,
- changes in financial estimates by securities analysts and whether our earnings meet or exceed such estimates,
- conditions and trends in the pharmaceutical and other industries,
- new accounting standards,
- general economic, political and market conditions and other factors, and
- the occurrence of any of the risks described in these "Risk Factors."

In the past, following periods of volatility in the market price of the securities of companies in our industry, securities class action litigation has often been instituted against those companies. If we face such litigation in the future, it would result in substantial costs and a diversion of management attention and resources, which would negatively impact our business. In addition, if our stockholders sell a substantial number of shares of our common stock in the public market, the market price of our common stock could be reduced. As of May 31, 2001, there were 48,363,918 shares of common stock outstanding, of which approximately 27,700,000 were immediately eligible for resale in the public market without restriction. Holders of approximately 14,100,000 shares, including the shares offered by this prospectus, have rights to cause us to register their shares for sale to the public. We have filed registration statements to register the sale of approximately 10,850,000 of these shares, including the shares offered by this prospectus. In addition, Abbott will have the right on or after June 30, 2002 to cause us to register for resale in the public market the 6,571,428 shares of common stock purchased at the closing of the Abbott Alliance. Any sales in the public market may make it more difficult for us to raise needed working capital through an offering of our equity or convertible debt securities and may reduce the market price of our common stock.

Declines in our stock price might harm our ability to issue equity or secure other types of financing arrangements. The price at which we issue shares is generally based on the market price of our common stock and a decline in our stock price would result in our needing to issue a greater number of shares to raise a given amount of funds or acquire a given amount of goods or services. For this reason, a decline in our stock price might also result in increased ownership dilution to our stockholders. A low stock price might impair our ability to raise capital under our Facility because Ramius is not obligated to sell our common stock under the Facility on a given

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day if our average stock price during such day is less than \$4.00 per share (or less than any higher floor price specified by us).

OUR STOCK PRICE COULD DECLINE AND OUR STOCKHOLDERS COULD EXPERIENCE SIGNIFICANT OWNERSHIP DILUTION DUE TO OUR ABILITY TO ISSUE SHARES UNDER THE FIRM UNDERWRITTEN EQUITY FACILITY.

Under our Facility we may sell, subject to various restrictions, up to \$100.0 million of common stock over a three-year period. The aggregate number of shares that may be issued under the Facility depends on a number of factors,

including the market price and trading volume of our common stock during each 15-trading day selling period. Because the price of any shares we choose to sell under the Facility is based on the market price of the common stock on the date of sale, both the number of shares we would have to sell in order to raise any given amount of funding and the associated ownership dilution experienced by our stockholders will be greater if the price of our common stock declines. The lowest price at which common stock may be sold under the Facility is \$4.00 per share

The perceived risk associated with the possible sale of a large number of shares under the Facility could cause some of our stockholders to sell their stock, thus causing the price of our stock to decline. In addition, actual or anticipated downward pressure on our stock price could cause some institutions or individuals to engage in short sales of our common stock, which may itself cause the price of our stock to decline.

ANTITAKEOVER PROVISIONS IN OUR CHARTER DOCUMENTS AND DELAWARE LAW COULD DELAY, DEFER OR PREVENT A TENDER OFFER OR TAKEOVER ATTEMPT THAT YOU CONSIDER TO BE IN YOUR BEST INTEREST.

We have adopted a number of provisions that could have antitakeover effects. We have adopted a preferred stock purchase rights plan, commonly referred to as a "poison pill." The rights plan is intended to deter an attempt to acquire Triangle in a manner or on terms not approved by the Board of Directors, the Board. The rights plan will not prevent an acquisition of Triangle which is approved by the Board. Our charter authorizes the Board to determine the terms of any shares of undesignated preferred stock and issue them without stockholder approval. The issuance of preferred stock may make it more difficult for a third party to acquire, or may discourage a third party from acquiring, voting control of Triangle. Our bylaws divide the Board into three classes of directors with each class serving a three year term. These and other provisions of our charter and our bylaws, as well as provisions of Delaware law, could delay or impede the removal of incumbent directors and could make more difficult a merger, tender offer or proxy contest involving Triangle, even if the events could be beneficial to our stockholders. These provisions could also limit the price that investors might be willing to pay for our common stock.

WE HAVE NOT DECLARED OR PAID ANY DIVIDENDS ON OUR COMMON STOCK.

We have never declared or paid any cash dividends on our common stock, and we currently do not intend to pay any cash dividends on our common stock in the foreseeable future. We intend to retain our earnings, if any, for the operation of our business.

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V. FORWARD-LOOKING STATEMENTS

This prospectus contains "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended. All statements, other than statements of historical facts, included in, or incorporated by reference into this prospectus, are forward-looking statements. In addition, when used in this document, the words "anticipate", "estimate", "project", and similar expressions are intended to identify forward-looking statements. These forward-looking statements are subject to various risks or uncertainties and assumptions. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those anticipated, estimated or projected. Although we believe that the expectations reflected in these forward-looking statements are reasonable, no assurance can be given that such expectations will prove to have

been correct. These statements are only predictions and involve known and unknown risks, uncertainties and other factors, including the risks outlined under "Risk Factors," that may cause our or our industry's actual results, levels of activity, performance or achievements to be materially different from future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee future results, levels of activity, performance or achievements. Moreover, neither we nor any other person assumes responsibility for the accuracy and completeness of these statements. We are under no duty to update any of the forward-looking statements after the date of this prospectus or to conform these statements to actual results unless required by law.

VI. USE OF PROCEEDS

We will not receive any of the proceeds from the sale of the shares by the selling stockholders.

VII. SELLING STOCKHOLDERS

We are registering all 2,000,000 shares of common stock covered by this prospectus on behalf of the selling stockholders named in the table below. We issued all of the shares to the selling stockholders on May 18, 2001 on the conversion of all outstanding Series B preferred stock. We issued the Series B preferred stock to the selling stockholders in a private placement completed on March 9, 2001. We have registered the shares of common stock to permit the selling stockholders and their pledgees, donees, transferees or other successors-in-interest that receive their shares from a selling stockholder as a gift, partnership distribution or other non-sale related transfer after the date of this prospectus to resell the shares when they deem appropriate.

We have agreed to file any amendments and supplements to the registration statement that are necessary to keep the registration statement effective until the earlier of the date on which all of the shares are sold or two years from the effective date of the registration statement.

The following table sets forth the name of each of the selling stockholders, the number of shares owned by each of the selling stockholders as of May 31, 2001, the number of shares that may be offered under this prospectus, and the number of shares of our common stock owned by

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each of the selling stockholders after this offering is completed. Except as shown in the table below, none of the selling stockholders has had a material relationship with us within the past three years other than as a result of the ownership of the shares or other securities of Triangle. The number of shares in the column "Number of Shares Being Offered" represent all of the shares that each selling stockholder may offer under this prospectus. We do not know how long the selling stockholders will hold the shares before selling them or if they will sell them and we currently have no agreements, arrangements or understandings with any of the selling stockholders regarding the sale of any of the shares.

Unless otherwise indicated, each person has sole investment and voting power with respect to the shares listed in the table, subject to community property laws, where applicable. For purposes of this table, a person or group of persons is deemed to have "beneficial ownership" of any shares which such

person has the right to acquire within 60 days. Percentage ownership is based on 48,363,918 shares of common stock of Triangle outstanding on May 31, 2001. For purposes of computing the percentage of outstanding shares held by each person or group of persons named below, any security which a person or group of persons has the right to acquire within 60 days is deemed to be outstanding for the purpose of computing the percentage ownership for that person or persons, but is not deemed to be outstanding for the purpose of computing the percentage ownership for other persons. This registration statement will also cover any additional shares of common stock which become issuable in connection with the shares offered hereby as a result of any stock dividend, stock split, recapitalization or other similar transaction effected without the receipt of consideration which results in an increase in the number of Triangle's outstanding shares of common stock.

	SHARE BENEFICIAL PRIOR TO	LY OWNED	NUMBER OF SHARES BEING
NAME OF SELLING STOCKHOLDER	NUMBER	PERCENT	OFFERED
Alta BioPharma Partners, L.P. Forward Ventures IV, L.P.(2) Forward Ventures IV B, L.P.(2)	1,045,920 1,207,040 126,290	2.2% 2.5	424,330 1,207,040 126,290
Triangle Pharmaceuticals Chase Partners (Alta Bio), LLC	597,330	1.2	242,340
TOTAL	2,976,580 ======		2,000,000

^{*} Represents beneficial ownership of less than one percent.

VIII. PLAN OF DISTRIBUTION

The sale or distribution of the shares may be effected directly to purchasers by the selling stockholders or by donees or pledgees of any such selling stockholders as principals or through one or more underwriters, brokers, dealers or agents from time to time in one or more transactions, which may involve crosses or block transactions, or (i) on any exchange or in the over-the-counter market, (ii) in transactions otherwise than in the over-the counter market, (iii)

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through the writing of put or call options, whether such options are listed on an options exchange or otherwise, (iv) through the distribution of the shares by

Assumes the sale of all shares offered hereby and no other purchases or sales of Triangle's common stock.

⁽²⁾ The general partner of each of Forward Ventures IV, L.P. and Forward Ventures IV B, L.P. is Forward IV Associates, LLC. The Managing Member of Forward IV Associates, LLC, Standish Fleming, is a member of the Board of Directors of Triangle.

any selling stockholder to its partners, members or shareholders or (v) through a combination of any of the above. Any of these transactions may be effected at market prices prevailing at the time of sale, at prices related to prevailing market prices, at varying prices determined at the time of sale or at negotiated or fixed prices, in each case as determined by the selling stockholder or by agreement between the selling stockholder and underwriters, brokers, dealers, agents or purchasers. If the selling stockholders effect transactions by selling shares to or through underwriters, brokers, dealers or agents, the underwriters, brokers, dealers or agents may receive compensation in the form of discounts, concessions or commissions from the selling stockholders or commissions from purchasers of shares for whom they may act as agent, which discounts, concessions or commissions as to particular underwriters, brokers, dealers or agents may be in excess of those customary in the types of transactions involved. Brokers, dealers or agents and any other participating brokers, dealers or the selling stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, in connection with sales of the shares. Accordingly, any commission, discount or concession received by them and any profit on the resale of the shares purchased by them may be deemed to be underwriting discounts or commissions under the Securities Act. Because selling stockholders may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act, the selling stockholders will be subject to the prospectus delivery requirements of the Securities Act.

The selling stockholders may enter into hedging transactions with broker-dealers or other financial institutions. In connection with such transactions, broker-dealers or other financial institutions may engage in short sales of Triangle's common stock in the course of hedging the positions they assume with selling stockholders. The selling stockholders may also enter into options or other transactions with broker-dealers or other financial institutions which require the delivery to the broker-dealer or other financial institution of shares offered hereby. The broker-dealer or other financial institution may then resell those shares pursuant to this prospectus, as supplemented or amended to reflect the transaction.

Under the securities laws of some states, the shares may be sold in those states only through registered or licensed brokers or dealers. In addition, in some states the shares may not be sold unless the shares have been registered or qualified for sale in the state or an exemption from registration or qualification is available and is complied with.

Selling stockholders may also resell all or a portion of the shares in open market transactions in reliance upon Rule 144 under the Securities Act, rather than under this prospectus, provided they meet the criteria and conform to the requirements of Rule 144.

Under applicable rules and regulations under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), any person engaged in the distribution of the shares may not simultaneously engage in market making activities with respect to our common stock for a period of two business days prior to the commencement of such distribution. In addition, each selling stockholder will be subject to applicable provisions of the Exchange Act and the associated rules and regulations under the Exchange Act, including Regulation M, which provisions may limit the timing of purchases and sales of shares of our common stock by the selling stockholders. We will make copies of this prospectus available to the selling

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stockholders and have informed them of the need to deliver copies of this prospectus to purchasers at or prior to the time of any sale of the shares.

We will pay all of the expenses incident to the registration, offering and sale of the shares to the public hereunder other than commissions, fees and discounts of underwriters, brokers, dealers and agents. We have agreed to indemnify the selling stockholders against certain liabilities, including liabilities under the Securities Act. We will not receive any of the proceeds from the sale of any of the shares by the selling stockholders.

We have agreed to keep the Registration Statement of which this prospectus constitutes a part effective until the earlier of the date upon which all of the shares are sold or two years from the effective date of the Registration Statement.

IX. LEGAL MATTERS

For purposes of this offering, Brobeck, Phleger & Harrison LLP, New York, New York, is giving its opinion as to the validity of the shares.

X. EXPERTS

The financial statements incorporated in this prospectus by reference to the Annual Report on Form 10-K of Triangle for the year ended December 31, 2000, have been incorporated in reliance on the report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of that firm as experts in auditing and accounting.

2.5

WE HAVE NOT AUTHORIZED ANY PERSON TO MAKE A STATEMENT THAT DIFFERS FROM WHAT IS IN THIS PROSPECTUS. IF ANY PERSON DOES MAKE A STATEMENT THAT DIFFERS FROM WHAT IS IN THIS PROSPECTUS, YOU SHOULD NOT RELY ON IT. THIS PROSPECTUS IS NOT AN OFFER TO SELL, NOR IS IT AN OFFER TO BUY, THESE SECURITIES IN ANY STATE IN WHICH THE OFFER OR SALE IS NOT PERMITTED. THE INFORMATION IN THIS PROSPECTUS IS COMPLETE AND ACCURATE AS OF ITS DATE, BUT THE INFORMATION MAY CHANGE AFTER THAT DATE.

2,000,000 Shares

TRIANGLE PHARMACEUTICALS, INC.

COMMON STOCK

PROSPECTUS

PRUSPECTUS

JUNE , 2001

PART II
INFORMATION NOT REOUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION.

The following table sets forth all expenses, other than underwriting discounts and commissions, payable by the Registrant in connection with the sale of the common stock being registered. All the amounts shown are estimates, except for the registration fee.

Registration Fee Printing and engraving expenses Legal fees and expenses	\$	2,375 10,000 5,000
Accounting fees and expenses Transfer Agent and Registrar Fees Miscellaneous Expenses		5,000 10,000 7,625
TOTAL	 \$ ==	40,000

ITEM 15. INDEMNIFICATION OF OFFICERS AND DIRECTORS.

Section 145 of the Delaware General Corporation Law permits indemnification of officers and directors of Triangle under certain conditions and subject to certain limitations. Section 145 of the Delaware General Corporation Law also provides that a corporation has the power to purchase and maintain insurance on behalf of its officers and directors against any liability asserted against such person and incurred by him or her in such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liability under the provisions of Section 145 of the Delaware General Corporation Law.

Article VII, Section (i) of the Restated Bylaws of Triangle provides that Triangle shall indemnify its directors and executive officers to the fullest extent not prohibited by the Delaware General Corporation Law. The rights to indemnity thereunder continue as to a person who has ceased to be a director, officer, employee or agent and inure to the benefit of the heirs, executors and administrators of the person. In addition, expenses incurred by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding by reason of the fact that he or she is or was a director or officer of Triangle (or was serving at Triangle's request as a director or officer of another corporation) shall be paid by Triangle in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by Triangle as authorized by the relevant section of the Delaware General Corporation Law.

As permitted by Section 102(b)(7) of the Delaware General Corporation Law, Article 5, Section (a) of Triangle's Second Restated Certificate of Incorporation provides that a director of Triangle shall not be personally liable for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to Triangle or its stockholders, (ii) for acts or omissions not in good faith or acts or omissions that involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware

General Corporation Law or (iv) for any transaction from which the director derived any improper personal benefit.

Triangle has entered into indemnification agreements with its directors and executive officers. Generally, the indemnification agreements attempt to provide the maximum protection permitted by Delaware law as it may be amended from time to time. Under such additional indemnification provisions, however, an individual will not receive indemnification for judgments, settlements or expenses if he or she is found liable to Triangle (except to the extent the court determines he or she is fairly and reasonably entitled to indemnity for expenses), for settlements not approved by Triangle or for settlements and expenses if the settlement is not approved by the court. The indemnification agreements provide for Triangle to advance to the individual any and all reasonable expenses (including legal fees and expenses) incurred in investigating or defending any such action, suit or proceeding. In order to receive an advance of expenses, the individual must submit to Triangle copies of invoices presented to him or her for such expenses. Also, the individual must repay such advances upon a final judicial decision that he or she is not entitled to indemnification.

The Registrant has an insurance policy covering the directors and officers of the Registrant with respect to certain liabilities, including liabilities arising under the Securities Act or otherwise.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) EXHIBITS.

EXHIBIT NO.	DESCRIPTION
4.1	Instruments defining the rights of stockholders. Reference is made to the Registration Statement on Form 8-A, filed October 18, 1996 (file no. 000-21589), and the Registration Statement on Form 8-A, filed February 10, 1999 (file no. 000-21589), as amended on June 18, 1999 (file no. 000-21589).
4.2	Form of Purchase Agreement made as of January 30, 2001, between the Company and each of the investors with whom the stock was placed. Reference is made to Exhibit 10.1 to the Current Report on Form 8-K filed March 21, 2001.
5.1	Opinion of Brobeck, Phleger & Harrison LLP
23.1	Consent of PricewaterhouseCoopers LLP, Independent Accountants.
23.2	Consent of Brobeck, Phleger & Harrison LLP. Reference is made to Exhibit 5.1.
24.1	Power of Attorney. Reference is made to pages II-4 and II-5 of this Registration Statement.

ITEM 17. UNDERTAKINGS.

The undersigned Registrant hereby undertakes:

- (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement to include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;
- (2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the Registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the Registration Statement 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.

The undersigned Registrant hereby undertakes to deliver or cause to be delivered with the Prospectus, to each person to whom the Prospectus is sent or given, the latest annual report to security holders that is incorporated by reference in the Prospectus and furnished pursuant to and meeting the requirements of Rule 14a-3 or Rule 14c-3 under the Securities Exchange Act of 1934; and, where interim financial information required to be presented by Article 3 of Regulation S-X are not set forth in the Prospectus, to deliver, or cause to be delivered to each person to whom the Prospectus is sent or given, the latest quarterly report that is specifically incorporated by reference in the Prospectus to provide such interim financial information.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of Triangle pursuant to the foregoing provisions, Delaware Corporation law, the Purchase Agreements or otherwise, the Registrant has been advised that in the opinion of the SEC such indemnification is against public policy as expressed in the Securities Act and is, therefor, 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 hereunder, the Registrant will, unless in the opinion of its counsel the question has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question of whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Durham, State of North Carolina, on the 11th day of June, 2001.

TRIANGLE PHARMACEUTICALS, INC.

By: /s/ David W. Barry

David W. Barry

Chairman and Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below hereby constitutes and appoints, jointly and severally, David W. Barry and Chris A. Rallis, and each of them acting individually, as his attorney-in-fact, each with full power of substitution and resubstitution, for him or her in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact full power and authority to do and perform each and every act and thing requisite and necessary to be done in connection therewith as fully to all intents and purpose as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact, or their substitute and substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated:

SIGNATURE	TITLE	
/s/ David W. BarryDavid W. Barry	Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	June 11, 2001
/s/ Chris A. Rallis Chris A. Rallis	Director, President and Chief Operating Officer	June 11, 2001
	Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)	June 11, 2001
/s/ Anthony B. Evnin	Director	June 11, 2001
/s/ Standish M. Fleming	Director	June 11, 2001

/s/ Dennis B. Gillings Dennis B. Gillings	Director	June 11, 2001
	II-4	
/s/ Henry G. Grabowski	Director	June 11, 2001
/s/ George McFadden	Director	June 11, 2001

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EXHIBIT INDEX

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