UNITED THERAPEUTICS CORP Form S-3 June 08, 2001 1 AS FILED WITH THE SECURITIES AND EXCHANGE COMMISSION ON JUNE 8, 2001 REGISTRATION NO._____ SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549 -----FORM S-3 REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933 _____ UNITED THERAPEUTICS CORPORATION (Exact Name of Registrant as Specified in Its Charter) DELAWARE 52-1984 2836 (State or Other Jurisdiction of Incorporation
or Organization)(Primary Standard Industrial
Classification Code Number)(I.R.S. EmIdentification 1110 SPRING STREET SILVER SPRING, MD 20910 (301) 608-9292 (Address, Including Zip Code, and Telephone Number, Including Area Code, of Registrant's Principal Executive Offices) _____ MARTINE A. ROTHBLATT CHAIRMAN AND CHIEF EXECUTIVE OFFICER UNITED THERAPEUTICS CORPORATION 1110 SPRING STREET SILVER SPRING, MD 20910 (301) 608-9292 (Name, Address, Including Zip Code, and Telephone Number, Including Area Code, of Agent For Service) _____ COPIES TO: LADAWN NAEGLE, ESQ. BRYAN CAVE LLP

BRYAN CAVE LLP 700 THIRTEENTH STREET, N.W. SUITE 700 WASHINGTON, DC 20005 (202) 508-6000 FAX: (202)508-6200

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

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, please 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. [

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. []

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CALCULATION OF REGISTRATION FEE

| Title of each class of securities to be registered | Amount to be registered(1) | Proposed maximum offering price per share(2) | Proposed maximum aggregate offering price (2) |
|--|----------------------------|--|--|
| Common stock, par value \$.01 per share(3) | 147,317 | \$13.13 | \$1,934,272.20 |

- (1) Pursuant to Rule 416 under the Securities Act of 1933, as amended, this registration statement also covers such indeterminate number of shares of common stock as may be required to prevent dilution resulting from stock splits, stock dividends or similar events.
- (2) Estimated solely for purposes of determining the registration fee pursuant to Rule 457(c), based upon the average of the high and low sales price for the Common Stock as reported on the Nasdaq National Market on June 1, 2001.
- (3) Pursuant to a Rights Agreement between the Registrant and The Bank of New York as Rights Agent, dated as of December 17, 2000, Preferred Stock Purchase Rights are attached to and trade with the common stock. Value attributed to such Preferred Stock Purchase Rights, if any, is reflected in the market price of the 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 THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION, ACTING PURSUANT TO SAID SECTION 8(a), MAY DETERMINE.

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SUBJECT TO COMPLETION JUNE 8, 2001

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

[UNITED THERAPEUTICS CORPORATION LOGO]

PROSPECTUS

UNITED THERAPEUTICS CORPORATION

147,317 Shares of Common Stock (par value, \$.01 per share)

The selling stockholder is offering to sell 147,317 shares of United Therapeutics' common stock. United Therapeutics will not receive any of the proceeds from the sale of these shares by the selling stockholder.

The selling stockholder acquired the offered shares directly from United Therapeutics in a private placement transaction. The selling stockholder may sell the shares at prices determined by the prevailing market price for the shares or in negotiated transactions. The selling stockholder may also sell the shares to or with the assistance of broker-dealers.

United Therapeutics' common stock is traded on the Nasdaq National Market under the symbol "UTHR." On June 1, 2001, the closing bid price of the common stock as reported on the Nasdaq National Market was \$13.20 per share.

BEFORE BUYING ANY SHARES YOU SHOULD READ THE DISCUSSION OF MATERIAL RISKS OF INVESTING IN THE COMMON STOCK IN "RISK FACTORS" BEGINNING ON PAGE 1.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR DETERMINED IF THIS PROSPECTUS IS TRUTHFUL OR COMPLETE. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is June __, 2001.

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RISK FACTORS

This offering involves a high degree of risk. You should carefully consider the risks and uncertainties described below and the other information in and incorporated by reference in this prospectus before deciding whether to invest in United Therapeutics' common stock. If any of the following risks actually occur, United Therapeutics' business, financial condition or operating results could be materially adversely affected. This could cause the market price of the common stock to decline, and you may lose part or all of your investment.

IF UNITED THERAPEUTICS' PRODUCTS FAIL IN CLINICAL STUDIES OR IF UNITED THERAPEUTICS IS UNABLE TO OBTAIN FDA APPROVAL FOR ITS PRODUCTS, UNITED THERAPEUTICS WILL NOT BE ABLE TO SELL THOSE PRODUCTS.

In order to sell its products, United Therapeutics must receive regulatory approval for its products. To obtain those approvals, United Therapeutics must conduct clinical studies demonstrating to the satisfaction of the FDA that the drug and the delivery mechanism for the drug are safe and effective. If United Therapeutics cannot obtain FDA approval for a product, that product cannot be sold and United Therapeutics' revenues will suffer. To date, United Therapeutics has not received FDA approval for any of its pharmaceutical products. United Therapeutics has completed its pivotal Phase III clinical study for Remodulin for advanced pulmonary hypertension and submitted an application for approval of Remodulin for advanced pulmonary hypertension to both the U.S. FDA and the French regulatory agency. United Therapeutics has started Phase III clinical studies for Remodulin for late-stage peripheral vascular disease. United Therapeutics completed enrollment in two Phase III clinical trials to treat early-stage peripheral vascular disease and early-stage pulmonary hypertension with beraprost. United Therapeutics is still developing studies for its other products and has only completed pre-clinical studies for a recently acquired drug delivery mechanism. United Therapeutics' ongoing clinical studies might be delayed or halted for various reasons, including:

- The drug is not effective, or physicians think that the drug is not effective;
- Patients experience severe side effects during treatment;
- Patients die during the clinical study because their

disease is too advanced or because they experience medical problems that are not related to the drug being studied;

- Patients do not enroll in the studies at the rate United Therapeutics expects; and
- Drug supplies are not sufficient to treat the patients in the studies.

In addition, the FDA and foreign regulatory authorities have substantial discretion in the approval process. The FDA and foreign regulatory authorities may not agree that United Therapeutics has demonstrated that its products are safe and effective.

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IF UNITED THERAPEUTICS CANNOT MAINTAIN REGULATORY APPROVALS FOR ITS PRODUCTS, IT CANNOT SELL THOSE PRODUCTS AND ITS REVENUES WILL SUFFER.

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The process of obtaining and maintaining regulatory approvals for new drugs is lengthy, expensive and uncertain. The manufacturing, distribution, advertising and marketing of these products are subject to extensive regulation. Any new product approvals United Therapeutics receives in the future could include significant restrictions on the use or marketing of the product. Product approvals, if granted, can be withdrawn for failure to comply with regulatory requirements or upon the occurrence of adverse events following commercial introduction of the products. If approvals are withdrawn for a product, United Therapeutics cannot sell that product and its revenues will suffer. In addition, governmental authorities could seize United Therapeutics' products or force United Therapeutics to recall its products. Finally, United Therapeutics and its officers and directors could be subject to civil and criminal penalties for failure to comply with these regulatory requirements.

UNITED THERAPEUTICS HAS A HISTORY OF LOSSES AND MAY NOT BE PROFITABLE.

United Therapeutics has lost money since its inception in 1996, and its accumulated deficit was approximately \$134.3 million at March 31, 2001. United Therapeutics expects to incur substantial additional losses over the next several years, whether or not it generates revenue, as it expands clinical studies and continues to develop its products. United Therapeutics expects its quarterly and annual operating results to fluctuate, depending primarily on the following factors:

- Timing of regulatory approvals and commercial sales of its products;
- Level of patient demand for its products;
- Timing of payments to licensors and corporate partners; and
- Timing of investments in new technologies.

Substantially all of United Therapeutics' products are in clinical studies and the related regulatory approval process, and United Therapeutics is not yet selling any of its pharmaceutical products. United Therapeutics might not obtain regulatory approvals for its pharmaceutical products, including its lead products, Remodulin and beraprost, and may not be able to sell its

pharmaceutical products commercially. Even if United Therapeutics sells its products, United Therapeutics may not ever be profitable and may not be able to sustain any profitability it achieves.

DISCOVERIES OR DEVELOPMENTS OF NEW TECHNOLOGIES BY OTHERS MAY MAKE UNITED THERAPEUTICS' PRODUCTS OBSOLETE.

Other companies may conduct research, make discoveries or introduce new products that render all or some of United Therapeutics' technologies and products obsolete or not commercially viable. Researchers are continually making new discoveries that may lead to new technologies to treat the diseases United Therapeutics' products are intended for. In addition, alternative approaches to treating chronic diseases, such as gene therapy, may make United Therapeutics' products obsolete or noncompetitive.

UNITED THERAPEUTICS' PRODUCTS MAY NOT BE COMMERCIALLY SUCCESSFUL BECAUSE PHYSICIANS AND PATIENTS MAY NOT ACCEPT THEM.

Even if regulatory authorities approve United Therapeutics' products, those products may not be commercially successful. United Therapeutics expects that most of its products, including Remodulin, will be very expensive. Patient acceptance of and demand for United Therapeutics' products will depend largely on the following factors:

- Acceptance by physicians and patients of United Therapeutics' products as safe and effective therapies;
- Reimbursement of drug and treatment costs by third-party
 - Pricing of alternative products;

payors;

- Convenience and ease of administration of United Therapeutics' products; and
- Prevalence and severity of side effects associated with United Therapeutics' products.

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UNITED THERAPEUTICS MAY NOT BE ABLE TO SUCCESSFULLY INTEGRATE THE BUSINESSES OF MEDICOMP, COOKE PHARMA OR ANY OTHER COMPANY IT MAY ACQUIRE

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United Therapeutics recently acquired Medicomp and Cooke Pharma and may make additional acquisitions. The successful integration of the acquired businesses will require:

- Definition and alignment of the management teams;
- Coordination of geographically separate organizations
- Integration of product offerings
- Coordination of sales and marketing and research and development efforts

- Alignment of corporate cultures and management philosophies;
- Management focus on transitional activities.

Management may not be able to accomplish the integration of acquired businesses successfully or within planned periods. Any difficulties encountered in the transition process could adversely affect the revenues and operating results of the businesses acquired. If United Therapeutics fails to integrate acquired businesses quickly and efficiently, it may incur unanticipated costs or be unable to successfully advance the business objectives of the acquisition.

IF THIRD-PARTY PAYORS WILL NOT REIMBURSE PATIENTS FOR UNITED THERAPEUTICS' DRUG PRODUCTS, SALES WILL SUFFER.

United Therapeutics' commercial success will depend in part on third-party payors agreeing to reimburse patients for the costs of United Therapeutics' pharmaceutical products. Third-party payors frequently challenge the pricing of new drugs. United Therapeutics expects that its products will be very expensive. Third-party payors may not approve United Therapeutics' products for reimbursement. If third-party payors do not approve a United Therapeutics' product for reimbursement, sales will suffer as patients will opt for a competing product that is approved for reimbursement.

UNITED THERAPEUTICS RELIES ON THIRD PARTIES TO DEVELOP, MARKET, DISTRIBUTE AND SELL ITS PRODUCTS AND THOSE THIRD PARTIES MAY NOT PERFORM.

United Therapeutics does not have the ability to independently conduct clinical studies, obtain regulatory approvals, market, distribute or sell most of its products and intends to rely substantially on experienced third parties to perform all of those functions. United Therapeutics may not locate acceptable contractors or enter into favorable agreements with them. If third parties do not successfully carry out their contractual duties or meet expected deadlines, United Therapeutics will be unable to get marketing approvals and will be unable to sell its products. MiniMed Inc. is United Therapeutics' exclusive partner for the subcutaneous delivery of Remodulin using the MiniMed Inc. microinfusion device in the field of pulmonary hypertension. United Therapeutics is relying on MiniMed's experience, expertise and performance. Similarly, United Therapeutics is relying on Gentiva Health Services Inc. and Priority Healthcare Corporation to market, distribute, and sell Remodulin once it has been approved by the FDA. If United Therapeutics' partners are unsuccessful in their efforts, United Therapeutics' revenues will suffer.

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UNITED THERAPEUTICS HAS LIMITED EXPERIENCE WITH MANUFACTURING AND DEPENDS ON THIRD PARTIES, WHO MAY NOT PERFORM, TO SYNTHESIZE AND MANUFACTURE MANY OF ITS PRODUCTS.

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United Therapeutics itself has limited experience with manufacturing. In October 1999, United Therapeutics acquired SynQuest, Inc., a company that manufactured Remodulin for United Therapeutics. In December 2000, SynQuest was dissolved and merged into United Therapeutics as its synthesis and manufacturing division. Prior to the acquisition of SynQuest, United Therapeutics had no experience with manufacturing. Although in connection with the acquisition of SynQuest United Therapeutics retained the employees and managers of SynQuest, United Therapeutics may be unsuccessful in maintaining drug manufacturing operations.

United Therapeutics relies on third parties for the manufacture of all

other products other than Remodulin. United Therapeutics is relying on Cook Imaging Corporation for the formulation of Remodulin. United Therapeutics relies on Magellan Laboratories Incorporated to test the purity and stability of each batch of Remodulin. United Therapeutics relies exclusively on Toray Industries, Inc. to manufacture beraprost. United Theapeutics relies on Nelson Nutraceuticals to manufacture the HeartBar. United Therapeutics' manufacturing strategy presents the following risks:

- The manufacturing processes for some of United Therapeutics' products have not been tested in quantities needed for commercial sales;
- Delays in scale-up to commercial quantities could delay clinical studies, regulatory submissions and commercialization of United Therapeutics' products;
- A long lead time is needed to manufacture Remodulin, and the manufacturing process is complex;
- United Therapeutics and manufacturers of United Therapeutics' products are subject to the FDA's good manufacturing practices regulations and similar foreign standards, and although United Therapeutics controls compliance issues with respect to the work conducted by SynQuest, the company does not have control over compliance with these regulations by its third-party manufacturers;
- If United Therapeutics has to change to another manufacturing contractor or abandon its captive manufacturing operations, FDA and comparable foreign regulators would require new testing and compliance inspections and the new manufacturer would have to be educated in the processes necessary for the production of the affected product;
- Without satisfactory long-term agreements with its manufacturers, United Therapeutics will not be able to develop or commercialize its products, other than Remodulin, as planned or at all and will have to rely solely on the manufacturing capacity the company acquired through SynQuest;
- Without substantial experience in operating a manufacturing facility, United Therapeutics may not be able to successfully manufacture Remodulin; and
- United Therapeutics may not have intellectual property rights, or may have to share intellectual property rights, to many improvements in the manufacturing processes or new manufacturing processes for its products.

Any of these factors could delay clinical studies or commercialization of United Therapeutics' products, entail higher costs and result in United Therapeutics being unable to effectively sell its products.

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IF THE LICENSES UNITED THERAPEUTICS DEPENDS ON ARE BREACHED OR TERMINATED, UNITED THERAPEUTICS WOULD LOSE ITS RIGHT TO DEVELOP AND SELL THE PRODUCTS

COVERED BY THE LICENSES.

United Therapeutics acquires or licenses drugs which have been discovered and initially developed by others. In addition, United Therapeutics has obtained and will be required to obtain licenses to third-party technology to conduct its business, including licenses for its products and a license for the MiniMed microinfusion device. This dependence on licenses has the following risks:

- United Therapeutics may not be able to obtain future licenses at a reasonable cost or at all;
- If any of United Therapeutics' licenses are terminated,
 United Therapeutics will lose its rights to develop and
 market some or all of its products;
- The licenses that United Therapeutics holds generally provide for termination by the licensor in the event United Therapeutics breaches the license agreement, including by failing to pay royalties and other fees on a timely basis;
- In the event that Glaxo Wellcome or Pharmacia & Upjohn terminate their agreements, United Therapeutics will have no further rights to utilize their patents or trade secrets to develop and commercialize Remodulin; and
- If licensors fail to maintain the intellectual property licensed to United Therapeutics as required by most of United Therapeutics' license agreements, United Therapeutics may lose its rights to develop and market some or all of its products and may be forced to incur substantial additional costs to maintain the intellectual property itself or force the licensor to do so.

IF UNITED THERAPEUTICS' PATENT AND OTHER INTELLECTUAL PROPERTY PROTECTION IS INADEQUATE, UNITED THERAPEUTICS' SALES AND PROFITS COULD SUFFER OR COMPETITORS COULD FORCE UNITED THERAPEUTICS' PRODUCTS COMPLETELY OUT OF THE MARKET.

The U.S. patent for the method of treating pulmonary hypertension with Remodulin expires in 2009. The U.S. patents for the beraprost composition of matter and synthesis expire in 2003 and 2010. United Therapeutics may not be able to extend these or any other patents. Competitors may develop products based on the same active ingredients as United Therapeutics' products, including Remodulin, and market those products after the patents expire, or may design around United Therapeutics' existing patents. If this happens, United Therapeutics' sales would suffer and United Therapeutics' profits could be severely impacted.

The issued beraprost patents do not cover methods of treating any disease, including pulmonary hypertension or peripheral vascular disease, using beraprost. Patents may be issued to others which prevent the manufacture or sale of United Therapeutics' products. United Therapeutics may have to license those patents and pay significant fees or royalties to the owners of the patents in order to keep marketing its products. This would cause profits on sales to suffer.

United Therapeutics has filed a patent application in the United States for the synthesis of Remodulin, but this and other patent applications which have been or may be filed by United Therapeutics may not issue. The scope of any patent that issues may not be sufficient to protect United Therapeutics'

technology. The laws of foreign jurisdictions in which United Therapeutics intends to sell its products may not protect the company's rights to the same extent as the laws of the United States.

In addition to patent protection, United Therapeutics also relies on trade secrets, proprietary know-how and technology advances. United Therapeutics enters into confidentiality agreements with its employees and others, but these agreements may not be effective in protecting the company's proprietary information. Others may independently develop substantially equivalent proprietary information or obtain access to United Therapeutics' know-how.

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Litigation, which is very expensive, may be necessary to enforce or defend United Therapeutics' patents or proprietary rights and may not end favorably for United Therapeutics. Any of United Therapeutics' licenses, patents or other intellectual property may be challenged, invalidated, canceled, infringed or circumvented and may not provide any competitive advantage to United Therapeutics.

UNITED THERAPEUTICS MAY NOT HAVE, OR MAY HAVE TO SHARE RIGHTS TO, FUTURE INVENTIONS ARISING FROM ITS OUTSOURCING AGREEMENTS AND MAY LOSE POTENTIAL PROFITS OR SAVINGS.

Pursuant to United Therapeutics' agreement with MiniMed concerning the subcutaneous delivery of Remodulin, any new inventions or intellectual property that arise from United Therapeutics' activities with MiniMed will be owned jointly by United Therapeutics and MiniMed. Under United Therapeutics' agreement with Shearwater Polymers, Inc. concerning pegylation, any inventions that relate to a non-prostacyclin pegylation method will be owned by Shearwater Polymers. If United Therapeutics does not have rights to new developments or inventions that arise during the terms of these agreements, or United Therapeutics has to share the rights with others, United Therapeutics will lose the benefit of the new rights which may mean a loss of future profits or savings generated from improved technology.

IF UNITED THERAPEUTICS' HIGHLY QUALIFIED MANAGEMENT AND TECHNICAL PERSONNEL LEAVE THE COMPANY, ITS BUSINESS MAY SUFFER.

United Therapeutics is dependent on its current management. United Therapeutics does not maintain key person life insurance. United Therapeutics' success will depend in part on retaining the services of its existing management and key personnel and attracting and retaining new highly qualified personnel. Expertise in the field of pulmonary and vascular disease is not generally available in the market, and competition for qualified management and personnel is intense.

UNITED THERAPEUTICS MAY NOT SUCCESSFULLY COMPETE WITH ESTABLISHED DRUG COMPANIES.

United Therapeutics competes with established drug companies during product development for, among other things, funding, access to licenses, personnel and third-party collaborators. United Therapeutics will also compete with these companies following approval of its products. Almost all of these companies have substantially greater financial, marketing, sales, distribution and technical resources, and more experience in research and development, clinical trials and regulatory matters, than United Therapeutics. United Therapeutics is aware of existing treatments that will compete with its products. If United Therapeutics cannot successfully compete with new or existing products, United Therapeutics' marketing and sales will suffer and it may not ever be profitable.

IF UNITED THERAPEUTICS NEEDS ADDITIONAL FINANCING AND CANNOT OBTAIN IT, PRODUCT DEVELOPMENT AND SALES MAY BE LIMITED.

United Therapeutics may need to spend more money than currently expected because it may need to change its product development plans or product offerings to address difficulties with clinical studies or preparing for commercial sales. United Therapeutics may not be able to obtain additional funds on commercially reasonable terms or at all. If additional funds are not available, United Therapeutics may be compelled to delay clinical studies, curtail operations or obtain funds through collaborative arrangements that may require it to relinquish rights to certain of its products or potential markets.

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UNITED THERAPEUTICS MAY NOT HAVE ADEQUATE INSURANCE AND MAY HAVE SUBSTANTIAL EXPOSURE TO PAYMENT OF PRODUCT LIABILITY CLAIMS.

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The testing, manufacture and marketing of human drugs involves product liability risks. Although United Therapeutics has product liability insurance, United Therapeutics may not be able to maintain this product liability insurance at an acceptable cost, if at all, and this insurance may not provide adequate coverage against potential losses. If claims or losses exceed United Therapeutics' liability insurance coverage, United Therapeutics may go out of business.

UNITED THERAPEUTICS' STOCK PRICE COULD BE VOLATILE AND COULD DECLINE.

The market prices for securities of drug companies are highly volatile, and there are significant price and volume fluctuations in the market that may be unrelated to particular companies' operating performances. United Therapeutics' stock price could decline suddenly due to the following factors:

- Results of clinical trials;
- Timing of regulatory approvals;
- Fluctuations in operating results;
- Announcements by United Therapeutics or others of technological innovations or new products;
- Failure to meet estimates or expectations of securities analysts;
- Rate of product acceptance;
- Developments in patent or other proprietary rights;
- Public concern as to the safety of products developed by United Therapeutics or by others;
- Future sales of substantial amounts of common stock by existing United Therapeutics stockholders; and
- General market conditions.

FUTURE SALES OF SHARES MAY DEPRESS THE STOCK PRICE.

If the stockholders sell a substantial number of shares of United Therapeutics' common stock in the public market, or investors become concerned that substantial sales might occur, the market price of the common stock could decrease. Such a decrease could make it difficult for United Therapeutics to raise capital by selling stock or to pay for acquisitions using stock. To the extent outstanding options or warrants are exercised or additional shares of capital stock are issued, existing stockholders may incur additional dilution.

EXISTING DIRECTORS AND EXECUTIVE OFFICERS OF UNITED THERAPEUTICS OWN A SUBSTANTIAL BLOCK OF STOCK AND MIGHT BE ABLE TO DIRECT THE OUTCOME OF MATTERS REQUIRING STOCKHOLDER APPROVAL.

United Therapeutics' directors and named executive officers beneficially own approximately 26 percent of its outstanding common stock. Accordingly, these stockholders as a group might be able to direct the outcome of matters requiring approval by United Therapeutics' stockholders, including the election of its directors. Such stockholder control could delay or prevent a change of control of United Therapeutics.

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BECAUSE OF THE RIGHTS AGREEMENT AND "ANTI-TAKEOVER" PROVISIONS IN UNITED THERAPEUTICS' CERTIFICATE OF INCORPORATION AND BYLAWS, A THIRD PARTY MAY BE DISCOURAGED FROM MAKING A TAKEOVER OFFER WHICH COULD BE BENEFICIAL TO UNITED THERAPEUTICS AND THE PUBLIC STOCKHOLDERS.

On December 14, 2000, United Therapeutics adopted a shareholder rights plan. The effect of this rights plan and of certain provisions of United Therapeutics' Amended and Restated Certificate of Incorporation and Amended and Restated By-Laws, and the anti-takeover provisions of Section 203 of the Delaware General Corporation Law, could delay or prevent a third party from acquiring United Therapeutics or replacing members of the United Therapeutics board of directors, even if the acquisition or the replacements would be beneficial to United Therapeutics' stockholders. These factors could also reduce the price that certain investors might be willing to pay for shares of the common stock and result in the market price being lower than it would be without these provisions.

IF STOCKHOLDERS DO NOT RECEIVE DIVIDENDS, STOCKHOLDERS MUST RELY ON STOCK APPRECIATION FOR ANY RETURN ON THEIR INVESTMENT IN UNITED THERAPEUTICS.

United Therapeutics has never declared or paid cash dividends on any of its capital stock. United Therapeutics currently intends to retain its earnings for future growth and therefore does not anticipate paying cash dividends in the future.

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THE COMPANY

United Therapeutics Corporation is a biotechnology company focused on combating cardiovascular, inflammatory and infectious diseases with unique therapeutic products.

United Therapeutics develops pharmaceuticals to treat vascular diseases,

including pulmonary hypertension and peripheral vascular disease, as well as other selected chronic conditions. Both pulmonary hypertension and peripheral vascular disease are characterized by reduced production of natural prostacyclin, a highly unstable molecule that has powerful effects on blood-vessel health. United Therapeutics' lead products, Remodulin(TM) and beraprost, are stable synthetic forms of prostacyclin. Remodulin is delivered under the skin, or "subcutaneously." United Therapeutics has completed its pivotal Phase III clinical study of Remodulin for treating advanced pulmonary hypertension, has filed a new drug application with the U.S. Food and Drug Administration and a Marketing Authorization Application in France and is awaiting a decision by the these agencies. Beraprost is delivered orally, and United Therapeutics has completed enrollment in two Phase III studies of beraprost for the treatment of early-stage peripheral vascular disease and early-stage pulmonary hypertension. United Therapeutics has also conducted phase II testing of Remodulin for critical limb ischemia and is in the pre-clinical stages of development for therapies in certain infectious diseases and chronic obstructive pulmonary disease.

United Therapeutics' objective is to become a leader in the development and commercialization of drugs and other therapies focused on combatting cardiovascular, inflammatory and infectious diseases with unique therapeutic products. To achieve this objective, United Therapeutics is pursuing the following strategies:

- Capitalize on its experience and expertise in pulmonary vascular medicine;
- Establish its prostacyclin products as the standard of care for cardiovascular disease; and
- Minimize fixed costs and corporate overhead through outsourcing and partnering where cost effective.

United Therapeutics was incorporated in Delaware in June 1996 under the name Lung Rx, Inc. Its principal office is located at 1110 Spring Street, Silver Spring, Maryland 20910, and its telephone number there is (301) 608-9292. United Therapeutics' clinical development office is located at 68 T.W. Alexander Drive, Research Triangle Park, North Carolina 27709, and its telephone number there is (919) 485-8350. Information on United Therapeutics' web sites is not a part of this prospectus.

USE OF PROCEEDS

United Therapeutics will not receive any proceeds from the sale of the shares of common stock by the selling stockholder pursuant to this prospectus.

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SELLING STOCKHOLDER

United Therapeutics is registering all shares covered by this prospectus on behalf of the selling stockholder named in the table below. United Therapeutics issued all of the shares to the selling stockholder in a private placement transaction. United Therapeutics has registered the shares to permit the selling stockholder and its pledgees, donees, transferees, distributees or other successors-in-interest, including their affiliates and limited and/or general partners that receive their shares from the 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.

In the agreement under which the selling stockholder acquired the shares of common stock, the selling stockholder represented that it was acquiring the shares for investment and with no present intention of distributing those shares. In addition, the selling stockholder qualified as an "accredited investor" as such term is defined in Rule 501 under the Securities Act of 1933. United Therapeutics agreed to prepare and file a registration statement to permit the resale of the shares and to bear all registration expenses other than fees and expenses of counsel or other advisors for the selling stockholder and underwriting discounts and commissions and brokerage commissions and fees. Accordingly, in recognition of the fact that the selling stockholder, even though it acquired the shares without a view to distribution, may wish to be legally permitted to sell the shares when it deems appropriate, United Therapeutics has filed with the SEC a registration statement on Form S-3, of which this prospectus forms a part. United Therapeutics will use its reasonable efforts to prepare and file amendments and supplements to the registration statement as may be necessary to keep the registration statement effective for at least one year after the date the registration statement is declared effective.

Cooke PH, Inc. sold Cooke Pharma, Inc. to United Therapeutics in December 2000. In furtherance of that acquisition, United Therapeutics now employs John Cooke, founder of Cooke Pharma, Inc. (now Cooke PH, Inc.) on a part-time basis.

The following table sets forth the name of the selling stockholder, the number of shares owned by the selling stockholder prior to this offering, the total number of shares offered under this prospectus, and the number of shares of common stock owned by the selling stockholder after this offering is completed. The number of shares in the column "Number of Shares Being Offered" represents all of the shares that the selling stockholder may offer under this prospectus. United Therapeutics does not know how long the selling stockholder will hold the shares before selling them and currently has no agreements, arrangements or understandings with the selling stockholder regarding the sale of any of the shares. The table assumes all shares being offered in this offering are sold to non-affiliates of the selling stockholder.

| | SHARES BENEFICIALLY OWNED | NUMBER OF SHARES BEING | PERCENI BENEFICIAL OWNED AFTE |
|-----------------------|------------------------------|---------------------------|-------------------------------------|
| NAME OF SELLING STOCK | CHOLDER PRIOR TO OFFERING | OFFERED | OFFERING |
| | | | |
| Cooke PH, Inc. | 147,317 | 147,317 | |

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PLAN OF DISTRIBUTION

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The common stock offered by this prospectus may be sold from time to time by the selling stockholder and its pledgees, donees, transferees, distributees or other successors-in-interest. The selling stockholder will act independently of us in making decisions with respect to the timing, manner and size of the sale of common stock covered hereby. The selling stockholder may sell its shares on the Nasdaq National Market or otherwise, at market prices or at negotiated prices. It may sell shares by one or a combination of the following:

- a block trade in which a broker or dealer so engaged will attempt to sell the shares as agent, but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker or dealer as principal and resale by the broker or dealer for its account pursuant to this prospectus;
- an exchange distribution in accordance with the rules of an exchange;
- ordinary brokerage transactions and transactions in which a broker solicits purchasers; and
- in privately negotiated transactions.

In addition, any shares offered hereby that qualify for sale pursuant to Rule 144 may, at the option of the holder thereof, be sold under Rule 144 rather than pursuant to this prospectus.

In effecting sales, brokers or dealers engaged by the selling stockholder may arrange for other brokers or dealers to participate. Brokers or dealers will receive commissions or discounts from the selling stockholder in amounts to be negotiated prior to the sale. The selling stockholder and any broker-dealers that participate in the distribution may be deemed to be "underwriters" within the meaning of Section 2(11) of the Securities Act of 1933, and any proceeds or commissions received by them, and any profits on the resale of shares sold by broker-dealers, may be deemed to be underwriting discounts and commissions. Because the selling stockholder may be deemed to be an underwriter, it will be subject to the prospectus delivery requirements of the Securities Act of 1933.

In connection with distributions of the shares offered hereby, the selling stockholder may enter into hedging transactions with broker-dealers or other financial institutions. In addition, broker-dealers may agree with the selling stockholder to sell a specified number of shares at a stipulated price per share, and to the extent such a broker-dealer is unable to do so acting as agent for the selling stockholder, to purchase as principal any unsold shares at the price required to fulfill the broker-dealer commitment to the selling stockholder. Broker-dealers who acquire shares as principal may thereafter resell such shares from time to time in transactions (which may involve crosses and block transactions and which may involve sales to and through other broker-dealers, including transactions of the nature described above) in the over-the-counter market, in negotiated transactions or by a combination of such methods of sale or otherwise at market prices prevailing at the time of sale or at negotiated prices, and in connection with such resales may pay to or receive from the purchasers of such shares commissions computed as described above.

We have advised the selling stockholder that the anti-manipulation of Regulation M under the Securities and Exchange Act of 1934 (the "Exchange Act") may apply to sales of shares in the market and to the activities of the selling stockholder and its affiliates. In addition, we will make copies of this prospectus available to the selling stockholder and have informed it of the need for delivery of copies of this prospectus to purchasers on or prior to sales of the shares offered hereby. The selling stockholder may indemnify any broker-dealer that participates in transactions involving the sale of the shares against certain liabilities, including liabilities arising under the Securities

Act. Any commissions paid or any discounts or concessions allowed to any such broker-dealers, and any profits received on the resale of such shares, may be deemed to be underwriting discounts and commissions under the Securities Act if any such broker-dealers purchase shares as principal.

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In order to comply with the securities laws of certain states, if applicable, the common stock will be sold in such jurisdictions only through registered or licensed brokers or dealers. In addition, in certain states, the common stock may not be sold unless such shares have been registered or qualified for sale in the applicable state or an exemption from the registration or qualification requirement is available and is complied with.

There can be no assurance that the selling stockholder will sell all or any of the shares of common stock offered under this prospectus.

If the selling stockholder notifies United Therapeutics that a material arrangement has been entered into with a broker-dealer for the sale of shares through a block trade, special offering, exchange, distribution or secondary distribution or a purchase by a broker or dealer, United Therapeutics will file a prospectus supplement if required by Rule 424 under the Securities Act of 1933.

United Therapeutics has agreed to indemnify the selling stockholder against certain liabilities, including liabilities arising under the Securities Act of 1933. The selling stockholder may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving shares of the common stock against certain liabilities, including liabilities arising under the Securities Act of 1933.

COMMON STOCK

Each share of the common stock of United Therapeutics trades with and has attached to it a right to purchase shares of preferred stock. The terms of the rights are set forth in a Rights Agreement dated as of December 17, 2000, between United Therapeutics Corporation and The Bank of New York, as Rights Agent. Each right entitles the holder to purchase from United Therapeutics one one-thousandth of a share of Series A Junior Participating Preferred Stock, par value \$0.01 per share, at a price of \$129.50, subject to adjustment. The rights are currently evidenced by common stock certificates and are not exercisable until the earlier of:

- the close of business on the tenth business day following the date of public announcement of or the date on which United Therapeutics first has notice or determines that a person or group of affiliated or associated persons has acquired, or has obtained the right to acquire, 15% or more of the outstanding shares of United Therapeutics voting stock without the prior express written consent of the Board of Directors, or

- The close of business on the tenth business day following the commencement of a tender offer or exchange offer by a person, without the prior written consent of the Board of Directors, which offer, upon consummation would result in such person's control of 15% or more of United Therapeutics voting stock.

If not exercised by the holders or earlier redeemed or exchange by United Therapeutics, the rights will expire on December 29, 2010. The purchase price payable, and the number of shares of Series A preferred stock or other

securities or property issuable upon exercise of the rights are subject to adjustment from time to time to prevent dilution by action of the Board of Directors and in circumstances described in the Rights Agreement.

For more information regarding the rights attached to United Therapeutics common stock, you may refer to the Form 8-K dated December 17, 2000, filed with the Securities and Exchange Commission on December 18, 2000.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

The following statements are or may constitute forward-looking statements:

- statements set forth in this prospectus or statements incorporated by reference from documents United Therapeutics has filed with the Securities and Exchange Commission, including possible or assumed

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future results of the company's operations, including but not limited to any statements contained in this prospectus or in the documents incorporated by reference concerning:

- expectation of continued losses;
- cash needed for current research and development contract obligations during 2001 and the funding for such expenses;
- expectations concerning milestone and royalty payments in 2001
- the use of net operating loss carryforwards and business tax credit carryforwards;
- the completion of in process research and development products in 2002;
- the levels of working capital required for existing research and development and general and administrative programs;
- adequacy of United Therapeutics' resources to fund operations through 2004;
- status and projected outcome of ongoing clinical studies; and
- existence and timing of future clinical studies of its product candidates.
- any statements preceded by, followed by or that include the words "believes," "expects," "predicts," "anticipates," "intends," "estimates," "should," "may" or similar expressions; and
- other statements contained or incorporated by reference in this prospectus that are not historical facts.

Because such statements are subject to risks and uncertainties, actual results may differ materially from those expressed or implied by such forward-looking statements. Factors that could cause actual results to differ materially include, but are not limited to:

- assumptions regarding the status of research and development subject to existing contracts;
- projections with respect to resources needed for future operations;
- expectations of success of clinical studies; and
- factors discussed under "Risk Factors" beginning on page 1.

You should not place undue reliance on such statements, which speak only as of the date that they were made. These cautionary statements should be considered in connection with any written or oral forward-looking statements that United Therapeutics may issue in the future. United Therapeutics does not undertake any obligation to release publicly any revisions to such forward-looking statements after completion of this offering to reflect later events or circumstances or to reflect the occurrence of unanticipated events.

LAWYERS

The validity of the shares of common stock offered hereby will be passed upon for United Therapeutics by Bryan Cave LLP. James L. Nouss, Jr., a partner of Bryan Cave LLP, beneficially owns 12,925 shares of common stock of United Therapeutics.

EXPERTS

The consolidated balance sheets of United Therapeutics, as of December 31, 1999 and 2000, and the consolidated statements of operations, stockholders' equity and cash flows for the years ended December 31, 1998, 1999 and 2000 incorporated by reference in this prospectus and registration statement have been incorporated by reference herein in reliance upon the report of KPMG LLP, independent certified public accountants, appearing in United Therapeutics' Annual Report on Form 10-K for the fiscal year ended December 31, 2000, given on the authority of that firm as experts in accounting and auditing.

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ADDITIONAL INFORMATION

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United Therapeutics has filed with the Securities and Exchange Commission, Washington, D.C., a registration statement on Form S-3 under the Securities Act of 1933, covering the securities offered by this prospectus. This prospectus does not contain all of the information that you can find in that registration statement and its exhibits and schedule. Certain items are omitted in accordance with the rules and regulations of the Commission. For further information with respect to United Therapeutics and the common stock offered here, reference is made to the registration statement and the exhibits and schedule filed with the registration statement. Statements contained in this prospectus as to the contents of any contract or other document referred to are not necessarily complete and in each instance such statement is qualified by reference to each such contract or document filed with or incorporated by

reference as part of the registration statement. United Therapeutics files reports, proxy statements and other information with the Commission. You may read any materials United Therapeutics has filed with the Commission without charge at the public reference facilities maintained by the Commission in Room 1024, 450 Fifth Street, N.W., Washington, D.C. 20549, and the Commission's regional offices located at the Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago Illinois 60661 and Seven World Trade Center, 13th Floor, New York, New York 10048. Copies of all or any part of these documents may be obtained from such offices upon the payment of the fees prescribed by the Commission. The public may obtain information on the operation of the public reference room by calling the Commission at 1-800-SEC-0330. The Commission maintains a World Wide Web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the Commission. The address of the site is http://www.sec.gov. The registration statement, including all exhibits thereto and amendments thereof, has been filed electronically with the Commission.

INFORMATION INCORPORATED BY REFERENCE

The Commission allows United Therapeutics to "incorporate by reference" the information United Therapeutics provides in documents filed with the Commission, which means that United Therapeutics can disclose important information by referring to those documents. The information incorporated by reference is an important part of this prospectus. Any statement contained in a document that is incorporated by reference in this prospectus is automatically updated and superseded if information contained in this prospectus, or information that United Therapeutics later files with the Commission, modifies and replaces this information. United Therapeutics incorporates by reference the following documents the company has filed with the Commission:

(1) Annual Report on Form 10-K for the fiscal year ended December 31, 2000.

(2) Current Report on Form 8-K/A filed February 1, 2001.

(3) Current Report on Form 8-K/A filed February 1, 2001.

(4) Current Report on Form 8-K/A filed March 6, 2001.

(5) Current Report on Form 8-K/A filed March 14, 2001.

(6) Quarterly Report on Form 10-Q for the quarter ended March 31, 2001.

(7) Current Report on Form 8-K filed April 13, 2001.

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(8) Description of common stock contained in the Registration Statement on Form 8-A, filed on June 8, 1999 and description of the preferred stock purchase rights (which trade with the common stock) contained in the Registration Statement on Form 8-A filed on January 2, 2001.

In addition, all documents filed by United Therapeutics with the Commission under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 after the date of this prospectus and prior to the filing of a post-

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effective amendment that indicates that all securities offered hereby have been sold or that deregisters all securities remaining unsold, will be considered to

be incorporated by reference into this prospectus and to be a part of this prospectus from the dates of the filing of such documents.

You may get copies of any of the incorporated documents (excluding exhibits, unless the exhibits are specifically incorporated) at no charge to you by writing or calling the Director of Finance and Investor Relations, United Therapeutics Corporation, 1110 Spring Street, Silver Spring, Maryland 20910, telephone (301) 608-9292.

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YOU MAY RELY ONLY ON THE INFORMATION CONTAINED IN THIS PROSPECTUS. WE HAVE NOT AUTHORIZED ANYONE TO PROVIDE INFORMATION DIFFERENT FROM THAT CONTAINED IN THIS PROSPECTUS. NEITHER THE DELIVERY OF THIS PROSPECTUS NOR SALE OF COMMON STOCK MEANS THAT INFORMATION CONTAINED IN THIS PROSPECTUS IS CORRECT AFTER THE DATE OF THIS PROSPECTUS. THIS PROSPECTUS IS NOT AN OFFER TO SELL OR SOLICITATION OF AN OFFER TO BUY THESE SHARES OF COMMON STOCK IN ANY CIRCUMSTANCES UNDER WHICH THE OFFER OR SOLICITATION IS UNLAWFUL.

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[UNITED THERAPEUTICS CORPORATION LOGO]

147,317 SHARES

COMMON STOCK

PROSPECTUS

JUNE ___, 2001

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PART II INFORMATION NOT REQUIRED IN PROSPECTUS

ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION

The following table sets forth all expenses payable by the Registrant in connection with the registration of the common stock.

| Registration fee\$ | 483.57 |
|--------------------------------------|------------|
| Nasdaq National Market Listing Fee\$ | 1,473.17 |
| Legal fees and expenses\$ | 7,500.00* |
| Accounting fees and expenses\$ | 2,000.00* |
| Miscellaneous expenses | * |
| Total\$ | 11,456.74* |

* Estimated

ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS.

As permitted by Delaware law, the Registrant's Amended and Restated Certificate of Incorporation provides that no director of the Registrant will be personally liable to the Registrant or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (a) for any breach of duty of loyalty to United Therapeutics or to its stockholders, (b) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (c) under Section 174 of the Delaware General Corporation Law, or (d) for any transaction from which the director derived an improper personal benefit.

The Registrant's Amended and Restated Certificate of Incorporation further provides that the Registrant must indemnify its directors and executive officers and may indemnify its other officers and employees and agents to the fullest extent permitted by Delaware law. The Registrant believes that indemnification under its Amended and Restated Certificate of Incorporation covers negligence and gross negligence on the part of indemnified parties.

The Registrant has entered into indemnification agreements with each of its directors and executive officers. These agreements, among other things, require the Registrant to indemnify such directors and executive officers for certain expenses (including attorneys' fees), judgments, fines and settlement amounts incurred by any such person in any action or proceeding, including any action by or in the right of the Registrant, arising out of such person's services as a director or officer of the Registrant, any subsidiary of the Registrant or any other company or enterprise to which the person provides services at the request of the Registrant.

ITEM 16. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES.

(a) The following is a list of exhibits filed as a part of this registration statement.

EXHIBIT NO. DESCRIPTION

- 3.1 Amended and Restated Certificate of Incorporation of the Registrant, incorporated by reference to Exhibit 3.1 of the Registrant's Registration Statement on Form S-1 (Registration No. 333-76409).
- 3.2 Amended and Restated Bylaws of the Registrant, incorporated by reference to Exhibit 3.2 of the Registrant's Registration Statement (Registration No. 333-76409).
- 4.1 Reference is made to Exhibits 3.1 and 3.2.
- 4.2 Registration Rights Agreement, dated as of October 30, 1998, by and among the Registrant, Merrill Lynch KECALP L.P. 1997, and Merrill Lynch KECALP International L.P. 1997, incorporated by reference to Exhibit 4.2 of the Registrant's Registration Statement on Form S-1 (Registration No. 333-

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76409).

- 4.3 Form of Common Stock Purchase Agreement, executed as of March 1998, by and between the Registrant and each of Community Investment Partners III L.P., LLLP, Mary Ellen and Raul Evelio Perez, Trustees of the Mary Ellen Perez revocable trust dated October 28, 1993, Edward D. Jones & Co., Oakwood Investors I, L.L.C. and James L. Nouss, Jr., incorporated by reference to Exhibit 4.3 of the Registrant's Registration Statement on form S-1 (Registration No. 333-76409).
- 4.4 Warrant to purchase shares of United Therapeutics common stock, issued on November 2, 1998 to Cortech, Inc., incorporated by reference to Exhibit 4.4 of the Registrant's Registration Statement on form S-1 (Registration No. 333-76409).
- 4.5 Stock Option Grant to purchase shares of United Therapeutics' common stock, issued on September 16, 1998, to Toray Industries, Inc., incorporated by reference to Exhibit 4.5 of the Registrant's Registration Statement on form S-1 (Registration No. 333-76409).
- 4.6 Registration Rights Agreement, dated as of October 7, 1999, by and among the Registrant and Robert M. Moriarty, Ph.D., Raju Penmasta, Ph.D., Lian Guo, Ph.D., George W. Davis, Esq. and David Moriarty, incorporated by reference to Exhibit 10.2 of the Registrant's Form 10-Q for the period ended September 30, 1999.

- 4.7 Form of Purchase Agreement dated as of December 22, 1999, incorporated by reference to Exhibit 4.6 of the Registrant's Registration Statement on form S-1 (Registration No. 333-93853).
- 4.8 Registration Rights Agreement, dated as of June 27, 2000 by and between the Registrant and Toray Industries, Inc., incorporated by reference to Exhibit 4.7 of the Registrant's Registration Statement on Form S-3 (Registration No. 333-40598).
- 4.9 Stock Option Grant issued on June 27, 2000 to Toray Industries, Inc., incorporated by reference to Exhibit 4.8 of the Registrant's Registration Statement on Form S-3 (Registration No. 333-40598).
- 4.10 Form of Stock Purchase Agreement dated July 13, 2000 incorporated by reference to Exhibit 99.2 of the Registrant's Current Report on Form 8-K filed July 14, 2000.
- 4.11 Registration Rights Agreement, dated as of December 15, 2000 by and between the Registrant and Cooke Pharma, Inc., incorporated by reference to Exhibit 2.2 of the Registrant's Form 8-K/A dated December 15, 2000.
- 4.12 Escrow Agreement, dated as of December 15, 2000 among Registrant, UP Subsidiary Corporation, Cooke Pharma, Inc., and Mahon, Patusky, Rothblatt & Fisher, Chartered, as escrow agent, incorporated by reference to Exhibit 2.3 of the Registrant's Form 8-K/A dated December 15, 2000.
- 4.13 Registration Rights Agreement, dated as of December 28, 2000 by and between the Registrant and Medicomp, Inc., incorporated by reference to Exhibit 2.2 of the Registrant's Form 8-K/A dated December 28, 2000.
- 4.14 Escrow Agreement, dated as of December 28, 2000 among Registrant, UTSC Sub Acquisition, Inc., Medicomp, Inc., Mahon, Patusky, Rothblatt & Fisher, Chartered, as escrow agent, and Chicago Title, as successor escrow agent, incorporated by reference to Exhibit 2.3 of the Registrant's Form 8-K/A dated December 28, 2000.
- 4.15 Rights Agreement, dated as of December 17, 2000 between Registrant and The Bank of New York, as Rights Agent, incorporated by reference to Exhibit 4 of Registrant's Form 8-K dated December 17, 2000.
 - 5 Opinion of Bryan Cave LLP.
- 23.1 Consent of KPMG LLP.
- 23.2 Consent of Bryan Cave LLP. Reference is made to Exhibit 5.
- 24 Power of Attorney (included on signature page).

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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 this Registration Statement or any material change to such information in this Registration Statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, 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.

(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.

Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers, and controlling persons of the Registrant pursuant to the provisions described in Item 15 or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission, such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer, or controlling person of the Registrant in the successful defense of any action, suit, or proceeding) is asserted by such director, officer, or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

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

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SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, 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 Silver Spring, County of Montgomery, State of Maryland on the 7th day of June, 2001.

UNITED THERAPEUTICS CORPORATION

By: /s/ FRED T. HADEED

Fred T. Hadeed Chief Financial Officer

In accordance with the requirements of the Securities Act of 1933, this registration statement was signed below by the following persons in the capacities and on the dates stated.

KNOW ALL PERSONS BY THESE PRESENTS, that each hereby constitutes and appoints Martine A. Rothblatt and Paul A. Mahon, and each of them, his attorney-in-fact, with full power of substitution, for him in any and all capacities, to sign any and all amendments to this Registration Statement (including post-effective amendments), and any and all Registration Statements filed pursuant to Rule 462 under the Securities Act of 1933, as amended, in connection with or related to the offering contemplated by this Registration Statement and its amendments, if any, and to file the same, with exhibits thereto and other documents in connection therewith, with the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by United Therapeutics' said attorney to any and all amendments to said Registration Statement.

| Signatu | res | Title | |
|--|-----|--|------|
| /s/ MARTINE A. ROTH Martine A. Roth | | Chairman of the Board and Chief Executive Office | June |
| /s/ ROGER JEFFS Roger Jeffs | | President and Chief Operating Officer | June |
| /s/ JAMES W. CROW James W. Crow | | President Emeritus and Director | June |
| /s/ GILLES CLOUTIER Gilles Cloutier | | Executive Vice President, Special Projects and Treasurer | June |
| /s/ SHELMER D. BLAC Shelmer D. Blac | · | Executive Vice President for Medical Affairs, Secretary and Director | June |
| /s/ FRED T. HADEED Fred T. Hadeed | | Chief Financial Officer | June |

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| /s/ NOAH A. SAMARA | Director | Jun |
|---------------------------|---|-----|
| Noah A. Samara | | |
| /s/ DAVID GOORAY | Director | Jun |
| David Gooray | | |
| /s/ H. BEECHER HICKS, III | Director | Jun |
| H. Beecher Hicks, III | | |
| /s/ MICHAEL C. MILES | Director | Jun |
| Michael C. Miles | | |
| /s/ WAYNE C. ROE | Director | Jun |
| Wayne C. Roe | | |
| /s/ RICARDO BALDA | Chief Executive Officer, Medicomp, Inc. and Director | Jun |
| Ricardo Balda | Inc. and Director | |

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